Barby Hill Archaeological Project
Interim Report for Third Year, 2013/2014

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May 2015

1. Introduction

This third Interim Report describes continuing archaeological work between May 2014 and September 2014 on the Barby Hill site (centred at SP 52820 52420) and the adjacent countryside, and extends the results reported in the first two Interim Reports dated March 2012 and December 2013.

1.1 Site map, with field numbers

The overall site is illustrated in Fig.1, which also shows the simplified field-numbering system adopted in the project, together with the respective Rural Landscape Register (RLR) field numbers.

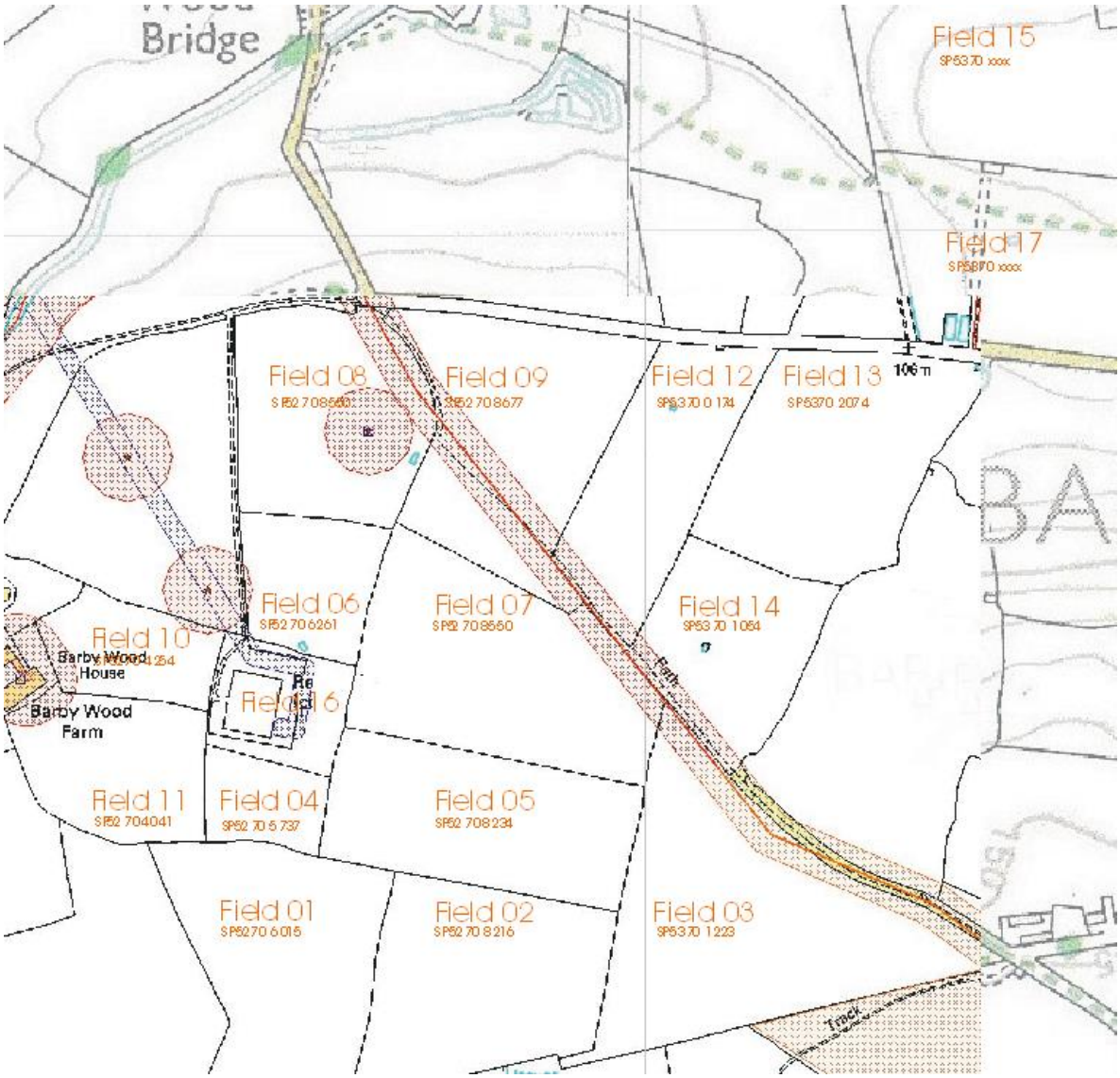

Figure 1: Site map, showing the field numbering system adopted for the project

1.2 Summary of new work

Work in the period covered by this report included the following main elements:

1.2.1 Continued Excavation

The major fieldwork emphasis was on excavation of a second set of trial trenches, this time in arable field 02. The rationale for choosing the location (close to the hedge line just over halfway along the north side of the field, see Figs. 2 and 3 below) was as follows:

a) The geophysical results for this location are relatively 'clean' and uncluttered; the traces appear at first sight to indicate a single focus of occupation, without added confusion due to overlaying of features associated with several periods of activity.
b) This being an arable area, there were no considerations requiring special permission to excavate, other than agreement from the farmer.
c) The chosen site is directly adjacent to the field edge, thus minimising the need to damage growing crops, with the associated expense incurred in compensation payments.
d) The chosen site is as far as possible (approx. 300m as the crow flies) from the trial trenching carried out in 2013. By choosing two points this far apart, at the extremities of the geophysics results for the whole site, it was hoped that any dating evidence recovered from the two locations would allow conclusions to be drawn regarding the nature of the site – for example, whether it had been a single large and unified site, or a smaller settlement that was relocated around the hilltop periodically.

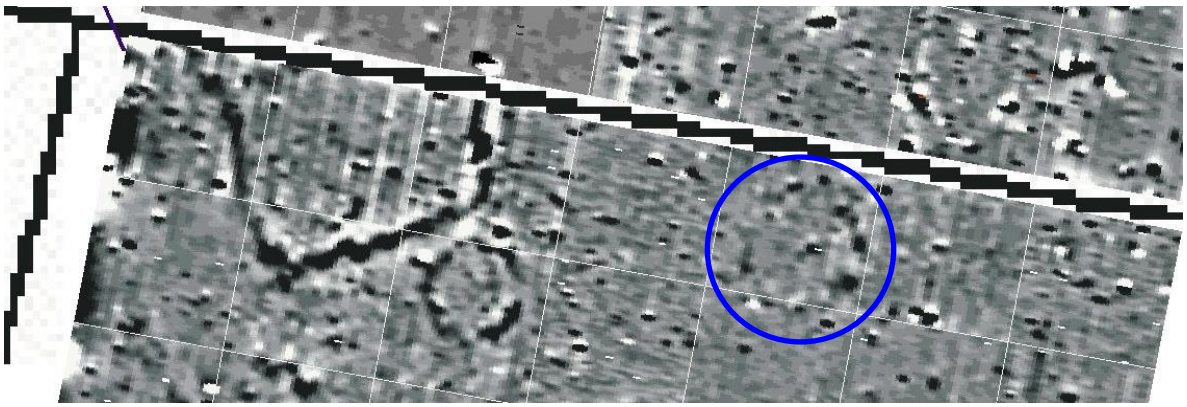

Fig. 2: North side of Field 02, with proposed excavation site indicated in blue

Fig. 3: Hedge cut back, access road cleared, reference base-line set, and crop cut back

A main trench 11m long x 2m wide was excavated by hand, with two side-trenches each 3m long x 2m wide cut into the west and east sides of the main trench, at points selected from the geophysics traces so as to examine two large dark ovoid geophysical features that were suspected to be possible hearth sites (see Fig. 4).

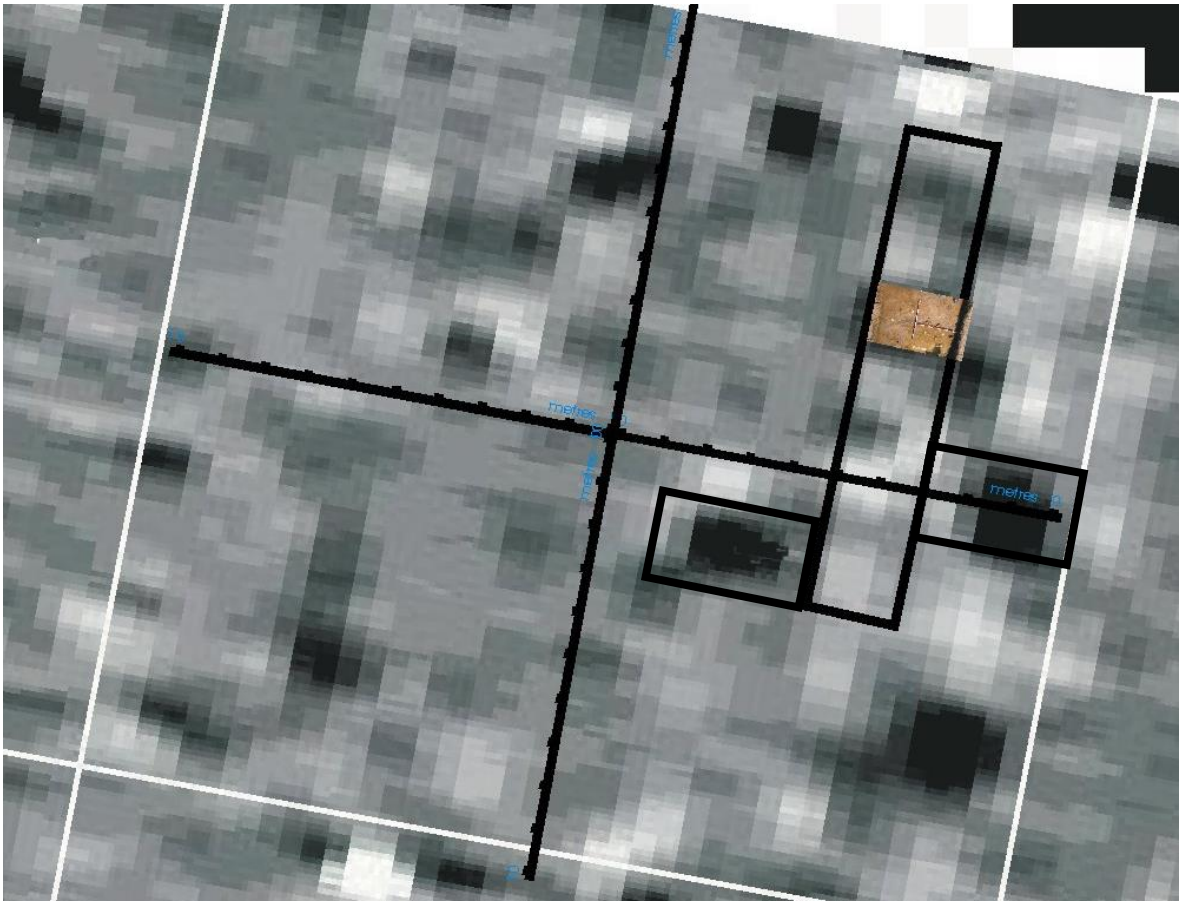

Fig. 4: Location of main trench (N-S) and stub trenches (W-E)

1.2.2 Soil Sampling

A wet-sieving rig was generously loaned to the project for several weeks by MOLA(N), and two project team members gained experience in using this to process soil samples taken from:

a) The perimeters of Field 02 (in order to assess the general background level of soil content for this field).
b) A series of selected 1m squares within the trenches (aiming to obtain detailed information on soil content within the area of geophysical interest).

1.2.3 Support of fieldwork

Various fieldwork support tasks were carried out during the period, including:

- **Experience with wet sieving kit:**
  A total of twelve 40kg soil samples were wet-sieved off site; the resulting residues and flots were separated out, carefully dried for several days, finally dry-sieved to separate the residue into 3 size grades, and boxed and labelled for later analysis.
- **Finds identification and classification:**
  Finds from the new trial trenches were cleaned and conserved, identified and classified, weighed and recorded, bagged and labelled. Geological/metallurgical analysis was carried out on samples of suspected iron-processing slag.

1.2.4 Monitoring of Previous Excavation: Liaison with Cotswold Archaeology

In the previous season's work, a trench had been excavated in Field 16, located midway between two areas of the site that had been shown (from the previous BHAP magnetometer survey in Field 07, and from previous excavation in Field 16 by Cotswold Archaeology) to contain a dense concentration of roundhouse circles.

During 2014, as they had previously announced, Severn Trent Water moved ahead with their plan to extend the Barby Hill reservoir. The Barby Hill Archaeological Project had already demonstrated that this Iron Age settlement was significantly extensive – so the STW project was therefore required to include further archaeological investigation before commencement of the project installation work.

Trial trenches were excavated in 2014 by Cotswold Archaeology, within the reservoir boundary fence. These confirmed the likelihood that further Iron Age archaeological features still lie sealed and undisturbed below the oversite spoil that was dumped within the compound during the previous extension work in 2010 (NB: this exactly confirms the findings from BHAP's trench 16-A immediately outside the reservoir boundary fence).

At the time of writing this report, Cotswold Archaeology are working within the reservoir compound, clearing away the oversite dumped spoil before carrying out further detailed excavation below the original topsoil level.

BHAP will continue to maintain contact with this work, and to coordinate findings and experience with Cotswold Archaeology; it is hoped that the respective reports filed by each party will provide a unified overall plan and description for this site.

1.2.5 Documentary and other research

- Magnetometry results from newly-surveyed industrial and housing development sites in the Crick/DIRFT area, and report results from an earlier archaeological survey associated with the original STW Reservoir Pipeline (which revealed Bronze Age finds in the valley NW of Barby Hill), were incorporated into the BHAP digital master map, to support long-term analysis of the area around the Barby Hill site.
- Other ongoing map studies continue to focus on the line of 'King Street' (modern Barby Lane/Onley Lane), which appears to converge to the SW with Watling St to a possible convergence at Towcester (Lactodorum), and to the NW to a possible reconvergence with Watling St at Mancetter. Further work is needed on this topic; it is mentioned here as it may be relevant to interpretation of the Barby Hill site.

1.2.6 Purchases – analysis and storage equipment

BHAP's existing stocks of surveying poles and stakes, optical square, measuring tapes, storage and archiving materials, were extended by purchase of:

- A basic toolkit for soil sampling work and analysis, including reference documents
- Additional labelling and storage equipment
- A further cost item was incurred due to the need to compensate the farmer for destruction of his crops during the growing season; the rationale for the excavation took account of this and sought to minimise the degree of crop damage.

2. Considerations Regarding Excavation Work

2.1 Excavation Strategy, and Preparation of the Site

It was recognised that the work would have to be done all by hand – there was no possibility of access to bring in machinery. Moreover, owing to the small size of the volunteer workforce (an average of 3 or 4 on any day), and the limited availability of the team, it would not be possible to wait until the crops were cleared (July/Aug) and attempt to carry out a concentrated dig before the field was harrowed and re-sown (Sept/Oct). The schedule was therefore chosen to run between May and September.

Having obtained the farmer's permission and determined a fair compensation sum for damage to 100sq.m. of growing crops, the first fieldwork task was to tidy and cut back 120m of the hedge line (see Fig.3 above), so as to provide an access route into the field and for initial spoil-dumping, and also to allow the reference base-line for the field grid to be re-established from the permanent marker posts that had been left after previous years of work.

This done, a 100m base-line was laid out with survey poles at 20m intervals, and the agreed excavation area (from 90m to 100m along the base-line [W-E], and up to 15m out into the field [N-S]) was marked out with survey poles at 5m intervals.

The growing crop of wheat was then cut down to ground level across the area of the proposed trenches, including sufficient additional area to allow for spoil dumping – a total of approx. 100sq.m. (see Figs. 3 and 4 above).

In addition to excavating down to the natural level and examining any features and artefacts thus exposed, a further aim was to take soil samples from just above the natural in various areas of the trenches and to wet-sieve these so as to permit analysis of all large and small particulate matter recovered. It was hoped thereby to identify the types of plant and other small material associated with the site at the time of its occupation. In order to obtain a "neutral" background comparison reading for the field, samples were also taken directly above the natural level at the centres of all four edges of the field (incidentally, it was noted that the natural level was about 15-20cm deeper below present-day surface level in the southern edge of the field, where a gradual declivity of about 3-5m indicates the upper reaches of a small sub-surface watercourse – see also later comments regarding solifluction in Sect. 2.3).

2.2 Practical Considerations regarding Excavation

One of the major challenges for this excavation was the nature of the soil – a heavy sticky and impermeable clay, which either turns to soup in heavy rain or bakes concrete-hard and cracks in dry weather; at both these extremes, any archaeological details revealed at the "working surface" of the excavation would quickly be lost forever. It was therefore essential to develop an experimental method by which to maintain the working surface of the clay moist and supple without allowing it to waterlog or dry out.

After several trials with tents, and with the use of various types of tarpaulins and watering methods, the final practical solution that proved successful was to use a combination of waterproof tarpaulins and a specific methodology for spray-watering the working surface. At the end of each day's work, the working surfaces of all trenches were first sprayed and then covered over with tarpaulins staked down along their edges to retain the underlying moisture but exclude any further water from above, carefully arranging the tarpaulins so as to eliminate the risk of further rainwater penetrating to the working surface. This maintained the top few cm of the trench earth in a damp, pliable crack-free and easily workable state, irrespective of the incident weather. The first task each day was normally to bail out any subsequent rain from the

upper surfaces of the tarpaulins with sponge and bucket, after which the tarpaulins were peeled back ONLY over those areas where work was to proceed, so as to avoid unnecessary drying-out of the remaining surfaces; the exposed working surface was maintained workable and pliable during the day by regularly spraying it lightly. Hand sprays and large plastic carboys of water were provided for this purpose, and kept regularly refilled with clean water (carried to site in the cleaned empty soil-sample containers that were regularly shuttled to and fro between site and the wet-sieving station in a nearby village).

2.3 Potential Contaminating/Disturbing Factors

The other great challenge of these trenches was that of attempting to excavate an Iron Age site on heavy clay arable land, where the natural was only 30-35cm below the modern soil surface on which a crop of wheat was growing, whose root systems extended down to about 25cm.

In addition to the inherent difficulty of the heavy clay soil, as described above, this site had also been subject to multiple significant disturbances since the Iron Age period, due to a host of factors, including medieval forestation, subsequent early-modern ploughing, Enclosure, post-Enclosure land drainage, modern ploughing, solifluction and wind-borne topsoil migration.

Assessing each of the above factors in turn:

a) Medieval forestation:
Documentary evidence shows that the hilltop and hillsides were covered in mature forest for most of the medieval period. Clearance of this woodland commenced in the late 1500s, and continued sporadically until the mid-1700s; by 1778 only the western end of the hill was still covered in woodland, and this was finally cleared in the period 1810-1820 (for more detailed comments on this, see the 2nd Interim Report).

b) Early-modern ploughing:
Clearance of the forest on the top and sides of the hill during the 1500s and 1600s produced a relatively impoverished and easily compacted clay soil, more suitable for pasture than for arable use. However, there is clear evidence of ridge and furrow ploughing across the top of the hill, and this is most evident in Fields 05 and 07 which have remained as pasture land in recent times. A more complete account of this is given in the 2nd Interim Report (pages 5-7). Although any remaining evidence of this early-modern period r&f has now been ploughed out of Field 02, the evidence from neighbouring pasture fields 05 and 07 indicates that Field 02 would certainly have been ploughed at intervals during the period 1570-1770; and this would potentially impact upon any earlier archaeological evidence.

c) Enclosure:
The artefactual evidence gathered from fieldwalking and metal detection in Year 1 of the project suggests that, following Enclosure in 1778, Fields 01/02/03 were all subjected to "up-and-down" cultivation – that is, a period of perhaps 10-20 years of fallow/pasture usage followed by a few years of arable cultivation. Although this ploughing would have been relatively shallow, it should nevertheless be taken into account.

d) Land drainage:
Although no clear evidence has been seen, either in geophysics plots or during excavation, insertion of Victorian land-drainage cannot be ruled out as a potential disturbing factor.

e) Modern ploughing:
The effects of modern ploughing in the late c20th are of more importance. Given that the 'natural' level in this field lies only about 30-35cm below the present soil surface, it might be expected that modern deep ploughing would have completely obliterated all earlier traces. It was therefore surprising to find so much detail revealed in the geophysics traces for Field 02. Excavation showed that the plough

pan depth is about 30cm – so it might be expected that only features such as ring-ditches and postholes would have survived. This is further explored in Section 3 below.

f) Solifluction:

Test borings made with an auger around the hilltop and sides indicate that the natural lies about 30-35cm below the modern soil surface over most of the hilltop, and that the depth of topsoil increases down the hillsides, attaining a depth of 1-2m in the valley below the hill. (NB: Studies on other sites by other archaeologists have suggested that most of this solifluction occurred over the last 2000-2500 years, and that it was linked to progressive deforestation of hillsides during the Iron Age.)

A precise detailed exercise to determine topsoil depths all over the hill has not yet been carried out, but this would perhaps be an interesting follow-up exercise.

The inference from this is, that any early archaeological remains on top of the hill may have been rendered more vulnerable and likely to disturbance by the gradual displacement of topsoil cover.

g) Wind-borne topsoil migration:

In addition to (f) above, it seems likely that topsoil will have been removed from the flat top of the hill in any areas subject to arable regime, by the repeated action of sun and wind to dry and blow away the friable clay surface. Although it is clearly impossible to estimate this effect with any precision, the removal of several cm of topsoil by such a mechanism, over a 200 year period from 1780 to the present time, does not seem unreasonable.

3. Details of Excavation

As explained above, this was a particularly challenging excavation, with many factors contributing to possible contamination or even obliteration of possible features. Nevertheless, the geophysics trace for this area exhibited an appearance of distinct, clear and strong features, suggesting that sufficient early archaeology had survived to warrant a careful excavation.

3.1 Finding the Plough-zone Base and the Natural Level

Initial digging quickly found the natural level, which consisted of pale yellow clay-like soil. The interface to the plough-level was much more difficult to locate – finding the base of the plough-zone involved locating and discounting numerous loose groups of stones that defined the plough-zone base itself. Once done, these loose sticky clay/stone plough-zone groups were removed, and detailed excavation could be carried out down to the topsoil/natural interface.

At first the main trench and stub-trenches were excavated purely level (ie horizontal) – but it was soon noticed that the whole field had a very gradual slope of about 1:112 from north to south, and the trench bases were therefore all adjusted to create a precisely similar slope.

Taking initial unstratified soil samples and processing them showed virtually no differences between the various areas of the trenches (see Appendices).

However, the geophysics traces had indicated significant differences across the excavated area (notably the large dark oval features within the two stub trenches). Subsequent results from the excavation of the trenches revealed, in summary:

- A series of apparent sub-circular features within the main trench.
- Within both of the stub trenches, large dark oval charcoal marks each about 2m x 1.5m were clearly revealed in the excavation, at points precisely coinciding with the dark marks in the geophysics traces; a similar (but smaller) area was also detected at the north end of the main trench. Although delicate metal-detection equipment revealed no magnetism across any of these charcoal areas, it seems likely that the

geophysics had recorded areas of thermally-magnetised ground (to support this interpretation, no individual north or south pole traces are visible in these dark geophysics traces)

- Slag-like rock samples and particles of burned clay were also noted amongst the areas of charcoal (see further details in 3.2 below).
- There was a general absence of possible artefactual evidence.

3.2 Observations regarding the Eastern Stub Trench

1) The three 2sq.m soil samples across the width of this 3x2m trench were all taken from unstratified layers about 3-5cm above the natural (the soil-sieving equipment was loaned by MOLA(N) for a few weeks only, and had to be returned before the excavation had been completed down to the natural level). Whilst these samples are certainly of use, this level is so close to the "active" current cultivation layer that the results from these samples may reveal more about the cultivation pattern after 1700AD than about the Iron Age occupation period. (see also details of soil analyses in the Appendices).

2) The various groups of small stones found at this level and slightly above it were almost certainly due to modern plough action, there is no Iron Age significance to these random stone groupings. For example, none of these stones bore any marks of burning or hand-working. Moreover, they generally occurred at a level that can be described as the 'plough-pan'.

3) However, one or two early potsherds of possible IA date were recovered from the soil samples taken from the main trench at approximately the same level – see Appendices.

4) The overall arrangement of the geophysics features across a diameter of about 18m (see Figs. 2 and 4 above) suggests that there may have been not one but several intersecting roundhouse circles at this location – and one definite sub-circular feature was revealed during excavation of the main trench, which appears consistent in both thickness and contour with a roundhouse wall (see Fig. 5 below). Such findings indicate that the layer about 3-5cm above the natural still contains at least <u>some</u> IA intact features and artefacts, despite the action of modern ploughing.

Fig. 5: Traces of a fragment of a possible roundhouse wall, above the natural level

5) A vertical section was taken along the entire length of the south wall of the eastern stub-trench, revealing a shallow discontinuity 5-6cms deep in the level of the

natural, which is interpreted as an early cutting later filled with darker topsoil (see Figs. 6a and 6b below).

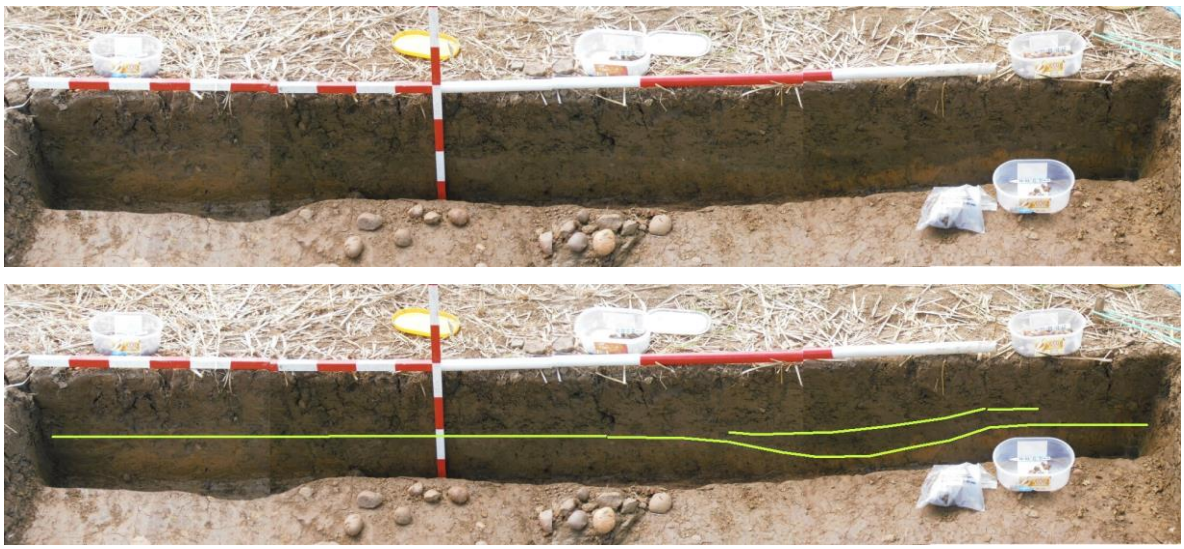

Fig. 6: Early cutting (possibly IA) in south edge of eastern stub trench

There is no sign that this shallow cutting continues into the eastern stub trench – however, a faint sub-circular feature excavated at the south end of the main trench appears to join precisely with this cutting (see Fig. 7 below), suggesting that both features form part of a ring-ditch.

Fig. 7: Sections of a probable roundhouse ring-ditch, running from south end of main trench to south end of eastern stub trench

6) As the trench floor was excavated in successive layers of about 0.5-1.0cm, the natural level was eventually encountered in most areas of the trench. The natural layer at this location is a dark-yellow sandy coloured clay, which may be a small local outcrop of (possibly iron-bearing) Northants Sandstone. However, despite the spread of this dark yellow clay/sandstone across most of the floor, there was a

shallow depression in this natural layer around the centre and south side of the trench, of 1-1.5cm depth, where the dark burned area continued. This precisely coincides with the dark oval shown in the geophysics trace.

7) At this same level of the trench floor – ie directly at the point where the natural commences – greatly increased traces of quite large black flecks were encountered. Some of these (at the west end of the trench) are undoubtedly decayed vegetable material, and the yellow clay at this point exhibits a patch of bluish discolouration due to the decayed plant material (though this was relatively shallow and petered out 1-1.5cms lower). However, most of the flecks were charcoal – and at least one substantial piece of charcoal was recovered (over 1cm across); there were no other signs of bluish discoloration due to decay of plant material, ie when considered together with item (6) above, this area appears to have been used as a large hearth; its area is too large to be classified as the central hearth of a roundhouse, which would typically be a rough circle less than 1m across.

8) At the same level, a shallow but dense scattering of very small (crushed?) stones was encountered, most of which appear to be fragments of iron-bearing Northants Sandstone. Almost all of these fragments exhibit signs of burning and scorching. This layer of stone fragments seems to be relatively shallow and extends over much of the area of the eastern stub trench, but with a greater concentration near the centre and east end of the trench. Amongst them were found about half a dozen larger lumps of what might be slag (see Fig. 8), none of which displayed any sign of magnetism. It is relevant to add that one or two similar fragments of possible slag were also found in the centre of the western stub trench, though that trench was not as completely excavated.

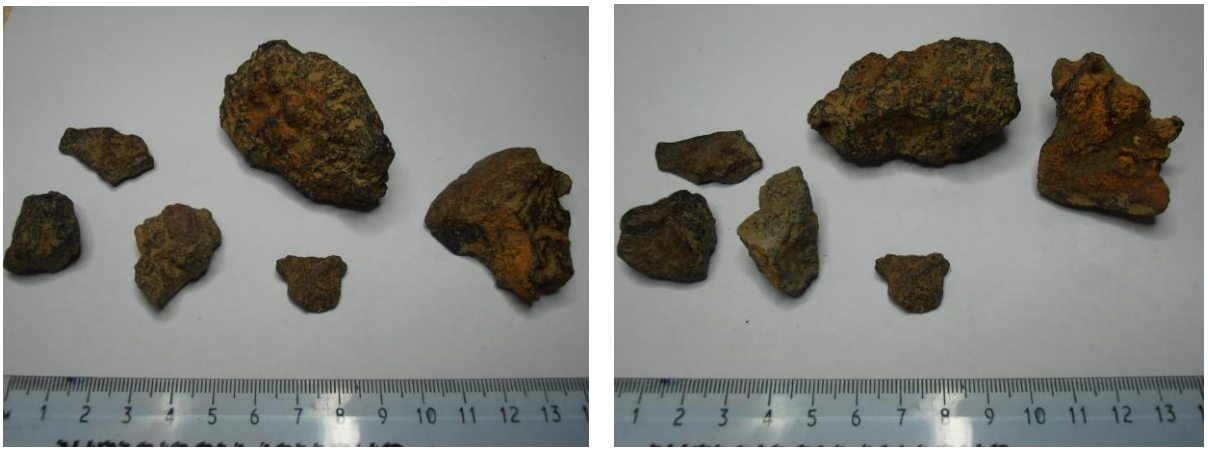

Fig. 8: Examples of slag-like materials recovered from the stub trenches

9) Three of the possible items of slag were sent for expert examination (by Dr. G.Morgan), which returned the following results:

   a) Vesicular fayalite hearth slag, with traces of oak charcoal and iron/rust: 67.4g
   b) Goethite and limonite "ironstone" nodule: 35.3g
   c) Vesicular vitrified stone or sandy clay with some limestone; possible hearth lining: 88.8g
   d) All these materials could have been used in connection with iron working in some form.

10) Taking the remarks in items (6)-(9) together, it seems very probable that we have here an early and rather crude hearth either for primary iron

smelting or secondary smithying.

11) Most of the features described for the eastern stub trench (including the charcoal layer and lumps of slag-like material) were also encountered in the western stub trench, which suggests that this part of the site may have contained a small group of crude smelting and/or smithying hearths. It may be relevant that this group of furnaces was deliberately located near to the centre of the overall settlement site, where it would be most protected from the eyes of "strangers".

12) The geophysics shows a third identical large dark ovoid feature a few metres further south, see Fig. 9 alongside; this was deliberately left untouched, to allow for more detailed subsequent investigation, possibly including sophisticated techniques such as dating by measurement of the magnetic polarity of the thermo-remanent hearth.

Fig. 9: Detail of geophysics, showing a group of 3 possible iron-working hearth sites (outlined in blue)

3.3 Observations regarding the Western Stub Trench

Many of the observations made in Section 3.2 above for the eastern stub trench also apply to the western stub trench – in particular, the findings of charcoal flecks and small amounts of slag-like rocky materials, all precisely coinciding with t0he large dark oval mark indicated in the geophysics.

Due to time and manpower constraints this trench could not be as fully examined as the highly detailed work that was carried out on the eastern stub trench; nevertheless, all the available evidence suggests that this was also the site of an early iron-working hearth. Two such hearths in close proximity (with the additional possibility of a third similar hearth a few metres south of the eastern stub trench, which, as stated above, was left undisturbed to allow for possible further examination in the future), combine to suggest that this area of the settlement site may have been a dedicated area where experimental metal-working may have been undertaken.

3.4 Observations regarding the Main Trench

One major point must be made at the outset. It was exceptionally difficult to distinguish and decipher the features and possible features in the main trench, owing to the extremely small variations in soil coloration across this area. Indeed, many possible features could be seen only briefly with the sunlight in the right direction, or in specific conditions of water-spraying. Moreover, many possible features were broken up and interrupted by the effects of modern agriculture, sometimes resulting in a jumble of small details that could not be interpreted.

As a result, the results reported below and presented in the main trench diagram can be no more than best estimates, and further excavation to the sides of the trench should be carried out to establish possible continuity of the features that are reported.

In the main N-S trench, features were encountered at a level 1-2cms higher than the potential hearths in the two stub trenches; moreover, some of these features appeared to be sections of larger sub-circular ring-ditches which may have continued into and through the area of the stub trenches (timescale and manpower limitations prevented this from being investigated by further excavation to the sides of this trench).

This may, perhaps, indicate that the iron-working referred to in Sections 3.2 and 3.3 might relate to an early and/or transient phase of the site. In particular, the relative alignment of the possible ring-wall feature in the main trench (Fig.5 above), which occurs at a level a few cms higher than that of the furnace hearths in the stub trenches, and also the suspected ring-ditch indicated in Fig. 7 above, suggest that any such hearth workings were subsequently abandoned and eventually built over by at least one roundhouse.

Fig.10: Overall view from north end of main trench

Faint traces were revealed of three possible ring-ditches in the main trench – two in the north half and one at the far south end (see Fig.7). Sectional excavation of these ditches showed them to be relatively shallow, no more than 3-4cm in depth. One of these ditch-like features may well have been associated with the wall-like feature noted in Fig. 5 above.

Regarding the suspected ring-wall feature: it is difficult to find any alternative interpretation for this feature – its outline in the trench was extremely clear and precise; its radius was consistent with that of a roundhouse of diameter roughly 7-11m (the shortness of the section exposed prevented a more accurate diameter estimate); it was first encountered at least 3cm above the natural level, so that it could not have been a feature excavated into the natural, but rather a feature built up above the natural; and, as mentioned in the previous paragraph, one of the possible ring-ditch features subsequently excavated appeared to have been cut so as to follow outside the outline of this possible wall feature at a distance of about 25-30cm.

The relative shallowness of the possible ring-ditch features may perhaps be explained by their having been constructed over each other within a few decades – the effect being, to compress features that would originally have been deeper. However, this is mere speculation.

Dark patches of charcoal flecks were noted at the extreme north end of the main trench, commencing 2-3cms above the natural and continuing down to the natural, in a location also shown in the geophysics traces (see outlined in orange in Fig.9 above). Although too small to have been associated with the group of furnace hearths

described above, this feature may perhaps represent a cooking hearth – however, the poor conditions of the soil in the trench prevented any more positive identification.

A number of features and possible features were encountered at higher levels in the main trench, all of which were too shallow to be maintained down to the natural level. These included:

- A close grouping of half a dozen rectangular holes about 5x8cm (seen in the foreground of Fig. 10 above), arranged more or less regularly in a sub-circular arc. From their vertical location, lack of depth, and regular rectangularity, these were dismissed as probably being of relatively recent date (1800s-1900s) and perhaps part of some kind of Victorian/Edwardian small staked enclosure associated with farming activity.
- A possible group of what appeared to be 5 very shallow post-holes each approximately 13-15cm in diameter, arranged in a straight line of about 3m overall length, at roughly equal respective spacing, with the line running at an angle of about 15 degrees to the line of the trench. From their vertical location, and lack of depth, these were also dismissed as probably being of relatively recent date (1800s-1900s) and perhaps associated with the above group of smaller rectangular holes.

If either or both of these finds really represent features, they must be of relatively recent date, as stated above. Moreover, the lack of depth of these features below the present soil surface may perhaps suggest that, if real, they were created at a time when the topsoil cover on this part of the hilltop was appreciably deeper than at present (see also comments on solifluction and windborne soil migration in Section 2.3 above); however, this seems a very unlikely scenario, and the most probable explanation is that the suspected line of large posthole features has no real significance.

3.5 Further Excavation Work

It will be clear that some further specific targeted excavation should be attempted, to shed additional light on some of the rather speculative findings described above. For example:

- The sides of the trench should be extended to east and west by slit-trenches, to follow and explore the possible ring-ditch features and the ring-wall feature.
- The remaining furnace hearth site, purposely left undisturbed in this programme of work (see Fig. 9 above), should be carefully excavated, looking specifically for further examples of burned stone and hearth slag; and an attempt should be made if possible to measure the magnetic polarity of the hearth site, as a means of establishing an approximate date by reference to a basic magnetic dating curve for this region (NB: experimental work in support of such a dating curve has recently been carried out on other Iron Age hearth sites, e.g. at Rainsborough hillfort).

Having set up long-term marker posts in the hedge line and carefully measured the dimensions of the trenches with respect to these marker posts, the trenches were backfilled with the spoil, and the site was levelled in preparation for re-seeding the field. Since the field will be deep-ploughed at intervals in the future, it was not possible to lay a permeable membrane over the trenches in order to protect the excavations, as had been done with BHAP's excavation in Field 16-A.

4. Interpretation

How does this new information influence our interpretation of the Barby Hill site?

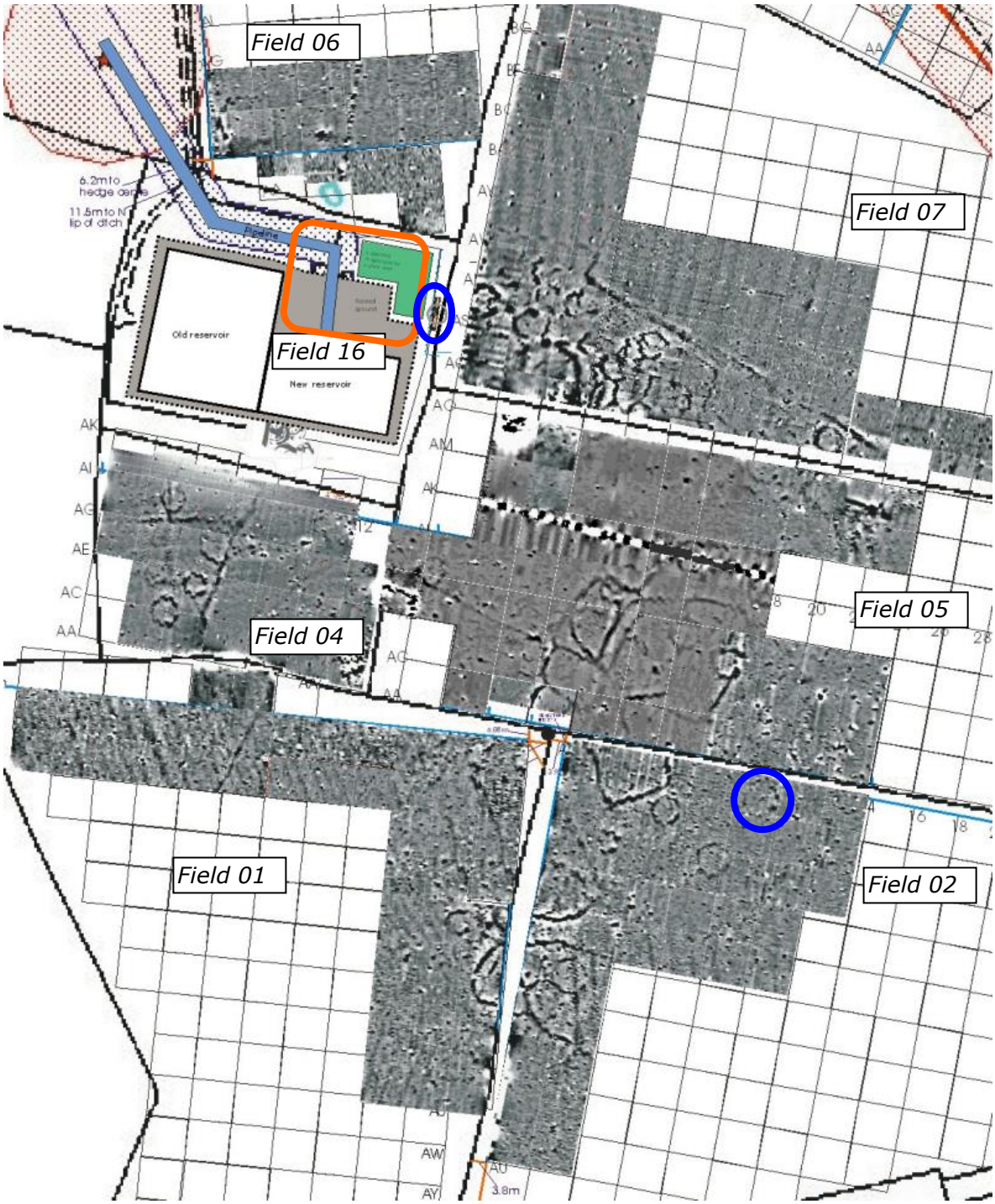

Figure 10: Overall results of magnetometer surveys (the grid squares are 20x20m)

The excavations carried out by BHAP (marked in blue in Fig. 10 above) provide two isolated samples, taken from the extremes of the site as so far established.

Further excavation work in Field 16 over a wider area of approx. 2500 sq.m. (shown in orange in Fig. 10), carried out in May/June 2015 by Cotswold Archaeology as part of a programme to extend the reservoir, will be published in a separate report in due course.

Until this additional information is published, it would be unwise to speculate too far upon the nature and function of the Iron Age settlement on Barby Hill. However, at least two significant deductions may be drawn from the work in Field 02-A as described above:

- There is increasing evidence that this site was laid out as a single large settlement rather than a smaller site that shifted its location around the hilltop over time; there appear to be a number of distinct specialised functional areas within the site layout, including lookout posts arranged around the rim of the hilltop, stock-management areas within the centre of the settlement, and a main focus of occupation overlooking 'King St' and a nearby complex of what appear (from the 1940s vertical photographs) to be Early Iron Age defended farmsteads at present-day Waldins Farm to the north-east of the hilltop.

- The existence of not one but several iron-working hearths in a group at the centre of the settlement raises the profile of this site, which is now seen to have included an industrial component.