Excavation of a Romano-British Enclosure Complex at Burton Wold Farm, Burton Latimer, Northamptonshire

by

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SUMMARY

Investigation of cropmarks known from aerial photographs revealed a rectangular complex of smaller enclosures, pits and other features, dating from the 1st-4th centuries AD. This report gives an integrated account of the archaeological work carried out during groundworks for the construction of a wind farm on land in Burton Wold Farm in the eastern part of Burton Latimer parish. It combines evidence from desktop assessment, geophysical survey, trial trench evaluation, watching brief and full excavation – focusing in particular upon the cropmark complex in the northern part of the Development Area, where Turbine 7 was to be located. Here geophysical survey gave an overall view of the form of the complex as a whole, while excavation allowed a small area within the larger complex to be examined in detail. Sections were excavated through enclosure ditches, gullies and a large pit. The enclosures are thought to have functioned as pens for livestock. Although no evidence of houses or other structures was found, considerable quantities of pottery suggest domestic activity nearby within the enclosure complex. The site went out of use by the 4th century AD.

INTRODUCTION

A planning application for the construction of a wind farm at Burton Wold, 6km south-east of the town of Kettering and 1.5km east of the village of Burton Latimer, led to the undertaking of a desk-based assessment by Cambrian Archaeological Projects Ltd (Jones 2003), a geophysical survey by Northamptonshire Archaeology (Butler 2003) and a subsequent field evaluation by Cambrian (Evans 2003). These established that although the area of the proposed windfarm did not contain extensive surviving areas of important archaeological remains, there were several localised areas where potentially important sites did survive – especially on the proposed location of Turbine 7 in the northern part of the development area.

Partly on the basis of this information, planning permission was granted for ten turbines and associated infrastructure, with a planning condition requiring further archaeological works to be carried out. In the late summer and autumn of 2005, following the guidelines of a Brief written by the County Archaeology Officer (Flitcroft 2004), Cambrian conducted a watching brief on groundworks for all of the ten turbine sites, access roads and cable trenches, with further investigation by excavation of archaeological evidence identified on the sites of Turbine 2 and Turbine 7 (henceforth referred to as T2 and T7).

Figure 1 shows a wind turbine base being unloaded next to T7, in preparation for construction, while recording of archaeological features was still in progress.

LOCATION, TOPOGRAPHY AND GEOLOGY

The wind farm at Burton Wold is centred at NGR SP 918 744, with the turbines dispersed and evenly spaced in...
the landscape rather than set out in a linear row. Figure 2 shows the boundaries of the development area and the position of turbines within it, together with the cable trenches between turbines and already existing landscape features such as the small stream. Also depicted are the cropmarks of archaeological sites known from aerial photography and recorded in the SMR: these will be described in more detail below.

The general topography of the area is characterised by large and fairly flat arable fields with an average height of 80m above sea level. The land rises slightly towards the north and east, with a small stream running in an east to west direction to the north of the Burton Wold Farm road. Soil consists of shallow boulder clay on an underlying Blisworth limestone (British Geological Survey 2003). In the area of T7, however, the boulder clay seems to be largely absent. The presence of more easily drained sandy clays here and the proximity just to the south of the stream mentioned above, as well as the slight protection offered by the rise in land towards the north, were probably major factors in the location of the complex of enclosures and associated settlement in the late Iron Age and early Roman period.

The earliest surviving map of the area is an Enclosure Award map of 1803/4 (NRO 2799). This shows the layout of fields at the time of enclosure. Most of the field boundaries depicted are subdivisions of what were formerly much larger open fields, such as South Fields and Wolds on the southern side of the farm road. No structures of any kind within the area of the wind farm are marked on the map.

**AERIAL PHOTOGRAPHY**

There are two areas where cropmarks of significant pre-modern archaeological activity have been discerned on aerial photographs (apart from medieval ridge-and-furrow, traces of which were identified in the central part
of the site). Firstly, in the southern part of the Development Area, a small group of rectilinear and curvilinear enclosures was recorded as SMR 1368 (NGR SP 917 743). Secondly, in the northern part of the Development Area, a large rectilinear enclosure measuring about 200m x 120m with some smaller rectilinear and polygonal enclosures and outlying field boundaries is recorded as SMR 5319 (NGR SP 916753). Both are shown on Figure 2. While SMR 1368 was not due to be directly affected by the construction of wind turbines, the proposed location of T7 was inside the area of cropmarks known as SMR 5319. As it would be directly impacted upon by groundworks, the cropmark complex was investigated further by means of geophysical survey and trial trench evaluation.

**GEOPHYSICAL SURVEY**

The geophysical survey was undertaken by Northamptonshire Archaeology in two 1.6ha blocks, either side of a hedge running roughly north-south, using a fluxgate magnetic gradiometer (Butler 2003). The total area covered corresponded to the area of known cropmarks recorded as SMR 5319. The results of the survey, in the form of linear and discrete anomalies detected, are shown in Figure 3. Positions of subsequent excavation trenches are also shown, as it is useful to place the results of these within a representation of the enclosure complex as a whole.

Large numbers of positive magnetic anomalies representing linear, curvilinear and discrete archaeological features were detected. Two distinct phases of archaeological activity could be discerned. The latest phase was represented by the parallel linear features running in a north-north-west to south-south-east direction across the whole of the surveyed area, spaced on average about 8m apart. These were the remains of a medieval ridge-and-furrow field system, and have not been marked on Figure 3. The fact that they all run in the same direction indicates that this whole area was part of a single large open field prior to parliamentary enclosure.

The pre-medieval phase is represented by linear, rectilinear and curvilinear features detected within a rectilinear area bounded to the north and east by a straight linear ditch, slightly curving at the corner. This corresponds to the large enclosure visible on aerial photos. The ditch measures approximately 160m from west to east and 90m from north to south, perhaps with further extensions taking it beyond the edges of the survey area. A 55m long stretch of ditch defines part of the southern side of this large enclosure, inside of which there are numerous subdivisions and smaller enclosures, mostly with sides aligned towards the cardinal points. In some cases there appear to be entrances or gaps in the ditches of small rectilinear or polygonal enclosures within the larger complex. Also visible are many discrete anomalies - probably pits - some of which form alignments or linear
patterns. These could be ritual in character or of a more practical function. In particular there is an alignment of up to thirty pits in the north-west part of the surveyed area, running parallel to the outer enclosure ditch but crossing some of the internal subdivisions – indicating that this pre-medieval phase of activity is itself comprised of multiple phases. Industrial activity may be suggested by several intense discrete anomalies which could be thermonemrnant and might possibly be the remains of kilns or ovens (Butler 2003).

It is interesting to note that the geophysical survey results for land on the western side of the modern field boundary are much clearer than those on the eastern side. There could be several reasons for this, perhaps the most significant of which is that, as excavation showed, depth of overburden seems to be greater on the eastern side. Slightly different geological conditions were also encountered on either side of the boundary. To the west, archaeological features in evaluation trenches A and B were cut into limestone bedrock, which outcrops at between 0.30m and 0.60m below the modern ground surface. To the east, features in T7 were cut into sandy clay soils at a depth of between 0.50 and 1.00m, indicating that the bedrock must have dipped or shelved down, creating different conditions both for agriculture (enabling deeper ploughing) and for the magnetic survey itself.

RESULTS OF EXCAVATION

METHODOLOGY

Excavation of archaeological features took place in four stages. The first (evaluation) stage involved the excavation in 2003 of three trial trenches – 20m, 15m and 15m in length and 1.7m wide – on the complex of cropmarks recorded as SMR 5319 which has already been described. Information from the geophysical survey was used to locate the trenches, in order to target the investigation on the outer enclosure ditch as well as internal boundary ditches and pits. Upper levels were removed by mechanical excavator. Archaeological levels were then cleaned, photographed, investigated further through hand excavation, and recorded using Cambrian Archaeological Projects Ltd recording systems. The aim was to assess the survival, quality, condition, date and significance of archaeological features and deposits which might be impacted upon by the construction of Turbine 7.

Rationales and guidelines for the next stages were set out in the Brief for a Recording Action (Flitcroft 2004). The second stage, undertaken by Cambrian in the summer of 2005, consisted of monitoring the construction of access roads and archaeological supervision of a 25 x 25m trench for each of the ten turbine sites. The aim was to ensure that any archaeological deposits present would be investigated and recorded prior to the construction of the circular turbine base foundations, each of which were to be 17m in diameter. Upper layers were removed by mechanical excavator, either to the level of the uppermost surviving archaeological horizons, or to the upper surface of the natural geological layers – in most cases boulder clay. Eight of the turbine sites were shown to be archaeologically blank. However, two parallel linear features were identified on the site of Turbine 2.

As expected, large numbers of archaeological features of various kinds were observed on the site of Turbine 7, situated as it is near the centre of a known cropmark complex. These two areas (henceforth called T2 and T7) were earmarked for further investigation through hand excavation.

The third stage of excavation was undertaken by Cambrian over a period of four weeks in the autumn of 2005. Archaeological surfaces in T2 and T7 that had been revealed during the watching brief were cleaned and features excavated by hand, following the guidelines set down in the Brief (Flitcroft 2004) which stated that at least 10% of fills of linear features and 50% of pit fills should be sampled by means of excavation. Particular attention was focused in understanding stratigraphy at the intersections of features. The general aim was to identify, Investigate through excavation, and make an appropriate record of archaeological remains about to be destroyed by the development. Specific aims were to establish: 1) the chronological development of settlement occupation and activity; 2) its economic basis; 3) the nature of social organisation within the settlement; and 4) the dates of abandonment or change in landscape use.

A fourth (watching brief) stage followed on from the excavation of T2 and T7. Digging of cable trenches between turbine sites and associated groundworks for the construction of a small electricity substation were monitored by an archaeologist.

All cuts, fills and layers were allotted context numbers during on-site recording. In post-exca vatation analysis, contexts were combined into a structural hierarchy of subgroups, groups, landscapes and phases. For the purposes of this paper, group numbers (eg G1) have been assigned to single features such as ditches or pits which might have been investigated and recorded in terms of multiple excavated segments and recorded contexts. Landscape numbers (eg L1) have been assigned to landscape features that consisted of more than one feature, such as the droveway which is formed by parallel ditches in T2. Evidence is divided into two broad phases, corresponding to the three principal periods of activity of which traces are found: 1. Late Iron Age to Early Roman; 2. Medieval; and 3. Modern.

EVALUATION TRENCHES

The three trenches were all located in the western half of the complex of enclosures (Fig 3). Evidence from each trench is described separately below (Fig 4).

TRENCH A

Phase 1: Late Iron Age to Romano-British

Pit G1 had a semi-circular cut that continued into the eastern section of the trench, measuring 1.7m in width from north to south and with a depth of 0.40m. It had a vertical northern edge and a gently sloping southern edge. It may be part of a large circular pit. The fill was compact orange-brown silty clay. It contained pottery of the 1st-2nd century AD.
Fig 4 Evaluation trenches, plans and sections
Pit G2 was a sub-rectangular shape, extending into the western section of the trench. It measured 1.00m in width from north to south and was 0.40m deep with irregular edges and base. It was filled by a compact orange-brown silty clay. Like the fill of Pit G1, it contained 1st-2nd century pottery.

Pit G3 was a large and irregularly shaped but symmetrical feature extending into the sections on either side. It measured 2.5m in width on the eastern side, narrowing to 1.2 m wide on the western side, with a maximum depth of 0.60m. Its gently sloping sides at the top changed sharply into a steep V-shaped cut at the base. Interpreted as a pit, there is a possibility that this feature could be a boundary ditch running east-west. The lower fill was greyish-brown clay. The upper fill contained a deposit of ash and cinder.

Ditch G4 was a linear cut feature oriented east-west across the trench, extending into and beyond both sections. It was 0.55m wide and 0.30m deep, with sloping sides and a fairly flat base. The fill was a compact orange brown silty clay, within which pottery sherds of the 1st-2nd century AD were found. This feature is interpreted as an internal boundary gully or ditch within the larger enclosure complex.

**TRENCH B**

**Phase 1: Late Iron Age to Romano-British**

Ditch L1 ran from east to west and consists of ditch G8 and the recut G9. Ditch G8 has a gently sloping southern edge and a flat base. It was 0.60m deep, filled by a compact dark brown silty clay which contained 1st-2nd century pottery. This was cut by the ditch G9, which represents a recut of the same linear feature. This had a steep near-vertical southern edge and a more gently sloping northern edge, with a flat base 0.20m wide. The maximum depth of the feature was 1.10m. Its fill was similar to that of G8 except less stoney. The sherds of shell-tempered ware it contained cannot be precisely dated. This recut ditch was the main boundary ditch in the northern part of the enclosure complex, and in fact defined its northern limits. It can be correlated with the northern boundary ditch clearly visible on the geophysical survey and aerial photos. As a major boundary, it is likely to have had a bank and/or hedge associated with it, though no evidence of this survives in the ground.

Ditch G10 was a smaller linear feature running parallel with and about 2.00m south of the main boundary ditch L1. It measured 0.50m in width and 0.20m in depth, with gently sloping sides and a flat base. Its fill was a compact dark brown silty clay. It may well have been associated with the main boundary ditch L1, perhaps forming part of the same boundary (one possibility, for example, is that it delineates the southern edge of an internal bank, of which no other trace survives). Or it may represent an earlier and smaller version of the northern boundary.

**Phase 2: Medieval**

Three plough scars G5, G6 and G7, approximately 0.15m wide and up to 0.08m deep, ran across the trench from north-north-west to south-south-east. These were filled with a dark brown silty clay. Their orientation is the same as the linear features, interpreted as furrows, which showed up on the geophysical survey. Cutting the earlier linear features of Romano-British date, they are thought to be of medieval date.

**TRENCH C**

No features were encountered in this trench.

**TURBINE SITE 7: EXCAVATION**

Topsoil and subsoil layers were removed by machine to a total depth of between 0.60m and 1.00m, over an area of about 23 x 23m, revealing a natural surface of firm mid orange-brown sandy clays and silty clays, with small areas of limestone outcrop. Many archaeological features were cut into these natural layers, their darker fills showing up clearly against the lighter background. The position of T7 in relation to features picked up on geophysical survey is shown on Figure 2.

A general plan of T7 is shown in Figure 5.

**Phase 1: Late Iron Age to Romano-British**

**Main enclosure ditches**

The principal landscape features encountered were the north-south ditch L3 and the east-west ditch L4. These are regarded as main enclosure ditches which were part of the overall internal pattern of rectangular enclosures within the complex as a whole. The ditches were found to have been re-cut several times, indicating that the use of these internal boundaries persisted for some length of time.

**Main north-south enclosure ditch L3**

This composite feature – actually comprised of an accumulation of cuts and recuts – extended the whole length of the trench from north to south, measuring up to 4m in width. Two segments were excavated across it and a further box segment located on its intersection with L4. There was much variation between the three sections. Patterns of recutting encountered are best illustrated by means of the section drawings in Figure 6.

In all cases the main part of the composite feature was formed by the latest recut G17. This ditch cut was 2m wide and between 0.45 and 0.90 deep. The profile varied from a fairly steep-sided V-shape in the north to a shallower concave shape in the south. In the former, a sequence of four fills ranged from mid orange-brown silty clays near the base of the ditch to much darker and more charcoal laden grey-brown silty clay, tightly specked with small fragments of limestone near the top.

G18 was a steep sided gully or trench cut by G17 on its eastern side. It extended for at least 5m, was up to 0.4m wide and 0.35m deep. This could have marked the north-south internal boundary before the later ditch was dug. The fill was a grey-brown silty clay.

G19, G20 and G21 were all earlier cuts of the ditch, truncated by the later recut G17. These are best seen in the section across the southern part of L3.

All these features are taken to be part of a single composite landscape feature which retained its integrity as an internal boundary throughout numerous episodes of recutting. Traces of a possible bank on the eastern side of L3 were recorded in the northern south-facing side of the excavation trench.
Fig 5  General plan, T7

Fig 6  Enclosure ditch sections, T7
Relationship between L3 and L4
The box segment excavated to explore the intersection with L3 revealed a complex relationship of intermeshing stratigraphy, from which it can be inferred that neither L4 nor L3 is earlier or later than the other. Rather, it can be said that both co-existed as part of the same system of internal division, and both were presumably recut as and when required, probably at the same times. No attempt is made here, then, to unpick the very complex sequence of deposits at the junction.

Main east-west enclosure ditch L4
Again it should be noted that this is a composite feature, comprised of a later recut and at least two earlier cuts, either of which could be the original. It extended from its junction with L3 right up to the eastern side of the excavation trench and beyond. Its width was up to 2.8m. Apart from the box segment, a further segment was excavated across L4 further to the east.

The main part of L4 consisted of the latest recut G22. This was up to 2m wide and 0.32m deep, with a fill of dark orange brown silty clay. G25 was a posthole cutting the base of this feature and thought to have been dug while the ditch was open and before it silted up. It measured 0.7 x 0.6m and was 0.2m deep, with a fill of mid orange brown clay, slightly lighter than that of the ditch fill above.

An earlier gully G23, running east to west, cut by the base of G22. This was 0.53m wide and 0.23m deep, with quite steep sides and a stony fill of mid grey-brown silty clay.

G24 was the earliest and original cut of ditch L4, surviving on the southern side in truncated form to a depth of up to 0.5m. Its fills of dark grey-brown to orange-brown silty clay contained some flecks of charcoal and small stones.

Smaller ditches
East-west gullies L5. This pair of parallel gullies, G27 and G28 ran either side of, and parallel to, the main east-west ditch L4. They may have been associated with that larger feature, or were perhaps precursors or successors to it – marking the same internal enclosure boundary. Unfortunately, there is no stratigraphic evidence to prove the point either way. Each gully was about 0.4m wide and 0.2m deep, with concave or flattish base, filled by mid orange brown silty clay.

North-south ditch G26. A very straight ditch, up to 1.2m in width and 0.3m deep, that ran parallel and to the west of the main N-S ditch L3. It was filled by a mid greyish brown silty clay with frequent small roundish stones. Sides partly destroyed by a later field drain that followed roughly the same course.

South south east – north west ditch G29. Unusual for being off the general alignment of most other ditches, and may therefore represent a different, earlier, phase. Cut by G26. It was up to 1m wide and only 0.12m deep, with a mid orange-brown silty clay fill.

East-west ditch G30. This ditch ran off from the main north-south ditch L3 on its western side, and might effectively consist of one of the recuts of that ditch turning a corner – perhaps indicating increased subdivision of the site over time. Its stratigraphic relation with G26 could not be ascertained with sure, though it is thought to be earlier. It was a steep-sided ditch, up to 1.6m wide, narrowing to 0.7m wide towards the west, and was filled by mid - light orange brown sandy clays.

East-west ditch G31. A slightly curving ditch with concave sides that was cut by both L3 and G26. It was 0.75m wide and 0.3m deep, and its fill was a grey-brown silty clay.

North-south ditch G32. Situated on the east side of T7, this ditch cuts and is therefore stratigraphically later than pit G16. As far as is possible to tell, it seems to turn to the east at its northerm end on the very edge of the trench. At least 2m wide and 0.6m deep, its full width was obscured by the trench side. Its fill was an orange-brown silty clay.

Pit
Pit G16 measured 3.00 x 2.60m in plan, and was 1.25m deep. It was excavated in two quadrants, though full excavation of the north-western quadrant was impeded by the presence of a large slab of stone extending into the section. The sides were quite steep and partially stepped on the south-eastern side. The bottom of the pit was fairly flat. Fills of the pit can be divided into three subgroups, which represent the different mini-phases of (a) erosion of lower sides while the feature was in use, probably as a water-pit; these were mainly interface layers that consisted of a mix of the organic 'peaty' deposits described below with natural clays originating from the sides, (b) silting up of the lower half of the feature after it had gone out of use; these heavily waterlogged layers were dark greyish-black silty clays with a 'peaty' consistency and a high organic content of woody fibrous material, obviously with potential for environmental analysis, and (c) backfilling of the top half of the feature; these layers were mainly dark brown or orange-brown compact or plastic sandy clays, including tipped layers containing quantities of large limestone slabs, which may have originated from a nearby building, wall or other structure (see Figure 7).

The lower 0.50m of fills were largely waterlogged; indeed the top of the layers of phase (a) represents approximately the current level of the water table. If the pit was originally dug as a water-pit, then it is reasonable to assume that the level of the water table then was more or less the same as it is now. While the lower fills may have accumulated through natural silting after abandonment of the water-pit, as suggested above, it was thought possible that the disused water-pit was re-used as a cess-pit, and this might account at least partially for the build-up of these organic layers. However, analysis of soil samples showed low levels of edible food remains such as fruit pits, discounting this theory.

Column samples were taken from all fills for pollen analysis and bulk samples were taken from the waterlogged layers for flotation, in search of charcoal, charred seeds or grain. Results are presented later in the section on environmental evidence.

It is now considered in the light of that evidence that
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The pit was deliberately backfilled with material from elsewhere on site, including construction debris. The stratigraphy of the pit fills indicates several episodes of backfilling, though it is likely that these took place over a fairly short period of time. The considerable quantities of pottery sherds found date the backfilling events to the 3rd-4th centuries AD.

One of the finds from the backfilling of the pit was the shaped fragment of a top stone from a small puddingstone quern (small find 4). This is probably a domestic item rather than an artefact for the large scale processing of grain. Along with the numerous pottery sherds, it indicates that domestic activity was taking place nearby, even if no evidence for structures was found in T7. The existence of the water-pit itself suggests occupation nearby, since its function was probably to provide water for a dwelling or group of dwellings.

Figure 8 shows recording of the pit in progress.

Posthole
There were practically no surviving postholes, despite intensive efforts made to find traces of such features in areas of natural sands and gravels between the enclosure ditches. The only posthole was in fact found on the base of the east-west enclosure ditch L6.

Posthole G14 was oval in shape and measured 0.70 x 0.60m. It was steep-sided with a concave base, filled with a compact mid orange-brown sandy clay. This feature was cut into the base of the ditch while the ditch was open and before it silted up.

The absence of posthole structures generally within T7 indicates that settlement and domestic activity was for the most part located elsewhere (though close by) within the wider complex of enclosures.

External Surface
Linear gravel surface G15, interpreted as a possible path, extended in a north west to south east direction for a distance of about 8.00m. It was up to 1.20m wide and 0.5 m deep, and consisted of frequent small-medium stones in
a loose greyish-brown clay matrix. Further traces of this feature were picked up further to the north-west, though its precise outline was difficult to establish. Overlying one of the pair of parallel gullies L5 as well as the main east to west running enclosure ditch L4, this was one of the latest features of Phase 1. As such its use cannot be associated with that of other features, which are earlier in date and mostly of different orientation. Amongst the inclusions was a small, shaped stone artefact, possibly an ornamental whetstone (small find 1), which is discussed in more detail later. It seems likely that the path may have led to or from a dwelling just outside of T7, perhaps on slightly higher ground to the north.

TURBINE SITE 2: EXCAVATION

Topsoil and subsoil were removed by machine to a total depth of about 0.35-0.50m over an area of approximately 25m square revealing the surface of natural boulder clay of glacial origin (Figs 2 & 9). This natural layer was a firm light yellowish brown with occasional small chalk particles, fairly typical of the boulder clay across most of the wind farm development area as a whole. Cutting into the clay were two straight parallel linear features which together defined the shape of droveway L1. Several possible postholes were investigated but only one proved to be real. A 1m wide modern ditch (on the line of the hedgerow that had been uprooted from beside the road) ran from east to west along the southern edge of the trench.

Droveway

The possible droveway L2 consisted of two ditches G11 and G12, both of which were aligned north-north-east to south-south-west and were of similar shape and dimensions. The distance between the ditches at any given point was about 7m.

Ditch G11 was 17m long, continuing beyond the northern trench edge and coming to a butt-end in the southern half of the trench. It forms the western side of the droveway. Three segments, each 1m in length, were excavated through the ditch. These proved to be between 0.70 and 0.80m wide, and between 0.20 and 0.30m deep. The profile of the ditch changed along its length. While flat-bottomed and fairly steep-sided at either end, it was more of a concave shape in the middle segment. In all three segments there was a fill of hard, light greyish-brown silty clay – similar to but slightly darker than the surrounding natural, with some patches of orange oxide staining and containing occasional small to medium stones. There were no pottery or other finds.

Ditch G12 was uncovered to a length of 13m. It forms the eastern side of the droveway. Like ditch G11, it clearly continued on beyond the northern trench edge, while coming to a butt-end in the middle of the trench. Four segments of various lengths were excavated, showing the ditch to be between 0.60 and 0.90m wide, and between 0.15 and 0.20m deep. The profile of the ditch was concave, although in one segment the inner side was very steep relative to a much shallower outer side. The fill was a hard mid greyish-brown silty clay, with occasional small stones. In the fill of G11, there were no finds.

Posthole

Only one posthole was discovered, despite extensive cleaning of surfaces and investigation of other possible candidates for postholes or pits that turned out to be natural features.

Posthole G13 was situated just to the east of droveway ditch G12. It was an irregular circular shape, 0.26m in diameter and 0.10m deep with an uneven base. The fill was a firm dark greyish-brown/black clay with occasional small stone inclusions. Again, there were no dateable finds.
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THE POTTERY
Peter Webster

INTRODUCTION

The Burton Latimer pottery consists mainly of small and medium sized sherds with relatively few rims. As an assemblage, it appears to be more local in origin and more kitchen-oriented than one would expect, for instance, from an urban or upper class rural site. In general, contexts seem to be mixed in date. The overall chronological spread is probably later 1st or 2nd century to earlier 4th century but the number of truly diagnostic pieces is low making the dating of individual features problematic.

All pottery from the site has been examined and listed in an archive. The collection is too small for much in the way of meaningful quantification. There are too few rims and bases to make the calculation of EVES a viable statistical tool. Quantification by weight was considered but this would have given undue prominence to the heavier grog-tempered fabrics (for instance) at the expense of others. The most practical way to represent the proportion of each fabric within the whole assemblage was by sherd count supplemented, where possible, by the isolation of specific vessels. A summary list arranged by context, fabric and sherd numbers will be placed in the archive.

CHRONOLOGY

The great majority of the pottery is from local sources and, as so often in such cases, this makes dating problematic. In our case, this is compounded by the fact that both the wide mouthed jars in sandy fabric and the ‘lid-seated’ jars in shell and grog tempered fabrics do not show the sort of development which encourages firm typologies. The latter may be confidently placed in the 1st and 2nd centuries and may well have survived into the 3rd century, but it is not clear if the Burton Latimer site extended over the whole of this period. There are a few pieces which seem more likely to be 1st or early 2nd century rather than later (from G2, G8, G16c, G17, G24, and G31). However, the absence of south Gaulish samian (even in an assemblage so lacking in samian) might suggest that extensive 1st century occupation is unlikely and a late 1st to early 2nd century start on our site is preferred. There seems no reason why this occupation

Fig 9  General plan and sections, T2
should not have extended across the 3rd century and there are certainly a few pieces of late colour coated ware (from G17, G36, G37, and possibly G31) which are likely to be 4th century. However, the absence of the later shell-tempered jar forms (eg Tyers 1996, fig 242, 2-4) suggests that occupation probably did not extend long into the 4th century.

POTTERY SOURCES
The collection as a whole can be summarised by source as follows:

FINEWARES
Samian
Extremely scarce, only 6 sherds, just under 1% of all sherds found. Only five contexts yielded even small sherds:
- Form 31 Central Gaulish; from G17.
- Form 33 Central Gaulish; from G1 and a probable example from unstratified contexts.
- There are also small scraps of Central Gaulish samian from G8 and unstratified contexts.

It is noticeable that all the samian is from Central Gaul and from common plain forms (2 cups, one bowl). As a collection they fall within the period CAD 120-200. The form 31 is certainly and the form 33 is probably Antonine, giving a distinctly mid-late 2nd century bias to the collection.

Other fine ware
With the exception of one colour coated sherd (from G16c) which may be from Hadham, all fineware is in the white fabric with colour coat characteristic of the Nene Valley. Again the numbers are low, 16 sherds or 2.5% of all sherds found:
- G16c Small sherd of indented beaker, 3rd-4th century
- G16c Beaker base (probably from a vessel such as Howe, Perrin & Mackreth 1980, no.27 (3rd century) although the later no. 55 is also possible)
- G17 Basal section of a large beaker (Howe et al 1980, no. 27), early 3rd century
- G17 Bowl (Perrin 1999, fig. 63, 239), first half of 4th century
- G17 Dish (Howe et al 1980, no.57), 4th century
- G18 Fragment from a fairly large vessel
- G24 Probable beaker fragment
- G31 Bowl base, probably 4th century
- Small barbotine decorated sherd (probably later 2nd or 3rd century)
- G36 Fragment of rouletted beaker (possibly as Howe et al 1980, nos.32-4, but more probably nos. 55-7), probably 4th century
- G37 Dish (Howe et al 1980, no.87), 4th century; also a fragment possible once colour coated
- Unstrat. Dish base, probably 4th century

The list seems small considering the likely chronological spread of the site and its proximity to the Nene Valley.

COARSEWARES
The great majority of the pottery from the site (over 84% of all sherds) falls into three broad categories, local shell-tempered, local gog tempered and local grey sandy wares:

Local Shell Tempered Ware
The fabric was present in most contexts and formed almost 26% of all sherds found. It falls within a general South Midlands tradition of shell-tempered pottery and a local source is implied. All or most fragments come from jars. It is noticeable that the late hook-rim jars are absent. The most common rim form present is a solid almost wedge-like rim with internal depression or groove as if for a lid. The total absence of these putative lids is however, noticeable implying some other use for this feature (see below). These rims appear to have an origin in the pre-Roman period and are found in quantity in the 1st and 2nd centuries (see for instance, Woods 1970, fig 34, 244-7 and Marney 1989, fig 21, 1-10). Similar rims appear elsewhere into the 3rd century (see Segontium, Period 7, Casey & Davies 1993, fig 17.11, 329, fig 17.13, 381; also Leicester, Kenyon 1948, fig 30, 18) and it is likely that the shell-tempered ware at Burton runs through into this period also. Sooting, especially externally, suggest use in cooking.

Local Sandy Wares
The fabric is most commonly reduced grey in colour, with a fine sand content and slightly darker core and surface. However, both darker and oxidised versions also appear along with a number altered by later burning. It formed the most common of all fabric found (making up almost 40% of all sherds). The tradition appears to be that found throughout the Nene Valley (cf Perrin 1999, 78 for instance; also discussion in Marney 1989, 70-87). The most common vessels are wide mouthed jars with tall often near upright necks (see for instance the many fragments of such a vessel from contexts G30 and G32). Most would seem to be 2nd and 3rd century, but the form does not seem to change sufficiently across time to give confidence in any detailed typology.

Grog-tempered Wares
This fabric clearly formed a staple for kitchen use and made up over 18% of all sherds found. The fabric tends to be oxidised with lumps of fired clay and a smoothed but pimply surface. Many examples are burnt suggesting
use on or near a fire. The tradition is a local one (see Marney 1989, 64-9 & 87-94). The most common rim form closely resembles that of the shell tempered jars and one suspects a common local tradition (and use, see below). There are also a number of jars with chunky everted rims. As with the shell-tempered vessels, a 1st to 3rd century date seems probable for most examples.

OTHER ROMAN FABRICS AND VESSELS

Mortaria

Only two mortarium fragments were noted, a Nene Valley mortarium from G16c and a flange of unknown source from an unstratified context. The dearth of these vessels so close to a source of mortarium manufacture is notable.

There were also a small number of sherds (about 10% of the whole) not certainly from the sources listed above, although a local origin cannot be ruled out for most.

POST-ROMAN POTTERY

The site was almost totally devoid of pottery which could certainly be ascribed a post-Roman date. The only exception were a few pieces of glazed earthenware from unstratified levels and from G8.

ECONOMIC AND SOCIAL IMPLICATIONS

The collection appears to be almost entirely kitchen oriented. The low percentage of finewares (3.5% of sherds) is noticeable. Samian is barely represented (a mere 6 sherds or 1% of the whole). Despite the proximity of the kilns, Nene Valley colour coated ware is only marginally more popular (16 sherds or 2.5%). Even among the latter, the majority are the late coarser kitchen wares rather than the earlier more delicate beakers. The enormous preponderance of shell-tempered, grog-tempered and local sandy wares (86% of all sherds) are almost all in forms which one might expect to be found in the kitchen. All, therefore, points to a way of life which was concentrated on the practicalities of living, rather than in its refinements. This may not be subsistence level farming, but it does not appear to be a great deal above that.

One other aspect of the collection calls for note. The great majority of the vessels recovered are jars. Among those jars, the so-called ‘lid-seated’ jar has already been noted as has the absence of lids. There seems little doubt that these vessels saw use on a fire as many show signs of sooting and burning, especially externally. They appear to be indicative of a particular form of cuisine concentrated on the cooking pot, rather than the dish and casserole. If so, then it may be that the ‘lid-seating’ supported not a lid, but other types of vessel. It would, for instance be possible to use the ‘lid-seating’ to support shallow wicker or similar vessels placed over the jar in cooking, after the manner of a steamer. It is a supposition impossible to prove from the Burton Latimer evidence, but perhaps one worth investigation on a more regional basis.

COPPER ALLOY BROOCH

Janet Webster

A simple one-piece brooch of the so-called Nauheim derivative type (see Webster, in Manning, Price & Webster 1995, 64-5 and references therein). The undecorated bow is of rod-like form with a roughly square cross-section and a single flattish curve in profile (Fig 10). Behind the head, where the rod of the bow is coiled back to form the spring, the metal has been flattened to produce coils of a broader rectangular cross-section, but with a more slender pin emerging from the rear. The bow tapers to a knife-edged foot with a simple trapeziform catchplate.

Although Hull was of the opinion that the Nauheim derivative in Britain was essentially a pre-Flavian form (Hull 1967, 28, footnote 49; Simpson 1979, 338), recent assessment of the dating evidence for this varied class of brooches has suggested that the rod-bow form survived in currency somewhat longer than the flat-bowed types (Bayley & Butcher 2004, 147), into the last quarter of the first century.

Fig 10 Copper alloy brooch (Scale 50mm)

STONE ARTEFACTS

Kevin Blockley

Quern (not illustrated). This is the top stone from a small quern 180mm in diameter, made from a conglomerate sandstone or 'puddingstone'. The central hole is evident, around 10mm in diameter. The thickness of the quern varies from 80mm in the centre to 55mm at the edge, although the original thickness of the quern has been lost since the underside is broken. The top surface and edge of the stone are smoothly worked.

Small find 4, from G16c.

Whetstone (not illustrated). This object is made from iron-rich fine-grained sandstone. It measures 12mm by 10mm in cross section, but its original length has been lost since both ends are broken. Three of the faces are smooth and one face has a slight depression which is very smooth. Probably used for sharpening a small iron blade. The surviving length is 31mm.

Small find 1, from G15.
A total of 264 fragments of animal bone were recovered from the evaluation trenching (7 fragments) and larger scale excavation (259 fragments). The assemblage was well preserved but very fragmentary and not a large enough collection for metrical analysis to have been undertaken.

Present in the collection were sheep and cattle bones. One mandible from an adult dog was found in the same context as a bone from a rat.

**SHEEP**

Mainly fragments from mandible and teeth and leg bones. The bones represent a minimum of one lamb and one adult sheep. One fragment of mandible showed evidence of gnawing from a canine. No butchering marks were evident. It is thought that these bones were from casualties around the farm rather than the result of butchery and meals.

**CATTLE**

The bones are mainly from mandibles, teeth, lower legs, vertebrae and ribs. The bones represent a minimum of one calf and one adult cow. The only butchering mark is on a fragment of rib. This is evidence of butchered and prepared food, but in this context perhaps a discarded bone which has been moved from the site of occupation by a canine, the remaining fragments are thought to have been casualties around the farm rather than the results of butchery and meals.

**DOG**

Two mandibles from an adult dog were recovered. These are from one medium sized dog perhaps the size of a modern sheep dog.

**RAT**

A single rib bone from a rat attests the presence of this rodent on the site.

**THE ENVIRONMENTAL EVIDENCE**

**POLLEN ASSESSMENT**

Five sub-samples were extracted from monolith samples from ditch G17, and 11 sub-samples extracted from monolith samples from Pit G16 for assessment of the pollen content. For a detailed account of methodology and results refer to the archive report.

**Fills of Ditch G17**

The assessment indicates that pollen grains and spores are poorly preserved and in low concentration. Those grains identified are highly resistant to chemical or biological degradation due to their higher sporopollenin content, and tend to be preferentially preserved. Therefore, the results are inconclusive and no information can be ascertained on the nature of the local environment.

**Fills of Pit G16**

The assessment of Pit G16 indicates that pollen grains and spores are preserved better than in Ditch G17, although overall the concentration and preservation are below acceptable levels. Nevertheless, those pollen grains and spores recorded indicate the presence of grassland (Poaceae), waste ground (eg thistle and ribwort plantain), open dryland woodland (eg oak, ash and birch), and wet ground (sedges and alder).

**PLANT MACROFOSSIL ASSESSMENT**

A one-litre sub-sample was taken from from the basal fill of Pit G16. The sample was wet-sieved and the wet residues scanned using a low power zoom-stereo microscope. Identifications were made with reference to the modern seed collection at Royal Holloway University, London.

The 1-litre sub-sample processed for this assessment contained very occasional charcoal and charred seeds that are poorly preserved and unidentifiable. The sample also contained a frequent number of waterlogged seeds, which were provisionally identified as *Rubus fruticosus* (blackberry), *Juncus sp* (rush), *Chenopodium album* (fat hen), *Atrus glutinosus* (alders), *Rumex sp* (docks and sorrels), *Apsiaceae* (carrot family) and *Caryophyllaceae* (campion family). This assemblage of plant remains indicates the presence of wet ground and possibly shallow open water fringed by alder and rushes, shrubland with blackberry bushes, and waste ground / grassland with short and tall herbs. The absence of a range of taxa representing edible food eg fruit, suggests that the feature is unlikely to have been a cesspit, but instead may have been utilised as a waterhole. The low concentration of charcoal and charred seeds suggests that these were probably deposited accidentally in the pit, perhaps by wind or water.

**DISCUSSION**

This discussion refers mainly to the interpretation of the enclosure complex initially known from aerial photography and classified as SMR 5319, later subject to evaluation by trial trenching and geophysical survey, then to excavation of a small area within it on the site of Turbine 7. Evidence from other turbine sites, and
from the watching brief of groundworks within the development area as a whole, will be used to shed light on the landscape context within which the enclosure complex was situated.

The excavation of T7 took place within an area of the enclosure complex that was relatively free of features picked up by geophysical survey. Even so, a considerable number of features - especially ditches - was uncovered. This indicates that the site as a whole has much more interior structure to it than the aerial photograph or geophysical evidence might suggest. Although not picked up on the survey, the main north-south and east-west ditches encountered fit within the general orientation of the enclosure complex as a whole; these can be taken to be internal boundaries. The large pit in the south-east corner of T7 can perhaps be taken to be fairly representative – in the sense of providing a good idea of size, shape and environmental potential - of the many other pits whose location is indicated on the survey.

The best indicator for the date of the enclosure complex is the pottery, which has an overall chronological spread from the later 1st or 2nd century to the earlier 4th century. This suggests the complex was in use for a period of approximately 200-300 years. Although its origins may lie in the very late Iron Age, the site is primarily of Romano-British date and character. Heavy recutting of ditches indicates a continuity of form, with the same internal boundaries being re-formed and reused again and again. Even when new ditches are cut, they tend to respect the general alignment of the older ones. All of this seems to suggest a settled way of life of the farming community that lived and worked here, and this is reflected by the internal coherence of the enclosure complex throughout its period of use.

What was the primary function of the enclosure complex? That settlement did take place is indicated by considerable quantities of domestic pottery found in ditch and pit fills, with the large pit itself probably serving as a water-pit for the community that lived nearby. On the other hand, the lack of postholes or other evidence of buildings within the excavation trench, where conditions were excellent for showing up such evidence if it had existed, shows that parts of the site were not inhabited as such. Areas of settlement were probably localised in particular areas and not spread out uniformly over the complex as a whole. A significant possibility is that the east-west pit alignment identified in the geophysical survey might have formed an internal boundary between a settlement area on higher ground to the north and animal enclosures to the south.

This also gives support to the idea that the primary function of the enclosure complex was more to do with the activity of farming itself. The interpretation of enclosures as animal pens was initially put forward in the evaluation report and this is not refuted by the results of excavation from T7. Indeed it may explain the absence of traces of domestic structures. Banks and possibly hedges associated with ditches could have played a major role in facilitating the control of animals through providing barriers to the movement of stock. These would have had considerable durability through time, with each recutting of a ditch serving to replenish the already existing bank. It is possible that animals were overwintered here on the dryer, better drained and more sheltered ground next to the stream, while being led out to graze more widely in summer months. Unfortunately, the assemblage of faunal remains – with a fairly typical ratio of cattle and sheep bones - is not particularly large and it is difficult to extrapolate much information from such a small sample.

There was little evidence of arable farming. The quern found in a pit is probably the kind of artefact that would be found in any Romano-British household. Not too much interpretation should be placed upon the negative evidence of the general absence of grain in pit and ditch fills, but this could be taken as being indicative of an economy based largely on other resources. The Boulder Clay in the vicinity may have been much more suitable for animal grazing than for arable farming.

Evidence of a droveway in T2, hints at the kind of system of communications within which the enclosure complex may have been embedded. Although the nearest known Roman road is some distance away, it is likely that small enclosures or enclosure complexes were linked together by a system of droveways, which provided routes for controlled animal movement across the landscape. This was certainly a characteristic of late Iron Age landscapes in upland boulder clay areas of the midland region – as for example at the recently excavated site on the Stoke Hammond Bypass in Buckinghamshire (Edgeworth 2006). It is probable that these patterns of communication, and agricultural practices associated with them, carried through into the Romano-British period.

The identification of the two parallel ditches in T2 as a droveway is of course a provisional interpretation, based mainly on comparison with similar features on other Iron Age and Romano-British sites. In this case there is no dating evidence, however, and the continuation of the feature does not show up on any aerial photographs. While it appears that the ditches both stop before they reach the southern edge of the trench, it is possible that they continue out of the excavated area, and that the shallower ditches which have since been ploughed out. The droveway – if that is what it was - was probably associated with banks and hedges, traces of which no longer survive. Absence of pottery in the fills, relative to the large amounts of pottery found in T7, indicates that the droveway passed through a tract of land which was not settled at this point, though it no doubt linked farmsteads or pockets of small scale settlement that were dispersed across the landscape.

Jeremy Taylor noted the association of droveway and rectilinear enclosures in his assessment of the Roman archaeological resource in the East Midlands region as a whole. Together with the simple farmsteads or small enclosed settlements like Wootton Hill (Jackson 1988-89) and Wollaston (Meadows 1996), he noted groups of individual rectilinear enclosures and enclosure complexes alongside long distance and local tracks and droveways” (Taylor 2001-2, 10). He associates these larger enclosure complexes with a restructuring of rural settlement which occurred from the Late Iron Age to the 2nd century AD, but only with regard to the “extensive and highly structured agricultural landscape of the river.
valleys" (ibid, 10-11). What the evidence at Burton Wold suggests is that such networks of enclosure complexes, linked by droveways, might have extended up onto the clay uplands too.

Most of the known Iron Age and Romano-British rural settlement sites in Northamptonshire are situated in lowland situations, often on the river gravels and away from the clay uplands. Until recently, it was assumed that the greater proportion of the Boulder Clay zone of the midland region was devoid of settlement at that time. The unquestioned belief until recently was that these areas were largely covered with woodland.

For a refutation of this, see Foster’s study of extensive occupation on Boulder Clay and Oxford Clay during the Iron Age and Roman periods in the Brigstock area (Foster 1988). At Mawsley New Village, Cransley Lodge, Kettering both enclosed and unenclosed structures dated to the middle Iron Age were found on the heavy boulder clay (Hull and Preston 2002). These suggest that exploitation of such supposedly marginal landscapes may have been well established before the Romano-British period.

Exploitation of the Boulder Clay zone, of course, does not necessarily imply an arable landscape any more than it does a wooded one. If sites like the enclosure complex at Burton Wold were primarily supported by a pastoral economy, this implies a fairly open grassed landscape, perhaps shaped and divided up more by droveways than by a patchwork of arable fields.

Admittedly only a small part of the enclosure complex at Burton Wold has been investigated by excavation and many questions about the site as a whole remain. Why were there so many pits? What was the function of the pit alignments? Where was domestic settlement located within the complex? Even so, the site is special in that it provides a concrete example of settlement and exploitation of the Boulder Clay zone during the Romano-British period. It points, perhaps, to the possible existence of many more such sites – not previously suspected because not situated on valley floors where most known sites are located, and perhaps not with such high visibility on aerial photos or geophysical survey due to the soil conditions.

A very interesting facet of the excavations here was how features on the limestone outcrop (eg enclosure ditches in T7) showed up extremely well on aerial photos, whereas features on the Boulder Clay itself (eg droveway ditches in T2) did not show up at all. Further illustration of this was provided by the geophysical survey of the enclosure complex itself. Features showed up much more clearly on the western side of the modern field boundary (where the limestone bedrock outcrops quite close to the surface) than on the eastern side (where the bedrock shelves down beneath sandy clays).

All this goes to show that sites and features in the Boulder Clay zone which are not conveniently located on limestone outcrops may be getting missed by archaeologists because their presence is masked by the drift geology on which they are situated.

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BIBLIOGRAPHY


British Geological Survey 2003 digital geology sheet, EW186

Butler, A, 2003 Geophysical Survey at Burton Wold Farm, Kettering, Northamptonshire, Northamptonshire Archaeology report


Flitcroft, M, 2004, Wind Farm at Burton Wold Farm, Thrwapston Road, Burton Latimer: Brief for a Recording Action, Northamptonshire County Council, Historic Environment Team report


Hull, M R, 1967 The Nor’nour Brooches, in D Dudley, Excavations on Nor’nour in the Isles of Scilly, 1962, Archaeological Journal, 124, 1-64

Hull, G, and Preston, S, 2002 Middle Iron Age Occupation at Mawsley New Village, Cransley Lodge, Kettering, Northamptonshire, Northamptonshire Archaeology, 30, 1-20

Jackson, D A, 1988-89 An Iron Age Enclosure at Wootton Hill Farm, Northampton, Northamptonshire Archaeology, 22, 3-21


Marney, P T, 1989 *Roman and Belgic pottery from excavations in Milton Keynes, 1972-82*, Buckinghamshire Archaeological Society Monograph Series, 2
Meadows, I, 1996 Wollaston, in *Current Archaeology*, 150, 212-15
Taylor, J, 2001-2a *An Archaeological Resource Assessment of Roman Northamptonshire*, East Midland Archaeological Research Framework
Tyers, P, 1996 *Roman Pottery in Britain*, London