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# A landscape revisited: recent work on Roman sites in the Walton Basin, Radnorshire

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*Small-scale assessment work for site management and conservation purposes has been undertaken on a number of first-century Roman military sites in the Walton Basin, Radnorshire, including Walton marching camps II–III, field ovens in the top of a Bronze Age round barrow adjacent to Hindwell marching camp I, on the putative Hindwell marching camp II, the annexes and extramural settlement associated with the Hindwell Roman fort, and a possible third- to fourth-century settlement site near Four Stones Buildings. Intriguing interrelationships between these Roman military sites and the major complex of large Neolithic ceremonial sites which underlie them are explored.*

## INTRODUCTION

Sites forming the complex of Roman military sites in the Walton Basin, in eastern Radnorshire (in the modern county or Powys), have been summarized in *Roman Camps in Wales and the Marches* (2006)[7] and *Roman Frontiers in Wales and the Marches* (2010).[8] The present article reports on more recent small-scale assessment work undertaken on a number of the sites described in those volumes, including Walton marching camps II–III, field ovens in the top of a Bronze Age round barrow adjacent to Hindwell marching camp I, on the putative Hindwell marching camp II, the annexes and *vicus* (extramural settlement) associated with the Hindwell Roman fort, as well as a number of other sites of Roman date. The assessment work was undertaken between 2009 and 2014 by the Clwyd-Powys Archaeological Trust with funding provided by Cadw – Welsh Government. It was principally targeted at answering specific questions, designed to be non-destructive and undertaken for site management and conservation purposes, often in relation to recent trial work on the underlying complex of large Neolithic ceremonial sites which has been published in *Archaeologia Cambrensis*.[9]

The Walton Basin is a natural amphitheatre between 4 and 6 kilometres across, forming a communications corridor between the Herefordshire lowlands and the uplands of Wales, surrounded by hills which rise dramatically to heights of between 300–600m. The floor of the basin rises gently from 180m in the east to around 230m in the west and is punctuated by fluvioglacial landforms such as drumlins, gravel ridges and meltwater channels.[10] The basin is drained by the Knobley Brook, the Summergil Brook the Riddings Brook which join on the east side of the basin to form the Hindwell Brook, which is in turn a tributary of the Lugg, the Arrow and the Wye. The floor of the basin is largely composed of gravels, clays and alluvium, which has had a significant impact on the availability of water and thus the pattern of human activity within the basin. The Knobley Brook and Riddings Brook to either side of the valley run all year round but in summer the Summergil Brook dries up, just to the east of the medieval town of New Radnor, re-emerging in a series of springs on the eastern side of the valley (Fig. 1), notably at Hindwell Pool near the Hindwell Roman fort (Fig. 6).

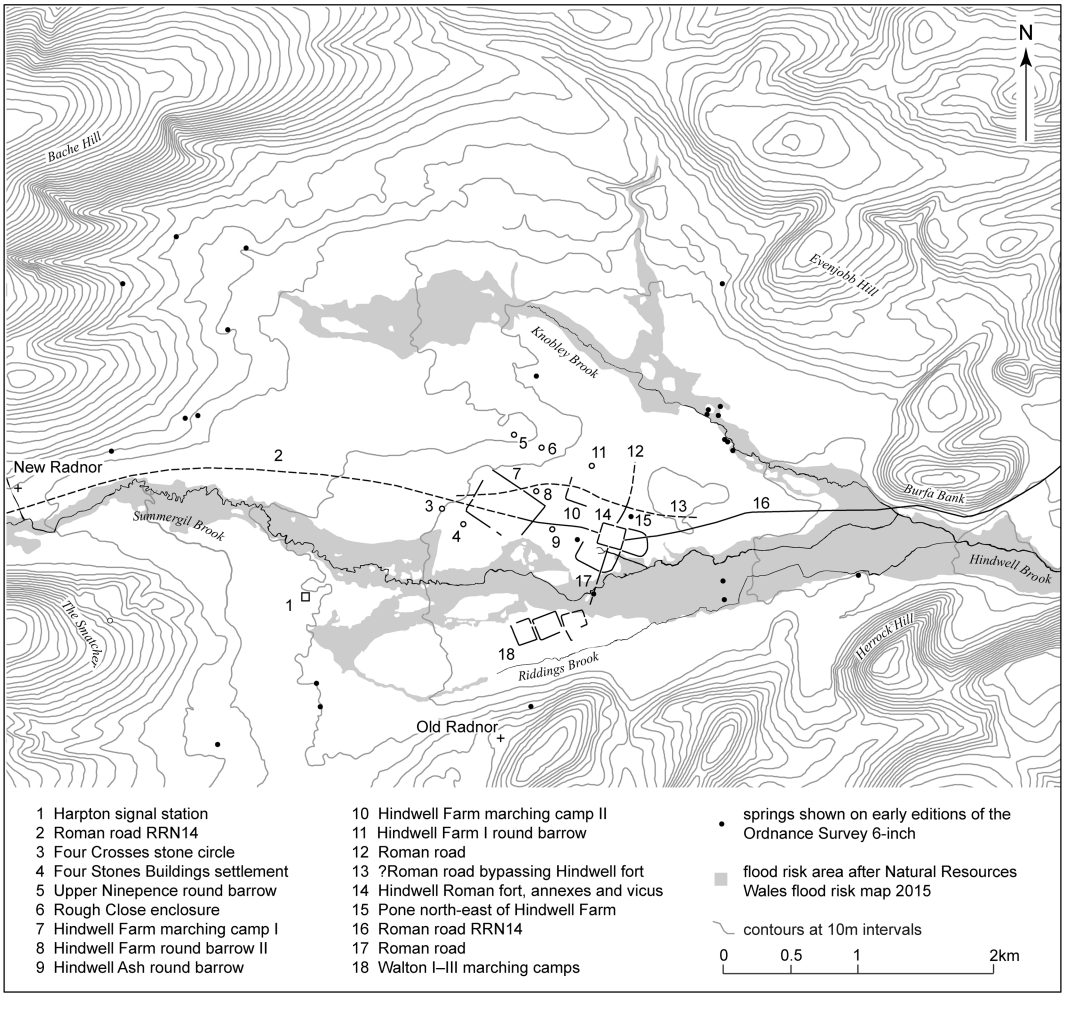



Fig. 1. Roman sites in the Walton Basin, Radnorshire.

## SITES EXAMINED

### Walton marching camps

Small-scale work was undertaken on two of the three Walton marching camps alongside Riddings Brook, towards the south side of the Walton Basin which are described in *Roman Camps in Wales and the Marches*.[11] The camps, which probably indicate the arrival successive military units,[12] are superimposed upon a cluster of prehistoric ceremonial sites which include the Walton Neolithic palisaded enclosure, the later Neolithic Walton Court Farm ring-ditch[13] and Court Farm barrow[14] (Fig. 2). All the marching camps are thought to belong to the conquest period, between *c.* AD 55–75.

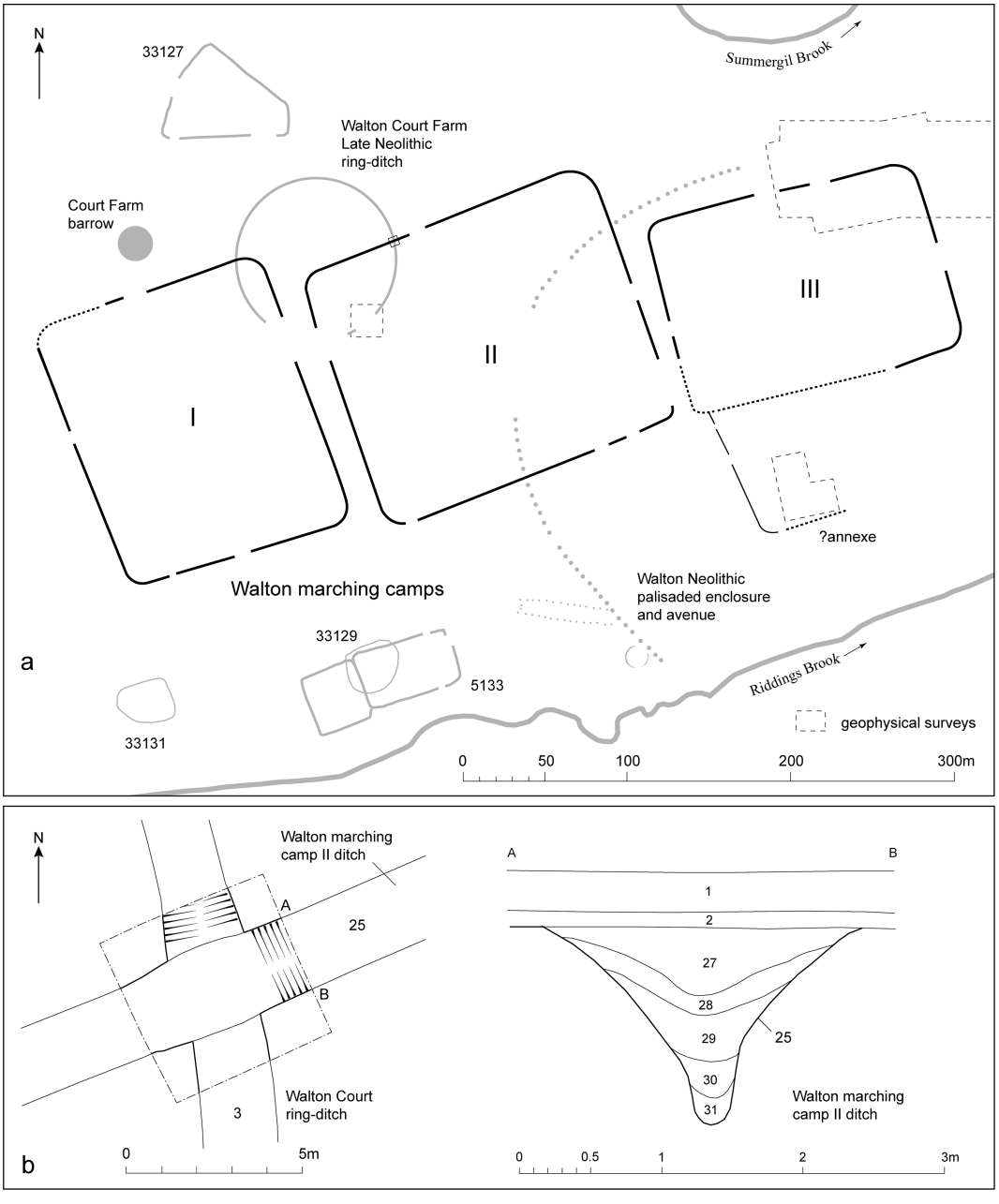



Fig. 2. Hindwell marching camp II.

*Walton marching camp II*

Walton marching camp II is about 192m by 163m across and encloses an area of 3.1 hectares (Fig. 2a).[15] A trial trench was excavated across the outer ditch of the marching camp in 2009 in order to examine its

relationship with the Walton Court ring-ditch, which was shown to be a Late Neolithic monument.[16] The marching camp ditch was found to be 2.25m wide and 1.4m deep from the subsoil surface, with a steep, V-shaped profile which narrowed to a slot around 0.12m wide at the base (Fig. 2b). The ditch had been cut through the natural gravels, and was filled with successive layers of silty clay with variable amounts of fine gravel and small stones. The ditch profile is characteristic of marching camps elsewhere; it is relatively wide and deep compared with others recorded in Wales but not exceptionally so when compared with ones elsewhere in Britain.[17]

Charred plant remains from a layer of the secondary fill (29) of the ditch, though scant, suggest the presence of grassland. A small amount of oak and willow/poplar charcoal was recovered from the ditch fills (see report below). The only find consisted of a sherd of probable Roman tile from the uppermost layer (27).

*Walton marching camp III*

The eastern camp, Walton III, is about 168m by 121m across and encloses an area of about 2 hectares (Fig. 2a).[18] Since the publication of *Roman Camps in Wales and the Marches* aerial photography has suggested the presence of a southern annexe[19] extending for about 85m from the south-west corner of the camp with a rounded corner at the southern end. Annexes to marching camps are relatively unusual on sites in England and Wales but have been found more frequently in Scotland.[20] Geophysical survey was carried out in 2014 in an attempt to trace the southern side of the possible annexe but readings were subject to high variations, possibly do to modern smithy waste which had been spread across the field.[21]

**Hindwell Farm marching camp I and Hindwell Farm barrow II**

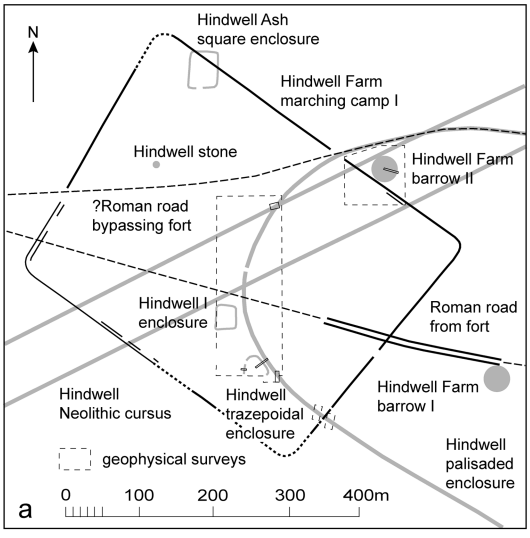
Recent assessment work involving Hindwell Farm marching camp I and the adjacent prehistoric Hindwell Farm barrow II is summarized below.

*Hindwell Farm marching camp I*

The marching camp[22] is *c*. 475m by 371m across and encloses an area of *c*. 17.6 hectares (Fig. 3a). Traces of a second line shown by aerial photography and geophysical survey, set *c*. 4m inside the ditch (Figs 3c–d) probably represents a palisade.[23] There is no clear evidence from aerial photography or from the small area of the camp's defences subjected to geophysical survey (Fig. 3c) for ovens set the inside of the bank.

The relationship of Hindwell marching camp I to earlier and later sites and its setting within the landscape have become clarified since the publication of *Roman Camps in Wales and the Marches*. Up to three small ditched enclosures, between *c*. 26–48m across, are known within the camp (Fig. 3a). Two of these are undated,[24] but trial excavation of the Hindwell trapezoidal enclosure[25] has shown this to be Iron Age and dated by calibrated radiocarbon dates which fall within the second and first centuries BC.[26] The enclosure ditches are relatively slight, being between 1.2–1.5m wide and 0.48–0.65m deep from subsoil level. Charred plant remains from the ditch fill included spelt wheat and charcoal of a wide range of species suggesting an environment dominated by heath grassland and scrub,[27] and although it is uncertain whether it remained in occupation at the time of the conquest this evidence is of potential significance to the local environment and the provisioning of the Roman army during the conquest period (see discussion below). The ditches are likely to have been levelled had they still been visible at the time of the conquest[28] but there is no clear evidence of this in the ditch sections. The siting of the Iron Age enclosure in relation to the Hindwell Neolithic palisaded enclosure[29] implies that the outer palisade of the

*Opposite* Fig. 3. Roman military field ovens adjacent to Hindwell marching camp I.


N
Hindwell Ash
square enclosure
Hindwell Farm
marching camp I
Hindwell stone
Hindwell Farm
barrow II
?Roman road
bypassing fort
Hindwell I
enclosure
Roman road
from fort
Hindwell
Neolithic cursus
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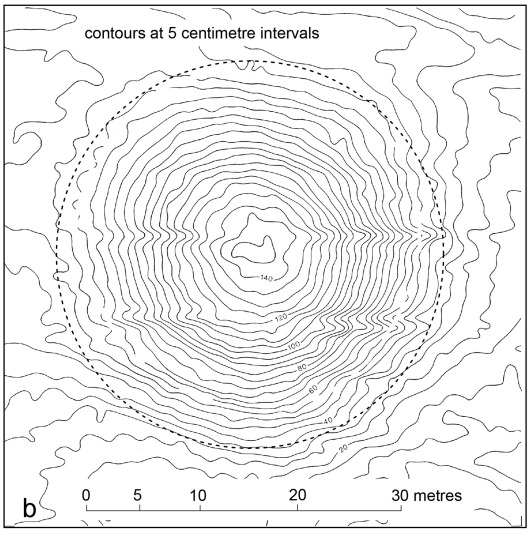
0 100 200 300 400m
a


contours at 5 centimetre intervals
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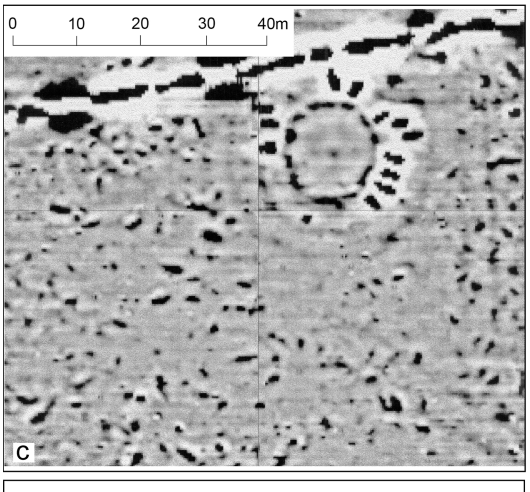
0 10 20 30 40m
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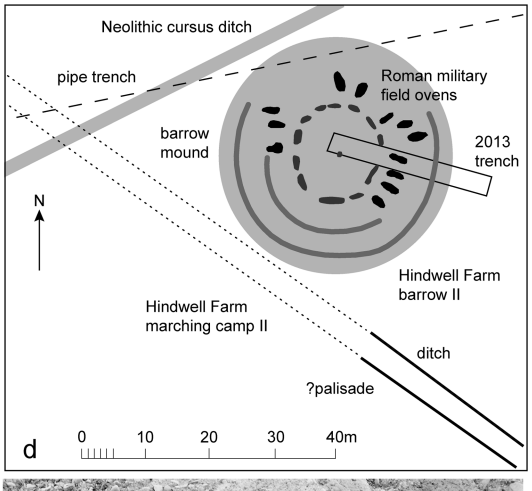
Neolithic cursus ditch
pipe trench
Roman military
field ovens
barrow
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N
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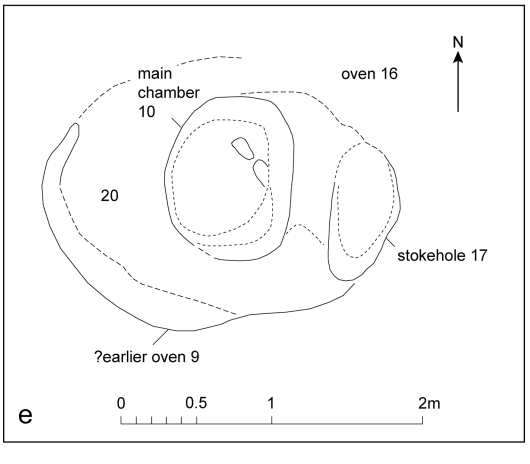
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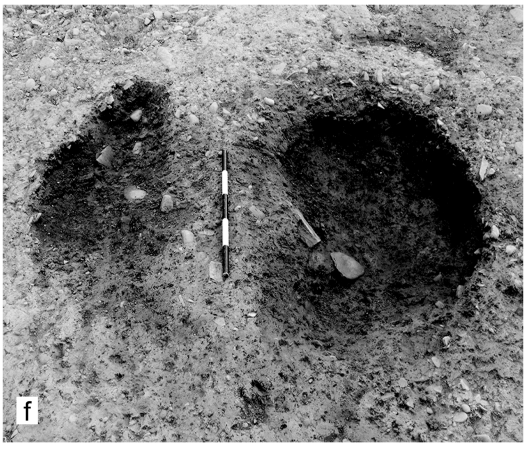
f

Oplatter remained visible as a landscape feature into the late Iron Age period. This appears to corroborate evidence elsewhere which suggests that the Neolithic enclosure remained visible as a surface feature into the Roman period and influenced the siting of the possible Roman road bypassing the Hindwell Roman fort (Figs 3a and 6; see also the section below on the local Roman road network). There is evidence that the ditches of the Hindwell cursus[30] had become infilled, at least locally, by the time that the Hindwell palisaded enclosure was constructed,[31] so this is unlikely to have affected the design or layout of the marching camp. The Hindwell stone,[32] a probable glacial erratic and possible recumbent standing stone, up to 1.6 × 1.1 × 0.9m across, lies within the west side of the marching camp. The Roman road from the west gate of the Hindwell fort can be traced as cropmarks crossing the eastern side of the marching camp and is likely to be later in date.[33] It has been suggested that camp was aligned upon Hindwell Roman fort,[34] though if the two were not contemporary it seems just as likely to have been orientated towards the natural springs *c*. 330m to the south-east, just to the south of Hindwell Farm (see discussion).

Three relatively small areas have been excavated inside the marching camp to examine prehistoric features in 1995,[35] 2011,[36] and 2013[37] (Fig. 3a). Since surviving archaeological remains inside marching camps have generally been very ephemeral it is unsurprising that none of these have produced any evidence of Roman activity. Chance finds from inside the marching camp include a probable Flavian *as* (see coin report).

*Hindwell Farm barrow II*

Hindwell Farm barrow II[38] is a large round barrow *c*. 36m diameter and probably of Late Neolithic or Early Bronze Age date (Fig. 3). The barrow survives to a height of *c*. 1.1m but this has most probably been significantly reduced by ploughing (Fig. 3b). Aerial photography and geophysical survey have shown that it is multi-period, with a complex internal structure.[39] The barrow lies within both the Hindwell Neolithic cursus and Hindwell Neolithic palisaded enclosure[40] and also appears to be butted by Hindwell Farm marching camp I in a seemingly deliberate manner (Fig. 3a).

Twelve distinctive thermo-remanent anomalies were detected by geophysical survey in 1998 which form an unusual radial pattern (Fig. 3c–d) that has been the subject of some debate.[41] These anomalies were the focus of trial excavation in 2013 which was largely limited to examining the surviving surface of the barrow mound.[42] One of the anomalies identified within the trial trench was shown to represent the stokehole and chamber of a Roman military field oven (16) set into the top of the barrow mound, marked by intense burning and patches of charcoal (Fig. 3e–f). The main chamber (10), set nearer to the top of the barrow, was 1.08m by 0.82m across and survived to a depth of 0.12m. The stokehole (17) was 0.92m by 0.45m across and 50mm deep. The top of the oven had undoubtedly been truncated by later ploughing though two stones and patches of clayey silt in the base of the main chamber might represent the remains of the collapsed superstructure. The area surrounding the oven also contained signs of burning (9) which may have been associated with an earlier oven in more or less the same spot. Charred plant remains from the fills of the oven (10) and stokehole (18) included hazel nutshell fragments, heath-grass and sedges grass, perhaps representing material used to seal or clamp the oven (see report below). Charcoal from the oven and stokehole was predominantly of Maloideae (apples, pears etc.), hazel and ash. The charcoal probably largely represents fuel, though the hazel fragments were mainly of stemwood rather than branchwood and may represent material used to support a clay dome above the oven. Radiocarbon dates were produced from charred hazel nutshells from both the oven and the stokehole, which have been calibrated to cal. AD 7–132 and 51 cal. BC – cal. AD 67 respectively (SUERC-52855, -52856). Each of the twelve thermo-remanent anomalies in the top of the barrow probably represents a separate oven. The radiocarbon dates suggests that the ovens are likely to have been associated with the immediately adjacent marching camp.

Finds from the excavation included a denarius of Augustus which is consistent with date of deposition in the early to mid first century AD (see coin report) together with a small body-sherd of plain samian, two small flint flakes and a flint chip. From the truncated surface of the barrow mound (context 7) came a small sherd possibly from a crucible (see below).

The reasonably regular spacing of the Hindwell ovens suggests that they were used more or less simultaneously by different military units. It is probably significant that the ovens are sited on the sides of the barrow furthest away from the assumed timber palisade of the marching camp, in order to reduce the risk of fire. The bipartite form of the excavated oven is characteristic of military field ovens excavated elsewhere, as for example at the Brompton (Shrops.)[43] marching camp, where they tended to be closely grouped. Bipartite ovens at Llanbeblig (Caerns.) were similarly clustered. These are dated to cal. AD 65–80 and are thought to be associated with a temporary construction camp next to the fort at *Segontium*.[44] The suggested reuse of the excavated oven at Hindwell is paralleled in marching camps elsewhere.[45]

**Hindwell Farm marching camp II**

It has been suggested that this possible site[46] might represent either a marching camp or more a construction camp for Hindwell Roman fort.[47] It was first identified by geophysical evidence in 1998 which appeared to define two sides of a rectilinear enclosure. Geophysical survey in 2015 traced the western side of the possible camp for a further 50m to the north, making its minimum dimensions approximately 160m by 182m (Fig. 4).[48] A second ditch, *c*. 60m to the south and running parallel with the southern ditch is also shown by the geophysical evidence. Trial excavation at the point of intersection with the southern ditch of the Hindwell Neolithic cursus (which as elsewhere does not show up clearly in the geophysical survey) revealed that the ditch of the possible marching camp had been dug into the top of the infilled cursus ditch but was only 0.6m wide and 0.28m deep from the subsoil surface and produced no dating evidence (Fig. 4). The ditch might appear too slight for a marching camp ditch though it was up to 0.68m from the modern surface and is likely to have been truncated by more recent ploughing. If this had been the case, the original dimensions of the ditch would be comparable with those of a number of other marching camp ditches excavated in Wales and the Marches, as for example at Pen-y-gwryd (Caerns.), Glanmiheli (Monts.) and Blaen-cwm Bach (Glam.).[49] The relationship of this possible marching camp to the suggested line of the Roman road bypassing the Hindwell Roman fort is uncertain (see below).

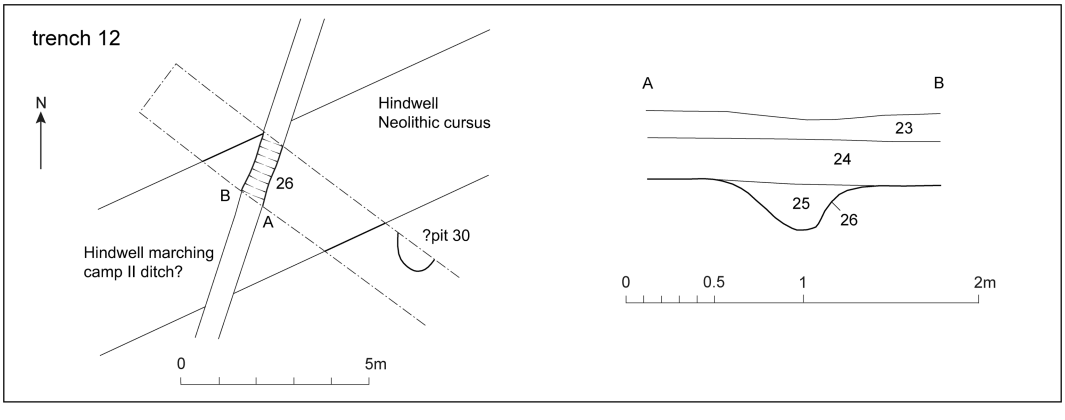


Fig. 4. Hindwell marching camp II (see location of trench 12 on Fig. 6).

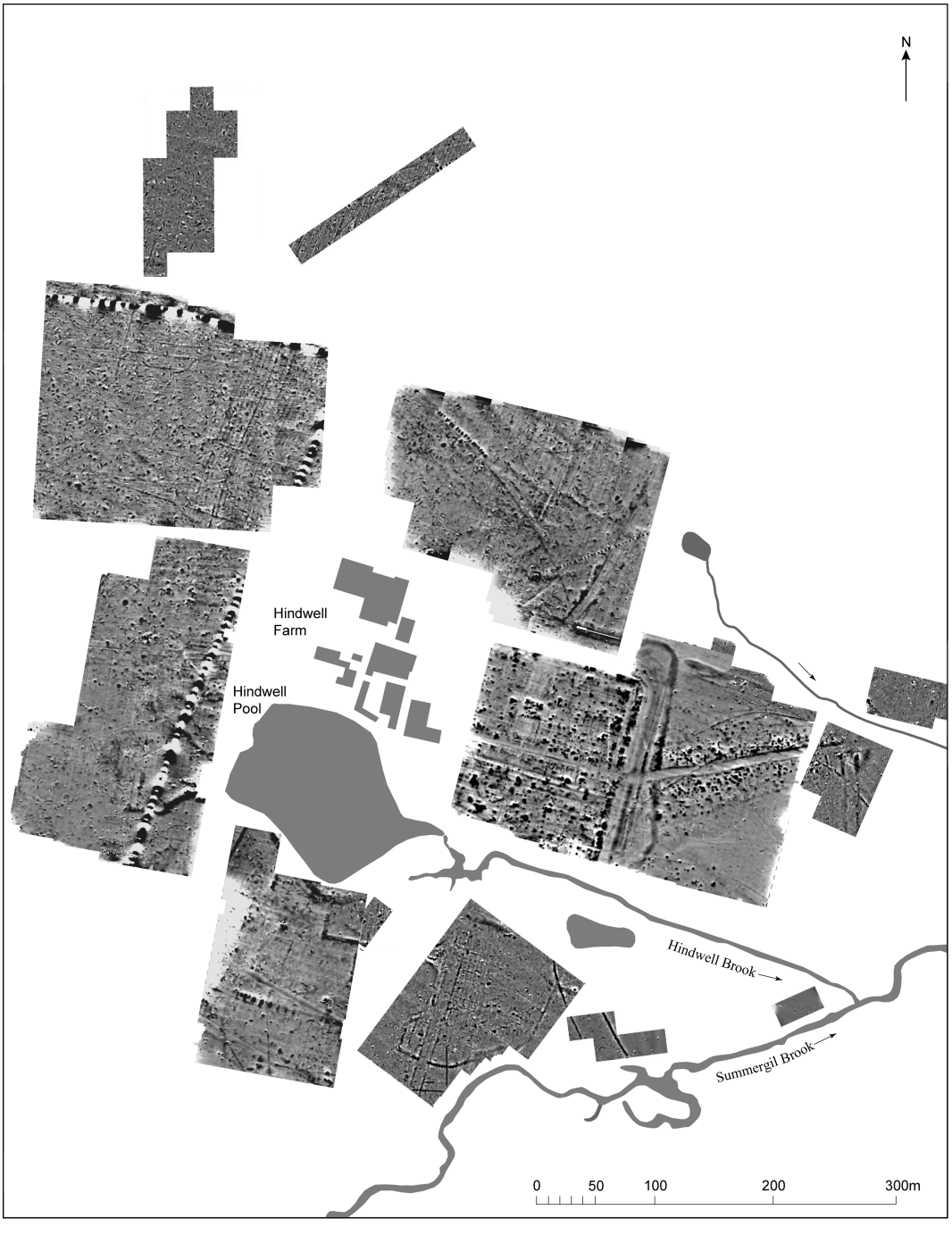


Fig. 5. Geophysical surveys in and around the Hindwell Roman fort and annexes.

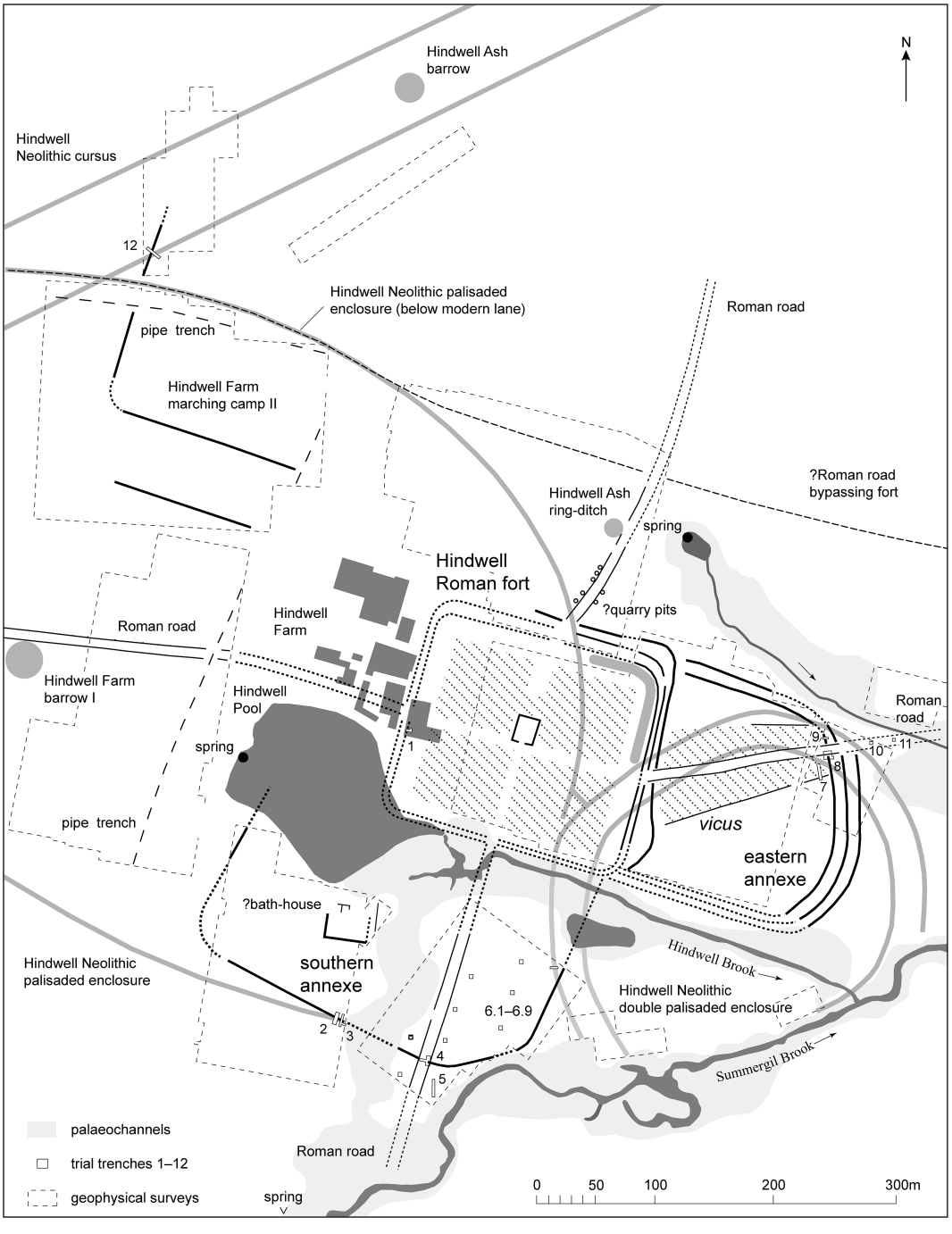


Fig. 6. Interpretation of the geophysical survey in and around the Hindwell Roman fort and annexes, superimposed upon a complex of Neolithic sites. The plan is partly based upon cropmark evidence.

Two ovens of similar dimensions to those in the top of Hindwell Farm barrow II (see above) were found side by side in the top of the Hindwell Ash barrow[50] just to the north of the possible marching camp, which produced hazel, ash, oak and elm charcoal.[51] One of ovens is dated to 119 cal. BC – cal. AD 142 (91.7% probability),[52] which raises the possibility that like the ovens in the top of Hindwell Farm barrows II (see above) they also represent Roman military field ovens, perhaps to be associated with the putative Hindwell marching camp II.

**Hindwell Roman fort annexes and *vicus***

The plan of the Hindwell Roman fort is partly known from surviving earthworks, small-scale excavations and geophysical survey and is likely to occupy an area of *c*. 2.29 hectares.[53] The only excavation undertaken within the fort itself is a small trench on the western defences in 1976[54] which revealed the inner ditch and the levelled rampart (Fig. 6, trench 1). Finds from these excavations and elsewhere in and around the fort have suggested that the fort was established in the Neronian period, between AD 55–65 and extended into the Flavian period to *c*. AD 75. Irregularities in the plan of the fort ditches, together with evidence of a ditch recut recorded in 1976 and geophysical evidence that one of the fort ditches underlies the Roman road leading to the east gate have suggested more than one phase of construction.

Further details of the *vicus* (civilian settlement) to the west of the fort and eastern and southern annexes, chronology and the local road network have emerged from recent assessment work.

*Eastern vicus and annexe*

The *vicus* on the eastern side of the fort was first discovered by geophysical survey in 1998[55] lining the road leading from the eastern gate of the fort (Figs 6–7). It covers an area of *c*. 0.7 hectares and extends for *c*. 140m from the east gate of the fort. It appears to extend for distance of up to *c*. 30m to either side of the road and to be demarcated at the rear by ditches to either side of the road. Individual building plots are not clearly discernible in the geophysical evidence though thermo-remanent anomalies suggest ovens, fires or forges associated with individual building structures. Closely comparable evidence is known from the *vici* associated with the Welsh forts at, for example Caerau, Caerhun and Pennal.[56]

The *vicus* lies inside a band of three curving ditches first identified by aerial photography to the east of the fort, which was formerly considered to be probably of Iron Age date.[57] Recent geophysical survey and small-scale excavation, however, have shown that the ditches represent an eastern annexe to the fort, whose asymmetrical plan was most probably due to the presence of lower-lying waterlogged ground further to the east (Fig. 6). The annexe extends up to 160m to the east of the fort and encloses an area of about 2.5 hectares. Its ditches butt up against the road leading from the east gate of the fort and although there are clearly three ditches to the south of the road it is uncertain whether this was reduced to two, to the north of the road. Although some *vici* in Wales, such as that at Caerhun,[58] lie within a ditched boundary, there are no clear parallels for a *vicus* set with such formidable defences. This might imply that the *vicus* and the annexe were not strictly contemporary.

Trench 8, excavated at a point where the innermost annexe ditch met the road leading out the east gate of the fort, confirmed that the two were contemporary (Fig. 7c).[59] The inner ditch (306) was steep-sided and *c*. 2.65m wide and 1.2m deep at the subsoil level. It butted up against the southern road ditch (302), which was *c*. 0.75m wide and between 0.65–0.9m deep, with a second slighter gully (315) just to the north. A second, smaller ditch (317) just to the east of 306 was over 1.5m wide and *c*. 0.8m deep at subsoil level. It appeared to cut road ditch 302 and is therefore later in date. A partial section was also excavated across the inner ditch to the north of the road (Fig. 7b, trench 9).

A cluster of pits or postholes were identified along the side of the road. Posthole 309, with a possible post-pipe (339) representing a post *c*. 0.4m in diameter, had been cut by the roadside ditch 302 and had

been cut through an earlier pit (332), which was at least 0.65m across and 0.27m deep. Geophysical evidence suggests that this post might have been part of a four- or possibly six-posted gate tower up to *c*. 5m by 7m across, though with no clear indication of whether it had a single or double portal.[60] Two possible postholes (316 and 330) between ditches 306 and 317 remain unexcavated.

The roadway running through the *vicus* area is *c*. 7m wide between the flanking ditches. No traces of road metalling survived in trench 8 but in two test pits to the east of the annexe (Fig. 7a, trenches 10 and 11), where the road agger remained visible, a depth of between 0.26–0.37m of road metalling survived.

A single trench was excavated in the south-east corner of the *vicus* area (Fig. 7d, trench 7).[61] The ditch (201) bounding the southern side of the *vicus* was between 0.9–1.2m wide and up to 0.4m deep from subsoil level. Two smaller pits (207, 210) and a large latrine pit (203) were identified together with a slight curving gully (205), *c*. 0.18m wide and 0.12m deep.

Finds from the inner annexe ditch and from the latrine pit in the *vicus* area included a denarius struck in 45 BC and pottery of Neronian to early Flavian date, *c*. AD 55–80, consistent with the assumed dating of the Hindwell fort. Other finds included smithing waste and charred cereal remains probably largely from processed crops and possible legumes (see below). A radiocarbon date which calibrates to 43 cal. BC – cal. AD 79 (SUERC-43283) was obtained from hazel charcoal from the fill of the curving gully 205 (see below).

*Southern annexe*

The presence of a southern annexe to the fort was first identified by geophysical survey in 2011 (Figs 5–6 and 8a).[62] This revealed a single ditch with a causeway respecting the side ditches of a road leading from the south gate of the fort. To the east the ditch turns through an angle of 45 degrees to avoid the course of the Summergil Brook and then runs north-eastwards probably to meet the south-east corner of the fort. The annexe ditch is shown further to the west in geophysical survey undertaken in 2008 (Fig. 6) and seems likely to have turned to join a ditch running north-eastwards in the direction of Hindwell Pool which possibly joined the south-western or western defences of the fort. The southern annexe would thus appear to be *c*. 290m by 180m across and cover an area of about 5 hectares. A series of straight ditches can also be identified to the south of the annexe entrance which are evidently of a different date to the annexe ditch and the road south of the fort.

A substantial rectangular structure inside the southern annexe to the west of the road leading from the fort, identified from geophysical survey in 2008 and 2011, seems likely to represent a bath-house or *mansio.*[63] The structure is up to *c*. 35m by 30m across and may correspond to the site of the discovery of an abundance of Roman brick and tile found in the 1950s 'when levelling a field to the south-east of Hindwell Pool'.[64] Coarse pottery, samian and glassware associated with the brick and tile suggests that the structure continued in use well into the Flavian period, to *c*. AD 80.[65] Hindwell Pool appears to have been constructed in the late eighteenth or early nineteeth century by damming an ancient spring at the head of the Hindwell Brook to collect water for feeding a system of water meadows just to the east of the Roman fort.[66] The course of the Hindwell Brook from Hindwell Pool to the point it is joined by the Summergil Brook appears to have been largely canalized, though when this was carried out is uncertain, as is the relationship of the stream to the eastern defences of the southern annexe. The presence of a bath-houses or *mansio* within a ditched annexe is paralleled at Bryn y Gefeiliau (Caerns.),[67] Caer Gai (Mer.),[68] and elsewhere.

Geophysical survey in 2011 revealed ditches to either side of the road from the south gate of the fort, through the southern annexe and extending for at least 30m beyond the annexe (Fig. 8a). The geophysical survey shows that the terminals of the annexe ditch slightly overlap the road ditches, suggesting that the road and the annexe ditch are of slightly different dates. A number of narrow ditches can be identified on

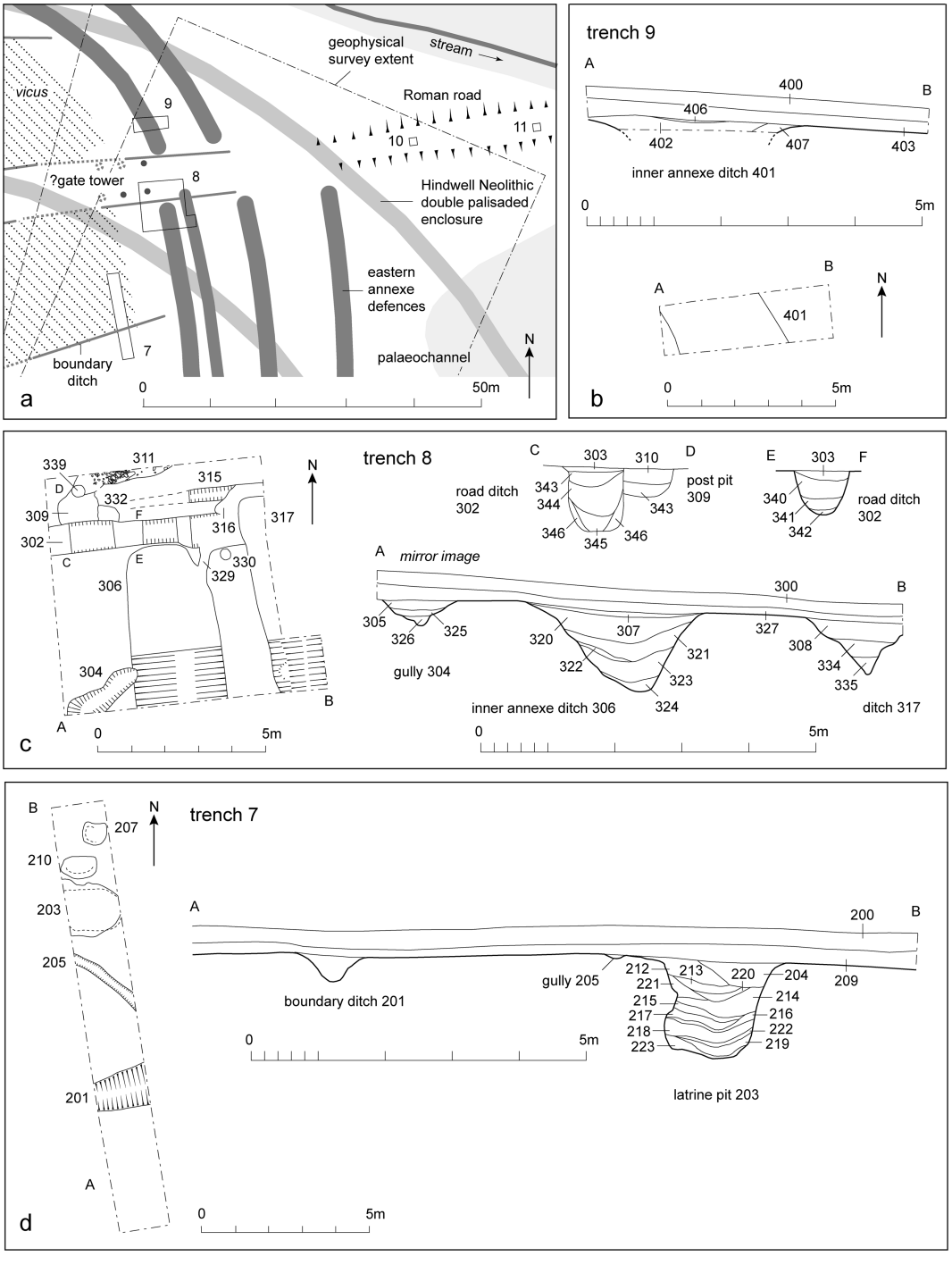


Fig. 7. Hindwell Roman fort, eastern annexe and *vicus*.

the eastern side of the road in the annexe, at right-angles to the road. These extend up to *c*. 26m from the eastern road ditch and appear to define a series of building plots *c*. 7m wide, comparable with geophysical evidence from the *vicus* attached to the Roman fort at Caerau,[69] for example. The apparent scarcity of thermo-remanent anomalies associated with the plots might suggest buildings of a different function to those in the *vicus* to the east of the fort, or that extramural settlement here was relatively short-lived or had failed for some reason.

Apart from random anomalies which appear to represent pits, the only other notable features detected by geophysical survey inside the southern annexe are a curving ditch and a group of linear marks to the east of the road which are up to *c*. 100m long and spaced at intervals of *c*. 3–5m (Fig. 8a). They are broadly parallel with the Roman road but might represent later ridge and furrow cultivation. On the west side of the road there are various linear features which appear to have been obscured by or most probably truncated by a palaeochannel between the Summergil Brook and the Hindwell Brook.

Several trial trenches were excavated across the annexe ditch to test relationships between features. Trenches 2 and 3 (Fig. 8b)[70] showed that the southern annexe ditch (312) was *c*. 5.8m wide and confirmed that it cut the Hindwell Neolithic palisaded enclosure at this point.[71] The annexe ditch was only excavated to a depth of *c*. 0.6m but this revealed a sequence of silts and clays in the upper fill which contained Roman pottery and flecks of Roman brick and tile (Fig. 8b). Layer 311, on the north side of the ditch, seemed to represent former bank material that had been subsequently levelled, later in the Roman period. Trench 4 was excavated to the subsoil surface to examine the relationship between the southern annexe ditch and the side ditches of the road south of the fort (Fig. 8c).[72] The annexe ditch at this point was *c*. 3m wide with an entrance causeway just under 6m wide, and were shown by augering to be *c*. 1.2m deep from the subsoil surface. Their upper fills contained fragments of Roman brick and tile. The road ditches were *c*. 1.3m wide and set *c*. 7m apart and contained no visible brick and tile. The eastern road ditch appeared to be earlier than the annexe ditch. No traces of road metalling survived. A possible small pit (63) at least 0.6m across was identified to the west of the entrance, cut by both the annexe and road ditches. A possible post-pit (55) on the edge of the ditch to the east of the entrance was about 0.8m across.

A series of $1m^2$ test pits were excavated in the eastern side of the southern annexe to examine the state of preservation (Fig. 8a, trenches 6.1–6.8).[73] In test pit 6.2 a gully (9) was identified which probably represents a ditch parallel with the Roman road identified by the geophysical survey. This was 0.6m wide and 0.28m deep from subsoil level. Test pit 6.4 revealed a possible metalled surface (31), which had been cut by a shallow pit (3) over 0.8m across and 0.2m deep and by a probably gully (27), over 0.5m wide, lying parallel with the Roman road. Test pits 6.2, 6.4 and 6.7 all produced fragments of Roman brick and tile.

Trench 6.9 (Fig. 8a) was excavated across the outer palisade of the Hindwell Neolithic double palisaded enclosure as it ran across the interior of the annexe.[74] An upper layer of fill (104) which had formed in a hollow in the top of the palisade trench after the decay of timbers it had held[75] contained sherds of Roman pottery and a heavily corroded Roman copper coin, which shows that the palisade remained visible as a hollow up to about 0.5m deep from the modern surface during the Roman period.

Trench 5 was excavated to the south of the southern annexe to examine two of the rectilinear ditches revealed by the geophysical survey which are clearly of a different date to the Roman road and the annexe ditch (Fig. 8a).[76] The northern ditch (74) within the trench was between 0.6–2.5m wide and up to 0.95m deep and the southern ditch (71) was 0.8m wide and 0.3m deep. The southern ditch was found to contain fragments of Roman brick and tile but the dating and phasing of these ditches is uncertain.

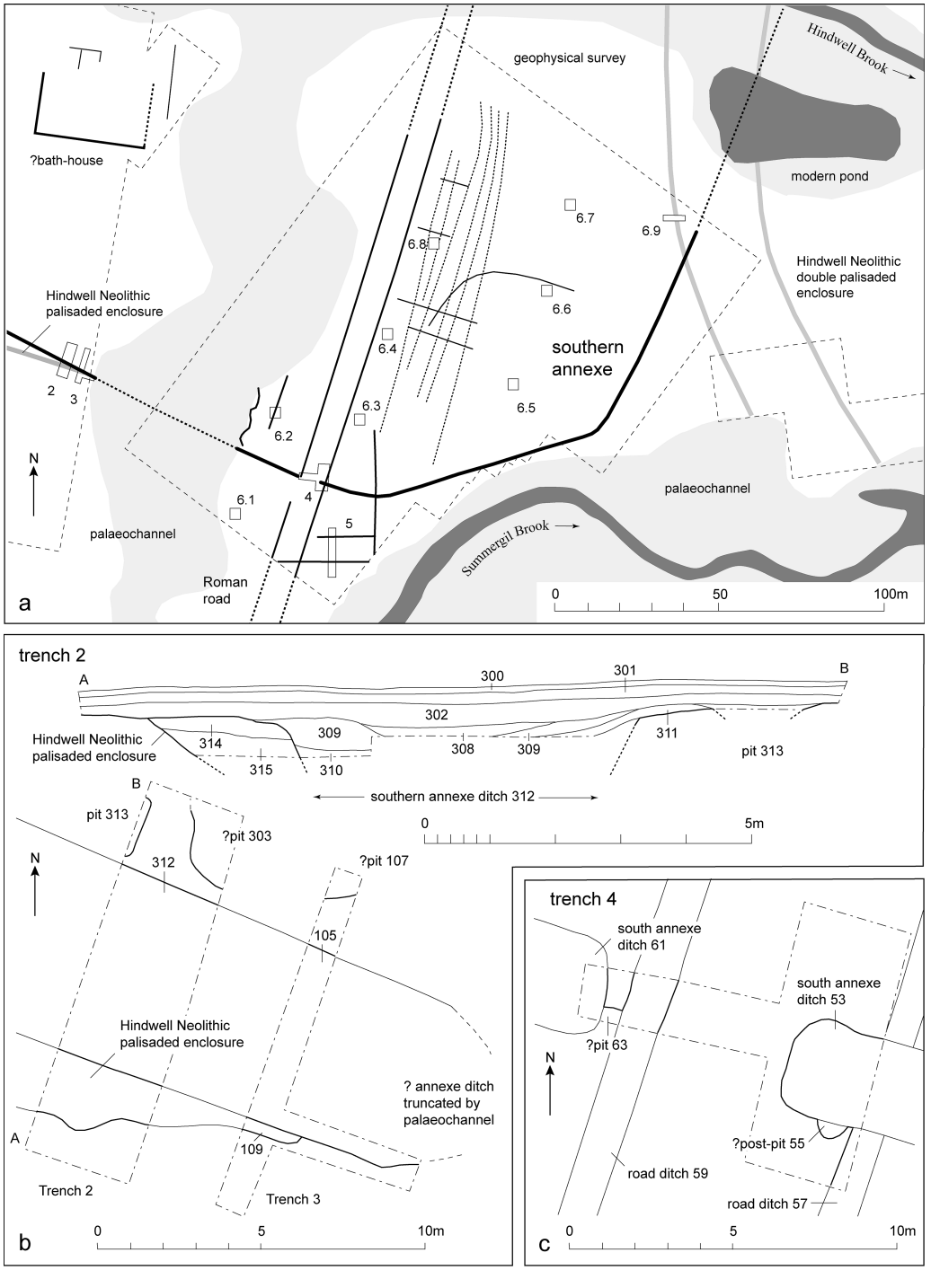


Fig. 8. Hindwell Roman fort, southern annexe.

*Roman road network*

Something is now known about the course of the Roman roads approaching each of the four gates of the Hindwell Roman fort though their ultimate destinations are uncertain (Figs 1, 6). The principal road through the valley[77] appears to have branched off Watling Street West[78] to the south of the fort at Leintwardine and approached Hindwell from the east via the valleys of the river Lugg and the Hindwell Brook.[79] Just to the east of the fort the line of the Roman road has been traced by geophysical survey running through the *vicus* and eastern annexe defences for a distance *c*. 190m, with a further 40m visible as a slight agger up to *c*. 0.2m high and 7.8m wide. To the west of the fort the course of the road is first evident from geophysical survey at a point *c*. 160m west of the fort[80] and then by aerial photography[81] up to *c*. 570m from the fort. At about 300m from the fort it seems to turn as it approached the Hindwell Farm barrow I (Fig. 6), which is assumed to be of Late Neolithic or Early Bronze Age date. Further to the west its course can then probably be traced running from the Four Stones stone circle via green lanes and field boundaries past the medieval town of New Radnor and then probably branching in the direction of the forts at Colwyn Castle and Castell Collen, respectively *c*. 19 kilometres and 25 kilometres away, via routes through the valleys.

It has been suggested that the angle at which the road approaches the east side of the fort 'strongly suggests that it was in fact a branch road from a main road which would have passed the fort to the north'.[82] It is remarkable and probably significant in this context that the northern arc of the Hindwell Neolithic palisaded enclosure, for a distance of 550m, is precisely reflected in the course of the narrow lane between Hindwell and the Four Stone stone circle.[83] As noted above there is clear evidence that both this enclosure and the Hindwell double palisaded enclosure remained visible as depressions in the ground as late as the Iron Age and Roman periods, following the decay of the original timbers. It therefore seems possible that the lane itself is of Roman origin and marks the line of the Roman road bypassing the Hindwell fort, turning from the palisaded enclosure soon after passing Hindwell Farm barrow II (Fig. 3a).

The course of the Roman road to the north of the fort[84] is known from geophysical[85] and cropmark evidence for a distance of *c.* 150m (Figs 5–6), skirting past the possible Hindwell Ash ring-ditch[86] and then heading in the direction of the village of Evenjobb, but its ultimate destination is unknown. It is *c*. 7m wide and flanked by side ditches and is associated with possible quarry pits.[87] The course of the road to the south is known for a distance of *c*. 220m but is lost before it reaches the Summergil Brook but appears to be heading in the direction of the eastern side of Hindwell marching camp III and the steep-sided Old Radnor Hill beyond rather than through the more accessible route through the hills on the south side of the Walton Basin, just to its east, now occupied by the modern A44. Its ultimate destination of the road may have been the large Neronian fort at Clyro, *c*. 17.5 kilometres away as the crow flies. As it leaves the fort the road is again *c*. 7m wide and flanked by side ditches.

**Roman-British settlement near Four Stones Buildings**

Traces of a probable Romano-British settlement site of late third- to fourth-century date were found during the excavation of a trial trench across the line of the northern ditch of the Neolithic Hindwell cursus in 2009,[88] just below a slight terrace to the south of Four Stones Buildings, within several hundred metres of the Roman road running west of the Hindwell Roman fort (Fig. 1). Air photography suggests the possible presence of a rectilinear ditched enclosure[89] though this is not entirely convincing and has not been fully reconciled with the evidence from the trial trench.

Features identified in the trial trench included a cluster of ditches, gullies and a posthole below a depth of 0.55–0.80m of ploughsoil (Fig. 9a). Ditch 3 was 1.1m wide, and up to 0.6m deep from the subsoil surface, being generally V-shaped but with a slot 0.25m wide in its base. It butt-ended at the south and appeared to be turning at the north. Posthole 17 next to this ditch, was 0.6m across; it extended beyond the

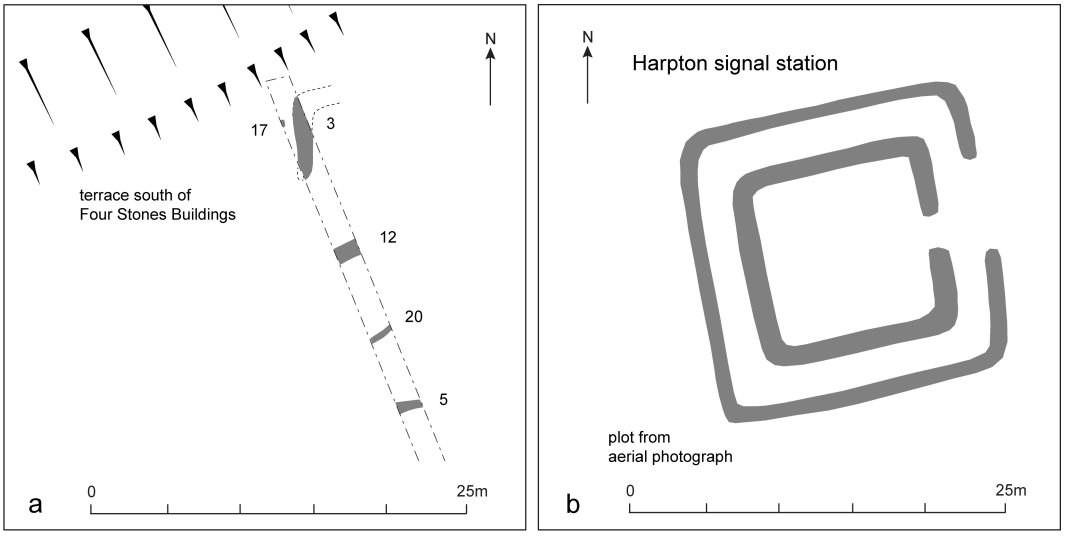


Fig. 9. ***Left*** Settlement site near Four Stones Buildings. ***Right*** Harpton signal station.

excavation and remained unexcavated but contained packing stones. Ditch 5 was V-shaped and 0.9m wide and 0.35m deep at subsoil level. Gully 20 was 0.5m wide and only 0.15m deep, and gully 12 was 1.1m in wide and 0.2m deep at subsoil level. Ditches 3 and 5 produced Roman ceramics and part of a Roman rotary quern also came from ditch 3 (see finds reports below). Charcoal recovered from ditch 3 included oak, elm, cherries/blackthorn and gorse, probably representing waste from a domestic fire with wood for fuel having been gathered from scrub, open woodland, or even hedges (see report below).

The settlement probably represents one of a significant cluster of ditched enclosures of later prehistoric and Roman date that are known in the Walton basin (see discussion).

## ROMAN COINS
By Mark Walters

The following coins have been found during assessment work or have been reported to the Portable Antiquities Scheme. A high proportion of the identified coins are of Republican date, which is characteristic of early military contexts of Claudio-Neronian to early Flavian date.

**Hindwell Farm barrow I**

1. AR denarius. Rome mint. P. Licinius Stolo, moneyer. Struck 17 BC.[90] *Obverse*: AVGVSTVS TR · POT, his bare head right. *Reverse*: P · STOLO above, III · VIR below, Flamen's cap (*apex flaminis*) between two studded oval shields (*ancilia*). In good condition with little wear and consistent with deposition date in early to mid first century AD. Found by metal detector in excavated ploughsoil.

**Hindwell marching camp I**

2. AE, in poor condition and illegible, but probably a Flavian *as.* Found in topsoil inside the marching camp.[91]

**Between Hindwell marching camps I–II**
Heavily corroded AR denarius, minted in Spain between 46–46 BC.[92]

**Hindwell fort eastern annexe and vicus**

3. AR denarius. Rome mint. L VALERIVS ACISCVLVS, moneyer. Struck 45 BC.[93] Obverse: ACISCVLVS below radiate head of Apollo right, pickaxe behind. Reverse: Diana in galloping biga right with crescent moon above. L VALERIVS in exergue. Condition is fair with heavy wear from circulation. Find 1009, context 307, fill of ditch 306.
4. AE, heavily worn and corroded, illegible. Find 1021, context 214, fill of rubbish pit 203.
5. Republican AR denarius of moneyer Q. Metell Scipio with Eppis Leg FC, Africa Mint, 47–46 BC. From the line of the eastern annexe defences.[94]

**Hindwell fort southern annexe**

6. Heavily corroded AE coin, illegible. From the upper fill of the outer palisade of the Neolithic double-palisaded enclosure (Jones 2011, 15; Hankinson 2011, 20).

**Adjacent to Hindwell Roman fort**

7. Republican AR denarius of M. Antonius, struck at a temporary/moving mint between 32–31 BC. Found on about the line of the Roman road just to the north of the Hindwell fort.[95]
8. AR denarius, probably post AD 128–240. Found outside the eastern annexe on the opposite bank of the stream, heavily eroded.[96]
9. Five heavily corroded AE coins found in spoil dredged from the pond at the site of the spring just to the north of Hindwell fort are including a possible fourth-century nummus, a third to fourth-century nummus or radiate, and a possible late third-century nummus.[97] The context in which these coins were found suggests that they were votive offerings made in the later Roman period.

## METALWORK FINDS REPORTED TO THE PORTABLE ANTIQUITY SCHEME

The following Roman metalwork find**s** found in the vicinity of the Hindwell and Walton Roman military sites reported to the Portable Antiquities Scheme.

**Brooch**

5. Cast copper-alloy Colchester brooch of very late Iron Age to Early Roman date (AD 25–80). Found in the eastern half of the southern annexe.[98]

**Horse pendants**

6. Fragmentary and abraded cast copper-alloy harness pendant likely to be part of the military parade uniform of the Roman cavalry in the later first century AD. From the area to the north of Walton marching camp I.[99]
7. Fragmentary small copper-alloy bell probably of mid first- to mid second-century date of a type frequently found in military contexts and thought to have been attached to horse trappings. From the line of the eastern annexe defences.[100]

## ROMAN POTTERY
By Wendy Owen and Peter Webster

**Hindwell Roman fort eastern annexe and *vicus***

Some 415 sherds (6.7kg) of Roman pottery were recovered from the excavations, the majority coming from the innermost ditch to the north and south of the entrance to the annexe (306, 401) and pit 203 within the *vicus.* The following broad fabric groupings were distinguished.

*Samian* (PW) 30 sherds (198g) were recovered from the excavation, all of which are South Gaulish. Much of this small assemblage is composed of small and worn body sherds, but it does include one fairly complete, stamped, form 27g (see below). The identified vessels include forms 15/17 (4 sherds), 18 (1 sherd), 27 (4 sherds) and 27g (7 sherds), a probable form 29 (1 sherd), some unspecifiable small bowl and cup forms, form 67 (2 sherds), Ritterling 12 and/or possibly Curle 11 (2 sherds).The small samian collection is certainly mid to late first century and would best suit a mid first-century date. The following two vessels are of particular note:

1. Form 27g, South Gaulish. Four fragments give a complete profile. The basal stamp is abraded across the centre but probably reads AMAND with the AM ligatured, die 15a of Amandus ii of La Graufesenque (Hartley and Dickinson 2008, 169–173). Hartley and Dickinson date this potter *c*. AD 30–65. The context here would suggest one of his later products. The rounded profile and bead of the cup can be paralleled at Usk (e.g. Manning 1993, fig. 85, 143) where the potter's work is also attested. From contexts 324 and 402, respectively the basal fill of annexe ditch 306 and the uppermost fill of annexe ditch 402.
2. Form 67, South Gaulish decorated body sherd, probably Flavian. An abraded ovolo frieze lies over what was probably panel decoration. From context 402, uppermost fill of annexe ditch 402.

*Red wares* 261 sherds (2902g) form the largest fabric group recovered. Severn Valley ware fabrics are well represented within this group, making up 90% of the total red ware sherds. Although not in the majority, a considerable proportion of these Severn Valley ware sherds occur in vesicular fabrics. Identified Severn Valley ware vessel forms include jars, often decorated with a panel of burnished diagonal line decoration bordered by horizontal grooves, several examples of necked jars such as nos 12–13, and two carinated beakers nos 5–6, a possible lid, two possible flagon forms, and a small bowl (no. 16). Dish no. 14, in light orange-buff smooth fabric, possibly originally burnished, is probably from a relatively local source and is not necessarily Severn Valley ware, whilst another dish is possibly derived from a Terra Nigra form. Jar no. 8, although not of Severn Valley ware, is clearly related to a Severn Valley jar form. The remainder of the red ware sherds include a ring-neck flagon form, its source unknown but probably of mid first-century date, and fragments of several other flagons, also from unknown sources in sandy orange fabrics.

*Reduced wares* 56 sherds (1132g). Black-burnished ware (BB1) is absent from the eastern annexe and *vicus* area. The fabrics varied greatly in hardness and inclusions, and the sources of many of these fabrics remain unknown. A number of sherds from Malvern-type jars or dishes were identified. Although the 'Malvern' type pottery with crushed metamorphic rock inclusions is best known and most widely distributed on Roman sites, there is a growing body of evidence for vessels of broadly similar form from southern parts of the Severn Basin. The occurrence of Palaeozoic limestone and shale/mudstone is noted by Timby, in her discussion of the Frocester fabrics (Price 2000, vol. 1, 127, fabric 8, Tf.8b), while Rees, in her consideration of the Droitwich fabrics (Woodiwiss 1992, 48), notes the continuation of a number

of related Iron Age fabric types into the Roman period. Hindwell vessel no. 7 is probably best considered as a local variant of the Malvern tradition. Grey wares vessel forms include a reduced and hard-fired possible Severn Valley ware jar no. 10. Jar forms have been recognised in other grey ware fabrics, the sources for which are all unknown. One large wheel thrown vessel was noted, probably a storage jar used for transportation of some commodity, in a hard, dark grey, slightly vesicular fabric containing frequent large white feldspar inclusions. A possible Triple Vase (a small part of the rim only, not illustrated) came from the fill of ditch 201 bounding the south side of the *vicus*. The vase is broadly similar to one from the Wroxeter fortress (Darling in Webster and Chadderton 2002, fig. 5.33, 123) in a pale grey-buff fabric with possibly a dark grey colour coat both internally and externally.

*Colour coated wares and fine wares* 24 sherds (417g). These included possible flagon no. 1 in a grey fabric with darker coat, Terra Nigra dish, bowl and jar forms (see nos 15 and 17) and butt beaker-derived jar no. 3, a medium necked vessel characterised by cordons, grooves and bands of rouletting, its source unidentified. The general form is undoubtedly derived from the 'Gallo-Belgic' butt-beaker (e.g. Hawkes and Hull 1947, pl. 57).

*White wares* 16 sherds (98g). Beaker no. 4, its form derived from a butt beaker, and two flagon rims were identified — one in a hard-fired greyish white fabric, rich in quartz, the other a Hofheim type flagon in a sandy cream fabric, of mid first-century date (general type as Manning 1993, Usk Fortress type 2, fig. 3).

*Amphorae* 28 sherds (1958g). With the exception of one Gauloise 4 south Gaulish wine amphora no. 2, all of the amphorae sherds identified are Dressel 20, south Spanish olive oil containers, one of which has a now illegible stamp on the handle.

**Comments on the pottery assemblage from the eastern annexe and vicus** (PW)

In his discussion of the Hindwell fort, Silvester comments 'finds, primarily from the 1976 excavation, argue for the fort's establishment in the Neronian period, between AD 55–65, but it remains unclear whether the occupation extended into the Flavian period' (Burnham and Davies 2010, 248–9). The material from the present excavations makes the picture somewhat clearer. The collection is remarkably homogeneous and all the vessels are likely to belong to the mid to mid/late first century. Indeed, there is nothing which need be later than the early Flavian period. The samian collection, although admittedly small, would not be out of place in Neronian Usk. The Severn Valley ware also finds parallels at Usk, although its predominance among the coarse wares makes the collection closer to that seen at Kingsholm and, more especially early Gloucester (period 1a, pre-dating the fortress, Darling 1977, 66 and fig. 6.10). Other parallels with early sites such as the Wroxeter fortress and the Droitwich fort are noted below. It seems entirely reasonable to date the present collection to the Neronian-early Flavian period (say *c*. AD 55–75) making it probable that the Hindwell fort closed with the Flavian advance into Wales in the mid 70s.

**Catalogue of vessels from eastern annexe and vicus** (Fig. 10)

1. Possible flagon in a fine grey coarse ware. On the exterior there are traces of a dark surface, perhaps a colour coat. From layer 214 in latrine pit 203.
2. Amphora in light buff fabric with the beginning of a handle on the neck. The form was probably Gauloise 4, a South Gaulish wine amphora. The type had a long history, probably first appearing in the 60s AD: cf. Usk fortress (Manning 1993, fig. 180, 42 and pp. 373–4) for a discussion. See also Darling in Webster and Chadderton 2002, fig. 5.39, 262. From layer 214 in latrine pit 203.
3. Butt-beaker derived jar. Fragments, not all joining, give a near complete profile of a medium necked vessel characterised by cordons, grooves and bands of rouletting. The fabric is fine, smooth, brownish-

orange with a grey core and the surfaces are dark grey, very micaceous and burnished. The general form is undoubtedly derived from the 'Gallo-Belgic' butt-beaker (e.g. Hawkes and Hull 1947, pl. 57) although our example has a simpler rim and neck. A close analogy with our vessel comes from the early fort at Dodderhill, Droitwich (Hurst 2006, fig. 19, 5.1). There is a similarly derived vessel from Kingsholm (Darling 1977, fig. 6.9, 27) although with decoration even further removed from the original beaker form. Yet another variant on the same theme comes from the Wroxeter fortress (Darling, in Webster and Chadderton 2002, fig. 5.37, 210). From basal layer 324 in inner annexe ditch 306 (and similar sherds probably from the same vessel in layer 402 in inner annexe ditch 401).

4. Beaker with rim derived from a butt beaker in abrasive, sandy, buff-cream fabric, with small traces of cream slip surviving on the surfaces. From basal layer 324 in inner annexe ditch 306.
5. Carinated beaker in Severn Valley ware, a smaller version than no. 6 (below). Vesicular orange-buff fabric. From layer 405 in inner annexe ditch 401.
6. Severn Valley ware carinated beaker in vesicular light orange fabric with grey core. An Iron Age derived shape, but which does also appear in Severn Valley ware. As Rawes 1982, fig. 7, no. 152 (probably first-century). From layer 214 in latrine pit 203.
7. Jar similar in form to a Malvernian cooking pot, with vertical burnished line decoration. Fabric is hard, rough, grey and includes siltstone rather than the metamorphic rock inclusions of the typical Malvernian fabric (see note above on siltstone in 'Malvern' pottery). This vessel is probably best considered as a local variant of the Malvern tradition. From layer 402 in inner annexe ditch 401.
8. Jar in fairly smooth but worn, powdery orange fabric with a grey core. Traces of burnishing survive on the exterior surface. Although not of Severn Valley ware, this vessel is clearly related to a Severn Valley jar form, and has the same type of shape as Usk fortress, Manning 1993, fig. 23, no. 4. The jar is decorated with a cordon at base of neck, and on the body there are bands of horizontal double grooves bordering a panel on which the decoration is no longer apparent. From fill of gully 304.
9. Severn Valley ware large jar in vesicular reddish-orange fabric with grey core, as Usk fortress, Manning 1993, fig. 24, no.7, mid to late first-century. From layer 321 in inner annexe ditch 306
10. Jar in hard-fired, vesicular grey fabric, possibly reduced Severn Valley ware or in the same tradition. From layer 403 in inner annexe ditch 401.
11. Severn Valley ware wide mouthed jar in burnished, slightly vesicular, reddish-orange fabric with a grey core. There is a closely similar vessel from the Usk fortress (Manning 1993, fig. 25, no. 4). Fill of ditch 201 bounding the south side of the *vicus*.
12. Severn Valley ware necked jar in vesicular, slightly sandy orange fabric with a grey core. This example has a cordon at the base of the neck. The general form was produced over a long period and appears from the mid first century, as seen from Usk fortress examples (Manning 1993, fig. 24, nos 1–5). From layer 215 in pit latrine 203.
13. Severn Valley ware necked jar as no.12 above, in vesicular, slightly sandy, light orange fabric with grey core Traces of burnish on the exterior. This example has a cordon at the base of the neck. From layer 406 in inner annexe ditch 401.
14. Probable dish in smooth light orange fabric, possibly originally burnished. Probably from a relatively local source, but not necessarily Severn Valley ware. From basal layer 324 in inner annexe ditch 306.
15. Terra Nigra dish in hard fine whitish fabric with polished dark grey surfaces. As Greene 1979, fig. 49, no. 11, mid to late first-century. From layer 214 in pit latrine 203.
16. Small bowl in an oxidised light orange fabric with grey core. The lower curved wall gives way to a flange with the near upright upper wall rising near its edge. Similar rims from early levels at Cirencester are from shallow bowls (Wacher and McWhirr 1982, fig. 61, 372, from a ditch back-filled in the early Flavian period). From layer 307 in inner annexe ditch 306.

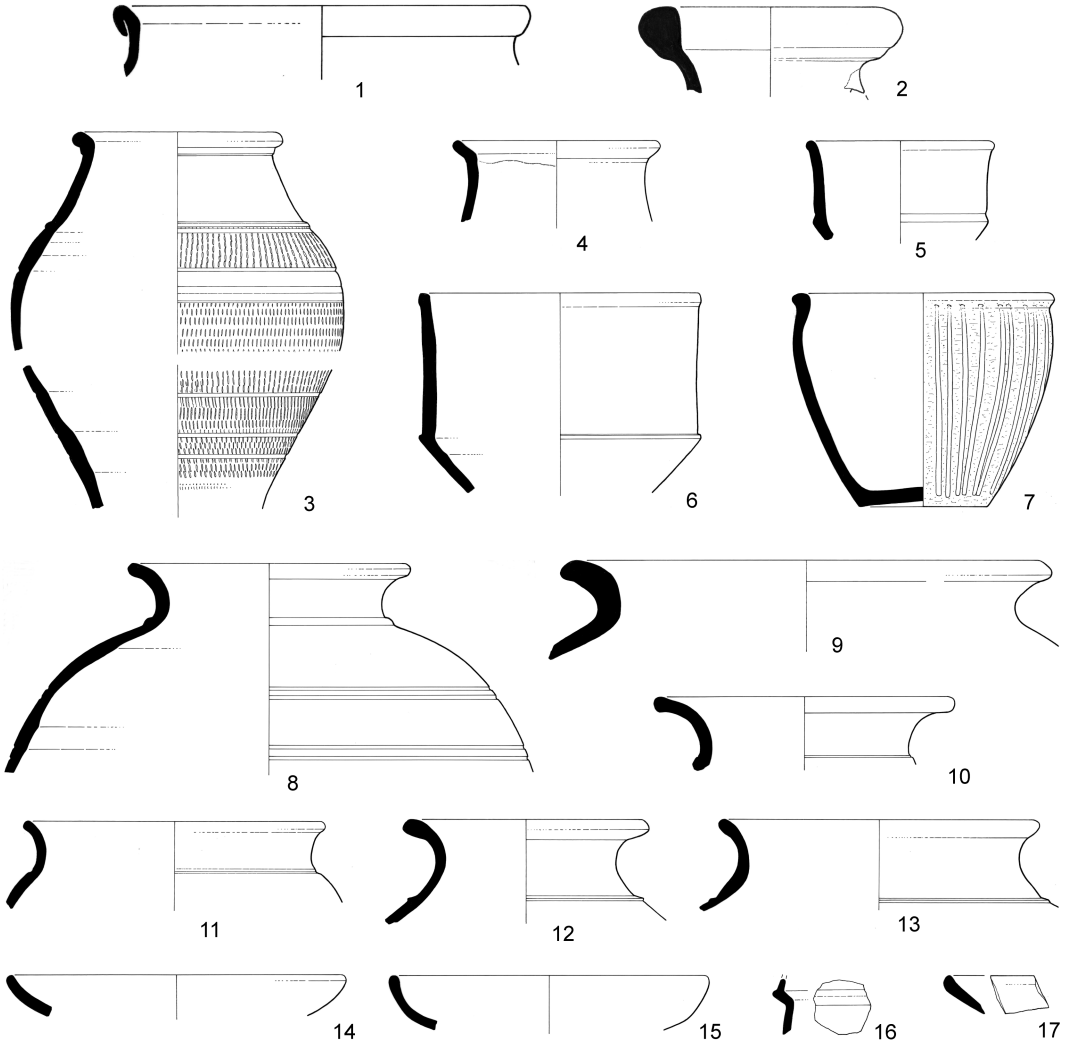


Fig. 10. Roman pottery from east annexe and *vicus*. Scale 1:4, except no. 1, scale 1:2.

17. Small rim sherd of uncertain diameter from a shallow dish in Terra Nigra, as Greene 1979, fig. 49, no. 14, mid first-century. Fabric is hard, smooth, pale grey, with darker grey polished surfaces. From layer 319 in inner annexe ditch 306.

**Hindwell Roman fort southern annexe**

Only 9 sherds (99g) of Roman pottery was found during excavations in the southern annexe of the fort during trial excavations in 2011. They included a rim from a Black-burnished ware cooking pot as Gillam 1976, no. 11, late third- to early fourth-century (unstratified in Fig. 8, trench 6.9) and one or two further probable Black-burnished ware sherds from Fig. 8, trench 2, but no other diagnostic pottery. Five red ware body sherds from Figure 8, trenches 4 and 5, 6.2 and 6.4, include one with possible traces of a black

colour coat, source unknown, one perhaps from a large jar and two probably from Severn Valley ware vessels

**Romano-British settlement near Four Stones Buildings**

A total of 277 sherds (4931g) of Roman pottery was recovered from the fills of Roman ditches 2 and 5 forming part of a possible later Roman-British settlement site near Four Stones Buildings. In general the vessels are surprisingly intact, with some complete profiles present, perhaps suggestive of deposition very close to the site of their usage. The majority of the sherds (56%) present are from Severn Valley ware vessels and represent at least six wide-mouthed jars (nos 2–7), a warped jar and two tankards (nos 8–9), all of third- to fourth-century date. Black-burnished ware (BB1) accounted for 41% of the sherds, all of which were from cooking pots, with the exception of an oval dish (no. 11) of mid to late third-century date, and three small sherds from undecorated dish or bowl forms. The cooking pots (see no. 10) represented a minimum of two vessels with oversailing rims, as Gillam 1976, nos 11–12 and obtuse-angle lattice decoration, suggesting a date in the late third to early fourth century. An Oxford mortarium (no. 13) and another possible mortarium (no. 12) similar to Oxford forms, are also probably of third-century date. Just five small sherds of Central Gaulish samian were recovered, which include a bowl possibly of mid to late second-century date and a fragment of form 31.

**Catalogue of vessels from Romano-British settlement near Four Stones Buildings** (Fig. 11)

1. Severn Valley ware jar with warped rim in hard fired orange brown fabric with grey core, as Webster 1976, no. 10, third/fourth-century. From fill of ditch 3.
2. Severn Valley wide-mouthed jar, as Webster 1976, no. 29, third/fourth-century, but with short neck. Hard orange brown fabric with grey core. From fill of ditch 3.
3. Wide mouthed jar in Severn Valley ware. The form approximates to Webster 1976, no. 22, but the neck is proportionally shorter suggesting a slightly later date, while the rim is more rounded. Similar vessels are found at Astley, from third/fourth-century contexts (Walker 1958, nos 113 and 121). Probably third-century. Orange brown fabric with grey core. From fill of ditch 3.
4. Severn Valley ware wide-mouthed jar in fairly hard orange fabric, as Webster 1976, nos 23–25, probably third-century. From fill of ditch 3.
5. Wide -mouthed jar in hard brownish-orange fabric, as Webster 1976, no. 23, mid to late third-century, but rim has sharp chiselled appearance. From fill of ditch 3.
6. Severn Valley ware wide-mouthed jar in hard orange fabric, as Webster 1976, no. 27, late third/fourth-century. From fill of ditch 3.
7. Severn Valley ware wide-mouthed jar in hard brownish orange fabric, as Webster 1976, no. 23, mid to late third-century. From fill of ditch 3.
8. Plain Severn Valley ware tankard in hard orange fabric with grey core, as Webster 1976, nos 43–44, third/fourth century. From fill of ditch 3.
9. Plain Severn Valley ware tankard in hard orange fabric with grey core, as Webster 1976, nos 43–44, third/fourth-century. From fill of ditch 5.
10. Black-burnished ware cooking pot, with obtuse-angle lattice as Gillam 1976, nos 11–12, late third- to early fourth-century. From fill of ditch 3.
11. Oval shaped dish in Black-burnished ware, with intersecting arc decoration on the body and loops under the base. As Gillam 1976 no. 80, mid to late third-century.
12. Probable mortarium in fairly hard pink fabric with a filler which includes fragments of clay, fired red. A few sparse rounded quartz-like grits on the internal surface are probably the remains of the trituration grits. The form resembles that produced in the Oxford region between the late second and

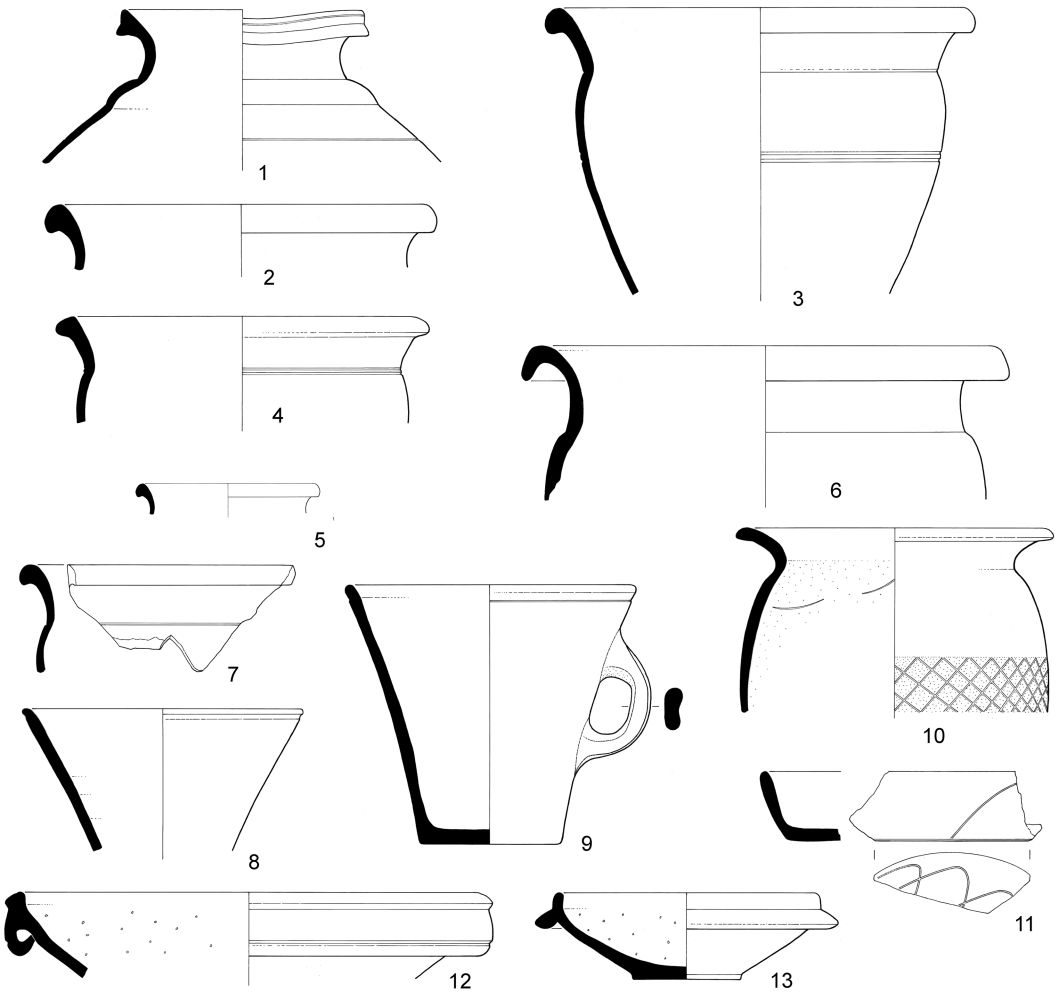


Fig. 11. Roman pottery from the settlement site near Four Stones Buildings. Scale 1:4.

mid third century (cf. Young 1977, M11). Although this is not an Oxford product, a third-century date seems reasonable and a local source likely. From fill of ditch 3.

13. Oxford mortarium as Young 1977, M17, AD 240–300, in dull cream fabric with translucent pink and brown quartz over the surfaces. From fill of ditch 3.

## ROTARY QUERN

Half of the upper stone from a rotary quern (not illustrated) was recovered from ditch 3 in the probable Romano-British settlement near Four Stones Buildings (Fig. 9a). The quern, which was made from sandstone, had a diameter of 560mm, with the upper stone being slightly concave internally, with

bi-directional grooving, and convex externally. The central hole for the pivot is flanked by two smaller holes which could have been used for either the wooden turning handle, or as grain feeds.

## METALWORKING RESIDUES

**Smithing waste**

A small quantity of smithing waste was recovered from a number of first-century contexts. These are principally layers 214, 215 and 216[101] within the large latrine pit 203 in the *vicus* area (Fig. 7d), the upper fill (402) of inner ditch 401 of the eastern annexe to the north of the annexe entrance, and the lower fill (324) of the inner ditch 306[102] south of the entrance (Fig. 7c). The waste included some plano-convex hearth bottom slags as well as some vitrified clay hearth lining (Mark Walters pers. comm.)

**Possible crucible fragment**

From the truncated surface of the barrow mound (context 7) came a single small and vitrified sherd (not illustrated) resembling, for example, the lug of pre-conquest crucibles from Llwyn Bryn-dinas (Monts.) (Musson *et al.* 1992, fig. 3, no. 28) and Old Oswestry (Shrops.) (Northover 1994, fig. 12), which may indicate copper-alloy metalworking.

## RADIOCARBON DATING

The following AMS dates are from Roman contexts in the Walton Basin. Sample identifications are by Lorne Elliott, Archaeological Services, Durham University. The calibration ranges have been determined using OxCal4.3.

MILITARY FIELD OVEN ADJACENT TO HINDWELL MARCHING CAMP
**SUERC-52855**
*Context*: 10, fill of field oven
*Sample*: charred hazel nutshell
*Conventional radiocarbon age*: 1927±29 BP
*Calibrated results at 95.4% probability*: cal. AD 7–132

**SUERC-52856**
*Context*: 18, fill of stokehole
*Sample*: charred hazel nutshell
*Conventional radiocarbon age*: 1997±28 BP
*Calibrated results at 95.4% probability*: 51 cal. BC – cal. AD 67

HINDWELL VICUS: CURVING GULLY
**SUERC-43283**
*Context*: 205, fill of gully 205
*Sample*: hazel charcoal
*Conventional radiocarbon age*: 1974 ± 29 BP
*Calibrated results at 95.4% probability*: 43 cal. BC – cal. AD 79

## CHARRED PLANT REMAINS AND CHARCOAL FROM ROMAN SITES IN THE WALTON BASIN

By Astrid E. Caseldine and Lorne Elliot

This report is a summary of a number of relatively small analyses of charred plant remains and charcoal from Roman contexts in the Walton Basin undertaken partly for the purpose of palaeoenvironmental study and partly for the identification of suitable material for radiocarbon dating. Many of the samples appear to belong to the conquest period: those from Walton marching camp II and a military field oven adjacent to Hindwell marching camp date probably belong to the period *c*. AD 55–69 whilst samples from the annexe and *vicus* associated with Hindwell Roman fort probably date to the period up to *c*. AD 75. The

samples from the settlement site near Four Stones Buildings probably date to the third- to fourth century AD. See the archive reports for individual sites referenced below for further information, including details of methodology, reference material and in some instances for further detail of the habitat preferences of the species identified.

**Walton marching camp II** (AEC)
Samples were examined from the primary (context 30) and secondary (context 29) fills of the marching camp ditch (Caseldine, Bale and Griffiths 2012). The only plant remains that were identified from sample 108 (context 29) were a charred grass seed and fragments of charred stem (Table 2). The only other identifiable remain from the marching camp ditch was a charred stem from sample 109 (context 30). Charcoal identified from one of one of the layers of ditch fill (29) was of oak (*Quercus* sp.) and willow/poplar (*Salix*/*Populus*) (Table 3).

**Military field oven adjacent to Hindwell marching camp** (LE)
Samples were examined from the fill (10) of oven 16 dug into a Bronze Age round barrow next to the Hindwell Roman marching camp, and the fill (18) of its associated stokehole 17 (Elliot 2014a; 2014b). Plant remains identified from the fill of the oven included heath-grass (*Danthonia decumbens*), sedges (Cyperaceae) and grasses (Poaceae) and hazelnut (*Corylus avellana*) shell fragments from the fill of both the oven and the stokehole (Table 2). The small quantities prevent any meaningful interpretations concerning the use of the oven, though the remains of heath-grass and sedges grass, which are typical of sandy or peaty, often damp heathy grassland, may have resulted from material used to seal, or clamp, the oven. The presence of charred fragments of hazel nutshell may suggest their use as a wild-gathered food, or they may have been brought in with wood used for fuel.

Charcoal identified from the oven was predominantly of hazel (*Corylus avellana*), ash (*Fraxinus excelsior*) and Maloideae (hawthorn, crab apple etc.), but also included smaller quantities of oak (*Quercus* sp.), blackthorn (*Prunus spinosa*), and gorse/broom (Fabaceae) (Table 3). Much of the material was present in the <4mm fraction, though whether this is a result of certain activities during burning or due to the fragmentary nature of the ash charcoal and post-depositional processes is uncertain. The predominance of Maloideae, hazel and ash charcoal may suggest the deliberate selection of these species for their fuel quality, since all of these types produce good firewood. Much of the ash charcoal appeared to be the remains of large calibre branchwood or stemwood. Many of the fragments comprised very narrow growth rings indicating slow growth. The hazel fragments from the oven (context 10) were predominantly of stemwood, rather than branchwood, possibly indicating its use not only as firewood but also in the structure of the oven.

Much of the charcoal and charred plant macrofossil remains recovered from the samples are from species typical of open scrub and often damp heathy grassland. Obvious signs of woodland management were absent from the samples.

**Hindwell Roman fort eastern annexe and *vicus*** (AEC)
Samples were examined from the innermost annexe ditch (306), a ditch (302) running along the southern side of the Roman road through the entrance to the annex, and a possible latrine pit 203 and gully 205 within the *vicus* (see full report in Caseldine and Griffiths 2013a).

The identified charred plant remains are given in Tables 1–2. Remains from the fills of the innermost annexe ditch (306) were scarce but included emmer/spelt wheat chaff and a grain only determinable to wheat/barley from the basal fill (324), wheat grain, including spelt, layer 323 above, and grains of hulled barley and wheat from layer 321. Straw nodes occurred in samples from layers 321 and 324 while oat/

Table 1. Charred cereal remains from Hindwell Roman fort eastern annexe and *vicus*

| Feature | inner annexe ditch | | | ?latrine pit in *vicus* | | | | | road ditch |
|---|---|---|---|---|---|---|---|---|---|
| Feature | 306 | 306 | 306 | 203 | 203 | 203 | 203 | 203 | 302 |
| Context | 321 | 323 | 324 | 214 | 215 | 216 | 219 | 223 | 344 |
| Sample | 1010 | 1011 | 1012 | 1018 | 1026 | 1015 | 1025 | 1024 | 1023 |
| *Avena strigosa*/*A. sativa* (bristle oat/oat) – floret base | – | – | – | – | 2 | – | – | – | – |
| *Avena* spp. (oat) | – | – | – | 1 | 6 | 1 | 1 | – | – |
| cf. *Avena* sp. | – | – | – | – | – | – | – | – | 1 |
| *Avena* sp./Poaceae (oat/grasses) | 2 | – | – | – | – | 1 | – | – | – |
| *Hordeum vulgare* L. (six-rowed barley) rachis | – | – | – | 1 | – | – | – | – | – |
| *Hordeum* sp. hulled – straight grain (barley) | 1 | – | – | 10 | 40 | – | – | – | – |
| *Hordeum* sp. hulled – twisted grain | – | – | – | 6 | 42 | 1 | 3 | – | 1 |
| *Hordeum* sp. hulled – twisted and sprouted grain | – | – | – | – | 1 | – | – | – | – |
| *Hordeum* sp. hulled – indet. grain | – | – | – | 4 | 7 | – | – | – | – |
| *Secale cereale* L. (rye) | – | – | – | – | – | – | 2 | – | – |
| cf. *Secale cereale* L. | – | – | – | – | – | – | 1 | – | – |
| *Triticum dicoccum*/*T. spelta* (emmer/spelt wheat) – glume bases | – | – | 1 | – | – | – | 1 | – | – |
| *Triticum dicoccum*/*T. spelta* – rachis | – | – | 1 | – | – | – | – | – | – |
| *Triticum spelta* – spikelet fork | – | – | – | – | 1 | – | – | – | – |
| *Triticum spelta* – glume bases | – | – | – | 3 | 5 | 7 | – | – | – |
| *Triticum spelta* – grain (spelt wheat) | – | 1 | – | 5 | 124 | 9 | 1 | – | 1 |
| cf. *Triticum spelta* – immature grain | – | – | – | – | 3 | – | – | – | – |
| *Triticum aestivum* – grain (bread wheat) | – | – | – | – | 38 | – | – | – | – |
| *Triticum* sp. – grain (wheat) | 1 | 1 | – | – | – | 1 | 4 | – | – |
| *Triticum* sp. – tail grain | – | – | – | – | – | – | 1 | – | – |
| *Triticum* sp./*Hordeum* sp. – grain | – | – | 1 | – | – | – | – | – | – |
| Cerealia indet. | – | 1 | – | 5 | 7 | 7 | 3 | – | 1 |
| Cerealia/parenchymatous frags indet. | – | – | 5 | – | – | – | – | – | – |
| Straw nodes | 1 | – | 1 | – | – | – | – | – | – |

grass and brome caryopses, a possible legume seed and a hazelnut shell fragment occurred and grass seeds were present in these layers.

Charred plant remains were plentiful in the possible latrine pit 203 within the *vicus* and dominated by cereal remains which included hulled barley, spelt wheat, oats and rye, as well as brome caryopses, but mineralisd and waterlogged plant remains indicative of a latrine failed to survive. Remains were relatively scarce in samples from three of the lower layers (216, 219, 223) but included rye, smooth tare (*Vicia tetrasperma*), vetches/peas, vetchlings (*Vicia* sp./*Lathyrus* sp.) and hazelnut shell fragments. The charred remains probably represent waste material deliberately used as fuel, although the grain might have been

Table 2. Charred plant remains from Hindwell Roman fort eastern annexe and *vicus*, Walton marching camp II, a field oven adjacent to Hindwell marching camp, the inner annexe ditch to the east of Hindwell Roman fort, and a latrine pit and road ditch in the *vicus* to the east of the fort

| Feature | marching camp ditch | | field oven | | inner annexe ditch | | | ?latrine pit in *vicus* | | | | | road ditch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Feature | 25 | 25 | 16 | 17 | 306 | 306 | 306 | 203 | 203 | 203 | 203 | 203 | 302 |
| Context | 29 | 30 | 10 | 18 | 321 | 323 | 324 | 214 | 215 | 216 | 219 | 223 | 344 |
| Sample | 108 | 109 | 127 | 128 | 1010 | 1011 | 1012 | 1018 | 1026 | 1015 | 1025 | 1024 | 1023 |
| *Corylus avellana* L. (hazel) – shell frags | – | – | 3 | 1 | 1 | – | – | – | – | 8 | 1 | – | 2 |
| *Rumex acetosella* L. (sheep's sorrel) | – | – | – | – | – | – | – | 1 | – | – | – | – | – |
| *Rumex* sp. (docks) | – | – | – | – | – | – | – | – | 1 | – | – | – | – |
| cf. *Rubus* sp. (bramble) | – | – | – | – | – | – | – | 1 | – | – | – | – | – |
| *Vicia tetrasperma* (L.) Schreber (smooth tare) | – | – | – | – | – | – | – | – | – | 2 | – | – | – |
| *Vicia* sp. / *Lathyrus* sp. vetches, peas, vetchlings) | – | – | – | – | – | – | – | – | – | 1 | – | – | – |
| cf. *Vicia* sp. / *Lathyrus* sp. | – | – | – | – | 1 | – | – | – | – | – | – | – | – |
| *Plantago lanceolata* L. (ribwort plantain) | – | – | – | – | – | – | – | 1 | – | – | – | – | – |
| *Galium aparine* L. (cleavers) | – | – | – | – | – | – | – | 1 | – | – | – | – | – |
| cf. Galium spp. (bedstraws) | – | – | – | – | – | – | – | 2 | – | – | – | – | – |
| *Bromus* sp. (bromes) | – | – | – | – | 1 | – | – | 1 | 25 | 3 | 6 | – | – |
| *Danthonia decumbens* (L.) DC. (heath-grass) | – | – | 3 | – | – | – | – | 1 | – | – | – | – | – |
| Cyperaceae (sedges) nutlet | – | – | 1 | – | – | – | – | – | – | – | – | – | – |
| Poaceae (grasses) | 1 | – | 1 | – | – | – | 1 | 2 | 1 | – | – | – | – |
| Poaceae frags | – | – | – | – | – | – | 3 | – | – | – | – | – | – |
| Rhizome / stem frags | 1 | 1 | 3 | – | – | 1 | – | 2 | 2 | – | – | – | – |
| cf. Rhizome | – | – | – | – | 1 | – | – | – | – | – | – | – | 1 |
| Organic indet. | – | – | – | – | – | – | – | – | – | 2 | – | – | – |
| Wood charcoal | + | + | + | + | + | + | + | + | + | + | + | + | + |

+ = present

charred accidentally. One of the middle layers (215) contained substantial amounts of cereal grain. Spelt wheat dominated the assemblage followed by hulled barley and bread wheat and a small amount of oat. As well as grain, glume bases and a spikelet fork of spelt, oat chaff, dock (*Rumex* sp.) and grass seeds were present and brome caryopses relatively frequent. The oat chaff, floret bases of oat/bristle oat, indicates that cultivated oat was being grown. Also, one of the barley grains had sprouted but there is no other evidence to suggest that the charred cereal represents the remains of a spoiled crop deliberately burnt or that the remains indicate malting was taking place. The dominance of grain in the assemblage suggests that the assemblage represents cereal that had been largely processed, apart from the removal of some larger seeds

such as brome. The barley and bread wheat might have been 'contaminants' of a spelt crop or the different cereals might have become mixed together post processing. Hulled barley dominated the assemblage from layer 214 immediately above this which included a barley rachis. The sample also contained a few grains and glume bases of spelt and an oat caryopsis. The weed assemblage was slightly more extensive than in the previous samples and, as well as brome, included sheep's sorrel (*Rumex acetosella*), ribwort plantain (*Plantago lanceolata*), cleavers (*Galium aparine*), heath grass (*Danthonia decumbens*) and grass seeds. In addition a possible bramble (*Rubus* sp.) seed was present. The charred assemblage from the pit as a whole probably represents waste from domestic and industrial fires and deliberate burning of crop processing waste or accidental charring during processing.

The remains indicate that spelt wheat, bread wheat, hulled barley, rye and oats were being used in the eastern annexe and *vicus* and hence probably grown in the area, assuming that the grain came from local suppliers, which seems likely. There is insufficient evidence to draw any firm conclusions about changes in crop husbandry during the period of occupation but the appearance of bread wheat in one of the middle fill samples from the pit might indicate the beginning of a shift from spelt wheat to free-threshing wheat. Similarly, the dominance of barley in the sample above might indicate a change in emphasis in the crops being grown but the assemblage is too small to justify this. Equally, the presence of rye in one of the lower fills of pit 203 could indicate a change in crop growing in the area, although there is a lack of Iron Age evidence from the Walton area with which to compare it.

Although the assemblages, particularly from pit 203, are largely dominated by processed grain with at most only some hand sorting of larger weeds, notably brome, remaining to be done, occasional glume bases and weed seeds in some of the samples might indicate that some crop processing was taking place although the evidence is slight. The current evidence suggests that processed grain, or almost totally processed grain, was brought to the annexe and *vicus,* though occasional glume bases and weed seeds in some of the samples provides slight evidence that some crop processing was taking place at the *vicus*. The predominance of cereal chaff and weed seeds rather than grain in samples from the *vicus* at Caersws (Caseldine 1996) points to the inhabitants being involved in cereal processing, if not engaged in agriculture. Davies has argued that there is no explicit evidence for the inhabitants of *vici* to be involved in agriculture (Arnold and Davies 2000, 60), although whilst cereal waste might just reflect processing it could also indicate cultivation (Caseldine 2010). Equally, if not engaged in agriculture the inhabitants of *vici* could have been involved in horticulture.

The presence of some chaff and weed seeds perhaps lends support to the view that the grain was produced locally. Wheat prefers a heavier soil with a high clay content while rye and oats, in particular, will tolerate poor soils and, along with barley, will withstand a harsher climate than wheat. The weed assemblage is too limited to provide much information about the soils cultivated, although the presence of heath grass (*Danthonia decumbens*) might hint at the cultivation of acidic soils, though it has been argued that its occurrence in acidic grassland today might be a result of an inability to compete with other species on more fertile soils (Van der Veen 1992). Its association with Iron Age and Romano-British assemblages containing spelt chaff led to the suggestion that it was an arable weed (Hillman 1981; Van der Veen 1992) and it has been recorded from a number of sites in Wales, including Tai Cochion on Anglesey (Caseldine and Griffiths 2016) and Troedyrhiw in south-west Wales (Caseldine and Griffiths 2013b). Its disappearance has been attributed to the use of the mouldboard plough during the middle to later Roman period (Hillman 1981), whereas prior to this ploughing using an ard allowed it to survive.

A small amount of charcoal was examined from three layers of fill of the possible latrine pit 203 and gully 205 within the *vicus* (Table 3). The charcoal identified from the pit was of oak and hazel, birch and ash and that from the gully of oak, ash, hazel and alder. Although the evidence is limited, the results suggest oak woodland with birch and ash and a hazel understory, or there may have been birch

Table 3. Charcoal from Walton marching camp II, a field oven adjacent to Hindwell marching camp, a latrine pit and gully in the *vicus* to the east of Hindwell Roman fort, and a ditch in the Romano-British settlement adjacent to Four Stones Buildings

| | marching camp ditch | | field oven | | latrine pit in *vicus* | | | gully *in vicus* | settlement ditch |
|---|---|---|---|---|---|---|---|---|---|
| | | | oven | stokehole | | | | | |
| Feature | 25 | 25 | 16 | 17 | 203 | 203 | 203 | 205 | 3 |
| Context | 29 | 30 | 10 | 18 | 215 | 216 | 219 | 206 | 4 |
| Sample | 108 | 109 | 127 | 128 | 1026 | 1015 | 1025 | | 1002 |
| *Ulmus* sp. (elm) | – | – | – | – | – | – | – | – | 1 |
| *Quercus* sp. (oak) | 1 | – | 3 | 1 | 1 | 4 | 3 | 3 | 6 |
| *Betula* spp. (birch) | – | – | – | – | – | – | 1 | – | – |
| *Alnus glutinosa* (alder) | – | – | – | 2 | – | – | – | 1 | – |
| *Corylus avellana* (hazel) | – | – | 35 | 1 | 3 | 1 | 1 | 1 | – |
| *Prunus spinosa* (blackthorn) | – | – | 2 | – | – | – | – | – | – |
| *Prunus* sp. (cherries/blackthorn) | – | – | 2 | – | – | – | – | – | 2 |
| *Fraxinus excelsior* (ash) | – | – | 64 | 48 | 1 | – | – | 1 | – |
| Maloideae (hawthorn, crab apple, whitebeams, wild service tree) | – | – | 88 | 12 | – | – | – | – | – |
| *Salix*/*Populus* (willow/poplar) | 1 | – | – | – | – | – | – | – | – |
| *Ulex* sp. (gorse) | – | – | – | – | – | – | – | – | 1 |
| Fabaceae (gorse, broom, greenweeds) | – | – | 8 | – | – | – | – | – | – |

and hazel scrub, in the area. Alder woodland would have occurred in wetter areas. Ash is a tree that is light-demanding and sensitive to too much shade and would have benefited from an open, agricultural environment, as indicated by the other charred plant remains.

**Romano-British settlement near Four Stones Buildings** (AEC)
Charcoal was examined from the fill of ditch 4 (Caseldine and Griffiths 2009; 2012). The assemblage contained a range of species including oak (*Quercus* sp.), elm (*Ulmus* sp.), cherries/blackthorn (*Prunus* sp.) and gorse (*Ulex* sp.) and suggests waste from a domestic fire and the use of what was readily available to hand (Table 3).

## A LANDSCAPE REVISITED

Recent assessment work has added to our understanding of the form, dating and siting of an important complex of Roman military sites in the Walton Basin and supplements the summaries published in *Roman Camps in Wales and the Marches* (2006) and *Roman Frontiers in Wales and the Marches* (2010). The four or five marching camps known in the Walton basin represent the only such grouping known in Wales.[103] Further detail has been revealed about Walton marching camp II, a possible annexe attached to Walton marching camp III, the possible Hindwell II camp, and military field ovens associated with Hindwell marching camp I — which probably all represent military campaigns during the period AD 55–75.[104] The apparent proximity of Hindwell II camp to the intersection of north–south and east–west roads as well as

Hindwell Roman fort may support the suggestion that it represents a construction camp.[105] Assessment work in the immediate environs of the fort has revealed the existence of an eastern annexe enclosing a small *vicus* settlement and a southern annexe which enclosed a possible bath-house or *mansio*. Pottery associated with the *vicus* and eastern annexe confirm that the fort and settlement were also Neronian in origin and housing an auxiliary unit continued in occupation up to a date of *c*. AD 75–80, having probably played a role as a spring-board for the Flavian offensives in Wales during the period AD 73–75.[106]

The way in which this complex of Roman camps and forts overlies an earlier landscape of Neolithic ceremonial sites appears to be due to more than coincidence and poses the question of what made the eastern side of the Walton Basin so attractive to both Roman military land surveyors and the earlier prehistoric communities who had built a causewayed enclosure, two cursus monuments and three palisaded enclosures in virtually the same area.[107] There is also the intriguing question of the extent to which this landscape of earlier ceremonial monuments would still have been visible and respected after two or three millennia. Some of the Neolithic sites in this part of the basin are exceptionally large and include, for example, the largest palisaded enclosure[108] and one of the longest cursus monuments[109] known in Britain. Walton marching camps I–III overlie the Hindwell Neolithic palisaded enclosure and avenue and the Walton Court Farm Late Neolithic ring-ditch (Fig. 2). Hindwell marching camp I overlies the Hindwell Neolithic cursus and the Hindwell palisaded enclosure (Fig. 3). The possible Hindwell II marching camp also overlies the Hindwell cursus (Fig. 6). The Hindwell Roman fort, its annexes and *vicus*, overlie both the Hindwell Neolithic palisaded enclosure and the Hindwell Neolithic double palisaded enclosure (Fig. 6).

Similar associations between Neolithic monuments and Roman military establishments are known elsewhere in Britain, notably at Meldon Bridge (Peeblesshire), where a Neolithic palisaded enclosure similar to those in the Walton Basin is overlain by a marching camp which forms part of a more extensive complex of Roman military sites.[110] At Inchtuthil (Perth and Kinross) a Neolithic long mortuary enclosure overlies a Roman legionary fortress, [111] and at Catterick (Yorks.) a Neolithic palisaded enclosure and henge lie close to the Roman fort and subsequent Roman town of *Caractonium*.[112]

The fact that the Walton Basin forms an important communications corridor between Midland England and the Welsh uplands will no doubt have influenced the siting of both prehistoric and Roman sites. The large Neolithic monuments in the basin would seem to have been created by large gatherings of nomadic or semi-nomadic peoples who came together at certain times of year as part of a transhumance cycle along this migration corridor between upland and lowlands in the Welsh borderland.[113] During the Roman conquest period it would have provided a springboard for campaigns in the heartland of Wales from military bases further east, around Leintwardine and Buckton in present-day south Shropshire and western Herefordshire, and eventually a staging point for forts further to the west, at Colwyn Castle and Castell Collen.[114] Though of lesser importance today, the route was once a significant coach road and drovers' road. More precise detail on the choice of site is provided by the Roman military tacticians Hyginus and Vegetius, who list the following ideal siting requirements of camps and forts:[115] a flat or gently sloping site, not overlooked by higher ground and avoiding woodland; a site not liable to flooding; and somewhere where sufficient supplies of firewood and animal fodder, with a river or spring to one side and water were available. Judging from the number of Roman military sites the Walton Basin clearly is likely to have met most or all these requirements in the first century AD.

There is some evidence that during the Neolithic period the floor of the basin may have been predominantly grassland and scrub.[116] As yet there is only limited evidence of environmental conditions in the later prehistoric period the charred plant remains and charcoal recovered from excavated enclosure sites (see below) suggest an open landscape in the valley bottom at the time of the conquest, characterized by grassland, heath and scrub rather than dense woodland.

Access to water — for domestic purposes in the Roman period though possibly for religious purposes during the Neolithic — seems to have been one of the most significant factors affecting the location of the sites. As noted in the introduction, the Knobley Brook and Riddings Brook to either side of the valley run all year but the Summergil Brook dries up each summer on the western side of the valley, remerging as a series of springs near Hindwell Pool on the east (Fig. 1). The stream dries up close to the medieval town of New Radnor, which appears to have been one of the important factors influencing the siting of the town. The distribution of Neolithic monuments, like similar instances elsewhere, appears to reflect the hydrology, especially in the case of the three palisaded enclosures,[117] which suggests a special reverence for streams and springs. The Roman military sites follow a similar pattern. Walton marching camps I–III lie parallel with and within *c*. 150m of the Ridding Brook. Hindwell I marching camp and the possible Hindwell II marching camp may both be orientated upon the spring which feeds Hindwell Pool, *c*. 200–300m away. Hindwell Roman fort lies immediately next to a series of springs, its southern annexe seemingly enclosing the spring which feeds the Hindwell Brook, whose course must have been accommodated by the annexe defences. The annexe encloses the possible bath-house or *mansio* identified by geophysical survey, which may have been fed by a leat from such a spring. Small-scale excavations here in 1975 suggests an association with what appear from the following description by Frank Noble to be Roman water management features.[118]

> After making several test-holes, which showed evidence of occupation but no trace of permanent features, we a last came to a place where there was an abundance of broken tile fragments—hypocaust, curved and flanged tiles mixed together—filling one end of an artificial clay basin, five feet broad [1.5m], eleven feet long [3.3m], and eighteen inches deep [0.4m]. This peculiar feature overlay the infilling of a trench which had been cut four feet deep [1.2m], and six feet wide [1.8m], in the gravel of the site.

Apart from the coincidental relationships between prehistoric ceremonial sites and Roman military sites other relationships appear to have been deliberately contrived. Hindwell barrow II, most probably or Late Neolithic or Early Bronze Age date, was clearly respected in the setting out of Hindwell marching camp I. Similar relationships have been noted in the case of a barrow and ring-ditch adjacent to the marching camp at Llanfor (Mer.)[119] and in the case of round barrow ring-ditches and marching camps at Bromfield and Stretford Bridge (Shrops.).[120] The Hindwell barrow was also used for siting out at least twelve Roman military field ovens which, probably for fire safety, were set out radially on the sides of the barrow away from the defences (Fig. 3). As noted above, at least two ovens had also been dug into the top of the Hindwell Ash barrow[121] which might similarly be associated with the possible Hindwell II marching camp and therefore also belong to the conquest period. Ovens of the kind represented at the Hindwell II and Hindwell Ash barrows are generally thought to have been used for baking, the absence of cereal remains being not unusual.[122] Ovens have rarely been found outside camps and forts, however. They are typically sited in the intervallum area, tucked into the rear of the rampart or former rampart,[123] as in the case of a small cluster within the Bromfield marching camp which are set in a line about 4m inside the marching camp ditch.[124] A line of three ovens at Brompton happen to fall inside an Early Bronze Age ring-ditch which appears to have been respected during the setting out of the marching camp, but since it is unknown whether the ring-ditch had a central mound, the siting of the ovens here might be coincidental.[125]

The discovery of a possible crucible fragment of Iron Age form at the surface of Hindwell II barrow may be significant. Iron Age crucible forms appear in early Roman contexts elsewhere[126] and it is therefore possible that some of the hearths identified by geophysical survey in the top of the Hindwell

round barrow may have been associated with copper-alloy metallurgy. Evidence of iron-working has been found in association with the marching camp ditch at Bromfield (Shrops.)[127] and possibly in association with an oven at the Kintore (Aberdeenshire) marching camp.[128] An association between Bronze Age burial monuments and later non-ferrous metallurgy is known elsewhere, as for example, the Iron Age hearth possibly to be associated with a crucible fragments identified in the edge of a Bronze Age round barrow within the Four Crosses (Monts.) barrow cemetery,[129] and the sunken hollow in the top of the primary burial at the centre of the Sarn-y-bryn-caled Bronze Age timber circle (Monts.), in which a hearth associated with Iron Age copper-alloy metalworking residues were found.[130] In each of these instances the siting may have been designed to make use of a pre-existing pit or mound to help create a flue shaft.

As noted above, there are grounds for arguing that a Roman road bypassing the Hindwell fort skirted the northern side of the Hindwell barrow II, following the northern side of the Hindwell palisaded enclosure still visible as a hollow resulting from the decay of the substantial timbers that it had held several millennia earlier. The outer palisade of the Hindwell double palisade was evidently also still visible as a hollow in the ground where it ran through the southern annexe of the Hindwell fort.

The Roman road emerging from the west gate of the Hindwell fort may also have been deliberately sited to run past both Hindwell barrow I and the Four Stones stone circle. Similar relationships between Bronze Age barrows and Roman roads have been noted elsewhere, as for example that between the large Crugyn barrow, St Harmon (Radns.)[131] and the Roman road from Castell Collen to Caersws. This appears to mirror the pattern of Roman cemeteries which were frequently sited alongside roads Roman outside Roman forts, as at Tomen y Mur (Caerns.) and elsewhere.[132] Whilst a certain reverence appears to be shown to pre-existing ceremonial and burial sites though they also provided convenient humps and bumps that reused for a variety of everyday purposes in what may otherwise have been an otherwise fairly featureless landscape.

As well as this legacy of earlier prehistoric ritual and burial monuments it is probable that the Roman military sites in the Walton Basin were also imposed upon a confiscated agricultural landscape of scattered farmsteads characterized by small ditched enclosures. About 25 such enclosures are known within the basin from aerial photography in addition to two hillforts on the hills to the east of the basin.[133] The earliest of these enclosures, like the curvilinear enclosure at Rough Close, have been shown to be of Early Bronze Age date.[134] A majority, however, are rectangular or sub-rectangular in shape and likely on morphological grounds to be Iron Age or Roman in date, such as those just in the vicinity of the Walton marching camps (Fig. 2a). Two excavated sites, Hindwell enclosure I[135] and the Hindwell trapezoidal enclosure inside Hindwell marching camp I (see above) have both been shown to be of Iron Age in date. It is uncertain whether either of these were still been in occupation at the time of the Roman conquest but, as noted above, the identification of spelt wheat at the Hindwell trapezoidal enclosure[136] suggests that local native farms may have helped to provision the Roman army during the conquest period. Iron Age cereals have also been identified in a pit found inside the Womaston Neolithic causewayed enclosure, about 400m to the north-east of Hindwell fort.[137] Supplies of processed grain which may have been obtained from local farms or ones further afield, are represented in the charred plant remains from the *vicus* attached to the fort (see report above by Caseldine and Elliot).[138]

A settlement in the post-conquest period has been identified to the south of Four Stones Buildings (see above), associated with third- and fourth-century pottery. Later Roman activity of some kind is also suggested by pottery of this date found in the southern annexe of the fort. The form of the Four Stones Buildings settlement is uncertain but may have taken the form of an enclosed farmstead which overlaps the Hindwell Neolithic cursus. The original earthworks associated with the Hindwell cursus must have been reasonably substantial but they appear to have had surprisingly little impact upon the layout of the landscape in the later prehistoric and Roman periods. By contrast, the much slighter cursus monument at

Walton Green, *c*. 500m to the east of the Walton marching camp, clearly influenced the siting of three or four rectilinear enclosures between *c*. 35m and 80m across which are set out along it.[139] These enclosures are undated but seem likely on the basis of shape and size to be of Iron Age or Romano-British date. A number of other earlier prehistoric sites evidently remained visible in the landscape into the later Iron Age and Roman periods. The upper fill of the Early Bronze Age enclosure at Rough Close has produced a radiocarbon date of 200 cal. BC – cal. AD 130 (SWAN-22; 2010±70 BP)[140] and a hearth (or possibly a corn-drying kiln) in the top of the Upper Ninepence barrow,[141] dated to cal. AD 230–590 (SWAN-115; 1640±70 BP), produced abundant charred wheat and barley grains[142] (see location of both these sites on Fig. 1).

The double-ditched cropmark enclosure with a single entrance known as the Harpton signal station (Fig. 9b)[143] lies just over 2 kilometres to the west of Hindwell fort (see location on Fig. 1). Its form is quite distinct compared to other ditched enclosures in the valley and encloses an area only *c*. 10m across internally. It is undated but compares in size and shape with several Roman fortlets, as for example, those at Hafan (Monts.), Penmincae (Radns.) and Pen y Crochbren (Monts.),[144] or with practice camps, such as Llandrindod Common camp X (Radns.),[145] though the latter normally have multiple entrances.

A revival in the ritual significance of the springs on the eastern side of the Walton Basin is suggested by the cluster of third- to fourth-century Roman coins (see coin report) found during the dredging of the pond *c*. 80m to the north of Hindwell fort (Fig. 60), possibly representing votive offerings of a kind frequently associated with watery places in the Roman world.

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Project archives have been retained by CPAT, while the finds from the excavations have all been deposited with Radnorshire Museum, Llandrindod Wells.

## NOTES

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3. Archaeological Services, Durham University, Green Lane, Durham DH1 3L.
4. CPAT.
5. CPAT.
6. Department of Archaeology and Numismatics, National Museum Wales.
7. Davies and Jones 2006.
8. Burnham and Davies (eds) 2010.
9. Britnell and Jones 2018; Jones and Gibson 2017.
10. Dwerryhouse and Miller 1930, 96.
11. Davies and Jones 2006, 139–41.
12. R. H. Jones 2012, 42.

13. Clwyd-Powys Archaeological Trust (CPAT), Historic Environment Record (HER) 375.
14. CPAT HER 373A.
15. CPAT HER 371; SO 2533 5990; Davies and Jones 2006, 139–40.
16. Jones 2010; Britnell and Jones 2012b, 180–3.
17. Davies and Jones 2006, 22–5.
18. CPAT HER 370; SO 2553 5993; Davies and Jones 2006, 139–41.
19. CPAT HER 122826, suggested by Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW) air photograph 995067-44.
20. Davies and Jones 2006, 20; R. H. Jones 2012, 101–6.
21. Hankinson and Grant 2015, 8–9.
22. CPAT HER 313; Jones and Davies 2006, 137–8.
23. Cf. the interpretations in Jones and Davies 2006, 33, 138.
24. Unexcavated enclosures are the possible Hindwell Ash square enclosure (CPAT HER 33155; SO 24980 61053) and the Hindwell I enclosure (CPAT HER 19358; SO 25013 60719).
25. CPAT HER 11442; SO 2505 6065; Jones 2014b.
26. Samples charred remains of short-lived species from the enclosure ditch have been calibrated at 95% probability to 193–46 cal. BC (SUERC-52858) and 192–42 cal. BC (SUERC-52863): Jones 2014b, 12.
27. Elliot 2014c.
28. Cf. Davies and Jones 2006, 32.
29. CPAT HER 19376.
30. CPAT HER 33109.
31. Britnell and Jones 2018.
32. CPAT HER1073; SO 24914 60930; Gibson 1999a, 7.
33. Davies and Jones 2006, 138.
34. R. H. Jones 2012, 40–1.
35. Section across of the Hindwell palisaded enclosure: Gibson 1999, 14–16.
36. Intersection of the Hindwell cursus and the Hindwell palisaded enclosure: Jones 2012a; Jones and Davies 2017; Britnell and Jones 2018.
37. Sections across the Hindwell trapezoidal enclosure: Jones 2014b.
38. CPAT HER 309; SO 2522 60918.
39. Becker 1999, 49 and fig. 25; Britnell 2013, 44; Musson 2013, 32.
40. Jones and Gibson 2017, fig. 9; Britnell and Jones 2018, fig. 15.
41. Becker 1999, 52.
42. Jones 2014a.
43. Hughes *et al.* 1995, fig. 14.
44. Kenney and Parry 2012, 253–261.
45. R. H. Jones 2012, 96.
46. CPAT HER 122794; SO 2556 6087.
47. Davies and Jones 2006, 138
48. Hankinson and Grant 2015.
49. See Davies and Jones 2006, 22–4.
50. CPAT HER 307; SO 2570 6112; Gibson 1999a, 23, 25 and fig. 20.
51. Gibson 1999a, 141 and table 38, contexts F5 and F6.
52. 1970±60 BP (CAR-1481); Gibson 1999a, 25.
53. CPAT HER 315; SO 258 606; Silvester 2010, 248–9.

54. Pye 1979.
55. Becker 1999, fig. 24.
56. Burnham and Davies (eds) 2010, 103–117.
57. Ibid. 249.
58. Ibid. 217–9, fig. 7.44.
59. Jones 2012b.
60. Cf. dimensions of fort gates given in Burnham and Davies 2006, 71–2.
61. Jones 2012b.
62. Hankinson 2011.
63. CPAT HER 316.
64. Noble 1957, 69.
65. Ibid.; Davies 1999, 69.
66. Cf. Jones 2012b, 4.
67. Burnham and Davies (eds) 2010, 206–7.
68. Ibid. 212.
69. Cf. Burnham and Davies (eds) 2010, fig. 5.7.
70. Jones 2011; Hankinson 2011; Jones and Hankinson 2014.
71. The palaeochannel just to the east of the trench is probably much earlier and may have represented the course of the Summergil Brook at the time when the Neolithic palisaded enclosure was constructed. Although the annexe ditch is not shown crossing the palaeochannel in the geophysical survey this is thought to be because the fills are magnetically too similar. The angled south-east corner of the annexe shows that it was contemporary with the present-day watercourse.
72. Hankinson 2011.
73. Ibid.
74. Jones 2011.
75. Jones and Gibson 2017, fig. 15.
76. Hankinson 2011.
77. CPAT HER 334124; Evans *et al*. 2010, 328, RRN 14.
78. Silvester and Toller 2010, 94 and fig. 4.3, RR6c.
79. See Davies 1999, 70; Daniels *et al.* 1971, 41–2.
80. Becker 1999, fig. 21.
81. Britnell and Jones 2012b, fig. 7; Jones and Gibson 2017, figs 8–9.
82. Davies 1999, 70.
83. Gibson 1999a, fig. 15; Jones and Gibson 2017, 42–3.
84. CPAT HER 122793.
85. Becker 1999, fig. 23.
86. CPAT HER 33148; SO 25875 60737.
87. Cf. Silvester and Toller 2010, 97.
88. CPAT HER 141965-67; SO 246 606; Jones 2009a, 9–16; Britnell and Jones 2018, fig. 15.
89. CPAT aerial photograph 89-MB-0964; CPAT HER 33108; SO 24674 60660; Silvester and Hankinson 2006.
90. C. H. V. Sutherland, *Roman Imperial Coinage* 1, 343; H. A. Seaby, *Roman Silver Coinage*, 438; H and R. A. G. Carson, *Coins of the Roman Empire in the British Museum*, 74–5 = H. Grueber, *Coins of the Roman Republic in the British Museum*, Rome 4592–3.
91. CPAT HER 132141, SO 25000 60667.
92. Find reported to the Portable Antiquities Scheme; CPAT HER 119635, SO 25 61.

93. H. Grueber, *Coins of the Roman Republic in the British Museum*, 4110; E. A. Sydenham, *The Coinage of the Roman Republic*, 1002.
94. CPAT HER 120012; SO 26 61. Find reported to the Portable Antiquities Scheme (PAS).
95. CPAT HER 120011; SO 26 61. Find reported to the PAS.
96. CPAT HER 122180; SO 26 61. Find reported to the PAS.
97. CPAT HER 120065–69; SO 26 26 Find reported to the PAS.
98. CPAT HER 122178; SO 2576 6035.
99. CPAT HER 119493; SO 25 60.
100. CPAT HER 122177; SO 2606 6052.
101. See also material from contexts 214 and 216 noted in Caseldine and Griffiths 2013a.
102. Ibid.
103. Davies and Jones 2006, 35.
104. Ibid. 37–9.
105. See comments in R. H. Jones 2012, 24.
106. Burnham and Davies 2010, 43.
107. Jones 2009b; Jones and Gibson 2017; Britnell and Jones 2018.
108. Jones and Gibson 2017.
109. Britnell and Jones 2018.
110. Burgess 1976.
111. Barclay and Maxwell 1991.
112. Hale *et al.* 2009; Wilson 1996.
113. Jones and Gibson 2017, 81; Britnell and Jones 2018, 56–8.
114. Davies and Jones 2006, fig. 29; Burnham and Jones 2010, fig. 2.4.
115. The following summary is drawn from Davies and Jones 2006, 11–14.
116. Britnell and Jones 2018.
117. Jones and Gibson 2017, 73–4.
118. Noble 1957, 69.
119. Davies and Jones 2006, 121–2; Burnham and Davies (eds) 210, fig. 7.84.
120. Davies and Jones 2006, 32.
121. Gibson 1999a, 23, 25 and fig. 20.
122. R. H. Jones 2012, 99.
123. Ibid. 98.
124. Hughes *et al.* 1995, 77–80.
125. Ibid. 57.
126. e.g. Bayley 1989, 179.
127. Starley 1995; Davies and Jones 2006, 147.
128. R. H. Jones 2012, 99–100.
129. Warrilow *et al.* 1986, 60; Havard *et al.* 2017, 55.
130. Gibson 1994, 156.
131. CPAT HER 1664; SN 98257 72346; Toller 1997, 71.
132. Davies and Jones 2006, 122–4; Burnham and Davies 2010, fig. 7.110; ibid. 113.
133. Britnell 2013, 48–53; Gibson 1999a, 163–4.
134. CPAT HER 50187; SO 253 613; Gibson 1999a, 19–20 (Upper Ninepence enclosure), with an associated radiocarbon date of 1880–1520 cal. BC (SWAN-21; 3390±70 BP) suggesting an Early Bronze Age date.

135. CPAT HER 4222; so 239 606; Gibson 1999a, 26–9, 152, associated with ceramics suggesting a middle Iron Age date.
136. Elliot 2014c.
137. Caseldine and Griffiths 2009b, 33, pit 38.
138. See Burnham and Davies 2010, 146, for a discussion of the potential impact of the Roman army upon the local farming economy.
139. These are shown in plan in Britnell and Jones 2018, fig. 2.
140. Upper Ninepence enclosure; Gibson 1999a, 19–20.
141. Ibid. 30, 33.
142. Caseldine and Barrow 1999, 146, 150.
143. CPAT HER 34055; SO 23544 60129; Britnell 2013, 57; Musson 2013, 31.
144. Burnham and Davies 2010, 291–9.
145. Davies and Jones 2006, fig. 127.

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