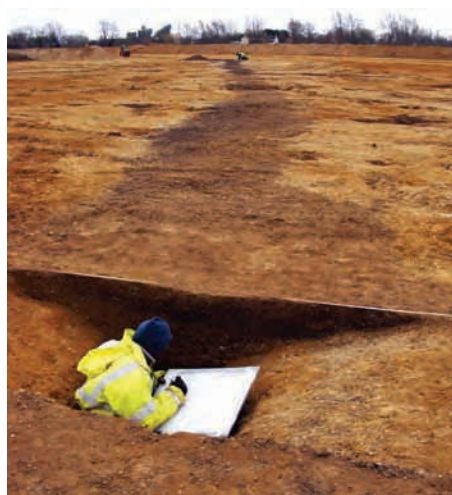


Further Excavations at Baston Quarry, Lincolnshire: Freeman Land

Archaeological Excavations 2009 / 2011



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Freeman Land 2009/2011**

On behalf of Hanson Aggregates

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Introduction

An archaeological excavation was undertaken by Cambridge Archaeological Unit (CAU) on the Freeman Land at Hanson Aggregates Plc, Baston Quarry No. 1, Langtoft, Lincolnshire (NGR TF 133 152) in two phases. The first phase (LFR09; 2.67ha) was machined in August and September 2009 and dug from 5th October to 6th November 2009; the second phase (LFR11: 5.03ha) was machined in October and November 2010 and dug from 19th January to 17th February 2011. The archaeological results are presented together as a single report.

The archaeological evidence consisted of part of a Middle Bronze Age coaxial field system and associated pits and wells or watering holes, with a tight cluster of four ring ditches, a possible barrow, two inhumations and at least two groups of postholes associated with cremated human remains. In addition, evidence to suggest a settlement pattern similar to that previously recorded on the Glebe land (Hutton 2008b) was identified in the northern area of the investigation. Later features of potentially Roman and Medieval quarry pits were superimposed on the prehistoric landscape, but were restricted to a small area in the northeast.

The work was carried out in line with a specification produced by the CAU in response to a brief from Phoenix Consulting Archaeology Ltd. and approved by the Lincolnshire Development Control Archaeology Office.

Topography and geology

The site lies at 2-3m OD on First Terrace river gravels overlying Oxford Clay, and is situated approximately 1km west of the Older Marine Alluvium and Nordelph peats at the former fen edge. The geology of the area is characterised by the river Welland which is located approximately 2.5km to the south and is associated with connected alluvial deposits and numerous intersecting palaeochannels. The site was capped by a ploughsoil horizon 30-45cm thick in the southern extent of the excavation and 20-30cm thick in the north. The natural geology was gravel and sand with patches of grey clayey silts. The highest elevation on the site was towards the western end of the area at 3m OD with the ground gradually sloping downward towards the east at 2.50m OD. There was no indication of subsoil; however, plough scars were evident across the area, especially in the northwestern corner, and to the east of the area where impact upon the cremation pits and ring ditch monuments was particularly heavy.

Archaeological Background

The fen-edge gravels of Langtoft parish are rich in high quality archaeological evidence. The background to the archaeological investigations across the Langtoft environs and wider context, particularly for excavations previously carried out at the Whitfield, Glebe and Freeman sites, has been fully reported elsewhere (Hutton 2008a, 2008b and 2008c). The results from these investigations bear specific relevance to the new evidence compiled during 2009 and 2011, and so a brief summary of these projects is presented here.

Successive excavations by the CAU within the quarry environs (Figure 1) have provided evidence for occupation spanning from later prehistory through to the Romano-British period (Hall 1998; Hutton 2007; Webley 2004a, 2004b; Collins 2010). Of particular significance is a

Middle Bronze Age field system and associated features that was recorded on the Whitfield and Glebe sites and which continues onto the Freeman site on the same northwest-southeast orientation. Cropmarks indicate that this field system covered an extensive area. A small enclosed farmstead and associated trackway, dated to the Middle to Late Bronze Age, were superimposed onto this field system on the Glebe land (Hutton 2008b, Hutton and Dickens 2009). Three watching briefs carried out to the immediate south of the Whitfield site in 1998 and 1999 revealed archaeological remains of a small number of pits, postholes and linear ditches. These were absent of any datable artefacts, except for one pit which contained a sherd of prehistoric shell-tempered pottery (Higbee 1998, 1999). In the northern part of the Meadow Lands site 2.5km southwest of the present site (in Areas A to D) were three posthole structures, 18 large pit/wells and several smaller pits, all containing Deverel-Rimbury pottery (Hall 1998; Webley 2004a). Linears recorded on the Bluebell Land site were undated, but may be attributed to the Middle Bronze Age owing to the similarity of profile, contexts and orientation to the field system recorded throughout the quarry landscape (Hutton 2007).

An excavation carried out by Archaeological Projects Services 1.34km to the northeast of the Freeman site also revealed the remains of a Middle Bronze Age settlement that included pits, postholes and hearths (APS 1998). A barrow was recorded from nearby with an intact upstanding mound (HER 34191). Adjacent to the Freeman Land on the western side, the Northamptonshire Archaeology Unit has uncovered a predominantly Roman landscape overlying another part of the Middle Bronze Age field system, which continues to the northwest (Mudd *pers. comm.*). Excavations at Pode Hole, and Tower Fen, Thorney uncovered a Bronze Age landscape that consisted of four Early Bronze Age ring ditches, the remains of a barrow cemetery that provided a focus for later Bronze Age field system with interspersed pits and water holes (Daniel 2009; Mudd and Pears 2008).

Excavations by the CAU at West Deeping, 7km to the southwest revealed a Bronze Age landscape that comprised of a field system, a trackway and part of an associated enclosure, with interspersed pit/wells, cremations and inhumations. The features bear similarities to those recorded throughout Langtoft regarding the layout, structure and morphology, although the linear features were on a different orientation; West Deeping has a northeast-southwest orientation whilst Langtoft/Freeman is northwest-southeast aligned. The same linear field system was also recorded at Rectory Farm, West Deeping (Hunn and Packham forthcoming). At Eye Quarry, Peterborough, excavations carried out by the CAU, highlighted a palimpsest of archaeological occupation that included a staggered linear field system, four-post structures, a roundhouse and evidence of droveways as well as pits and ovens/hearthths. There was also evidence of large ramped watering holes; one example had wattle linings to aid stability, as well as part of a barrel. This was later cut by smaller 'bucket' wells (Gibson and White 1998; McFadyen 2000). Subsequent excavations revealed the extent of the field system in the form of segmented ditches, and included an enclosed area. Large pits were also incorporated into this system (Patten 2002; 2009).

The landscape surrounding the investigated area attests to the occupation of a living community and a place for the dead in the landscape. Numerous cropmarks of the surrounding area indicate the remains of barrows and ring ditches, some of them as standing monuments or as soil marks within the fields. A full list of probable ring ditches and barrows within a 4km radius of the Freeman land can be seen in Appendix 2.

Investigation Strategies

The overburden of topsoil was stripped down to an archaeological level using a 360° tracked excavator with a 3.00m wide toothless ditching bucket under the supervision of an experienced archaeologist. The CAU modified version of the MoLAS recording system was used, and all relevant archaeological and geological features were planned at 1:50, with sections drawn at 1:10 and augmented by a colour digital photographic record. A percentage of quarry pits were tested (48%) by half-section, whereas pits, wells and the waterhole were divided into opposing quadrants. Linear features were tested by a 1m slot at 10m intervals, or as appropriate. Archaeological features were assigned a unique number (e.g. **F.100**; bolded upon introduction within the text) and each stratigraphically distinct episode (e.g. a cut, a fill) was recorded with a unique context number, (e.g. [001]). The archaeological features were metal detected using a Laser Rapier metal detector prior to and during the excavation of features. The site was surveyed into the Ordnance Survey Grid and Ordnance Datum by means of an RTK GPS unit. All work was carried out with strict adherence to Health and Safety legislation and within the recommendations of FAME (formerly SCAUM; Allen & Holt 2007).

A total of 324 features were identified during the investigation programme, with 1282 separate contexts assigned. The artefacts and accompanying documentation have been compiled into a stable, cross-referenced and indexed archive in accordance with the MoRPHE Project Managers Guide (English Heritage 2006). The archive is currently stored at the offices of the Cambridge Archaeological Unit under the project codes LFR09 and LFR11.

Results

During the two phases of excavation, there were 324 distinct archaeological features that consisted of 87 quarry pits, 51 postholes, 45 linears, 6 pit/wells, 6 pits, 2 water holes and 4 ring-ditches with a potential associated barrow with surrounding clusters of 38 cremations and 2 inhumations. The linears were ascertained to be part of the extensive Middle Bronze Age field system that has been previously recorded throughout the landscape with associated pit/wells and water holes. The four ring-ditches were adjacent to two previously recorded during the 2007 phase; these will be discussed collectively. Associated with the ring ditches were 52 cremations (from 2007 and 2009 phases) and 2 crouched inhumations. Towards the northwest of the investigation area a large number of clustering quarry pits were sampled and recorded. A number of large machine dug modern quarry pits were also sampled in the northeast area of the investigation interspersed with features associated with the derelict pub that lay just outside the area.

Linears and Field System

There were 45 linears in total and each was sampled and recorded; most were part of the Middle Bronze Age field system that continued from the previous phase excavated on the Freeman Land during 2007 (Hutton 2008c). The main axis of the system was on a northwest-southeast orientation as per the co-axial field system recorded throughout the landscape of Langtoft and Baston quarry. This linear field system was interspersed with smaller divisional linears on a northeast-southwest orientation that divided the field system into smaller paddocks or enclosures.

Evidence of these enclosures were found on the Freeman land; to the southwest of the area, there were two parallel linear ditches (**F.588** and **F.603**) that were associated with **F.547** from the 2007 phase. These small ditches or gullies were perpendicular to **F.549**, **F.553** and **F.601**; similar features were also recorded on the Glebe field system associated with the Middle Bronze Age enclosed settlement (Hutton 2008b). There were also probably related to the segmented linears to the north; **F.809**, **F.857**, **F.859**, and **F.860**. All of these linears consisted of the same profile and fills and were probably contemporary.

Similar linears were also found in the northwest of the investigation area superimposed by the quarry pits, (Figure 7). Three linears (**F.840**, **F.849**, and **F.874**) potentially formed a small enclosure, (Figure 7). The two parallel linears, **F.761** and **F.853**, could potentially form a trackway that continued northwest outside of the investigation area, again, as seen on the Glebe land. The southern terminal of **F.840** contained 89 pieces of Deverel-Rimbury pottery that weighed 644g. A large amount of Deverel-Rimbury pottery was also found in similar circumstances on the Whitfield Land (Hutton 2008a); this was also deposited in the southern terminal of a linear that was similar in size and fill matrix to **F.840**.

The linear **F.851** marked the most northerly point of the first phase of the field system that continued down to the southwest and terminated in the area excavated in 2007. This was later re-cut in several places to form a much more substantial ditch, as shown in Figure 2. Towards the north, a short section of linear **F.755** can be seen on Figure 9. Southward, there was a break in this re-cut which then continued as **F.869** and terminated close to waterhole **F.628** (Figure 6). Also at this point there was the terminal of a linear (**F.901**) on a northeast-southwest orientation that continued under the remaining large spoilheap and probably relates to **F.643** and **F.644** seen on the other side. **F.901** cut a small linear, **F.608**, on a similar orientation, which could be a re-cut.

The linears **F.643** and **F.644** terminated in the northeast and a series of small ditches and pits were re-cut in this area. Parallel to this was an additional linear on the same orientation (**F.555**) that was re-cut twice. This terminated adjacent to the terminals of **F.643** and **F.644** and cut an earlier ditch **F.683**. To the north of **F.555** a small L-shaped linear **F.690** was sampled, that cut a small linear **F.692**, which formed part of the field system. There was no clear evidence for the function of **F.690**; however, the matrix of the feature correlated with the adjacent features and therefore is probably of the same date. No artefacts were recovered from any of these features; however, due to the similarity of the profiles and matrix to the Middle Bronze Age field system, it can be suggested that they were contemporary.

On the most northern edge of the area of investigation there were two large linears that had evidence of re-cuts and alterations in addition to associated small pits. The western linear **F.565/F.856** was on an east-west orientation and had evidence of one re-cut. This linear was quite substantial compared to the rest of the linears, and was on average 1.54m wide and 1.15m deep. The terminal of **F.856** cut into a large pit, **F.860**, which is a pattern that has been seen throughout the landscape at Whitfield and Glebe (Hutton 2008a, 2008b, 2009). The fill suggested that it silted up naturally over time. No artefacts were recovered from this feature. Linear **F.868**, on a northeast-southwest orientation, had the same profile and fill matrix as that of **F.856** and therefore it can be suggested that they were contemporary. Associated with this linear was a series of segmented linears with evidence of re-cuts in addition to small gullies and small pits (**F.876**, **F.886**, **F.887**, **F.888**). Both terminals of **F.868** were cut into earlier pits, as was linear **F.564** which continued on the same orientation.

Both linears F.856 and F.868/F.564 were of the same profile and fill matrix as the other large linears in this area previously discussed; F.555, F.581, F.643/F.644, F.869 and F.901. These linears form a re-established field system of enclosures that have previously been recorded within the Langtoft landscape associated with settlements (Hutton 2008a, 2009). There were no artefacts recovered from the linears in the southern part; however, Deverel-Rimbury pottery was prevalent towards the northern half of the area suggesting that a settlement associated with this field system potentially lies outside the area to the north.

Pits and Postholes

Throughout the investigation area, there were dispersed pits of various sizes, postholes and pit/wells. There was no evidence of structures apart from one four-poster structure towards the southeast of the area.

In the southern area of the 2009 phase, there appears to be an alignment of three pit/wells and a water-hole (**F.605**, **F.671**, **F.627** and **F.628**) as seen in Figure 6. The profiles of the pit/wells were fairly consistent in their profile and matrix, with the exception of F.605 which had evidence of a re-cut as well as an ashy deposit at the base and to the side of the feature. This suggested deposition of burnt material from the north-eastern side of the feature. As with the majority of these features, artefacts were sparse and there was no evidence of worked wood in any of them such as log ladders. However, they all had a slight step in each of them at the top of the cut of the feature, especially F.605. There has been evidence of these steps throughout the landscape in the previous excavations and offers an alternative way to access the water in the pit/well when there is no log ladder available. At the western end of this alignment there is a large waterhole situated on the other side of the linear F.640, see below for the description.

At the eastern end of the orientation there is a four-post structure that appeared to have been an isolated structural element in this area as there was no other evidence of habitational activity within the immediate vicinity. Just to the north of this four-poster was an isolated posthole, **F.586** and to the west a group of postholes that formed no clear pattern to suggest a structure (**F.723**, **F.724**, **F.725**, **F.726**, **F.727**, **F.728** and **F.729**). None of these features produced artefactual evidence.

There were another two pit/wells and a small pit that were orientated almost north-south and running 90 degrees to the pit/wells discussed earlier (**F.668**, **F.678**, and **F.695** respectively); the four-poster forming the 'corner' (Figure 6). If these are intentionally aligned to each other it could indicate the presence of a different field system orientation, as they are not on the same orientation as the ditched system. However, the dating of these features is somewhat problematic and the sequence of events could have been chronologically quite short. Additionally there are examples on the Freeman land, indeed throughout the quarry environs, of pits being incorporated into the field system ditches. One explanation could be that the pits formed an earlier, more ephemeral division of the landscape and the ditches were dug to re-establish the boundaries.

Additional evidence for this for this inference was found in the northwest corner of the area, amongst the quarry pits. The linear F.874 was curved and cut through four pits; **F.875**, **F.876**, **F.877** and **F.893**. These were different to the pit/wells as they were smaller in diameter with steep near vertical sides and flat bases. Another example of these pits included **F.841** just 15m to the west and **F.639** adjacent to linear F.643 to the west of the area.

Unfortunately, no pottery was recovered from the pits cut by linear F.874, although pottery was recovered from F.841 which was Middle Bronze Age.

Two postholes (**F.878** and **F.879**) adjacent to the large water-hole F.908 to the north of the area contained Deverel-Rimbury pottery. There have been similar features around other waterholes in the landscape, including the water-hole F.1254 on the Glebe Land. The fills of these small pits/postholes also contained a lot of charcoal and could be deposits of hearth material, although it is unclear at this time whether this relates to domestic activity or a more functional/small scale industrial aspect. A fragment of briquetage pedestal was recovered from the upper fills of F.908 which could suggest potential salt making activity.

Water-holes

Two water-holes (**F.628** & **F.880/908**) were identified during the excavations. F.628 was located to the south of the site adjacent to the terminal of F.869 (Figure 6). The eastern side of the feature was graded, probably for access, whereas the western side was vertical. Its base was deeper at the west suggesting that this was where the water ‘pooled’, and the basal fills were waterlogged with abundant evidence of roots capped by water silted fills interspersed with eroded slumping of the sides. The upper fills indicated a more gradual silting process, but also displayed impact from the wheels of quarrying machinery, highlighting the shallow topsoil depth across this area of the site. Except for small fragments of unworked roundwood the feature contained no artefacts.

F.880/908 was in the northeast of the site and proved to be one of the most interesting features investigated within this area. Four sections from two quadrants displayed irregular fill patterns throughout the feature representing a large water-hole with successive episodes of re-modelling that subsequently re-cut by a small pit or well. The primary water-hole is likely to have been sub-square in plan. Covering the base was a thin lens [2231] of dark greasy clayey silt. This thickened or ‘mounded up’ within a localised area along the south edge, which in turn was overlain by a deposit [2230] of fairly clean mid-olive clay/silt with lenses of small gritty stones and some darker silt. Overlain by lensed deposits of natural slippage from the sides [2231], these deposits may represent some initial scraping out of the bottom of the pit and indicate a large open base within the water-hole.

The secondary deposits were markedly different in each section suggesting multiple events of re-cutting or cleaning, but never of the entire watering hole. It is also notable that this could only be observed for when the feature had silted up quite considerably. 60cm of slumped natural deposits [2227] along the east section presented evidence of a steady process of natural silting, possibly indicating a prolonged period of abandonment. Secondary deposits in the north section comprised up to 0.70m of fine sinuous lenses of very dark organic silt [2232] mixed with lenses of light clay/silt with patches of dark clayey and sandy gravelly silts. These are indicative of a period of maintenance, but it is unclear whether this material has been cast to one side of the large hole or had been fully removed and later reincorporated by natural means. Both [2227] and [2232] thinned markedly towards the centre of the feature, merging into a patchy mixed deposit [2228]. Importantly, another re-opening of the waterhole occurred following a second period of abandonment. However, in this case there are few signs of maintenance with the accumulation of patching, silting and collapse.

The final phase of F.908 involved a westwards extension of the watering-hole into cleaner gravels. This cut [2222] was a broad oval with steep sides to the west and southwest rounding very tightly towards a flat base some 20 – 25cm shallower than the earlier cut.

A log ladder [2200] afforded access from the north side of the water-hole towards its base. A pronounced circular hollow 0.80-0.90m across and up to 1.57m deep was found to the south of the ladder which appears to represent a ‘bucket dipping’ pool. This was filled with silt mixed with occasional clean re-deposited natural [2190]. Considerably more extensive weathering or eroded deposits of upcast [2189] were present in the west and southwest of F.908. These merged into a central ‘core’ deposit [2188] that consisted of a greasy very dark soft and sticky organic silt which also entirely filled the ‘bucket dipping’ pool. Deposit [2188] contained a number of roundwood fragments, twigs and bark as well as two worked timbers ([2196] and [2199]).

In the final stages of the watering-holes’ abandonment a small pit or well (**F.902**) was opened at the southern edge of the watering hole (now more characteristic of a hollow). [2191] is possibly upcast from F.902, with the remaining infill comprised of 40cm of moderately clayey silt [2187] overlain by a thin lens (up to 16cm, but mostly <10cm) of mottled clayey silt [2186] with occasional charcoal and very occasional red burnt flecks. Above this was over 30cm of decayed peaty silt with orange and dark brown silt clays [2185]. These upper fills were truncated by a Post-Medieval ditch aligned NW-SE.

A number of watering-holes at Langtoft as well as other sites such as Pode Hole and at Eye Quarry (Daniel 2009; Patten 2009) had later small pits cut into them once they were silted up. It was suggested that these were for the purpose of erected posts, perhaps to mark their location in a flat landscape.

Cremations and Ring Ditches

Four ring ditches (**F.591**, **F.592**, **F.660** and **F.669**) were recorded during the excavation adjacent to the two previous ring-ditches (**F.542** and **F.545**) recorded and excavated during the 2007 season (Figure 3). They varied in diameter, as can be seen in Table 1 below, the largest being F.545 from 2007. The smallest ring-ditch, F.660 was severely truncated and the whole circumference did not survive. Evidence of truncation was prevalent across the site as can be seen with the associated cremations where only the very bases of the features have survived.

The overall orientation of the group of ring ditches appears to be on a northwest-southeast orientation, very similar to the alignment of the adjacent field system, although there was no evidence of a close association as there was no evidence of any linears within the immediate vicinity of the ring-ditches.

Feature No.	External Diameter	Internal Diameter
542	8.35m	7.55m
545	11.30m	10.10m
591	8.25m	6.00m
592	5.45m	4.45m
660	2.90m	2.30m
669	3.35m	2.70m

Table 1: Dimensions of the Ring-Ditches

There was no definitive evidence of central burials within the centre of the ring-ditches, perhaps due to the nature of truncation from cultivation activity. The only exception being F.592 which had a shallow central pit (F.689) which revealed no artefactual evidence, human remains or grave goods, although the similar fills to that of F.592 and with the presence of charcoal flecks suggests that they may be contemporary.

The largest of the ring-ditches excavated during the 2009 phase was F.591 (which was similar to F.542 from the 2007 phase). The average width of the surviving ditch was about 1.20m with an average depth of 0.60m. Only one of the sampled slots produced any artefactual evidence, in the form of pottery and animal bone; the pottery was Deverel-Rimbury (see Appendix). The two remaining ring-ditches (F.660 and F.669) were small in diameter and badly truncated; indeed the surviving ring-ditch of F.660 was fragmentary and extremely shallow in profile. Two of the ring-ditches (F.591 and F.592) contained small fragments of cremated bone which is probably due to the fact that the majority of the cremations were clustered around these two features.

Amongst the clusters of cremations, were two inhumations that were in poor condition (F.682 and F.694), perhaps due to the truncation of the area as well as poor taphonomic conditions. The best preserved of the two was F.694. Although the bone was extremely fragmentary, several teeth were recovered. The body was in a crouched position with the body orientated north-south and the head facing west. There was also no evidence of any accompanying grave goods, although the body could have been placed on a bed of river pebbles. The location of these two graves was amongst the cremations and there were no evidence of later disturbance of either types of feature which may suggest that they may be contemporary. Indeed, there was no evidence of features cutting into each other which suggests that there may have been some sort of 'markers' indicating where the burials and cremations were located; this is discussed further below.

In total, from both 2007 and 2009 phases, 52 cremations were excavated and recorded. Three different forms of deposition were noted: urned, probable organic container and no container. The cremations that were ascertained as having organic containers had cremated bone tightly clustered in the centre of the feature; there were no remains of a container which suggests that they were deposited in a bag made from cloth, leather or vegetable material that no longer survived. The cremations categorised as having no container had cremated bone evenly distributed throughout the fill. Just over half of the recorded cremations were not deposited in any container, with almost equal numbers for urned and organic containers (see Table 2 below). However, it should also be noted that there were a further 32 features scattered amongst the cremation which could be the remains of postholes, perhaps marking the positions of the deposits. Equally, as most of the features were shallow, these could represent truncated cremations, although no bone was recovered from them.

One cremation that is worth further description at this stage; **F.596** that appears to be isolated from the rest. The depth of the cremation was 0.28m, much deeper than the rest, and the profile suggested that this cremation was not as badly truncated as the others.

Type	Number
Urned	12
Organic container	11
No container	26

Table 2: Cremation Types

A full analysis of the cremations could possibly assign sex and ages to the remains, and these results can be plotted to see if any relationships can be determined, whether they were grouped socially or as family groups (see human bone assessment).

Quarry Pits

The quarry pits were clustered towards the northwest of the area and overlay the Bronze Age features. There was little artefactual evidence to indicate a date for these features and at best, it can only be suggested that they were post-Bronze and pre-modern. They can tentatively be placed into two categories; the first were dug in linear clusters (elongated oval in plan) whilst the second were dug in a more clustered fashion and were more circular in plan. The quarry pits that were clustered together also had a peat derived fill whereas the linear quarry pits were more clayey. The majority of the quarry pits were sampled, but only a small proportion was recorded

The linear clustered quarry pits were mainly centred alongside the small linear **F.851**; although this linear was fully silted up prior to the quarry pits being dug. These were sub-circular or oval in shape with gradually sloping concave sides and concave bases and the fills suggests that they silted up naturally. Quarry pits **F.904**, **F.904**, **F.850** and **F.871** all had the same sterile fill and contained no artefacts. Additionally the cluster of quarry pits (**F.808** to **F.821**) also consisted of a similar fill and were fairly small in size and it can be suggested that they were contemporary. The only artefacts recovered from one of these quarry pits was that of **F.847** which contained an almost complete Roman pot. There was a slight comparison in fill textures with the adjacent linear quarry pits; these perhaps could also be tentatively dated to the same period and be associated with the Roman features recorded in the adjacent quarry to the west.

The remaining quarry pits were larger and slightly sub-rectangular in plan with steep sides and flat bases. The fills were mainly mixed deposits of peat and clay and can be dated later than that of the smaller quarry pits previously discussed. Evidence of these pits cutting the first phase can be observed with **F.767** and **F.894** to **F.900** cutting the smaller adjacent pits. The fills of these pits suggests that they were simultaneously backfilled when the adjacent pits excavated material in one continuous cycle, whereas the earlier ones were probably left to silt naturally. A single piece of pottery was recovered but due to its condition it had no diagnostic traits to suggest a possible date. As a whole, the quarry pits were sterile of finds and the fills were fairly uniform and dating of them remains tentative

Post-Medieval Features

Towards the northeast of the site a number of small features were uncovered that related to the derelict building that lay just outside of the investigation area. There were also areas of modern disturbance including 23 large oblong machine dug quarry pits that were probably associated with the building of the road to the north of the investigation area.

The small pits that were dispersed amongst the machine dug quarry pits were full of either domestic debris such as buckets or items related to the public house. These features were full of discarded glass bottles and other associated items (bottle tops etc.) that have been dated to the 20th century. These features, including the large quarry pits were all located within a small boundary ditch that probably marked the area of land associated with the aforementioned public house, The New Inn.

Discussion

The archaeological features and artefacts assemblages recorded during all the phases of work on the Freeman Land, as well as the previous investigations throughout the quarry, provide a picture of a Middle Bronze Age landscape with information relating to land use, settlement activity, recycling of artefacts, and the burial of the dead. In a broader context, similar activity has been recorded throughout the wider landscape surrounding Langtoft and Baston that highlights a broad human affected landscape utilised throughout millennia.

The start of the Bronze Age at Langtoft saw land clearance and land enclosure take place with the linears dug to create adjacent banks to encourage hedgerows which would then become a source for fuel and food. These landscape boundaries were widespread and have also been recorded within the landscape at West Deeping (Murrell 2010). The field system orientation at Etton, Pode Hole, Thorney and Eye Quarry are all broadly similar and could form part of the same landscape pattern (French and Pryor 2005; Daniel 2008; Mudd and Pears 2008; Patten 2009).

The environmental evidence suggested that the land at Freeman was probably multi-functional with little cultivation, based largely on the keeping of livestock, the field system and wells/water holes enabling the management and keeping of animals. The field system at Pode Hole also provided information that the people who occupied this landscape were subsistence agriculturists with cattle representing the mainstay of the economy supplemented with arable cultivation (Daniel 2009).

The briquetage pedestals that were found through the Langtoft landscape in the upper fills of the waterholes poses an interesting question. This has occurred three times within the immediate landscape so far with a further example at Pode Hole. Pode Hole also had a small amount of briquetage suggesting that the salt collection occurred elsewhere as the environmental remains suggested a freshwater landscape together with the lack of features representing hearths, settling tanks and feeder ditches which are thought to represent salt making sites. Could the deposits of large pottery vessels in the ditch terminals on Freeman and Whitfield represent broad, flat shallow pans for the use of small scale salt production? The fabric of the pottery was similar to that of Deverel-Rimbury.

There was no direct relationship between the field system and the ring-ditches; the only similarity being that they were roughly on the same northwest-southeast orientation. One could have influenced the other or they could have been established at the same time. A sampling strategy for radio carbon dating would benefit in the dating of the features and address these questions.

The ring-ditches are classed as such and not barrows as there was no evidence of any surviving mounds, although this possibly cannot be entirely discounted. The baulks that were retained across the ring-ditches during excavation gave no indication of any potential central mound, and there was also no evidence of central burials or cremations. The surviving cremations were severely truncated through ploughing activity (plough scars was prevalent throughout the area). Another hypothesis is that central burials could have been interred into the mound itself leaving no evidence in the gravel, or thirdly that the primary function of these monuments was not for the internment of the dead, but as a focus in the landscape. They were either markers for the cremation burials or used/incorporated as territorial markers within a wider landscape. The three ring-ditches excavated at Cherry Hinton, Cambridgeshire, also had no associated burials (White 1998). However, again, due to the truncation of the features, this cannot be confirmed.

The nature of the cremation cemetery and the differences, as well as similarities, between the ring ditches is worthy of more detailed analysis. Is there meaning in the variations in diameter, ditch width and density of adjacent cremations? The majority of the cremations appeared to be clustered around the south-eastern side of ring-ditch F.591. The depth and profile of this feature was more impressive than the rest. The smaller ring-ditches were very truncated, indeed it was briefly considered whether they were ring-ditches at all, but there are other examples of ring-ditches with similar dimensions. At Mucking (Evans *et al* forthcoming), ring-ditches with clustered cremations were recorded as well as small ring ditches (e.g. 2.44m in diameter). These ring ditches however were located throughout that prehistoric landscape and not clustered as at Freeman. Perhaps the land at Freeman was prioritised for settlement use, and too precious a commodity for extensive burial activity. The ring-ditches were located fairly close together and the cremations were placed fairly close to the ring-ditches, particularly F.591 and F.592.

The presence of the two crouched inhumations within the cremation cemetery area was unexpected. They were located in an area where there is an 'arc' of cremations around an area with no features other than an isolated cremation (figure 3). This area of empty space could be evidence for a barrow of which nothing physical has survived. Evidence from other sites indicates that such features can be shallow, and some also have inhumations around the edge. At Lodge Farm in Essex a pond barrow was the focal point for funerary and ritual activity dated to the Early Bronze Age (Germany 2007). The Lodge Farm barrow was very shallow and had a central cremation that was deeper than those surrounding. This is similar to the isolated cremation at Freemans; F.596 is sited in the central area of the 'space' and is indeed, much deeper than the rest of the cremations excavated. Based on the level of truncation at the Essex site, had this been a pond barrow at Freeman no physical remains would have survived the apparent degree of truncation. The empty space very probably indicates the presence of a 'missing' monument; it is possible that this might have been a pond barrow. Similar sites with a pond barrow associated with ring-ditches of varying sizes and a cremation cemetery have been found at Pampisford and Over in Cambridge and at Snail Down, Wiltshire and Monkton Up Wimbourne in Dorset (Pollard 2002; Thomas 2005; Atkinson *et al* 1951), and also at the Neolithic and Bronze Age monument complex at

Radley, Oxfordshire (Barclay and Halpin 1999). Further analysis and comparison may be able to determine whether there was a pond barrow at Langtoft, it remains an intriguing possibility.

Further in depth analysis of the cremations from Freeman could include examination and correlation of burial types with sex or age; was a certain group predominantly interred with urns, or associated with a particular ring-ditch? Early indications suggests that the groups appear to be mixed, indicating ties with family or social grouping and they were interred close together, but never overlapping. This indicates a surviving memory of those who were buried and where, perhaps using markers such as timber posts; however the majority of the small postholes could be the remains of truncated cremations and not actual features at all. Other Bronze Age cremation cemeteries can have both pot and uncontained remains, such as those at Pasture Lodge Farm, Lincolnshire and at Deeping St. James to the south (Allen *et al* 1987; French 1994).

The features attributed to the Bronze Age on the Freeman land were widespread across the whole of the area. Later activity was restricted to certain areas, such as the quarry pits to the northwest which could potentially relate to the Romano-British settlement to the west and/or to the features highlighted by aerial photographs to the north. The features associated with the former public house, The New Inn, also offers and insight to the activities there.

Appendix 1

Specialist Reports

An Assessment of the Prehistoric Pottery Mark Knight

Introduction

This report represents an assessment of three groups of pottery recovered from three conjoining areas of the same excavation (LFR07, LFR09 and LFR11). The overall condition of the assemblages was generally good although some contexts, especially cremation related contexts, included leached or crumbling fragments. With the exception of five sherds of Collared Urn (LFR07) all of the pottery belonged to the same Deverel-Rimbury tradition, and as such represents another large collection of Middle Bronze Age pottery from the Langtoft Quarries (Hutton 2008a, 2008b).

	Sherds	Weight	MSW
<i>LFR07</i>	696	3755g	5.4g
<i>LFR09</i>	523	2572g	4.9g
<i>LFR11</i>	121	896g	7.4g
	1340	7223g	

Table 3: Assemblage Breakdown

2007 Phase

Pit F.579 produced a small number of Collared Urn sherds, including two rim fragments and part of a collar, all of which were plain and possibly burnt (four of the five sherds were the same uniform pale buff colour even across breaks).

The assemblage consisted of 691 sherds weighing 3646g. The majority of the material (81.2% by number and 89.5% by weight) came from six features (F.513, F.520, F.521, F.524, F.542 and F.560) and it was these contexts that generated the greatest number of diagnostic 'feature' sherds. There was little variation between contexts beyond changes in sherd condition, the size of fragments and the presence or absence of crushed shell, the principal tempering or opening material. Most of the fragments had light pink or orange oxidised exteriors and dark grey or brown un-oxidised interiors although some pieces were a uniform pink colour. The presence or absence of shell also affected the appearance of the fragments with pieces being either speckled white or pock-marked with small voids. The most striking attribute of the assemblage was its homogeneity with almost every context yielding at least one or two large featureless slabs of pottery from big diameter bucket shape vessels with little or no decoration. Sherd thickness illustrated a similar regularity (most equalling 8-12mm).

	Sherds	Weight (g)	MSW (g)
F.513	13	253	19.5
F.520	51	454	8.9
F.521	76	547	7.2
F.524	88	623	7.1
F.542	253	1216	4.8
F.560	80	170	2.1
<i>Totals:</i>	<i>561</i>	<i>3263</i>	<i>5.2g</i>

Table 4: Major Deverel-Rimbury Assemblages

Where present, feature sherds included large diameter base fragments (> 30cm; F.521 and F.524 for example) and even larger diameter rim sherds (35 to 45cm; F.521, F.524, F.542).

The upper fills of the ring-ditch F.542 bore 253 sherds of Deverel-Rimbury pottery including pieces of a cordon decorated with diagonal slashes and two base angle fragments. The small pit F.513 produced only plain body sherds whereas the pit F.524 contained a large rim fragment from a thick-walled and large diameter (c. 35cm) bucket-shaped vessel alongside some smaller rim pieces belong to a similar shaped vessel only this time with a flattened out-turned rim. A T-shaped rim was present within the ditch terminal F.521 and F.536 had a decorated cordon (impressed with fingertip impressions). Comb-point decoration adorned a rim sherd (flattened with external lip) from F.534.

2009/2011 Phase

The 2009 assemblage comprised 523 sherds weighing 2572g. The partial and disintegrating remains of eight Deverel-Rimbury urns made up all but two sherds or 4g of the total collection with the remainder coming from a ring-ditch associated context (F.591). The cremation contexts produced base and body fragments of large diameter (>35cm) bucket shaped vessels and all made of the same crushed shell tempered fabric. An absence of rim or upper body fragments suggests that all of the urns had been truncated *in situ*. The condition was poor and the vessel bases were either partial or badly leached. The crumbling base of F.619 was perforated by a couple of 8mm diameter holes, which could have been caused by root action. The best preserved context was F.619 which generated large fragments (MSW 25.9g) of an urn with a base diameter of approximately 42cm otherwise the majority of the contexts produced small pieces or crumbs.

Crem.	Feature	Sherds	Weight	MSW
1	587	193	329g	1.7g
2	593	21	165g	7.8g
3	594	98	202g	2.0g
4	600	88	314g	3.6g
5	614	34	164g	4.8g
6	617	22	69g	3.1g
7	619	51	1323g	25.9
8	625	14	2g	0.1g
		521	2568g	

Table 5: Pottery from Cremation Contexts

In the 2011 phase eight contexts yielded 121 sherds weighing 896g. As in 2007 the majority of the assemblage came from just a few features (F.830, F.840 and F.908) with the remaining contexts small fragments. The principal contexts contributed 89.2% of the total number of sherds and 91.2% of the total weight. The material was identical in appearance to the pottery from LFR07 although generally there were far fewer large fragments. Simple rounded rims were present in F.840 alongside some base angles whereas F.908 contained a body sherd with an applied cordoned and fingertip impressions. A base angle with a diameter of 26cm came from F.830.

Discussion

Besides the diminutive Collared Urn assemblage, the homogeneity of the rest of the material was reflected by its apparent uniform distribution, in that the pottery did not appear to be restricted to one particular type of context. Ring-ditches, gullies, cremations, pits and hearths all produced very similar material, the only real difference being the degree of fragmentation

as well as some differences in post-depositional processes. The Deverel-Rimbury cinerary wares appeared to be the same as domestic wares and the consistency or uniformity of the fabrics would appear to confirm this pattern. Colour differentiation between contexts, including between 'domestic' contexts, might be an attribute of certain sherds being subject to different post-breakage histories including fragments being burnt or re-fired (uniform pale colour, some surface crazing etc.). Perhaps the most important attribute of the combined LFR07, LFR09 and LFR11 assemblage is its contribution to the impressive corpus of Deverel-Rimbury pottery being generated by the fieldsystems of the Welland Valley (Hutton 2007, 2008a, 2008b, 2008c, Murrell 2010).

An Assessment of the Flint Artefacts *Lawrence Billington*

Three worked flints (39g) and 6 unworked flints (4g) were recovered from the 2009/2011 excavation. Only one worked flint was recovered from cut features; a small hard hammer struck tertiary flake from F.608. The two remaining worked pieces were collected from the surface of the site and consisted of a blade like flake with fine invasive retouch and a heavily corticated and edge damaged multiplatform core. Neither piece was strongly diagnostic but both are likely to reflect Neolithic or Early Bronze Age activity. The burnt flint assemblage was derived from two cremation deposits, F.619 and F.596 and was made up of small fragments of heavily burnt and shattered gravel. F.619 contained six small fragments (3g) and F.596 contained a single fragment (1g). Presumably this material represented gravel incidentally caught up in the cremation process.

An Assessment of the Roman Pottery *Katie Anderson*

A small quantity of Romano-British pottery, totalling 40 sherds weighing 539g was recovered from the 2009/2011 excavations. 39 sherds (530g) were from a single vessel, a semi-complete jar. It seems likely that this vessel was complete when deposited within a small, shallow pit (F.847). Unfortunately the feature had been truncated and thus the remainder of the jar had been lost. The vessel itself was a fine sandy greyware globular jar with an everted rim, with a cordon on the neck and a groove around the body. A thick layer of limescale was present on the bottom third of the vessel, implying that it had been used to store/hold water. This vessel dates to the earlier Roman period (mid 1st-2nd century AD).

An Assessment of the Cremations and Human Bone *Marcus Brittain, Iona Robinson and Natasha Dodwell*

Introduction

The 2007 investigations at Freeman found the remains of one inhumation and cremated material from ten features (Hutton 2008c: 20). The 2009/ 2011 archaeological investigations revealed two further inhumations and cremated bone from an additional 43 separate features. The condition of the bone within these contexts is highly variable depending upon the degree of impact through truncation and the acidic preservation environment. The purpose of this report is an overview assessment of the analytical potential of the human bone assemblage based on its condition and character.

Inhumations

Two sub-rectangular grave cuts (F.682 & F.694) oriented north-south were excavated 4m to the east of ring ditch F.591. These were broadly similar in dimension (L 1.11-1.33m, W 0.45-0.46m, D 0.07-0.09m). Preservation of bone in F.682 was exceptionally poor with only 12g of highly degraded bone recovered. The distribution of the bone within the grave allowed for possible signs of articulation to be inferred during excavation, and several teeth were collected together from the north cut of the grave. Grave F.694 was situated 1m to the north of F.682, and contained a single skeleton [1426] in a tightly crouched position on its right side, oriented north-south with the head facing to the west and resting against the northern cut of the grave. It is possible that the body had been placed upon a bed of rounded pebbles. The grave was highly truncated. Partial remains of left and right skeletal elements had survived, including fragments of skull, and incomplete limb bones from the left and right all with missing articulating ends. These were in an advanced state of degradation and it was only possible to recover 4g of bone.

Cremated bone

A total of 14.092kg of cremated human bone was collected from 43 features. Where possible, bone fragments larger than 10mm were collected separately from the smaller and less diagnostic specimens. For each context a 100% whole earth sample was recovered and then wet and dry sieved at 10mm, 5mm and 2mm apertures (see table 6). In most cases the bone was a buff white colour and exhibited twisted fracture signatures indicative of exposure to consistent and high combustion temperatures. The generally good potential for analysis of age, sex and pathology at the Freeman site was assessed in the 2007 assemblage from the same cemetery (Dodwell in Hutton 2008c). A similar measure of potential is given to the larger 2009/2011 assemblage, but is contingent on the degree of truncation on any given deposition context. The degree of truncation is recorded in Table 6 below.

39 features may be characterised as small pits specifically dug for the deposition of cremated human remains either within an urn, an organic container or loose. Two additional pits (F.689 and F.691) contained at least one fill with less than 1g of cremated human or animal bone, but do not appear to have been dug specifically for the formal deposition of cremated remains. Very small quantities of cremated bone were also found within the encircling ditches of the ring monuments F.660 and F.669 from soil samples taken from four of the test slots; this comprised less than 1g in each case and it may not be possible to distinguish that of human from animal.

Of the 43 features containing cremated bone over 60% were less than 10cm deep and are likely to have been severely truncated. In eight of the cremation pits bone was found within or in accompaniment to a Middle Bronze Age cinerary urn. The rims were missing from each of these urns, and in many instances the body of the urn was also largely missing due to heavy truncation. Three cremation deposits within pits appear to have suffered little truncation having been sealed by overlying fills (F.596, F.631 & F.647). With these exceptions all the deposits of cremated bone have been truncated to degrees considered light, moderate or heavy. In only six of the cremations did the total weight exceed 1000g. That from F.596 is by far the largest at 3412g, and is from a secure and undamaged cremation pit context 28cm in depth. 56% of the assemblage was less than 100g, with 45% less than 50g and 13% less than 1g. Where concentrations of bone were documented there were indications that at least eight of the un-urned deposits were deposited in an organic container.

Feature number	Feature type	Depth of feature (m)	Urn	Total weight of cremated bone (g)	Wt (g) <5mm	Wt (g) 5-10mm	Wt (g) >10mm	Concentrated (Yes/No)	Truncation: None/Light/Moderate/Heavy
584	Cremation pit	0.05		15	8		7	Y	Heavy
585	Cremation pit	0.13		369		228	141	N	
587	Cremation pit	0.18	Y	1343		502	841	Y	
589	Cremation pit	0.18		289		138	151	Y	Light
590	Cremation pit	0.06		255		166	89	N	
593	Cremation pit	0.04	Y	267		142	125	N	Heavy
594	Cremation pit	0.12	Y	159		108	51	N	Heavy
595	Cremation pit	0.02		<1	<1			N	Heavy
596	Cremation pit	0.28		3412		1306	2106	Y	None
597	Cremation pit	0.03		45		20	25	N	Heavy
598	Cremation pit	0.03		4	2		2	N	Heavy
599	Cremation pit	0.08		1220		628	592	N	Heavy
600	Cremation pit	0.07	Y	92	20	22	50	Y	Heavy
610	Cremation pit	0.06		137		108	29	Y	Light
611	Cremation pit	0.08		315		232	83	Y	Light
612	Cremation pit	0.06		571		276	295	Y	Moderate
613	Cremation pit	0.02		73		22	51	Y	Heavy
614	Cremation pit	0.07	Y	89	2	50	37	N	Heavy
615	Cremation pit	0.07		<1	<1			N	Heavy
616	Cremation pit	0.2		1050		786	264	Y	Light
617	Cremation pit	0.05	Y	4		4		N	Heavy
618	Cremation pit	0.04		2		2		N	Heavy
619	Cremation pit	0.37	Y	308		240	68	Y	Light
620	Cremation pit	0.1		6		6		N	Light
621	Cremation pit	0.03		52		50	2	N	Heavy
622	Cremation pit	0.03		<1	<1			N	Heavy
623	Cremation pit	0.08		180		136	44	N	Heavy
624	Cremation pit	0.02		30		24	6	N	Heavy
625	Cremation pit	0.04	Y	34		32	2	N	Heavy
629	Cremation pit	0.03		16	6			N	Heavy
630	Cremation pit	0.11		1004		722	282	N	Light

Feature number	Feature type	Depth of feature (m)	Urn	Total weight of cremated bone (g)	Wt (g) <5mm	Wt (g) 5-10mm	Wt (g) >10mm	Concentrated (Yes/No)	Truncation: None/Light/Moderate/Heavy
631	Cremation pit	0.2		208		200	8		None
635	Cremation pit	0.01		<1	<1			N	Heavy
636	Cremation pit	0.13		848		572	276	N	Light
637	Cremation pit	0.15		358		326	32	N	Light
647	Cremation pit	0.31		1074		452	622		None
649	Cremation pit	0.05		10		8	2	N	Heavy
650	Cremation pit	0.05		2	2			N	Heavy
660	Ring Ditch	0.09		<1	<1			N	n/a
669	Ring Ditch	0.15		<1	<1			N	n/a
689	Pit	0.12		<1	<1			N	Heavy
691	Pit	0.4		2	2			N	n/a
700	Cremation pit	0.13		226		162	64	N	Light

Table 6: Summary of cremation weights by fraction after sieving

Recommendations for further work

The human bone assemblage from 2009/2011 should be analysed together with the assemblage from 2007 as all share the same broader cemetery context. Analysis should be possible at the very least to determine or refine the age and in some cases sex of individuals. Detailed understanding of prehistoric cremation practices in Britain has progressed significantly in recent years, but comparative analysis between datasets are lacking. Therefore, comparison to assemblages from other sites within the region and at a national scale would also prove advantageous, with particular reference to funerary deposits recovered from pre-quarrying excavations at Over. Further analysis of the cremated human bone is therefore necessary for retrieval of artefacts that may have accompanied the body during the cremation, including animal bone and other material items. Moreover, bone <5mm should be sorted and weighed by body part in order to determine whether there has been deliberate selection of bone prior to burial.

[N.B. Not included here are 12g of cremated human bone from tree throw F.699. This is situated in an area of cremation pits and is likely to be related to the deposition activities regarding cremated bone.]

An Assessment of the Animal Bone *Vida Rajkovača*

The excavations at the Langtoft Freeman site resulted in the recovery of a small faunal assemblage. The raw fragment count is presented in Table 7 to emphasize the level of fragmentation recorded in the assemblage. Following the faunal analysis with any refitting fragments being counted as one, the total of 84 specimens were recorded weighing 2477g. Based on the chronology of the material, the assemblage was dated to the Middle Bronze Age.

<i>Phase</i>	<i>Raw fragment count</i>	<i>Weight (g)</i>
<i>2009</i>	432	696
<i>2011</i>	221	1781
Total	653	2477

Table 7: Fragment count and weight by phase

Methodology

The zooarchaeological investigation followed the system implemented by Bournemouth University with all identifiable elements recorded (NISP: Number of Identifiable Specimens) and diagnostic zoning (amended from Dobney & Reilly 1988) used to calculate MNE (Minimum Number of Elements) from which MNI (Minimum Number of Individuals) was derived. Identification of the assemblage was undertaken with the aid of Schmid (1972), Hillson (1999) and reference material from the Cambridge Archaeological Unit, Cambridge. Unidentifiable fragments were assigned to general size categories where possible. This information is presented in order to provide a complete fragment count. Ageing of the assemblage employed both mandibular tooth wear and fusion of proximal and distal epiphyses. The ageing data of Silver (1969) was used to assess epiphyseal fusion of the post-cranial elements and the analyses of tooth eruption and mandibular toothwear stages were recorded following Grant (1982).

Preservation and taphonomy

The state of preservation ranged from moderate to quite poor, with the exception of two contexts ([2187] and [2188]/ F.908), which showed quite good level of preservation. Sixteen fragments demonstrated good and 39 fragments a moderate level of preservation, compared to 29 specimens showing signs of surface erosion, fragmentation or weathering. On the basis of the proportion between isolated teeth and mandibles, the assemblage appears to be highly fragmented. Six mandibles and 26 loose teeth were recorded for all species

combined; a figure which corresponds to *c.* 67% of the identified species count. Considering the ratio between the raw fragment count (653) and number of assessable specimens (84), where assessable specimens make up only *c.* 13% of the total number of bone fragments recovered, the level of fragmentation also appears to be great. Only one specimen was recorded with gnawing marks and butchery was not noted in the assemblage.

Occurrence of species

In common with most archaeologically recovered assemblages from Britain, the Langtoft faunal record is dominated by livestock species. Cattle were the dominant species, followed by sheep/goat, horse and pig (Table 8). The prevalence of cattle is reflected in the numbers of cattle-sized elements recorded. Wild fauna is absent from the assemblage. Ageing data was available from three sheep/goat mandibles all of which died as adult animals (4-6 years) or old adults (6-8 years).

Taxon	NISP	<i>NISP%</i>	MNI
Cow	25	<i>52.1</i>	1
Sheep/goat	10	<i>20.8</i>	2
Horse	7	<i>14.6</i>	1
Pig	6	<i>12.5</i>	1
Total ID to species	48	<i>100</i>	.
Cattle-sized	28	.	.
Sheep-sized	5	.	.
Mammal n.f.i.	3	.	.
Total	84	.	.

Table 8: Number of Identified Specimens (NISP) and Minimum Number of Individuals (MNI) for all species

Conclusion

The area investigated during these two seasons is part of the Middle Bronze Age settlement excavated during 2007 (Hutton 2008). It is not a surprise, therefore, that the faunal record derived from these excavations during 2009 and 2011 produced faunal ‘signature’ very similar to that recorded from 2007 (Rajkovača 2008b). The prevalence of cattle, followed by sheep/goat and pig is in keeping with the majority of domestic Middle Bronze Age assemblages from the area. The small faunal assemblage recovered from Langtoft Whitfield Land during 2007 (Rajkovača 2008a) is the closest parallel both in terms of the assemblage’s size and ratio of different species. Other comparatives from the area include West Deeping (Rajkovača 2010) and Bradley Fen (Rajkovača in Knight and Brudenell forthcoming). The prevalence of cattle is typical for the period, yet it must have also been brought about by environmental factors particular for the locale, given that cattle tend to be the preferred species in wet landscapes. The assemblage is quantitatively inadequate for propositions about animal husbandry and in the absence of butchery, ageing and biometrical data, it is difficult to assess the assemblage any further.

An Assessment of the Environmental Remains *Val Fryer*

Introduction and Method Statement

Excavations at Langtoft Quarry, undertaken by the Cambridge Archaeological Unit (CAU) recorded features which formed part of a Mid- to Late Bronze Age landscape of enclosures, wells, ring ditches and a cremation cemetery. Samples for the retrieval of the plant macrofossil assemblages were taken from across the excavated area and twelve were submitted for assessment.

Eleven samples were bulk floated by CAU and the flots were collected in a 300 micron mesh sieve. A further sample from the waterlogged fill of well F642 (sample 593) was processed by the author using manual water flotation/washover, and the flot was collected in a 250 micron mesh sieve. Both dried flots and the wet retent were scanned under a binocular microscope at magnifications up to x 16 and the plant macrofossils and other remains noted are listed in Table 1. Nomenclature within the table follows Stace (1997). Both charred and waterlogged/de-watered plant remains were noted, with the latter being denoted in the table by a lower case 'w' suffix. Modern fibrous roots, seeds and arthropod remains were also recorded.

The non-floating residue from sample 593 was collected in a 1mm mesh sieve and sorted when dry. Artefacts/ecofacts were not recorded.

With the exception of two assemblages (samples 593 and 665 (linear F856)), which contained a moderate density of waterlogged/de-watered macrofossils, plant remains were very scarce, with most occurring as single specimens within an assemblage. Preservation of the charred material was quite poor, with the remains being in a very fragmentary state. However, the waterlogged/de-watered macrofossils were reasonably well preserved, although distortion had occurred, probably as a result of the compression of the deposits, and the apparent intermittent drying and re-wetting of the deposits had resulted in some deterioration of surface detail.

Cereal remains were exceedingly scarce, with a bread wheat (*Triticum aestivum/compactum*) type rachis node from sample 617 (un-urned cremation deposit F700) and an indeterminate cereal grain from sample 614 (Roman ditch F592) being the only two macrofossils recorded. Charred weed seeds were also scarce, occurring within only two assemblages (sample 541 from un-urned cremation F589 and sample 567 from urned cremation F619), but seeds of dry land herbs, wetland/aquatic plants and tree/shrub species were recorded within the waterlogged/de-watered assemblages. Taxa noted included nipplewort (*Lapsana communis*), silver weed (*Potentilla anserina*), buttercup (*Ranunculus* sp.), stinging nettles (*Urtica dioica*), gipsy wort (*Lycopus europaeus*), mint (*Mentha* sp.), water crowfoot (*Ranunculus* subg. *Batrachium*), hazel (*Corylus avellana*), hawthorn (*Crataegus monogyna*) and bramble (*Rubus* sect. *Glandulosus*).

Charcoal/charred wood fragments were present throughout, although rarely at a high density. Other plant macrofossils were scarce, although indeterminate culm nodes, leaf fragments, thorns, tubers and twig fragments were recorded. The two waterlogged/de-watered assemblages both contained small assemblages of both terrestrial and freshwater obligate mollusc shells, and the assemblage from sample 593 also included water flea eggs

(Cladoceran ephippia) and reasonably well preserved arthropod remains. Small fragments of burnt/calced bone were present within all three of the cremation deposits.

Conclusions and Recommendations

As plant macrofossils and other remains are so scarce within the assemblages, accurate interpretation of the site or its component features is very difficult. However, the following statements may be made:

- The un-urned cremations are particularly sparse, possibly suggesting that the deposits have suffered some degree of post-depositional disturbance and/or dispersal. The few plant remains that are recorded may be either accidental inclusions or relicts of the flora burnt *in situ* beneath the pyres. The black tarry material and vitreous concretions noted within sample 541 are all probable products of the cremation process.
- Urned cremation F619 appears to be more complete (i.e. has a higher density of charcoal/charred wood fragments) although again, plant macrofossils other than charcoal are scarce. Those recorded, and most particularly the tuber fragments, are almost certainly derived from grassland herbs, which were either up-rooted for use as kindling for the pyre or were burnt *in situ* during the cremation.
- The waterlogged/de-watered assemblages from samples 593 and 665 are broadly similar in composition, containing seeds of dry land herbs, wetland/aquatic plants and tree/shrub species. Assuming that these remains are derived from the flora surrounding these features, it would appear that rough grassland conditions were prevalent, although the presence of a small number of annual weed seeds may suggest that some nearby areas were disturbed and/or cultivated. However, it should be noted that this disturbance might simply be a result of the digging of the features themselves. Both wells F642 and linear F856 provided semi-aquatic microhabitats, which were capable of supporting a limited range of both wetland plants and freshwater molluscs. Both features appear to have been either overgrown by or surrounded with woody shrubs, most particularly brambles and hawthorn. The condition of the macrofossils and the limited range of flora recorded may indicate that the fills within both of these features have been subjected to extended periods of drying and re-wetting since deposition.

In summary, whilst these assemblages do indicate that plant macrofossils are preserved within the archaeological horizon at Langtoft Quarry, their potential for any close interpretation of the site is, perhaps, somewhat limited. However, this site offers a rare opportunity to study an intact Bronze Age landscape and, therefore, the importance of the samples should not be understated. Therefore, it is strongly recommended that all available samples from the current project should be studied and, that if further interventions are planned, additional plant macrofossil samples of approximately 30 – 50 litres in volume should be taken from all well-sealed and dated contexts recorded during excavation.

Sample No.	541	617	567	598	611	581	593	665	592	607	614	616
Context No.	925+6	1501	1021	1300	1425	1138	1259	1967	1207	1384	1477	1480
Feature No.	F589	F700	F619	F682	F694	F639	F642	F856	F660	F591	F592	F592
Feature type	UU Crem	UU Crem	U Crem	Grave	Grave	Pit	Pit/Well	Linear	R.Ditch	R.Ditch	R.Ditch	R.Ditch
Cereals												
<i>Triticum aestivum/compactum</i> type(rachis node)		x										
Cerealindet. (grain)											xc f	
Dry land herbs												
Apiaceae indet.							xw					
<i>Arrhenatherum</i> sp.(tuber frag.)			xc f									
Chenopodiaceae indet.								xw				
<i>Lamium</i> sp.							xc fw					
<i>Lapsana communis</i> L.							xw					
<i>Persicaria maculosa/lapathiifolia</i>								xw				
<i>Plantago lanceolata</i> L.			xc f									
<i>Polygonum aviculare</i> L.	x											
<i>Potentilla anserina</i> L.								xw				
<i>Ranunculus</i> sp.								xw				
<i>Solanum</i> s p.								xw				
<i>Urtica dioica</i> L.								xw				
Wetland/aquatic plants												
<i>Carex</i> sp.								xc fw				
<i>Lycopus europaeus</i> L.								xxw	xw			
<i>Mentha</i> sp.								xw	xw			
<i>Montia fontana</i> L.	x											
<i>Ranunculus</i> subg <i>Batrachium</i> (DC)A.Gray								xw	xw			
Tree/shrub macrofossils												
<i>Betula</i> sp.(fruit)								xw				
<i>Cornus sanguinea</i> L.									xc fw			
<i>Corylus avellana</i> L.									xw			
<i>Crataegus monogyna</i> Jacq.								xw				
<i>Rubus</i> sp.									xw			
<i>R.</i> sect. <i>Glandulosus</i> Wimmer & Grab								xxw	xw			
<i>R. idaeus</i> L.								xc fw				
<i>Sambucus nigra</i> L.								xw				

Other plant macrofossils												
Charcoal <2mm	xx	xx	xxxx	x	x	xx	x	x	xx	x	x	x
Charcoal >2mm	x		x	x		x			xx	x	x	x
Charcoal >5mm						x						
Charred root/stem	x	x	x		x	x						
Waterlogged/de-watered root/stem							xxxx	xxxx				
Charred organic concretion											x	
Indet.culm frags.				x								
Indet.fruits							xw					
Indet.leaf frags.							xw					
Indet.seeds						x					x	
Indet.thorns (<i>Rosa</i> type)							xw					
Indet.tuber			x			xf						
Indet.twig frags.							xw					
Wood frags >5mm							xw					
Mollusc shells												
Terrestrial species												
<i>Carychium</i> sp.							x					
<i>Trichia hispida</i> group								x				
<i>Vallonia</i> sp.							x	xf				
<i>V. costata</i>								x				
Zonitidae indet.								x				
Freshwater obligate species												
<i>Anisus leucostoma</i>								x				
<i>Aplexa hypnorum</i>								xf				
<i>Lymnaea</i> sp.								x				
<i>Pisidium</i> sp.							x					
<i>Planorbis</i> sp.								x				

Other remains												
Black tarry material	x											
Bone	x xb	xb	xxb	x								
Cladoceran ephippia							xxxw					
Vitreous material	x											
Waterlogged arthropod remains							xx					
Sample volume (litres)	36	5	46	18	20	8	1	25	8	10	10	8
Volume of flot (litres)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.4	0.4	<0.1	<0.1	<0.1	<0.1
% flot sorted	100%	100%	100%	100%	100%	100%	25%	25%	100%	100%	100%	100%

x = 1 – 10 specimens xx = 11 – 50 specimens xxx = 51 – 100 specimens xxxx = 100+ specimens

cf = compare w = waterlogged/de-watered b = burnt

UU Crem = un-urned cremation U Crem = urned cremation R.Ditch = ring ditch

Table 9: Plant Microfossils and other remains

An Assessment of the Burnt and Worked Clay *Simon Timberlake*

F.908 Middle Bronze Age waterhole briquetage support pedestal

Part of the side of what is probably part of a crudely fashioned cylindrical pedestal (originally 70mm diameter, 318g) made for supporting briquetage containers for salt-making (Lane & Morris 2001). The fabric suggests manufacture from a mid-grey/ brown clayey silt with minor inclusions of broken flint (c. 5mm) and more major inclusions of worn limestone gravel (<10mm). The internal structure and presence of sand/grit on the exterior suggests that the silt-clay was rolled into shape rather than squeezed, and then perhaps fired in an open hearth. Just below the surface of the fabric this is oxidised, yet the exterior itself is sooted and encrusted, suggesting this reflects the effect of use and re-use in a hearth/flue. No salt deposit could be seen on the exterior of the pedestal, yet the blackening tallies with what has been suggested for the placing of these supports directly in the fire embers (Lane *ibid.*).

This pedestal fragment is not obviously like the Middle Iron Age Type PD4 (two-horned triangular-shaped) example recorded from Outgang Road, Langtoft by Lane (2001), nor is it like the sub-square base round-stemmed type PD5 from Langtoft and Market Deeping. In some respects this compares better with the cylindrical pedestal types described from Ingoldmells Beach (Crosby 2001), yet the partial condition of this particular example makes any accurate comparison impossible. More likely the lack of any clear correspondence here may simply be due to its much earlier date. Lane and Morris do not refer to any Middle Bronze Age salt-making sites, and the better-known Langtoft production site(s) are clearly MIA. However, we should remember that this example was clearly not found at a salt-production site. Either these have been re-deposited from out of their original context, or else they have been used in an altogether different process. Bronze Age saltmaking using hearths and briquetage pans has been recorded from elsewhere in Lincolnshire (Webley, 2004a).

F.879 posthole, burnt clay

Only 208 g of this bag (total wt 602g) consists of burnt clay. The rest consists of nodular limestone (as described above), some of which appears to have been burnt. The buff-pink coloured burnt clay (c. 20 pieces) is quite abraded, and thus shows little evidence of what object or material this came from. However, one or two pieces seem to have had original external surfaces. It seems likely that these are burnt fragments of daub walling. The absence of stick (wattling) impressions suggests these represent only the outer layers.

F.878 posthole, burnt clay

Small fragments of burnt clay (34g), including x4 pinkish-buff pieces probably from burnt daub (see <032>), and one grey-brown silty fabric similar to that of <046>.

F.865 pit/well, burnt clay

Some 11 small fragments (46g) of a bright red sandy burnt clay containing small inclusions of grit and shale. No other visible structure.

F.891 pit/well, burnt clay

Seven small fragments (12g) of mid orange-brown burnt clay. These show no visible structure.

F.840 gully, burnt clay

A single piece of brick-red burnt clay, part of the corner of an object that possibly could be briquetage.

Conclusion

Apart from the fragment of cylindrical briquetage pedestal (318g) which would appear to be a likely re-deposited item from a nearby salt-production site, only 300g in of small fragments of burnt clay was actually recovered. There is little evidence of this being briquetage, the most likely explanation is that this represents re-deposited and abraded burnt daub. Not much more can be said about the relevance of this assemblage to *in situ* structures and settlement activity.

An Assessment of the Wood *Jacqui Hutton*

Introduction

Twelve samples of wood were recovered from the 2009 and 2011 excavations: four samples of roundwood; three stakes; two pieces of worked wood; two log ladders and one Y-shaped post. The majority come from water hole or pit/well contexts and are in fairly good condition. The presence of small pieces of roundwood suggests coppicing, as previously highlighted in the other investigations. The log ladders and the Y-shaped post were birch, as identified from the *in situ* bark and cross section of the heart and sapwood where present. The tapering of the wood at the base of the log ladders probably aided stability. The purpose of the Y-shaped piece of worked wood is unknown at this time, although it was probably functional.

Results

Roundwood

F.628 Pit/well [1235] 1 small chip of split roundwood with no tool marks, plus 4 small flat fragments with no tool marks, 3 with *in situ* bark.

F.642 Linear [1157] 1 small piece of roundwood with *in situ* bark and no tool marks.

F.842 Pit/well [1846] 10 fragments of small roundwood pieces with *in situ* bark and no tool marks.

F.860 Linear [1967] 25 fragments of unworked wood, mainly twigs.

Worked Wood

F.841 Pit/well [1848] 270mm x 30mm 1 piece of roundwood with *in situ* bark with one end worked into a blunt point with 2 facets.

F.908 Pit/well [2196] 270mm x 60mm x 40mm 1 piece of split timber with irregularly cut tapering point at thicker end and cut at a blunt angle at the other narrower end.

Stakes

F.908 Water Hole [2197] 260mm x 52mm 1 roundwood short stake with a long tapering point with tool marks. The other end broken/degraded.

F.908 Water Hole [2198] 1 longish piece of worked timber tapering to a point at one end that had slightly rotted. The central part showed a seven-faceted cross-section. The other end of the stake was broken/degraded.

F.908 Water Hole [2199] 1 straight piece of roundwood with a short tapered point at one end.

Log Ladders and Y-Shaped Post

F.823 Pit/well [1872] Birch A log ladder with one complete notch cut into the centre and one partial notch at the top. The thicker end was tapered to a point on one facet, the bark had been stripped off and tool marks were present, including 'bite' marks in the central notch. The steps were use-worn and the log ladder was smooth between the two steps. The depth of the steps was approximately 50mm. The top of the log ladder was degraded at the upper step suggesting that the upper part of the ladder had since rotted away.

F.908 Water Hole [2220] Birch A log ladder with one complete notch cut into the centre and one partial notch at the top. The bark is in situ on one side only – opposite the side with the cut steps. There was evidence of several small branches cut off from the main trunk of the tree. The base was tapered to a point with two facets, one longer than the other. The cut bark was evidence on the shorter facet at the back. The depth of the central notch was 90mm and had slight wear on the edge with evidence of tool marks perhaps indicating the taking off the bark in this area. The upper partial cut had extensive wear although the wood at this point was very degraded.

F.908 Water Hole [2221] Birch A Y-shaped post with extensive tool marks to strip off the majority of the bark and to shape the two 'prongs'. The tops of both prongs were cut across and both ends were shaped by multiple facets. Approximately 40% of the piece was covered by bark which was limited to the thicker base end of the piece, which was highly degraded. There were extensive tool marks on the prongs from removing the bark and to shape.

Recommendations for further work

The wood assemblage, though small, should be considered in greater detail specifically in the context of the wood recovered during the 2007 Freeman phase, and more generally in relation to other material from the broader Langtoft landscape. The macroscopic species ids should be confirmed by microscopic investigation and the suitability for dendrochronological dating assessed by a specialist, though it is considered that the potential in most specimens is very low.

An Assessment of the Shell Remains *Jacqui Hutton*

A small assemblage of fragmentary cockleshell was recovered from the excavations of 2009 and 2011. All of the remains were recovered from cremations focused around the ring ditches. As the remains were so fragmentary, any evidence of working could not be determined. They do have, however, signs of burning which would suggest that the shells were incorporated within the cremation process, presumably as either personal decoration items or as food.

Three perforated cockleshells were previously recovered from the Whitfield excavation carried out in 2007. These were from a pit/well that had accompanying Deverel-Rimbury pottery (Hutton 2007). Six similar perforated cockleshells and one whelk shell were also found in a large water hole at Thorney Borrow pit. These were thought to have formed a necklace or other decoration (Mudd *et al* 2008). Within the wider landscape, perforated shells were found at Striplands Farm, Cambridgeshire. These consisted of six freshwater mussel shell halves, each of which had been perforated along one edge and were recovered from a large pit F.438 (Patten 2004).

Shell Type	Feature No.	Feature Type	Description
Cockle	600	Cremation	1 small piece, unburnt
Cockle	614	Cremation	Several small fragments, slightly burnt
Cockle	619	Cremation	Small fragments, 1 fragment is charred

Table 10: Description of the shells

An Assessment of the Post Medieval Artefacts *Jacqui Hutton*

A small assemblage of tobacco pipes were recovered from features to the north and east of the excavation area and were probably residual finds. A small fragment of pipe stem <010> was found on the surface of cremation F.589. A slightly larger fragment of pipe stem <087> was recovered from the upper fill of linear F.640.

Fragments of clay tobacco pipe were observed in plough soil in the northeastern area of the excavation during the machine-strip. Clay pipes generally date from the 16th century onwards, although these examples are too small to accurately date, they are probably later in date; 18th century onwards. There was no evidence of any burn marks on either of the artefacts. These artefacts could possibly be associated with the now derelict public house, The New Inn, situated outside the excavation area to the northeast.

<010> Pipe stem off white in colour, 12mm in length, 5mm in diameter, central perforation 1.5mm

<087> Pipe stem off white in colour with speckled green/brown stains (post deposition) 42mm in length, 7mm in diameter, perforation 2mm

An Assessment of the Glass Artefacts *Vicki Herring*

A total of six complete bottles make up a representative sample collected from a dump of bottle glass thought to be associated with former Public House 'The New Inn'. Of these six bottles three stand out as being particularly interesting as the original contents can be ascertained with some degree of certainty and two of these are also embossed with manufacturer names.

The most interesting of the sample and possibly the earliest is the 'Codd' bottle (<107> **F.651**), invented in 1872 by Hiram Codd as a way of containing aerated liquids, it is relatively unusual to find these complete within an archaeological context, the neck and/or marble being the strongest and therefore the most likely to survive. This particular bottle is embossed *Lee & Green*; a Lincolnshire based Mineral Water Manufacturer trading in the late 19th and early 20th centuries. The beer bottle (<108> **F.652**) is embossed *Smith & Co.*, a brewery, wine and spirit merchants and aerated water manufacturer based in Oundle, Northamptonshire in the mid 19th to mid 20th centuries. Finally, a square, colourless bottle with screw top (<109> **F.653**) is typical of a 20th century sauce bottle possibly containing a sauce such as 'HP' or 'Daddies'. The origin and contents of the rest of the bottles is unclear, though characteristics of the bottles themselves show that they were manufactured in the early 20th century.

The characteristics of the bottle glass sampled suggest a mid 20th century deposition date, and the bottle types can readily be associated with the Public House.

<107> F.651

Codd bottle (Aerated liquid). Complete. Cylindrical. Height: 22cm. Diameter 6cm. Moulded. Light green colour. Applied top. Marble stopper. Embossed: *Lee & Green, Bourn, A16*. Post 1872.

<108> F.652

Beer bottle. Complete. Cylindrical. Height: 25.5cm. Diameter: 7.5cm. Moulded. Colourless. Applied internal screw top. Embossed: *Smith & Co, The Brewery, Oundle (P33 1932 2269)*. Post 1872.

Pharmaceutical bottle. Complete. Cylindrical. Height: 8.5cm. Diameter: 3.5cm. Moulded. Colourless. 'Laid-on' lip ring. Pontil scar on flat base. Base embossed: *1213 A527*. Late 19th/Early 20th century.

<109> F.653

Utility bottle. Complete. Square. Height: 17cm. Base 3.8x3.8cm. Automatic bottle machine. Colourless. External screw thread top. 20th century.

<110> F.654

Utility bottle. Complete. Oval. Height: 12.5cm. Base: 6x3cm. Automatic bottle machine. Colourless. External screw thread top. 20th century.

Pharmaceutical bottle. Complete. Rectangular. Height: 9.5cm. Base: 3.5x2cm. Automatic bottle machine. Colourless. External screw thread top with metal cap rusted in place (some internal liquid). 20th century.

Appendix 2

Catalogue of barrows and ring identified ditches from cropmarks (Extracted from Lincolnshire Heritage Environment Record)

HER No.	Grid Reference	Description
33421	TF 122 113	Complex of cropmarks including a ring ditch with central pit, 2 trackways and field boundaries
33431	TF 133 113	Complex of cropmarks that included 7 ring ditches as part of a barrow cemetery, also possible mortuary structure
34046	TF 172 122	Diffuse flint scatter over a barrow with a surrounding ring ditch
34047	TF 161 133	Part of a group, visible as a slight mound and soilmark on AP, 20m in diameter and 2m in height
34048	TF 162 133	Part of a group and adjacent to 33047, 20m in diameter and 2m in height
34049	TF 162 134	The largest barrow of a group standing at 1m in height and cut by Cross Drove Drain
34050	TF 163 134	A low mound of yellowish clayey gravel, visible as a soil mark on AP, not visible in 2000
34051	TF 163 134	Part of a group, adjacent to 34050, 20m in diameter and 2m in height
34052	TF 163 137	Part of a group, conspicuous mound and yellowish soil mark, 20m in diameter and 2m in height
34053	TF 162 134	Group of round barrows (cemetery), on the edge of Deeping Fen
34183	TF 154 154	Probable barrow, part of a group, seen as a cropmark
34184	TF 154 151	Probable barrow, part of a group, seen as a cropmark
34185	TF 156 150	Probable barrow, part of a group, seen as a cropmark
34186	TF 156 150	Probable barrow, part of a group, seen as a cropmark
34758	TF 148 121	Crop mark of a ring ditch
34191	TF 147 156	Gravel mound 20m in diameter and 1m in height, 1 worked flint recovered and another possible barrow to the east
35834	TF 115 162	Cropmark of round barrow to the west of Baston Edge Drove
35840	TF 108 134	3 cropmark ring ditches to the southwest of Um Farm

Table 11: Descriptions of the cropmarks of the surrounding landscape



Based on the Ordnance Survey 1:2500 map
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- | | |
|--|--|
| <ul style="list-style-type: none"> Excavation area (LFR09 AND LFR 11) Quarried Areas Previous Investigations | <ol style="list-style-type: none"> 1. Baston Quarry Area A (1998) 2. Baston Quarry Area B (2001) 3. Baston Quarry Area C (2002) 4. Baston Quarry Areas D-E (2003) 5. Outgang Road Excavation (Heritage Lincs.) 6. Outgang Road Watching Brief (Heritage Lincs.) 7. Cross Road Watching Brief (1998-99) 8. Langtoft Common Watching Brief (2001) 9. Areas F-H The Bluebell Land (2006) 10. Glebe Land (2007 and 2008) 11. Freeman Land (2007) 12. Whitfield Land (2007) 13. Northampton Archaeological Unit (2007) 14. Baston Quarry (2009) Evaluation 15. 2010 Evaluation |
|--|--|

Figure 1. Location map with cropmarks and previously investigated areas

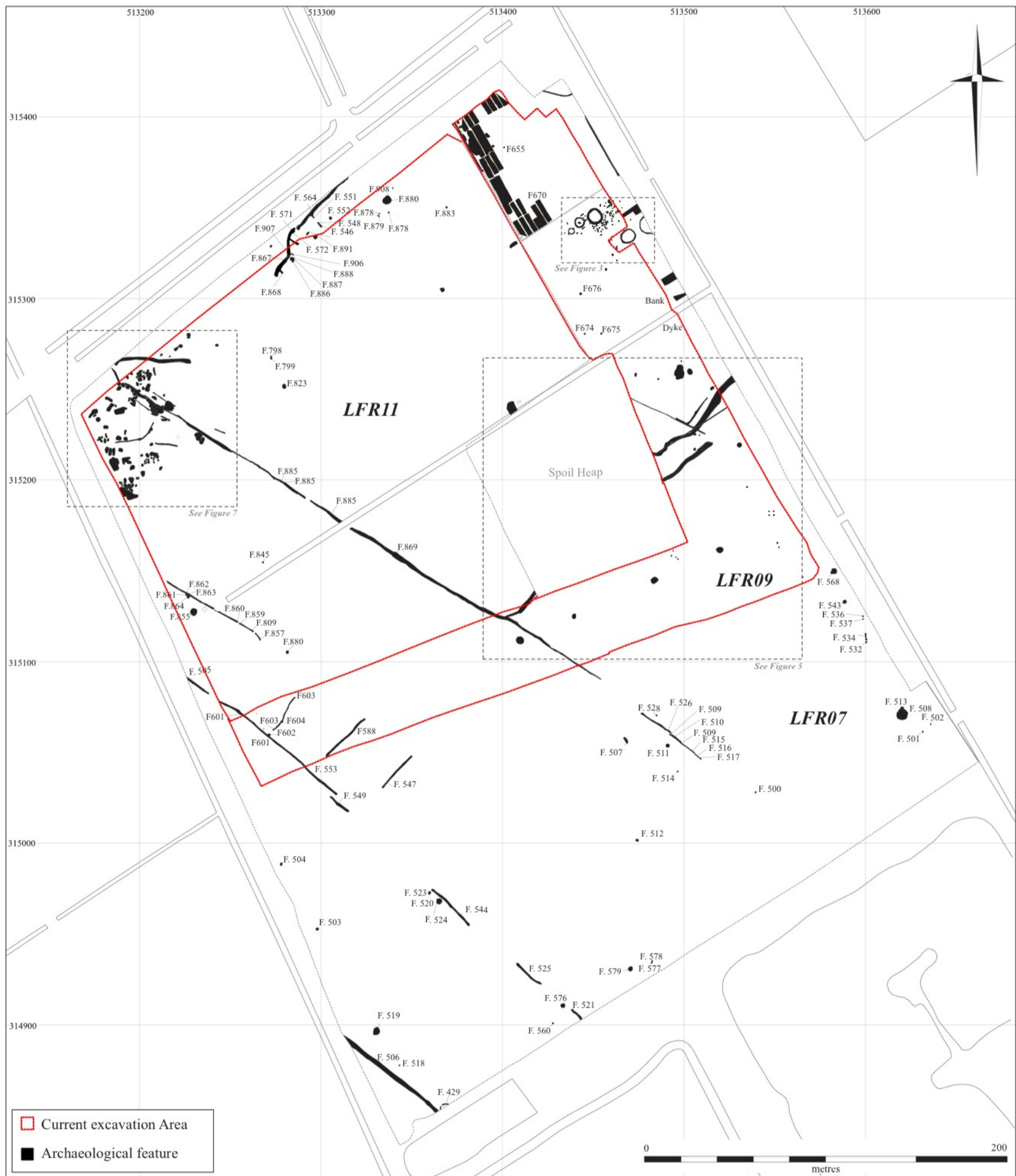


Figure 2. Plan of 2007 - 2011 excavations at Langtoft

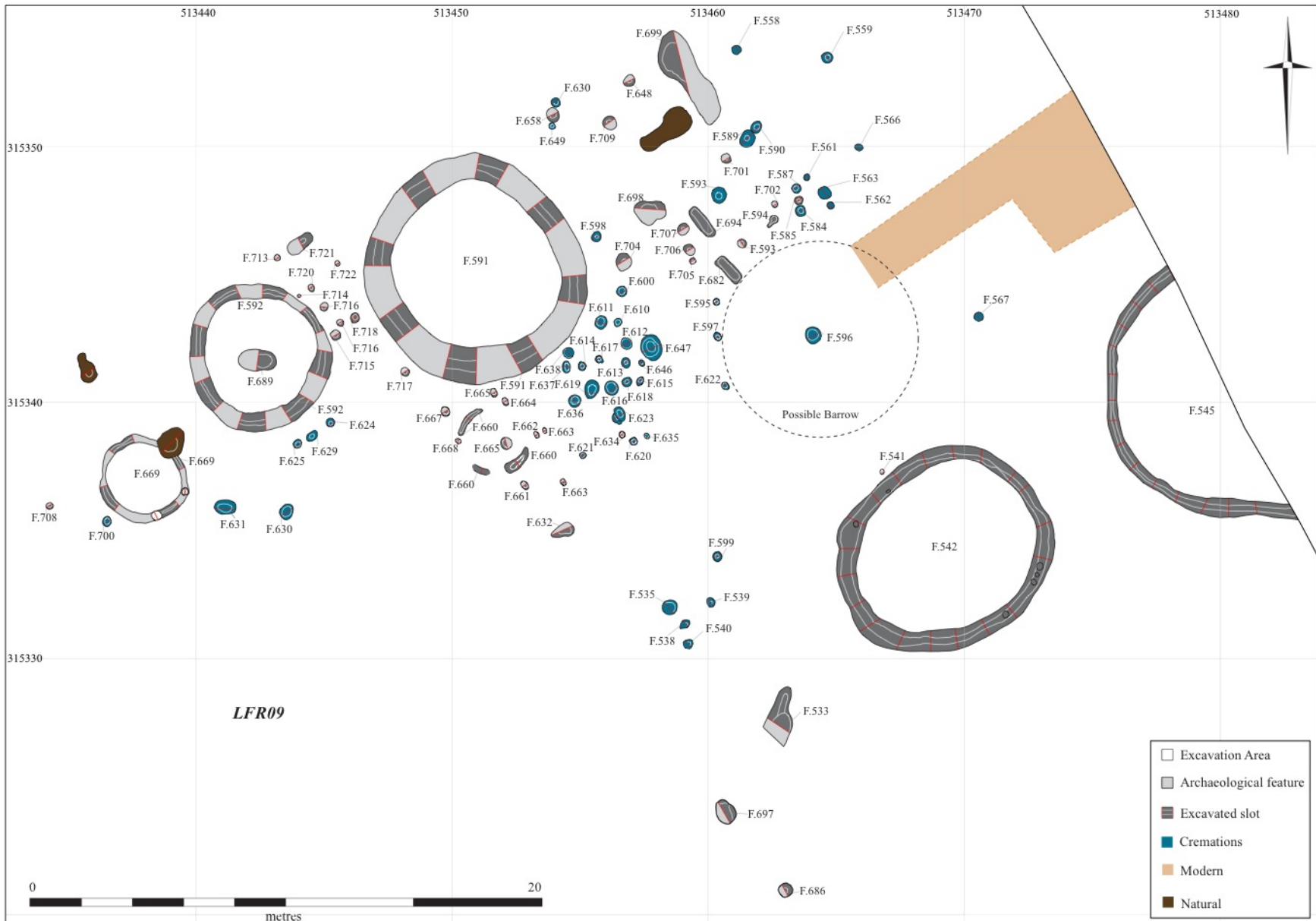


Figure 3.

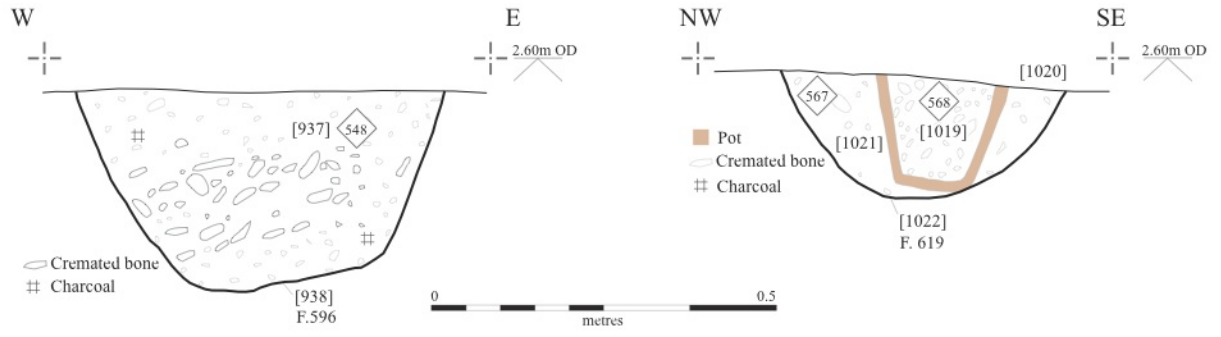


Figure 4. Section and photograph of F.596 and F.619 (above) and photograph of F. 694 (below)



Figure 5. Photographs of ring ditches F.591 (above) and F.592 (below)

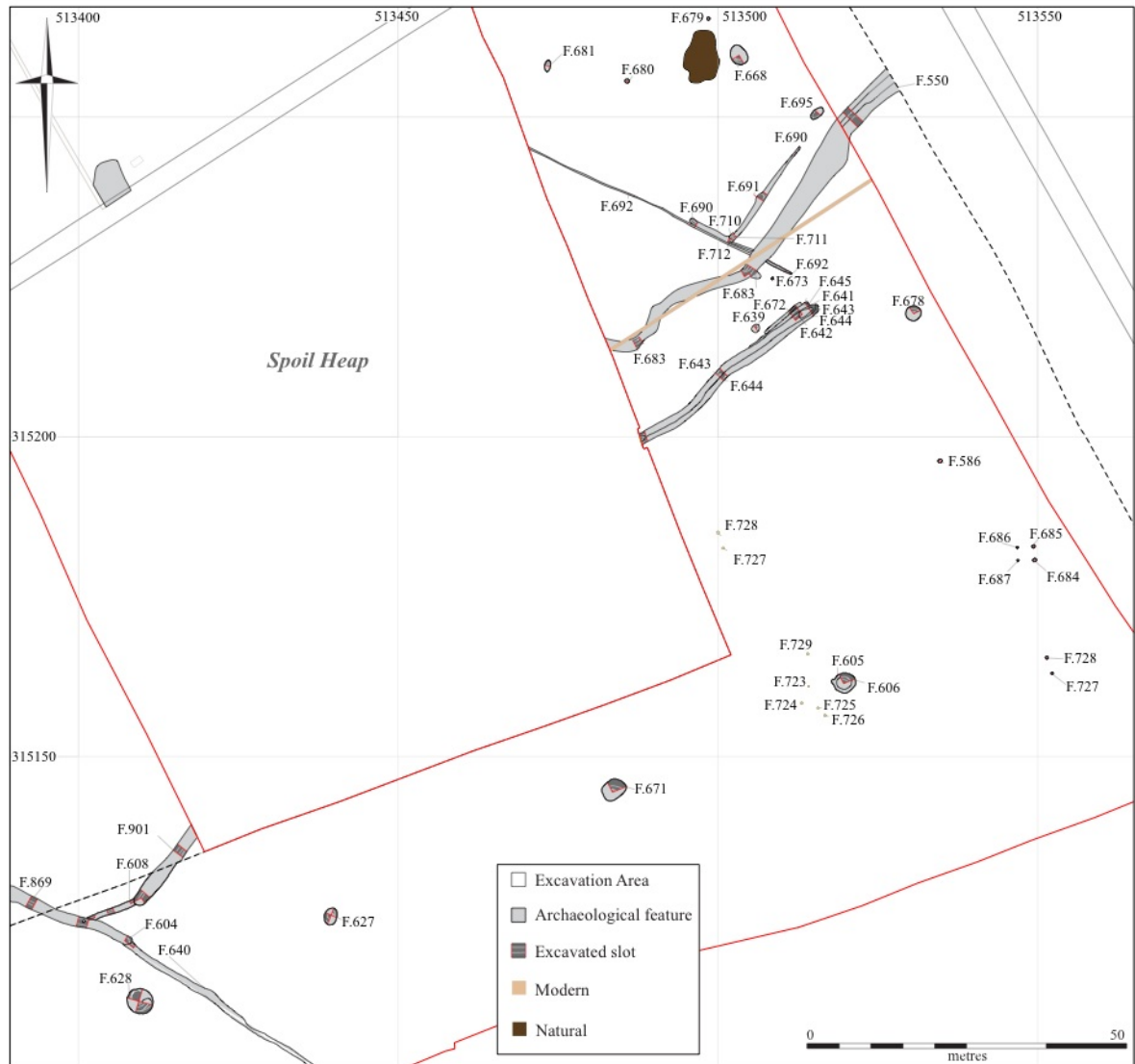


Figure 6. Area of linears, pit / wells and postholes



Figure 7. Photographs of pit / well F.823, linear F.869 and water hole F.908 / F.880

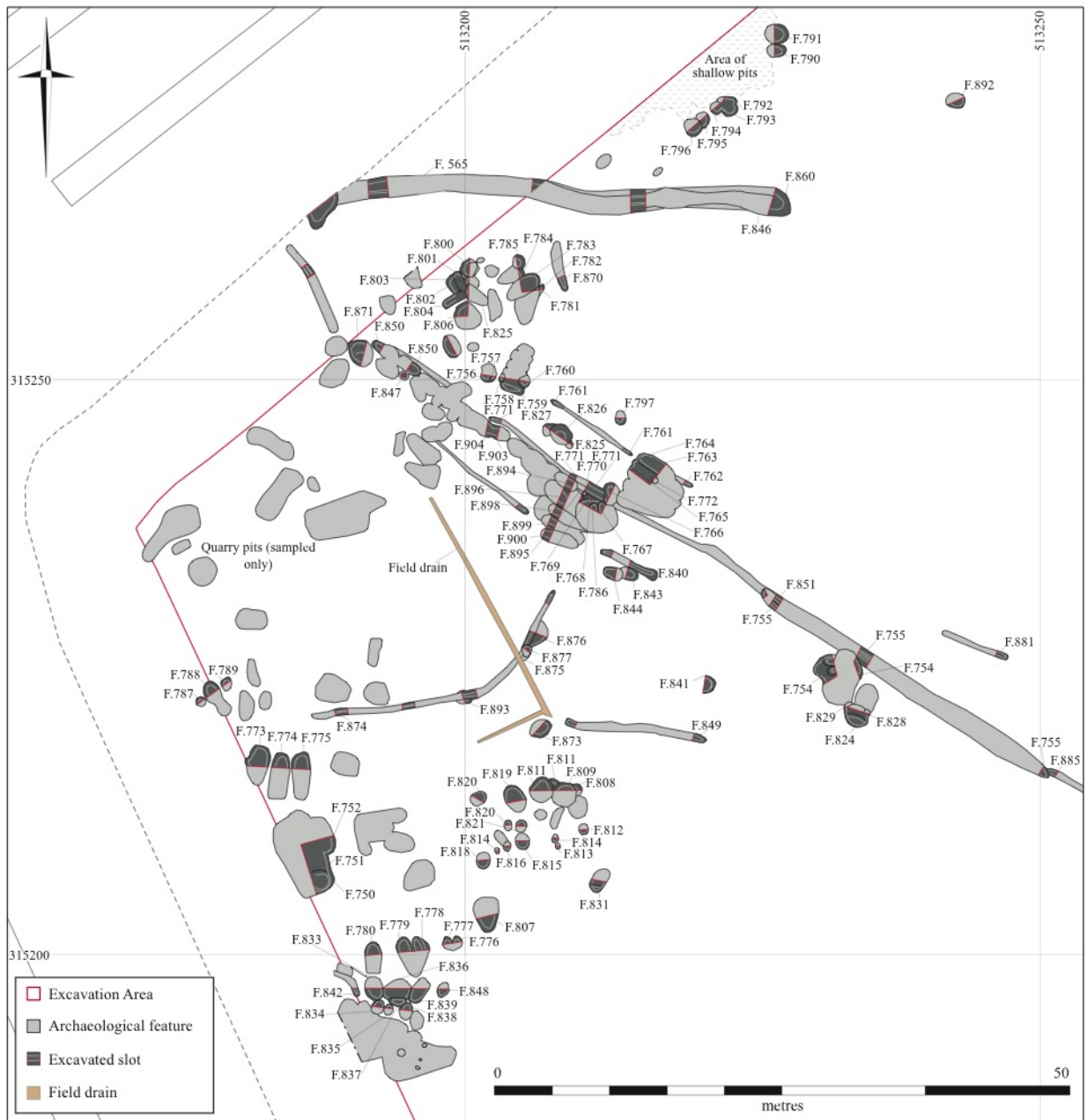


Figure 8. Area of trackway and enclosure linear overlain by quarry pits

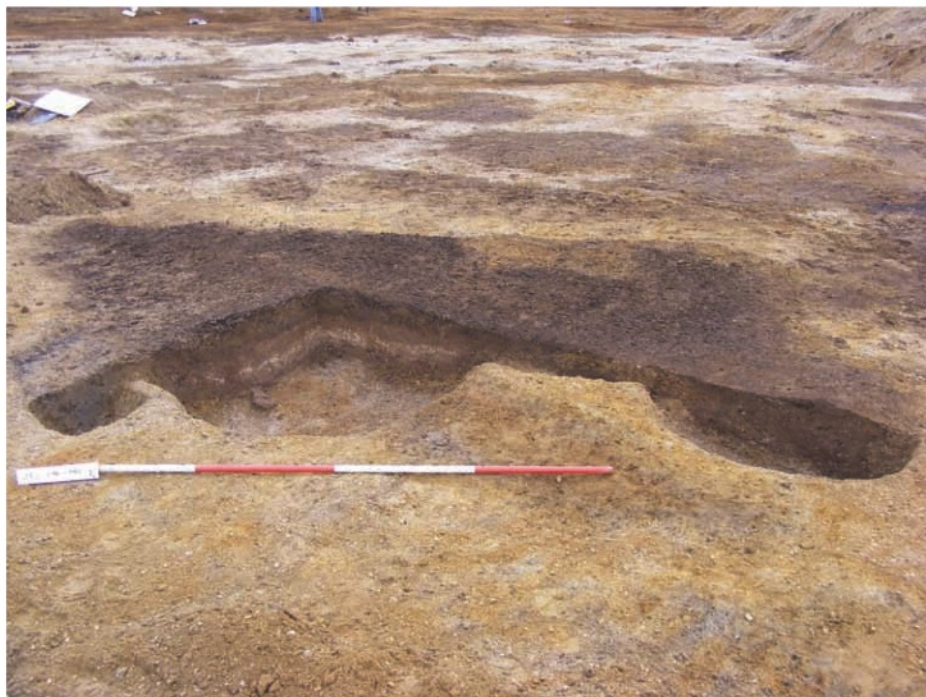
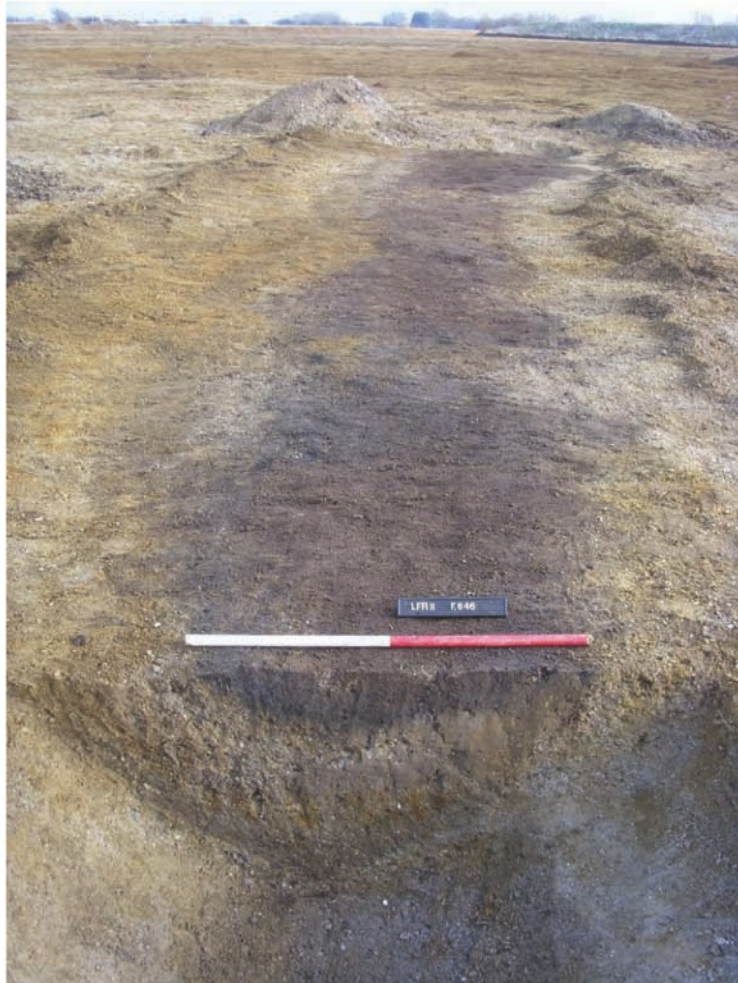


Figure 9. Photograph of linear F. 846 (above) and quarry pits F.781, F.784 and F.755 (below)

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OASIS ID: cambridg3-115584

Project details

Project name	Freeman Land Langtoft 2009/2011
Short description of the project	Two phases of archaeological excavation was undertaken by Cambridge Archaeological Unit (CAU) on the Freeman Land at Hanson Aggregates Plc, Baston Quarry No. 1, Langtoft, Lincolnshire in 2009 and 2011. The archaeological evidence consisted of part of a Middle Bronze Age coaxial field system and associated pits and wells or watering holes, with a tight cluster of four ring ditches, a possible barrow, two inhumations and at least two groups of postholes associated with cremated human remains.
Project dates	Start: 24-08-2009 End: 17-02-2011
Previous/future work	Yes / Not known
Any associated project reference codes	LFR09 - Sitecode
Any associated project reference codes	LFR11 - Sitecode
Type of project	Recording project
Site status	None
Current Land use	Other 7 - Mineral extraction
Monument type	FIELD SYSTEM Middle Bronze Age
Monument type	PITS Middle Bronze Age
Monument type	CREMATIONS Middle Bronze Age
Monument type	RINGDITCHES Middle Bronze Age
Monument type	INHUMATIONS Middle Bronze Age
Significant Finds	POTTERY Middle Bronze Age
Significant Finds	WOOD Middle Bronze Age
Significant Finds	POTTERY Roman
Significant Finds	ANIMAL BONE Middle Bronze Age
Significant Finds	GLASS Post Medieval
Investigation type	'Full excavation','Open-area excavation'
Prompt	Direction from Local Planning Authority - PPG16

Project location

Country	England
Site location	LINCOLNSHIRE SOUTH KESTEVEN LANGTOFT Freeman Land, Langtoft: Hanson Quarry
Postcode	PE6 9NX
Study area	7.70 Hectares
Site coordinates	TF 133 152 52.7222180155 -0.322257052652 52 43 19 N 000 19 20 W Point
Height OD / Depth	Min: 2.50m Max: 3.00m

Project creators

Name of Organisation	Cambridge Archaeological Unit
Project brief originator	Local Authority Archaeologist and/or Planning Authority/advisory body
Project design originator	Alison Dickens
Project director/manager	Alison Dickens
Project supervisor	Jacqui Hutton
Type of sponsor/funding body	Developer
Name of sponsor/funding body	Hanson Aggregates plc

Project archives

Physical Archive recipient	Lincs County Council
Physical Archive ID	LFR09/LFR11
Physical Contents	'Animal Bones','Ceramics','Environmental','Glass','Human Bones','Wood','Worked stone/lithics','other'
Digital Archive recipient	Lincs County Council
Digital Archive ID	LFR09/LFR11
Digital Contents	'Animal Bones','Environmental','Glass','Human Bones','Survey','Wood','Worked stone/lithics','other','Ceramics'
Digital Media available	'Images raster / digital photography','Images vector','Spreadsheets','Survey','Text'
Paper Archive recipient	Lincs County Council
Paper Archive ID	LFR09/LFR11
Paper Contents	'Animal Bones','Ceramics','Environmental','Glass','Human Bones','Survey','Wood','Worked stone/lithics','other'
Paper Media available	'Context sheet','Drawing','Photograph','Plan','Report','Section','Survey ','Unpublished Text'

**Project
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