

**LAND ADJACENT TO CASTLE QUARRY
ANCASTER, LINCOLNSHIRE**

ARCHAEOLOGICAL STRIP, MAP AND RECORD

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Report prepared for
Goldholme Stone Ltd

by

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Summary

Pre-Construct Archaeology (Lincoln) carried out a strip, map and record exercise for Goldholme Stone Ltd on land adjacent to Castle Quarry, to the southeast of the village of Ancaster, in the South Kesteven district of Lincolnshire.

This work forms part of an ongoing archaeological management plan for the extension of Castle Quarry. Previous work on the site includes a desk-based assessment, a geophysical survey and a field evaluation by trial trenching, targeted on the results of geophysical survey. The area covered by this report constitutes less than 10% of the proposed quarry extension area and further work may be anticipated in due course.

The current strip, map and record exercise has confirmed the presence of the eastern side/corner of a Roman military camp surviving within the quarry extension area. This had been previously only speculatively identified by geophysical survey and trial trenching. Although heavily truncated at this location, an entranceway was clearly identifiable and, intriguingly, articulated human remains were recovered from the adjacent ditch terminus. The remains of a macabre trophy or punishment displayed at the camp entrance may be speculated.

Further evidence of an Iron Age settlement, previously identified within the existing quarry in the 1960's, was also recorded. The features observed here included ditches, gullies and a number of shallow pits and postholes. Predominantly these truncated features remain enigmatic although they appear to define the southern extent of the settlement and suggest it may have been occupied for longer than previously thought.

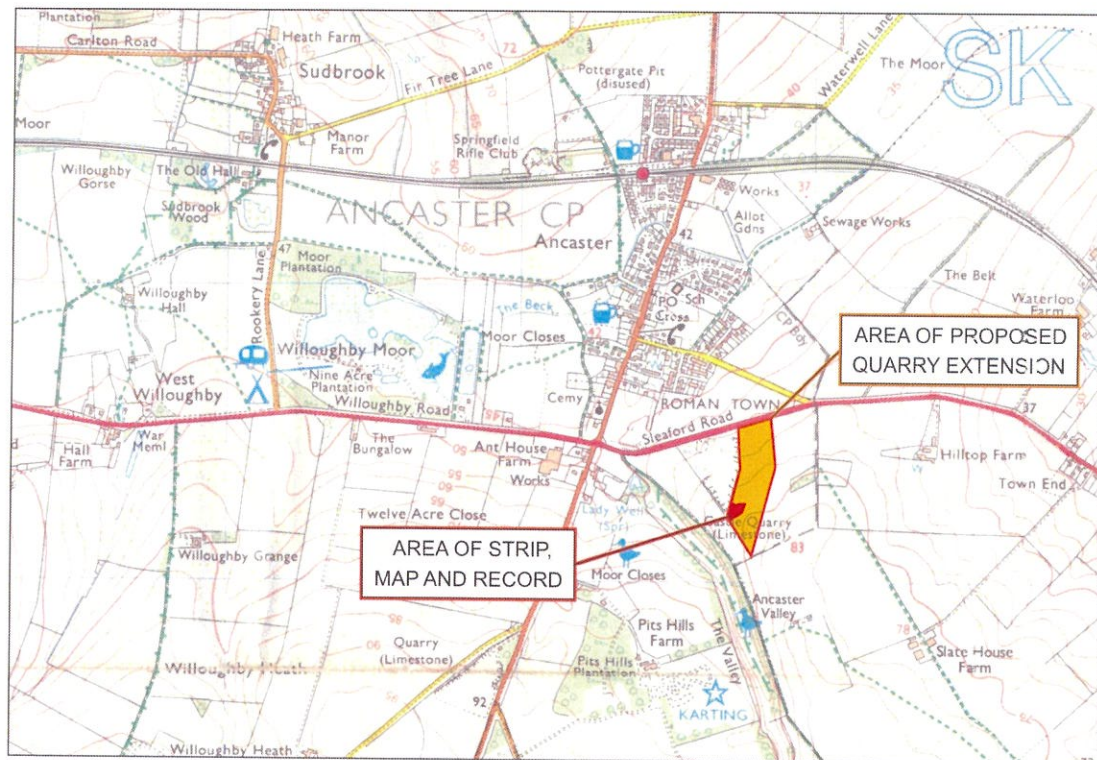


Fig. 1: Site location map. Scale 1:25 000
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1 Introduction

Between the 27th July and 5th August 2009 Pre-Construct Archaeology (Lincoln) (now Pre-Construct Archaeological Services Ltd) carried out a strip, map and record exercise for Goldholme Stone Ltd on land adjacent to Castle Quarry, to the southeast of the village of Ancaster, in the South Kesteven district of Lincolnshire.

This work was carried out in accordance with an Archaeological Works Specification (PCA Lincoln 2009) and approved by Dr. B. Lott, Historic Environment Team Leader, on behalf of Lincolnshire County Council. Its aim was to preserve, by record, the archaeological remains contained within the site as part of the final phase of mitigation in advance of the extraction of mineral within the proposed extension to the existing quarry.

The strip, map and record area constitutes less than 10% of a proposed c. 3.5 ha quarry extension, which has already been subject to a combined desk-based assessment and geophysical survey (PCA Lincoln 2007), and an archaeological evaluation by trial excavation (PCA Lincoln 2008b). The current work forms part of an ongoing archaeological management strategy for the proposed quarry extension (PCA Lincoln 2008a), which anticipates further work being undertaken in phases over a number of years.

The scheme of investigation complies with the recommendations of *Archaeology and Planning: Planning Policy Guidance Note 16* (Dept. of Environment 1990) and also follows the *Standard and Guidance for Archaeological Field Evaluation* (Institute of Field Archaeologists 1999).

2 Site location and description (Fig. 1, see Photograph No. 1)

The proposed quarry extension site is located within the parish of Ancaster in the South Kesteven district of Lincolnshire, c. 30km south of the City of Lincoln and c. 200m southeast of the historic village of Ancaster. It is situated immediately east of an existing quarry and stone-processing site, Castle Quarry/Goldholme Stone, and south of the A153 Grantham-Sleaford road, c. 500m east of the junction with the B6403 Ermine Street.

The extension site lies on the higher ground, although not the hilltop, of the c. north facing slopes of Wilsford Heath overlooking the valley of the Ancaster Gap. It is located on the southern side of the Gap on a narrow peninsular with the land sloping down into the valley in every direction from the northwest to the east side of the site. A dry valley, known as 'The Valley', forms the west-southwest side of the peninsular isolating this strip of land from the rest of Wilsford Heath.

The extension site, along with the rest of the hillside is currently under pasture. It is flanked by the open cast quarry workings behind a sparse hedgerow to the west. A mature hedgerow flanks the northern side of the site, with the A153 beyond. There are no physical boundaries to the site to the south or east, other than the new post and wire fencing that has been recently erected. The proposed quarry extension site encloses approximately 3.5ha of which only the southwest corner has been

currently subject to the strip, map and record exercise (centred on NGR: SK 9874 4324).

This part of the site slopes gently down to the north and lies at c. 73m ACD and covers an area of c. 40m². The underlying solid geology is mapped as belonging to the Undivided Lincolnshire Limestone formation of the Jurassic era. No drift geology is recorded at this location (British Geological Survey 1972).

3 Archaeological and historical background

A detailed assessment of the known archaeological and historical background for the immediate area has been outlined in a desk-based assessment (PCA Lincoln 2007) and summarised in the results of the archaeological evaluation (PCA Lincoln 2008b). To avoid unnecessary repetition, only the main points are outlined here.

The earliest permanent habitation within the local area has been identified immediately adjacent to the proposed quarry extension, within the existing quarry. The remains of a Middle Iron Age settlement were recorded during the 1960's. These consisted of the structural elements of two roundhouses; the smaller containing two fireplaces, while the larger, 12.5m in diameter, contained a clay oven, and produced fragments of burnt daub with impressions of both flat latns and woven wattles (May 1976).

Up to 75 pits were found at the site; one had apparently been used for burning lime, and another had been lined with clay, possibly for use as a water tank, while others were of a distinctive shape known from other Iron Age sites and tentatively interpreted as grain silos. The results of these excavations have never been fully published, and are known only from interim reports and from secondary references in other texts (*ibid.*).

Evidence of occupation during the Late Iron Age has been recorded to the northwest of the site within the Ancaster Gap itself. Although the full extent of this settlement remains unknown, and its existence has only been revealed by very limited finds. It appears to have been overlain, and possibly largely destroyed, initially by a Roman fort and subsequently by the Roman settlement at Ancaster and latterly by the medieval and modern settlements (Stevens and Shotter 1996).

Excavations have revealed a number of pits and gullies on the west side of the modern town, which have yielded a greater variety of pottery than that found at the Castle Quarry site. These have including some high quality wares, imported Gallo-Belgic material and coins of the Corieltauvian tribal group. It has been suggested that this material is of a later date and that a shifting settlement pattern during the later Iron Age may be interpreted, moving off the more easily defended high ground into the more agriculturally productive valley with perhaps better access to trade routes (*ibid.*).

It has also been speculated that the strategic advantages of the eastern end of the Ancaster Gap 'were quickly appreciated by the Roman army during the conquest of Britain from AD 43. A marching camp, 28 acres in area, was revealed by aerial reconnaissance in 1974, on the higher ground on the northern side of the Gap' (Todd 1981, p.4). Todd concludes that 'it is presumably a relic of a Roman unit

making use of the ancient route along the limestone ridge' (*ibid.*). This is perhaps the clearest evidence of Roman military interest in the area, but not the only evidence of such activity.

Knowledge of the fort later constructed on the valley floor is limited to a pair of ditches apparently terminating at a gate-causeway. The more northerly, and probably the outer, of the two ditches had a sharp V-shaped profile, the other a section closer to that of a *fossa Punica*, with a steeper face towards the south. The date at which the fort was occupied cannot be fixed with any precision on present evidence. All that need be said for the moment is that the forts along Ermine Street were probably in position by about AD 47 or very shortly afterwards, and are unlikely to have retained their usefulness as garrison-posts after the mid-seventies' (Todd 1981, p.4).

The extra-mural settlement (*vicus*) that is known to have developed outside the Roman fort appears to have benefited from the same strategic position as its Iron Age predecessor and developed in to a small town (*Causennae*), covering an estimated 60 acres (Todd 1975). Although the presence of a Roman settlement has been known about from the early modern period little systematic excavation has taken place within the area and the most well known and best recorded elements of this settlement are the later town defences which were probably constructed at the very end of the second century or during the first quarter of the third, and only enclosed an area of c. 9 acres. As such it may be argued that the defenses may appear to misrepresent the full extent of the Roman period settlement (Todd 1981).

Evidence of this extended settlement has been identified within the neighboring Castle Quarry site itself, including an aisled stone building, possible corn dryer and other oven type structures. Unfortunately these are known only from a brief note in an interim report and cannot be accurately located. The 1st edition Ordnance Survey map also records that high-status Roman material has been found at the location of the existing quarry, formerly known as Castle Pits, as has more anecdotal evidence recorded by Antiquarians in the 18th and 19th century (PCA Lincoln 2007). Similarly, evidence for Roman period occupation including a stone built wall, surfaces and a drain and ditches have been identified immediately north of the existing quarry site on the other side of the A153, Grantham-Sleaford Road (Edwards 2001).

Excavations and finds from the area around Ancaster appear to indicate that a thriving and prosperous settlement existed here during the Roman period. As well as benefiting from its strategic location, and its position along the London-Lincoln-York Roman road (Ermine Street) this period saw the introduction of a new element into the local economy, and the archaeological record, that of quarrying and construction in stone and even the export of the raw material (Whitwell 1992).

Limestone quarried around Ancaster during the Roman period has been identified in Lincoln and indicates that 'the Romans were prepared to cart good stone some distance' (Whitwell 1992, p.39). Likewise, Ancaster stone has been identified as far south as London and this has been seen as evidence for 'waterborne bulk freight along the east coast' (de la Bédoyère 2001, p.115), perhaps also making use of former prehistoric trade routes to the east along the Rivers Slea and Witham.

However, as with the rest of the Roman province, this prosperity appears to have come to an end by the early 5th century. The presence of a Saxon cremation cemetery identified in the 19th century just south of the Roman settlement records a continued presence in the area during the early post-Roman era although no settlement evidence from this period has yet been identified.

Similarly there is little evidence of activity during the medieval period on a scale to match that of the Roman period, although the quarrying of stone continued throughout the medieval and post-medieval periods. However, most of this work was undertaken on a relatively small scale and like the settlement at Ancaster itself remained so until the modern era (PCA Lincoln 2007).

Results of the previous evaluation (Fig. 2)

The eleven trench evaluation (PCA Lincoln 2008b) carried out across the proposed quarry extension area, targeted on the results of the geophysical survey (PCA Lincoln 2007) identified a sparse and generally even spread of archaeological features within the site and confirmed that many of the features identified by the geophysical survey were of archaeological interest.

The identified features consisted of mostly undated shallow pits and ditches. Truncation as a result of modern ploughing was apparent, particularly in the south of the site. The presence of animal bone, probably food waste, within many of these features attests to human activity within the vicinity. This was confirmed by a storage pit and a ditch identified in Trench No.9, both of which contained pottery of Mid-Late Iron Age tradition and are assumed to be part of the settlement identified at the existing quarry during the 1960's (May 1976). The ditch appears to be traceable to the north on the geophysical survey, forming a rectangular enclosure, within which the storage pit was located.

A long rectilinear ditch with an apparently rounded corner (in 'playing card' shape), was examined by Trenches Nos. 4, 7 and 11. This had a distinct 'V' shaped profile along the better-preserved northern section and, although inconclusive, it was speculated that this feature could be the ditch of a Roman military marching camp.

Towards the north of the site, a broad deep ditch, aligned c. northeast-southwest, was identified at the south end of Trench No. 3. A possible in-filled quarry pit was also recorded at the north of the same trench. Both of these features remain undated. A broad shallow ditch, also aligned c. northeast-southwest, and a large pit with Roman period pottery, were also identified in Trench No. 1.

4 Aims and objectives

The aim of the strip, map and record exercise is to *preserve by record* the archaeological remains contained within the site to mitigate the effects of expanding the quarry.

5 Methodology

The current site, consisting of c. 40m² in the southwest corner of the proposed quarry extension area, was marked out and the overlying topsoil and subsoil was removed down to the natural substrate by a tracked 360° excavator using a 1.8m ditching bucket under continuous archaeological supervision.

A rigid site grid was established using steel pins at 10m intervals, which were subsequently tied into the Ordnance Survey National Grid. The exposed area was hand cleaned and all archaeological features planned at 1:50. Subsequently archaeological features were sample excavated by hand. This constituted 50% of pits and postholes and at least 10% of all linear features.

Archaeological features were sample excavated to establish depths and profiles and, where possible, date and function. Features were recorded in section at appropriate scales (1:20 and 1:10), and written accounts were prepared on *pro forma* context record sheets. A colour photographic record was maintained throughout the project, supplemented by monochrome and digital. Selected prints have been reproduced in this report.

6 Results (Figs. 3-8, see Photographs Nos. 1-10)

Truncation, as a result of modern agriculture and evidenced by plough scarring, was apparent across the stripped area. This had been anticipated as it had previously been observed in the southern-most evaluation trenches. Consequently, all of the archaeological features exposed in the current scheme of work were shallow and some of the ditches appeared to have been completely ploughed out in places.

Nonetheless, numerous features survived and in places clear stratigraphic relationships have been recorded. The features identified consist of pits, postholes, gullies and ditches, with the greatest concentration to the northwest of the stripped area. A total of 81 sherds of pottery were recovered from 16 contexts. These were mostly small and abraded and only roughly datable to the Late Iron Age and Early Roman periods.

Pits (Figs. 3 and 4, see Photographs Nos. 2 and 4)

The majority of the identified pits were located in the northwest part of the stripped area. Two notable exceptions to this were the larger, amorphous features [173] and [178], located in the south of the stripped area. Both of these undated features were characteristically different from the other pits, being both larger in size and irregularly shaped, with irregular base profiles. Neither produced any finds although feature [176] showed evidence of possible *in situ* burning. Although unproven, both of these features have been interpreted as tree throws, with perhaps the roots of a tree being burnt out at [176] indicating a deliberate act of clearance, although from what period remains unclear.

A nearby small area of charcoal residue was also recorded, but was not contained within an identifiable feature, and similarly may be the remains of burnt out tree

roots. Similar patches of charcoal residues were observed during the evaluation to the northeast in Trench No. 5.

The remaining identified pits were all characteristically oval - sub-rounded in plan. The one exception was pit [174], which had a distinct sub-rectangular plan with a flat base, effectively creating a slot. No dating evidence was recovered from its apparently naturally silted up fill.

Pits [108], [166] and [170] were all characterised by their moderate sized circular plan and flat bases. They also appeared to have been deliberately backfilled, with what appeared to be domestic waste material, including fragments of animal bone, predominantly sheep/goat and pottery. The pottery could only be broadly dated to the Late Iron Age. Hazel nutshell fragments and a single charred grain of barley were recovered from the processed samples taken from the fills of pits [166] and [108] respectively.

The most well preserved of these pits, [170] had a primary fill (171) apparently deliberately deposited, which included fragments of both sheep/goat and cattle bones. This was sealed by a clay-rich deposit (172), which also appeared to have been deliberately deposited. This in turn was beneath naturally accumulated silts (173).

It is notable that these three pits appeared to be almost evenly dispersed from each other, with [108] being located within the main cluster of pits, [170] being located peripheral to the main cluster, and [166] being located in isolation. They may also have been separated from each other by contemporary ditches D, E and H (see below).

Pits [106] and [110] both also appeared to have been deliberately backfilled although they were respectively smaller and less regularly shaped and it remains unclear if they originally served the same purpose as the larger, more regular pits [108], [166] and [170]. Pit [110] contained some apparently burnt stone fragments at its base as well as fragments of burnt animal bone, although it was not clear if this was the product of *in situ* burning or if this material had been introduced with the deliberate backfilling of the pit, possibly indicating the setting of fire very close to this location. Neither of these two pits produced any dating evidence.

Pit [112], truncated by Pit [110] and isolated Pit [186] were both unremarkable and it remains unclear if they were deliberately backfilled or what function they may have originally served. Neither produced any dating evidence.

Postholes (Figs. 3 and 4, see Photograph No. 3)

All of the postholes were characteristically very shallow, and their interpretation as postholes, rather than pits, is based solely on their smaller diameter. Postholes [148] and [150] appeared to have entirely naturally silted fills; [150] possibly being a replacement post for [148].

Postholes [114] and [167] both had clay-rich fills, possibly fine silts accumulating as the timber decayed. Posthole [152] contained sparse charcoal flecks and may be evidence of an *in situ* burnt out post, although the evidence for this was very slight.

Features [158] and [160] were both shallow and unremarkable. They were recorded as possible post pits with naturally silted up fills. These features were perhaps too ephemeral to be conclusively interpreted. Only a single fragment of unidentifiable large mammal was recovered from the fill of feature [160].

Ditches (Figs. 3, 5, 6 and 7, see Photographs Nos. 5-10)

Ditch A was orientated c. northeast-southwest and extended for over 45m, continuing beyond the limit of excavation to the southwest and terminated to the northeast. Throughout, it appeared to have a steep-sided, near 'V' shaped profile, with a broader, more flat base at its northeast terminus.

It was not entirely clear if it had been purposefully backfilled, but this did not appear to be the case. Ceramic material of Late Iron Age–Early Roman period date and Mid-Late 1st century AD was recovered from excavated sections through this ditch. A small amount of mostly unidentifiable animal bone, but also fragments identifiable as horse and dog, were recovered from the excavated sections.

Remarkably, articulated human remains, along with some animal bone, appeared to have been deposited within the terminus of this ditch.

Ditch B was also orientated c. northeast-southwest and shared the same alignment as Ditch A, forming a continuation of this ditch either side of a gap/entrance way c. 5m wide. This ditch only survived to a length of c. 6.5m, terminating to the southwest and being truncated by ploughing to the northeast. Ditch B was shallow and had a less well pronounced profile than Ditch A. No dating evidence or other finds were recovered from this short section of ditch.

Ditch C consisted of only a short, c. 5.5m, length of steep-sided ditch, with a largely irregular section profile. It was parallel with, and c. 5m to the southeast of, the entranceway between Ditches A and B. However, unlike Ditches A and B this ditch appeared to have been deliberately backfilled. A number of fragments of animal bone identifiable to horse and dog, as well as Late Iron Age–Early Roman period ceramic material was recovered from this ditch.

Ditch D was orientated c. northwest-southeast and extended for over 40m, continuing beyond the limit of excavation to the northwest and had been ploughed out to the southeast. It had a concave/irregular base and section profile. Six sherds of Late Iron Age pottery were recovered from its fill, as well as some animal bone, including sheep/goat and horse. It had clearly been truncated by Ditch A and towards the northwest it was adjoined by, or possibly truncated, a shallow, heavily ploughed out gully [190], of which only a very short section survived.

Ditch E was also orientated c. northwest-southeast and was located c. 1.8m to the southwest of Ditch D, running parallel with it. It shared the same basic profile as Ditch D, although was notably less deep. No dating evidence was recovered from this ditch. Its relationship with Ditch A was not entirely clear as it was very shallow and hardly discernable at the point of intersection.

Ditch F was orientated c. northwest-southeast, had a broad shallow profile and extended for over 22m beyond the limit of excavation to the northwest and southeast. This feature cut across the infill of Ditch B and has been interpreted as a possible furrow. Two sherds of pottery of early Roman period date were recovered from this feature.

Ditch G was orientated c. northeast-southwest and extended for over 12m beyond the limit of excavation to the northeast. It was unclear if this narrow, shallow gully terminated to the southwest or had been truncated at this location. No further trace of it was observed to the southwest beyond its shallow tapering terminus. Ditch G appeared to truncate Ditch J and a small area of root disturbance to the north. No dating evidence was recovered from this feature, although fragments of animal bone were, including one fragment identifiable as cattle.

Ditch H was orientated c. northeast-southwest running adjacent to Ditch G along its northern length, but diverged to the south, forming a slight arc at its northern end. It had a clear terminus to the southwest, which stopped short of Ditch D by c. 1.5m and extended for over 15m beyond the northern limit of excavation.

The northern part of this ditch had been re-cut [184] at least once. The apparently naturally accumulated fill within this re-cut produced the single largest ceramic assemblage, totalling 19 sherds of Late Iron Age date. It also produced the largest assemblage of animal bone, with sheep/goat, cattle and horse all identifiable.

Ditch J consisted of c.5m of slightly curving gully orientated c. northeast-southwest. This was truncated to the north by Ditch G and no trace of it was observed extending beyond the other side of Ditch G. Five small scrapes of Late Iron Age–Early Roman period pottery and fragments of animal bone identifiable to horse and cattle were recovered from this gully.

All of the processed environmental samples taken from Pits [108] and [166], and ditches A (105 and 125), C (189), D (163) and H (185) produced small amounts of hammer scale.

7 Discussion and conclusion

As may have been anticipated by the results of the evaluation, the archaeological remains in the southern part of the proposed quarry extension area have clearly suffered a high degree of truncation; almost certainly due to modern agricultural practices. As a direct result of this truncation, the quantity and quality of finds was generally low and the surviving features characteristically shallow, and this has inevitably diminished the scope for interpretation.

Intrusive material was also noted following the completion, specifically a small shard of modern glass recovered from the processed environmental sample taken from Ditch A (105). Intrusive material was also observed during the evaluation. However, in both cases, the introduced material was clearly modern and easily detectable and currently there is no reason to consider the majority of finds as unreliably located.

The earliest evidence for human activity recorded within the site consists of a single worked flint flake, characteristic of the Late Neolithic – Early Bronze Age (Appendix 3: Lithic Material). In isolation, however, it can do no more than record a human presence at this location during this period.

The earliest dated features consist of pits [108, 110, 166 and 170], posthole [152] and ditches (D, H and J), all dated to the Late Iron Age–Early Roman period. It may also be speculated that (by association and lack of conflicting dating evidence) typologically similar features are also of the same period and consequently the majority of features identified are of the late prehistoric period; specifically the Late Iron Age and are consistent with a rural settlement.

Unfortunately, the quality of the pottery assemblage was insufficient to establish a precise date range for these features or assist in more precisely dating apparent different chronological phases indicated by inter-cutting features such as Pits [110] and [112], Postholes [148] and [150] and Ditches G and J. Collectively, these inter-cutting features indicate some redevelopment of the site during this period, and thus perhaps a period of activity of some longevity.

However, the evidence for redevelopment is slight and it may be speculated that most of the features identified were broadly contemporary as they largely respected each other spatially, with only some limited re-setting of posts, slight re-alignment of gullies and the excavation of pits within in-filled features. Thus the majority of identified features appear to belong to the Pre-Roman Iron Age (from some time during the last century of the first millennium BC to the early first century AD); potentially indicating activity spanning only one or two generations.

Of the features identified or assumed to belong to this period, the possible post pits [158] and [160] and most of the other pits [106, 110, 112 and 186] remain difficult to interpret due to their shallow depth, although they do indicate a focus of activity towards the northwest corner of the stripped area.

Conversely, Pits [108, 166 and 170] were all of similar proportion to the probable storage pit identified to the north during the evaluation in Trench No. 9, although notably less deep. It may be speculated that the clay-rich secondary fill (172) within Pit [170] may indicate the deliberate sealing of the primary fill (171) for re-use or possibly it was re-deposited material that was originally used to seal the pit when in use (Cunliffe 1983, p. 110). If correctly interpreted as storage pits, their apparent dispersed configuration may represent a deliberate strategy to minimise the risk of contamination or infestation of stored goods.

The largest features identified of this period, Ditch D and parallel Ditch E, may be interpreted as defining a trackway, and with the exception of possible storage Pit [166] (see above) appears to define the southern extent of the main activity area. It is possible this ditched trackway may have served as a droveway, allowing animals to be brought into and out of the area without straying into the activity/storage areas.

The ditched trackway appears to have been respected by Ditch H, leaving space sufficient for access between Ditches D and H. It remains unclear if these ditches had any defensive qualities, or served solely to delimit specific areas and/or

prevented stock from wandering. Nonetheless, Ditch H and the trackway appear to define and enclose the main activity area, to the northwest.

Within the main activity area, the two gullies (Ditches G and J) may have served as drip gullies or drains for a postulated structure indicated by Postholes [114, 148, 150, 152 and 167]. The re-alignment of the slightly curved gully (Ditch J) with straight gully (Ditch G) indicates a sequence of re-development, although the change appears slight, respecting the same basic alignment, and appears to be more akin to improvements and renovations rather than complete reconstruction.

However, the proximity of Ditch H, which surely would have rendered any shallow gully superfluous would appear to belong to a different phase, although, as there is no direct physical relationship between the gullies and Ditch H - whether it pre-dates or post dates the gullies remains unclear. Notably, all of these features also appear to respect the same location and alignment, which again appears to indicate evolution and continuity, rather than complete change.

The nature of the structure indicated by the postholes also remains elusive, although posts located at [114] and [167] may have formed one side of a structure which would then have been paralleled by the gullies to the southeast. Potentially a four post structure (the forth corner being located to the north beyond the limit of excavation) may be speculated with posts at [148] and [150], possibly acting as central supports for a possible raised structure serving as a granary or rick platform (Cunliffe 1983, p. 106).

Collectively, the trackway, defined by Ditches D and E, the enclosure ditch (Ditch H), the possible storage pits [108, 166 and 170], post-built structure (Postholes [114, 148, 150, 152 and 167]) with flanking gullies (Ditches G and J) and the other pits of unknown use appear to indicate an established settlement. Faunal remains indicate that sheep/goat and cattle were important to the economy and that horses, the cultivation of barley and the gathering of natural resources also contributed. The identification of hammer scale within all the processed samples would appear to indicate that metal working may also have been practised at this site.

Potentially, this site may be part of the small Iron Age farming settlement previously identified within the existing quarry in the 1960's, although not accurately located (May 1976, p.133). However, it should be noted that it has been concluded that 'there is no clear evidence that the settlement was occupied during the last phase of the local Iron Age, from c. 100 BC to the Roman conquest...[evidence]...would support a date for the main occupation of the site around the third century BC (*ibid.* p.140).

Clearly, this is at odds with the dating of finds from the current excavation which suggests an exclusively Late Iron Age date. Thus, it must remain a possibility that the Iron Age remains identified here may not be part of the earlier settlement at all. As such, while it was previously assumed that the Iron Age settlement pattern was one of shifting from this hillside location, occupied during the Mid-Late Iron Age, into the valley during the Late Iron Age (PCA Lincoln 2008b), it may now be speculated that this area continued to be occupied into the Late Iron Age, with perhaps some shift to the east from the earlier settlement.

Furthermore, May adds that 'there was no evidence for any system of defence...and there was no sense of constriction of occupation within some well defined boundary, bank or ditch' (May 1976, p.133). This too is markedly different from the identified ditched trackway, formed by Ditches D and E, the enclosure ditch (Ditch H) and the large ditch identified by the geophysical survey and recorded in Trench No. 3 of the evaluation (PCA Lincoln 2008b), which collectively present a picture of an Iron Age settlement distinctly different from the one previously encountered.

As such the ongoing work at the quarry is adding a new perspective on the Iron Age settlement around Ancaster and rather than a simple shift from one small settlement on the hillside to another in the valley during the Late Iron Age a more densely occupied and developed landscape of the Late Iron Age appears to be emerging. The apparent rectangular enclosure identified by the geophysical survey and partially recorded here as Ditch H and the large ditch identified by the geophysical survey, as well as the high status Late Iron Age material recorded within the valley (PCA Lincoln 2007) may be beginning to indicate a settlement of a size and stature to be significantly related to the Late Iron Age site of nearby Old Sleaford, possibly a precursor, or even a rival, to that settlement which appeared to have developed rapidly from c. 50 BC (Elsdon 1997).

The other main feature identified within the stripped area is represented, collectively by Ditches A, B and C, and combined with the results of the evaluation, provide compelling evidence for the defensive ditch and defended, *titulum* style, entrance of a Roman military camp (Wilson 1980).

Although the section profiles are less distinct from those identified during the evaluation to the northeast, this may be explained by the lack of subsoil in this area and consequently the ditches were originally excavated through the solid rock, and as such the manner in which the rock splits has largely dictated the profile of the ditch.

Unfortunately, as only one corner and one entrance has so far been identified, this remains insufficient to draw inferences about the camp's original size. The dating evidence is however consistent with the conquest period and a 1st century AD date seems appropriate. The identification of another Roman military installation around the Ancaster Gap confirms the strategic importance the Roman military placed on this location.

The inclusion of articulated human remains within the northeast terminus of Ditch A is of note, although at present only assumptions can be made as to why and how these remains arrived in this situation. The deliberate disposal of the dead, even a slave or prisoner, within the ditch seems inconsistent with the Roman practice of disposing of the dead beyond occupied areas. Similarly, these remains may indicate an assault on the camp with the dead being left where they fell and subsequently interred with the backfilling of the ditch, although no other evidence for an assault was observed.

Alternatively, it may be speculated that these remains were deliberately placed at this location, adjacent to the entrance where they would be seen. As such, it may be speculated that the display of these remains was intended as a warning and that the dead were either significant members of the conquered local population/resistance

or possibly even the recipients of a punishment incurred as a result of serious indiscipline within the camp itself.

The identification of the military camp may also have implications for the interpretation of the previously identified, but unfortunately not well recorded, Roman structures found within the existing quarry. These included an aisled stone building, possible corn dryer, other oven type structures and structural remains too badly damaged to be interpreted (PCA Lincoln 2007). Some of these are likely to be the product of extramural occupation around the *vicus*, for which there is supporting dating evidence. Potentially, however some of them may have been contemporary with the camp, indicating that it may have remained occupied for some time, although, the lack of detailed recording of the location of these structures and the lack of other identified contemporary structures within the camp currently leave this matter purely speculative.

Intriguingly, pit [174] is typologically different from the other identified Iron Age features and as such it may belong to another period. Its more regular, rectangular shape is consistent with the regular plan of the Roman camp and as such, although there is no corroborating evidence, it may be speculated that this pit may have formed part of the camp's defences, forming a *Lillia* type concealed pit, designed to trip the unsuspecting whilst approaching the camp entrance. In its most elaborate form such pits had sharpened stakes in the base and were more commonly arranged in staggered rows. An individual pit may simply be a variation on this theme, perhaps indicating a slightly more developed camp, occupied over a short period but not intended to be permanent. Under such circumstances, it may be speculated that some structures, but not the full panoply of a military fort, were constructed.

The later date suggested by the pottery of the Iron Age settlement raises questions concerning the relationship between the settlement and the Roman military camp. Potentially, they both occupied, albeit at different times, the same strategically important location, overlooking the Ancaster Gap and thus the superimposition of one over the other may be a coincidence of topography. However, if the settlement is later than previously assumed then it may be speculated that the Iron Age settlement was still occupied at the time of the arrival of the Roman military and thus may have been deliberately destroyed prior to the construction of the Roman camp, as an act of conquest and to deliberately disperse the local population and thus minimise resistance. This also currently remains an unresolved interpretation.

Ditch F is stratigraphically the latest feature, post-dating in-filled Ditch B and has been interpreted as a furrow. This is consistent with a similar feature also tentatively identified as a furrow in evaluation Trench No. 10. Both features share the same c. northwest-southeast alignment and may provide evidence of the medieval use of the site, as lying within the common field system.

In conclusion, further evidence of the Iron Age settlement pattern within the local area has been recorded, possibly indicating a longer period of occupation and a more developed site than previously thought, and potentially defining the southern extent of the occupation area. Additionally, the hypothesised Roman marching camp has been demonstrated to be much more convincing with the identification of a

defended entranceway, although the exact nature, period and duration of occupation of this camp still remains unclear.

The identification of probable medieval ridge and furrow is consistent with the known small rural settlement of this period.

8 Effectiveness of methodology

The adopted methodology has successfully provided a meaningful record of the archaeology on the site and has highlighted unresolved issues which may be considered appropriate for further investigation during future phases of work.

9 References

British Geological Survey 1972 *Grantham, England and Wales Sheet 127*. Solid and Drift Edition. 1:50,000 Provisional Series. Keyworth, Nottingham.

Cunliffe, B. 1983 *Danebury: Anatomy of an Iron Age Hillfort*. Batsford Ltd. London

de la Bédoyère, G. 2001 *Eagles over Britannia: The Roman Army in Britain*. Tempus. Stroud.

Edwards, K. 2001 *Ancaster Roman Town and Cemetery, Lincolnshire: An Interim Report on the Archaeological Investigations*. Typescript Report.

Elsdon, S. M. 1997 *Old Sleaford Revealed: A Lincolnshire settlement in Iron Age, Roman, Saxon and Medieval times: excavations 1882-1995*. Oxbow Monograph 78. Oxford.

May, J. 1976 *Prehistoric Lincolnshire. History of Lincolnshire I*. History of Lincolnshire Committee. Lincoln.

Pre-Construct Archaeology (Lincoln) 2007 *Proposed Extension to the Castle Quarry, Ancaster, Lincolnshire: Archaeological Desk-Based Assessment and Geophysical Survey*. Typescript Report No. 07/318/01.

Pre-Construct Archaeology (Lincoln) 2008a *Archaeological Assessment and Management Plan: Land adjacent to Castle Quarry, Ancaster, Lincolnshire*.

Pre-Construct Archaeology (Lincoln) 2008b *Land adjacent to Castle Quarry, Ancaster, Lincolnshire: Archaeological Evaluation*.

Pre-Construct Archaeology (Lincoln) 2009 *Archaeological Works Specification for a Strip, Map and Record Exercise: Land adjacent to Castle Quarry, Ancaster, South Kesteven, Lincolnshire*.

Stevens, J. and Shotter, H. 1996 *Ancaster. A Roman town*. Highfield Press. West Willoughby.

Todd, M. 1975 Ancaster, in W. Rodwell and T. Rowley (eds.) *The small towns of Roman Britain*. BAR 15. Oxford.

Todd, M. 1981 *The Roman Town at Ancaster, Lincolnshire: The Excavations of 1955-1971*. University of Nottingham. Nottingham.

Whitwell, J. B. 1992 *Roman Lincolnshire. History of Lincolnshire II*. History of Lincolnshire Committee. Lincoln.

Wilson, R. 1980 *Roman Forts: An Illustrated Introduction to the Garrison Posts of Roman Britain*. Bergström + Boyle Books Ltd. London

10 Site Archive

The documentary and physical archive for this scheme is currently in the possession of Pre-Construct Archaeological Services Ltd. This will be deposited at The Collection in Lincoln within six months of completion of this report.

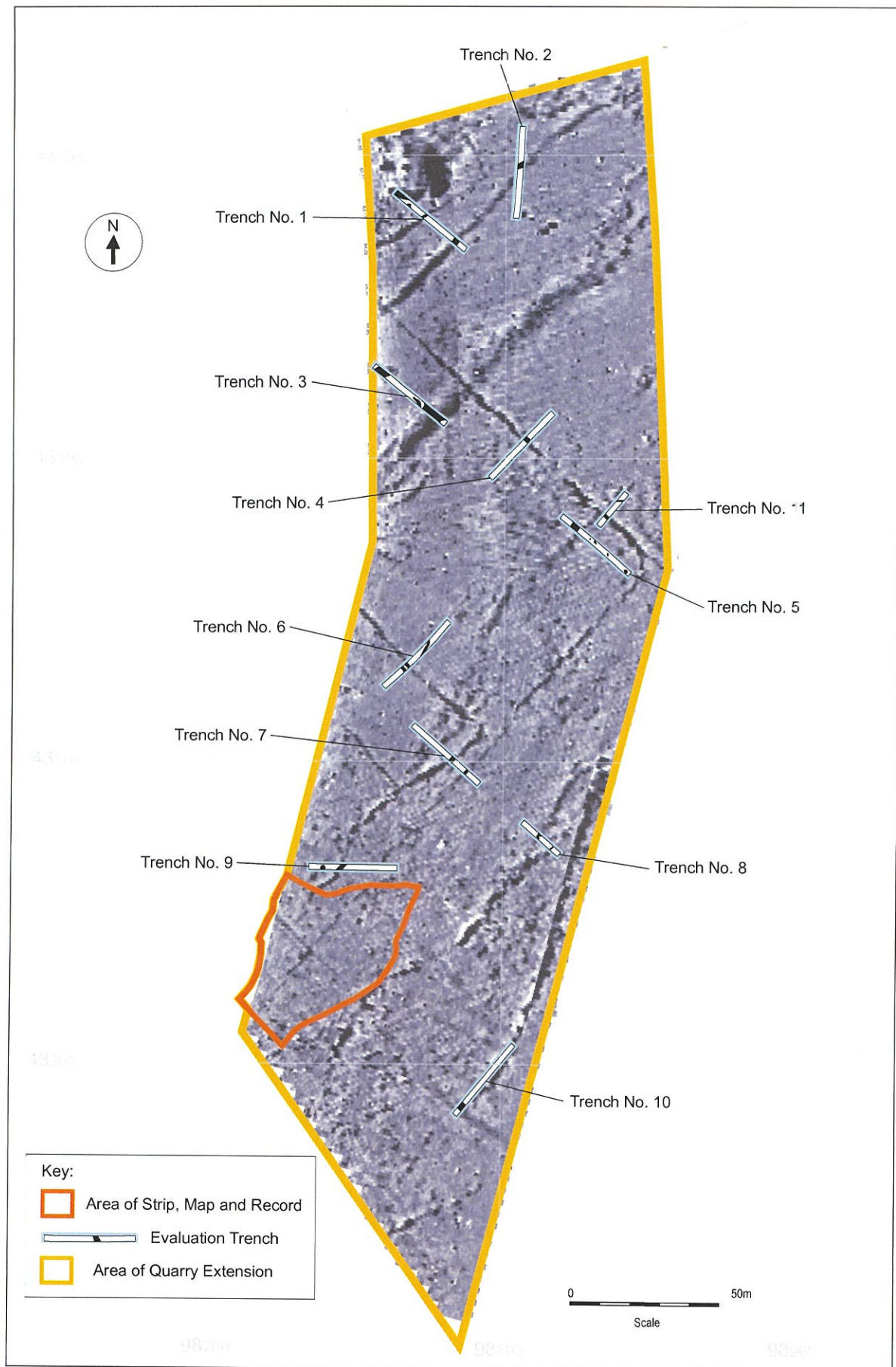


Fig. 2 Area of Strip, Map and Record superimposed over the results of the Geophysical Survey (PCA Lincoln 2007) with Evaluation Trenches (PCA Lincoln 2008b)
Scale 1:2000

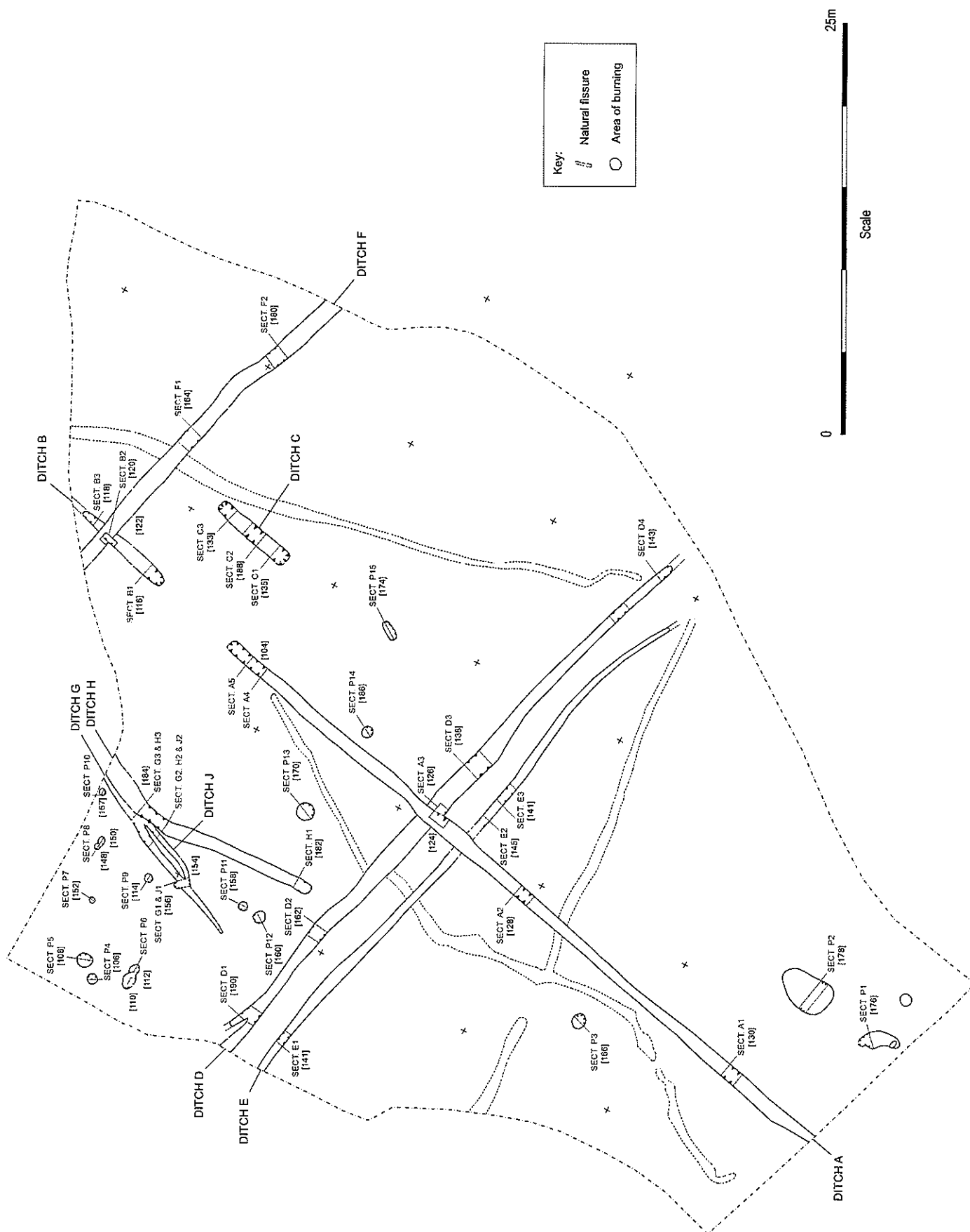
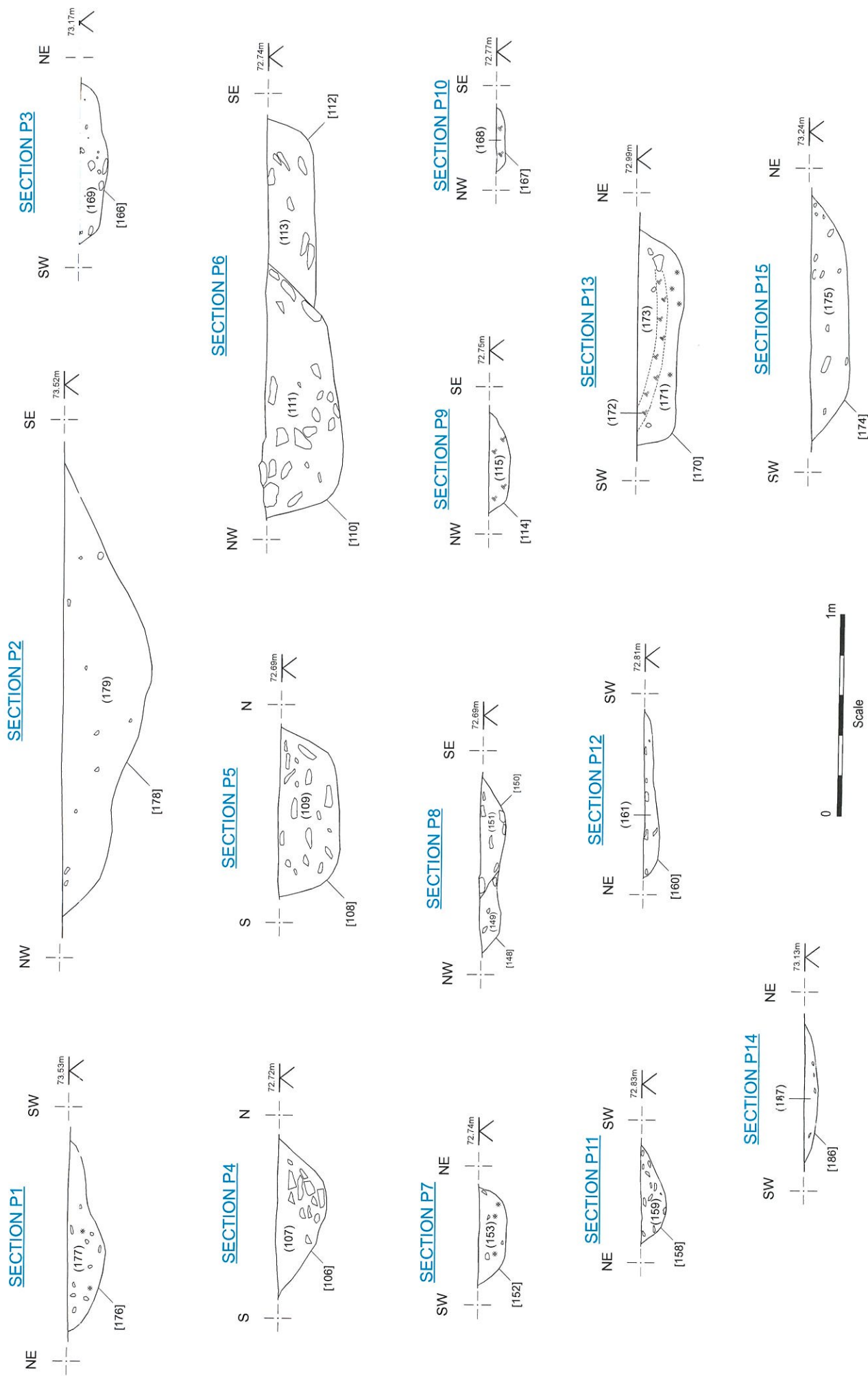
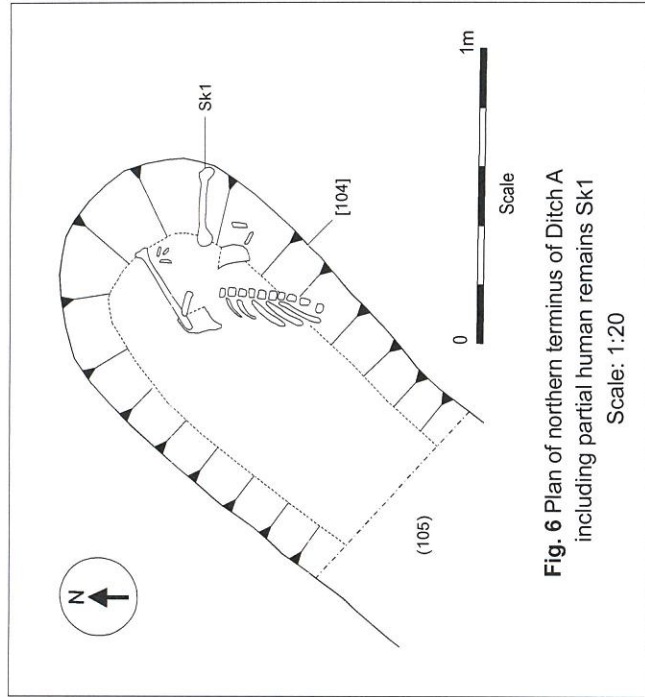
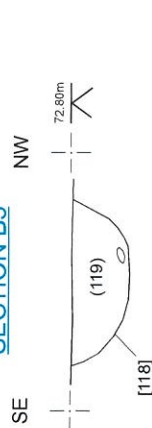


Fig. 3 Area of Strip, Map and Record.
Scale 1:250

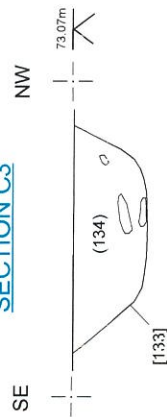




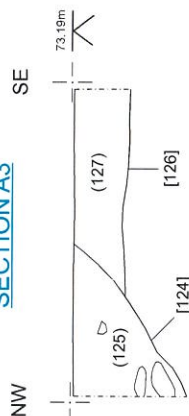
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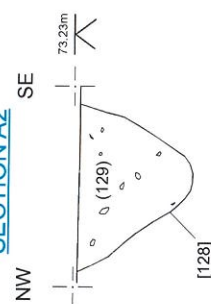
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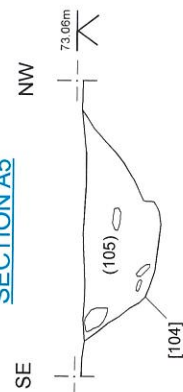
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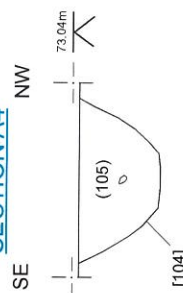
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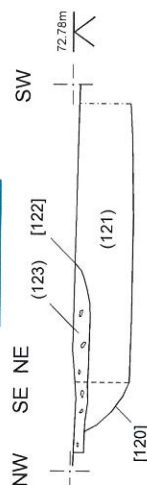
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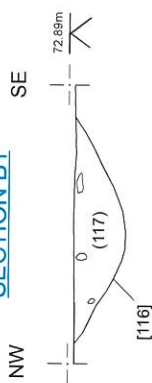
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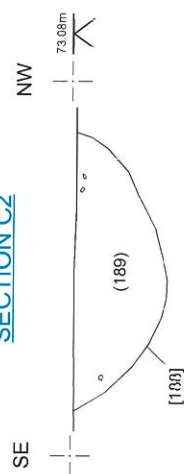
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SECTION B1



SECTION C2



SECTION C1

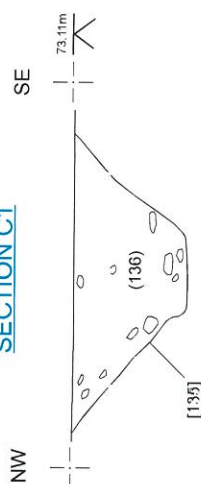
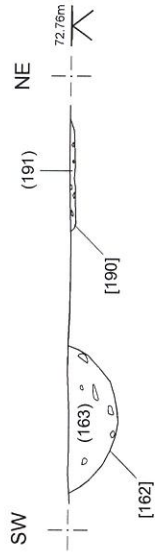
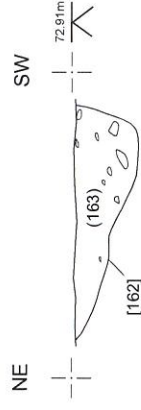


Fig. 5 Sections through Ditches A, B and C
Scale: 1:20

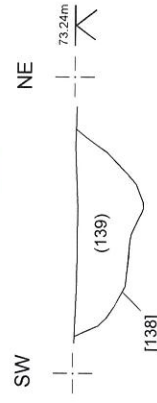
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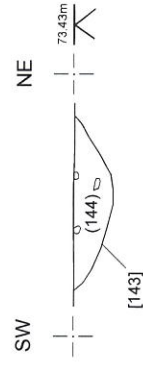
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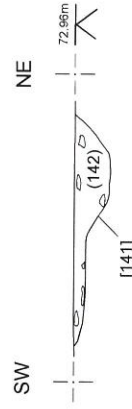
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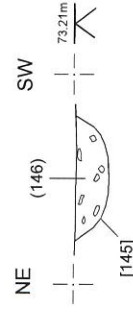
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SECTION E1



SECTION E2



SECTION E3

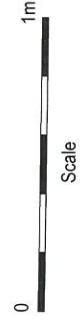
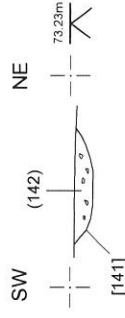
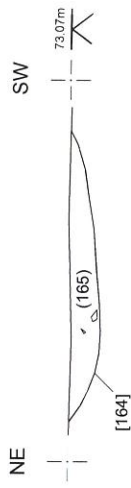
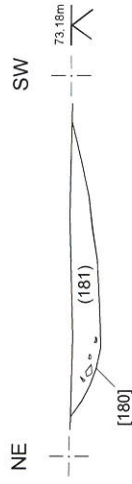


Fig. 7 Sections through Ditches D and E
Scale: 1:20

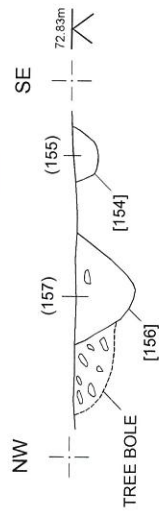
SECTION F1



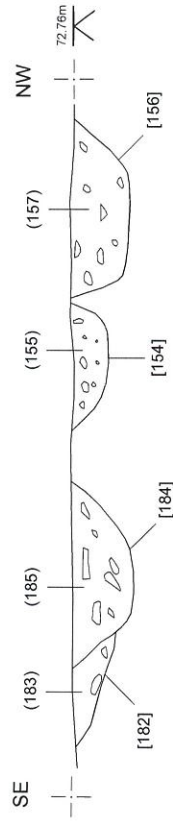
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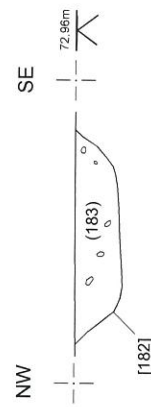
SECTION G1 & J1



SECTION G2, H2 & J2



SECTION H1



SECTION G3 & H3

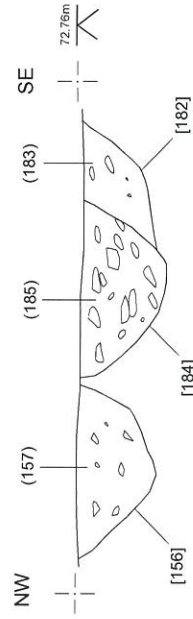


Fig. 8 Sections through Ditches F, G, H and J
Scale: 1:20

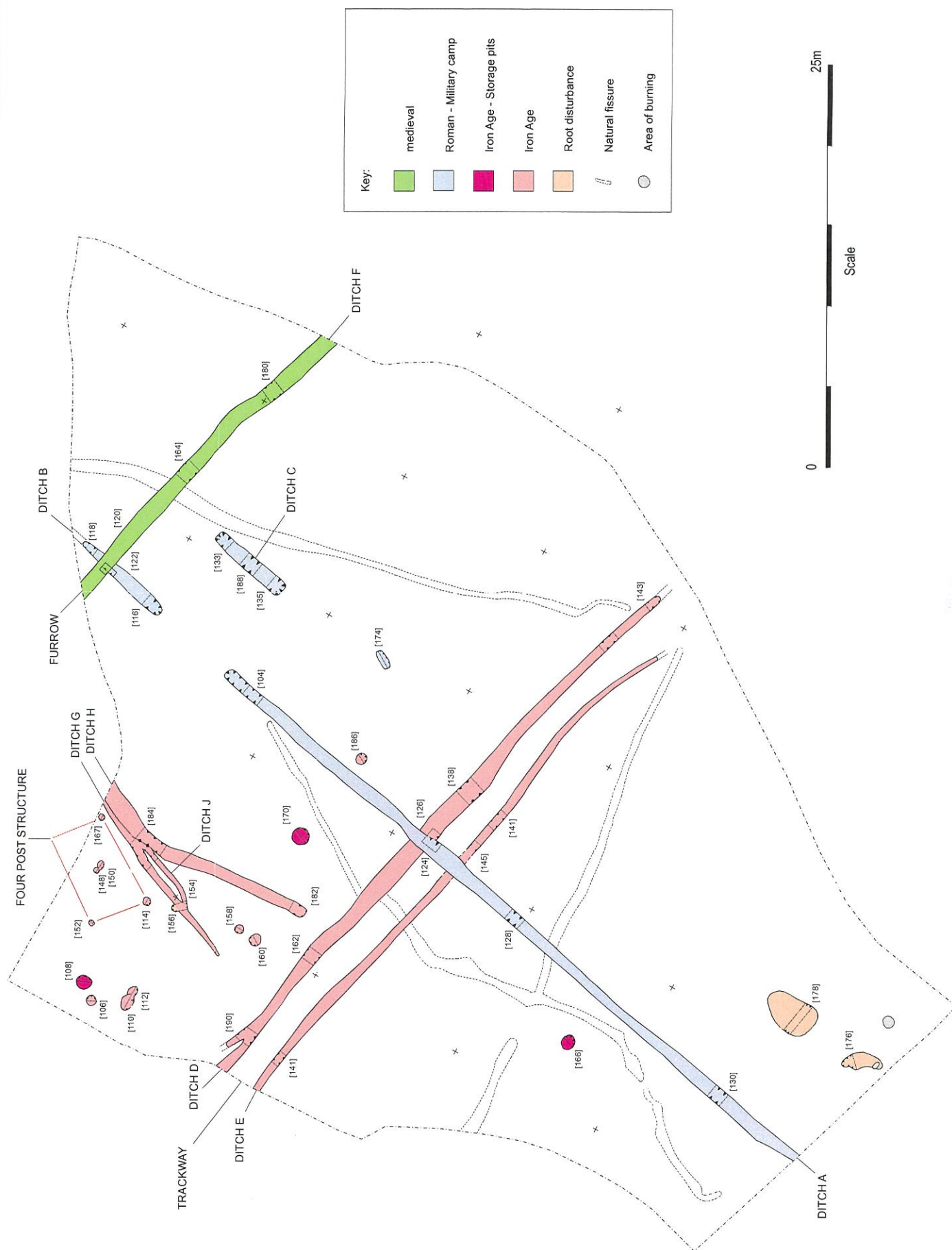


Fig. 9 Interpretation.
Scale 1:250



Photo No.1 The Site; looking to the north, overlooking the Ancaster Gap.

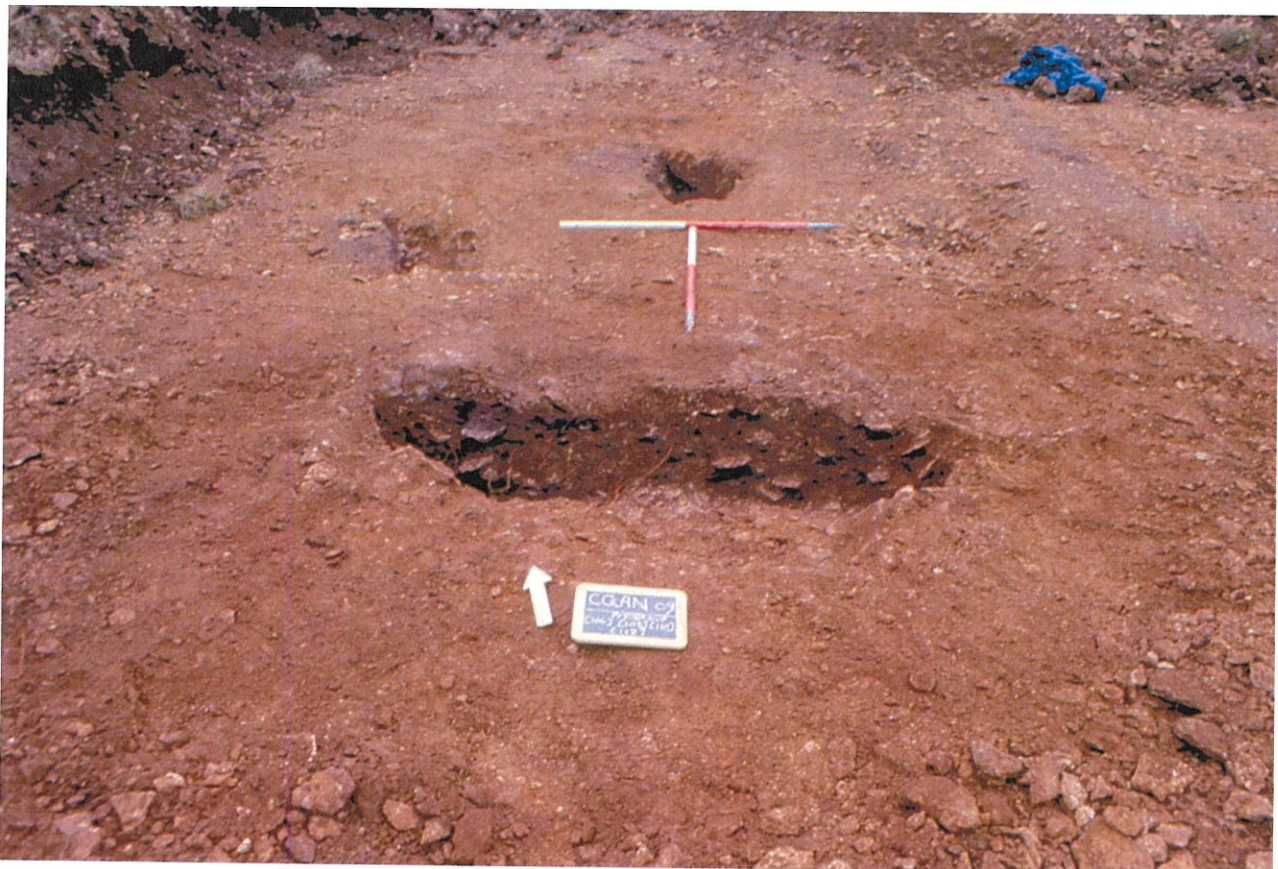


Photo No.2 Pits [110] and [112] in the foreground, with pits [106] and [108] behind.
Scales 1m.



Photo No.3 Section through truncated possible post pits [158] and [160]. Scale 1m.

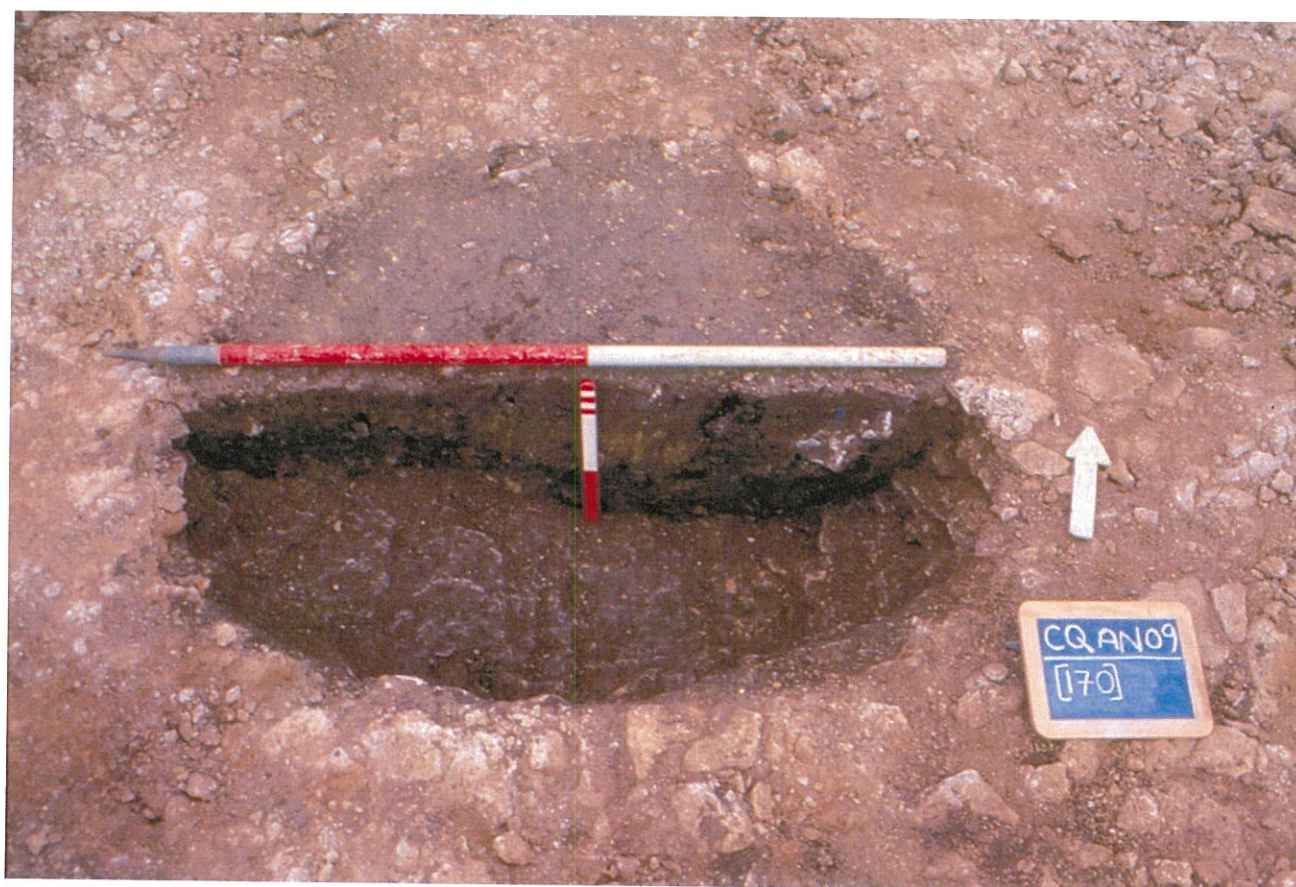


Photo No.4 Section through pit [170]. Scales 1m and 0.25m.



Photo No.5 Ditches B (right foreground) and A (extending beyond the limit of excavation), forming the marching camp entrance with Ditch C (on the left). Scales 1m. Looking southwest.

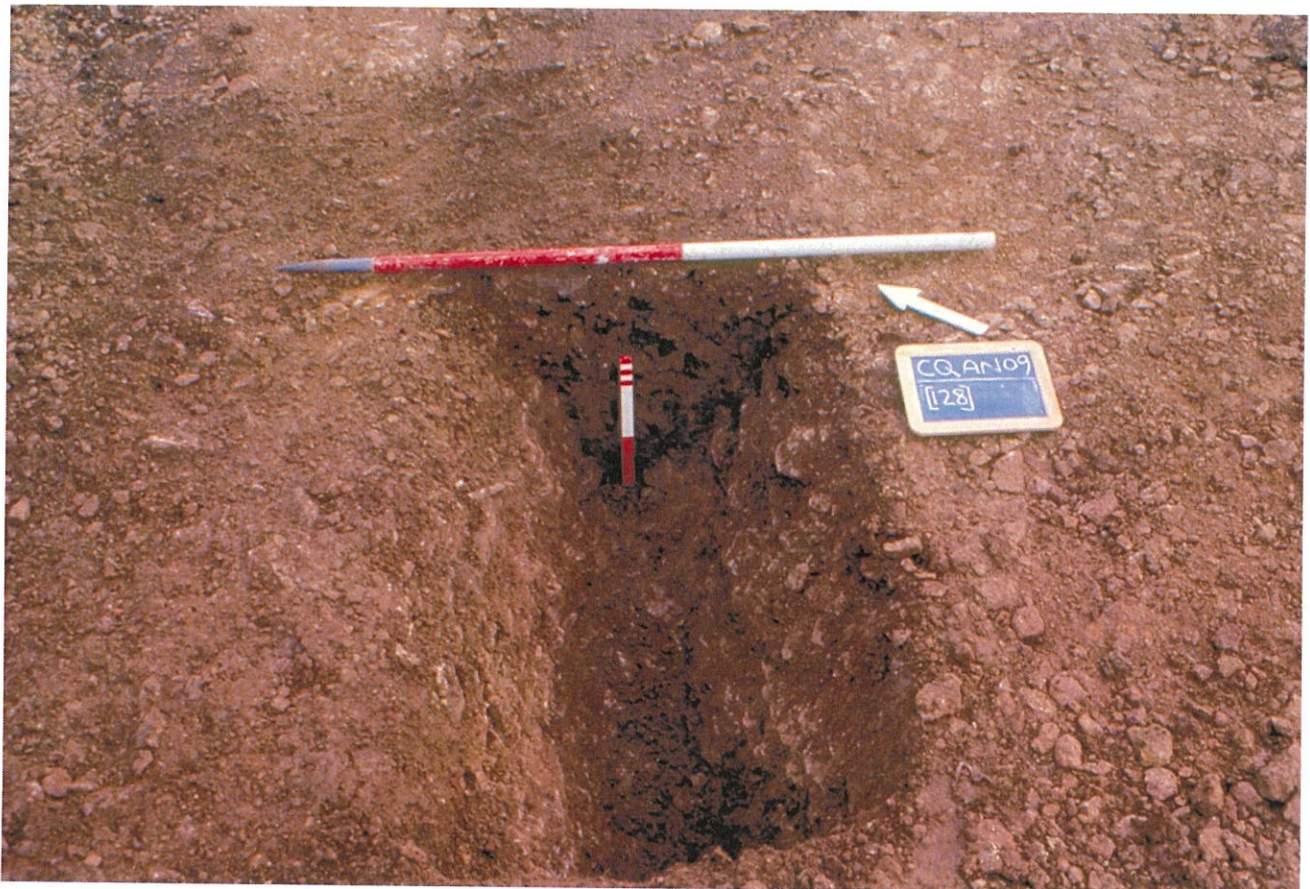


Photo No.6 Section through Ditch A. Scales 1m and 0.25m.



Photo No.7 Sections through Ditch C. Scales 1m. Looking southwest.



Photo No.8 Section through terminus of Ditch A with partial articulated human remains Sk1. Scales 1m and 0.5m.



Photo No.9 Ditches D and E. Scales 1m. Looking northwest.



Photo No.10 Sections through Ditches D and E. Scales 1m and 0.25m.

Appendix 2: Context descriptions

Context No.	Type	Description
100	Topsoil	Mid brown slightly sandy silt with moderate small-medium limestone fragments. < 0.3m thick.
101	Subsoil	Mid orange brown slightly sandy silt with moderate small-medium limestone fragments. < 0.4m thick.
102	Natural	Mixed light yellow brown silty sand with frequent small-medium limestone fragments (weathered bedrock) = Limit of Excavation.
103	Feature Number Ditch B	Eastern part of c. NE-SW aligned ditch, part of marching camp defences. > 70m long x < 0.9m wide x 0.28m deep.
104	Cut of terminus Ditch A	Rounded end, steep sloping sides - concave base of c. NE-SW aligned ditch. > 2.75m long x < 0.75m wide x 0.22m deep.
105	Fill of 104 Ditch A	Mid orange brown sandy silt with occasional limestone fragments and charcoal flecks. Includes partially articulated human remains (SK 1). SAMPLE No. 2
106	Cut of pit	Shallow sloping sides – concave base, irregular sub-rounded plan. 0.7m long x 0.6m wide x 0.2m deep.
107	Fill of 106	Dark grey brown sandy silt/clay with moderate small-medium limestone fragments and occasional charcoal flecks and pieces of blue-yellow clay. 0.7m long x 0.6m wide x 0.2m deep.
108	Cut of pit	Steep sloping sides – flat base, irregular sub-rounded plan. 0.86m long x < 0.86m wide x 0.38m deep.
109	Fill of 108	Mid-dark grey brown sandy silt/clay with moderate small-medium limestone fragments and occasional charcoal flecks and pieces of blue-yellow clay and fragments of burnt stone. 0.86m long x < 0.86m wide x 0.38m deep. SAMPLE No. 1
110	Cut of pit	Moderate sloping sides – concave base, irregular sub-rounded plan. 0.8m long x 0.8m wide x 0.38m deep. Cuts pit [112].
111	Fill of 110	Mid grey brown sandy silt/clay with moderate small-medium limestone fragments (some burnt) and pieces of blue-yellow clay. 0.8m long x 0.8m wide x 0.38m deep.
112	Cut of pit	Moderate sloping sides – flat base, irregular sub-rounded plan. > 0.85m long x 0.22m wide x 0.27m deep.
113	Fill of 112	Mid orange brown sandy silt/clay with moderate small-medium limestone fragments. > 0.85m long x 0.22m wide x 0.27m deep.
114	Cut of posthole	Moderate sloping sides – flat base, sub-rounded plan. 0.5m diameter x 0.1m deep.
115	Fill of 114	Light blue-grey clay. 0.5m diameter x 0.1m deep.
116	Cut of terminus Ditch B	Rounded end, moderate sloping sides - concave base, of c. NE-SW aligned ditch. > 1.2m long x 0.8m wide x 0.2m deep.
117	Fill of 116 Ditch B	Mid orange brown sandy silt with occasional limestone fragments and charcoal flecks. > 1.2m long x 0.8m wide x 0.2m deep.
118	Cut of ditch Ditch B	Moderate sloping sides – concave base, linear plan, ploughed out to northeast. > 1m long x 0.6m wide x < 0.1m deep.
119	Fill of 118 Ditch B	Mid orange brown sandy silt with occasional limestone fragments and charcoal flecks. > 1m long x 0.6m wide x < 0.1m deep.
120	Cut of ditch Ditch B	Moderate sloping sides (base not fully exposed) of c. NE-SW aligned ditch – intersection with ditch [122]. > 1m long x 0.25m wide x 0.2m deep.
121	Fill of 120 Ditch B	Mid orange brown sandy silt with occasional limestone fragments and charcoal flecks. > 1m long x 0.25m wide x 0.2m deep.
122	Cut of furrow Ditch F	Shallow sloping sides – shallow concave base of c. NW-SE aligned furrow – intersection with ditch [120]. > 0.25m long x > 0.4m wide x 0.05m deep.
123	Fill of 122 Ditch F	Mid yellow brown sandy silt with occasional limestone fragments and 'pea grit'. > 0.25m long x > 0.4m wide x 0.05m deep.
124	Cut of ditch Ditch A	Moderate-steep sloping sides (base not fully exposed) of c. NE-SW aligned ditch – intersection with ditch [126]. > 1m long x 0.5m wide x 0.4m deep.

125	Fill of 124 Ditch A	Mid orange brown sandy silt with occasional limestone fragments and charcoal flecks. > 1m long x 0.5m wide x 0.4m deep. SAMPLE No. 6
126	Cut of ditch Ditch D	Moderate sloping sides – concave base of c. NW-SE aligned ditch – intersection with ditch [124]. > 1m long x > 0.5m wide x 0.25m deep.
127	Fill of 126 Ditch D	Mid green-grey clay silt. > 1m long x > 0.5m wide x 0.25m deep.
128	Cut of ditch Ditch A	Steep sloping sides – narrow concave base (V profile) of c. NE-SW aligned ditch. > 1m long x 0.6m wide x 0.4m deep.
129	Fill of 128 Ditch A	Mid orange brown sandy silt with occasional limestone fragments and charcoal flecks. > 1m long x 0.6m wide x 0.4m deep.
130	Cut of ditch Ditch A	Moderate-steep sloping sides – concave base of c. NE-SW aligned ditch. > 1m long x 0.8m wide x 0.38m deep.
131	Fill of 130 Ditch A	Mid orange brown sandy silt with occasional limestone fragments and charcoal flecks. > 1m long x 0.8m wide x 0.38m deep.
132	Feature number Ditch C	c. NE-SW aligned short length of ditch protecting entrance to marching camp. 5.8m long x < 1m wide x 0.4m deep.
133	Cut of terminus Ditch C	Moderate-steep sloping sides – flat base, linear plan, aligned c. NE-SW, with rounded cornered-squared off terminus. > 1m long x 0.8m wide x 0.28m deep.
134	Fill of 133 Ditch C	Mid orange-grey brown sandy silt with occasional limestone fragments and charcoal flecks. > 1m long x 0.8m wide x 0.28m deep.
135	Cut of terminus Ditch C	Moderate-steep sloping sides – flat base, linear plan, aligned c. NE-SW, with rounded cornered-squared off terminus. > 1m long x 1m wide x 0.4m deep.
136	Fill of 135 Ditch C	Mid orange-grey brown sandy silt with occasional limestone fragments and charcoal flecks. > 1m long x 1m wide x 0.4m deep.
137	Feature number Ditch D	c. NW-SE aligned ditch, extending across the site, ploughed out to the southeast. > 40m long x < 0.7m wide x 0.25m deep.
138	Cut of ditch Ditch D	Moderate sloping sides – concave base of c. NW-SE aligned ditch. 1.2m long x 0.7m wide x 0.27m deep.
139	Fill of 138 Ditch D	Mid grey brown clay silt with occasional charcoal flecks. 1.2m long x 0.7m wide x 0.27m deep.
140	Feature number Ditch E	c. NW-SE aligned ditch, extending across the site, truncated throughout and ploughed out to the southeast. > 40m long x < 0.5m wide x 0.1m deep.
141	Cut of ditch Ditch E	Plough truncated sides – concave base of c. NW-SE aligned ditch. > 1.2m long x 0.4m wide x 0.05m deep.
142	Fill of 141 Ditch E	Mid grey brown sandy silt with moderate limestone fragments. > 1.2m long x 0.4m wide x 0.05m deep.
143	Cut of ditch Ditch E	Plough truncated sides – concave-flat base of c. NW-SE aligned ditch, ploughed out to southeast. > 1m long x 0.6m wide x 0.12m deep.
144	Fill of 143 Ditch E	Mid grey brown clay silt with moderate limestone fragments and occasional charcoal flecks. > 1m long x 0.6m wide x 0.12m deep.
145	Cut of ditch Ditch E	Plough truncated sides – concave base of c. NW-SE aligned ditch, ploughed out to northwest. > 1m long x 0.4m wide x < 0.11m deep.
146	Fill of 145 Ditch E	Mid grey brown sandy silt with moderate limestone fragments. > 1m long x 0.4m wide x < 0.11m deep.
147	Feature number Ditch F	c. NW-SE aligned broad shallow furrow, extending across the site. > 25m long x < 1m wide x 0.1m deep.
148	Cut of posthole	Moderate sloping sides – flat base, sub-rounded plan, truncated by posthole [150]. 0.14m diameter x 0.1m deep.
149	Fill of 148	Mid orange brown sandy silt with occasional limestone fragments. 0.14m diameter x 0.1m deep.
150	Cut of posthole	Moderate sloping sides – concave base, sub-rounded plan, truncates posthole [148]. 0.6m diameter x 0.1m deep.
151	Fill of 150	Mid grey brown clay silt with moderate limestone fragments. 0.6m diameter x 0.1m deep.
152	Cut of posthole	Moderate sloping sides – concave base, sub-rounded plan. 0.5m diameter x 0.15m deep.
153	Fill of 152	Mid-dark grey brown clay silt with moderate limestone fragments and

		occasional charcoal flecks. 0.5m diameter x 0.15m deep.
154	Cut of gully Ditch J	Shallow sloping sides – concave base, curvilinear plan, truncated by gully [156]. 5.5m long x 0.2m wide x 0.1m deep.
155	Fill of 154 Ditch J	Light brown sandy silt with occasional limestone fragments and 'pea grit'. 5.5m long x 0.2m wide x 0.1m deep.
156	Cut of gully Ditch G	Moderate sloping sides – narrow concave base of c. NE-SW aligned gully, truncates gully [154]. > 0.5m long x 0.4m wide x 0.2m deep.
157	Fill of 156 Ditch G	Mid red brown sandy silt with occasional limestone fragments. > 0.5m long x 0.4m wide x 0.2m deep.
158	Cut of pit/posthole	Shallow-moderate sloping sides – concave base, sub-rounded plan. Possible posthole. 0.4m diameter x 0.15m deep.
159	Fill of 158	Dark grey brown clay silt with moderate limestone fragments. 0.4m diameter x 0.15m deep.
160	Cut of pit/posthole	Shallow-moderate sloping sides – concave base, sub-rounded plan. Possible posthole. 0.8m diameter x 0.07m deep.
161	Fill of 160	Dark grey brown clay silt with moderate limestone fragments. 0.8m diameter x 0.07m deep.
162	Cut of ditch Ditch D	Shallow-moderate sloping sides – irregular concave base of c. NW-SE aligned ditch. > 1m long x 0.8m wide x 0.25m deep.
163	Fill of 162 Ditch D	Mid grey brown clay silt with occasional charcoal flecks. > 1m long x 0.8m wide x 0.25m deep. SAMPLE No. 3
164	Cut of furrow Ditch F	Shallow-moderate sloping sides – shallow concave base of c. NW-SE aligned furrow. > 1m long x 1m wide x 0.09m deep.
165	Fill of 164 Ditch F	Mid orange brown sandy silt with occasional limestone fragments. > 1m long x 1m wide x 0.09m deep.
166	Cut of pit	Moderate sloping sides – shallow-concave base, rounded plan. 0.8m diameter x 0.1m deep.
167	Cut of posthole	Moderate sloping sides – concave-flat base, rounded plan. 0.32m diameter x 0.05m deep.
168	Fill of 167	Light blue-grey clay. 0.32m diameter x 0.05m deep.
169	Fill of 166	Mid grey brown clay silt with occasional charcoal flecks. 0.8m diameter x 0.1m deep. SAMPLE No. 5
170	Cut of pit	Steep sloping sides – flat base, rounded plan. 1.09m diameter x 0.25m deep.
171	1 st Fill of 170	Mid orange brown sandy silt with occasional charcoal flecks. 1.09m diameter x 0.12m deep.
172	2 nd Fill of 170	Mid green grey clay silt with occasional limestone fragments. 1.09m diameter x 0.07m deep.
173	3 rd Fill of 170	Mid grey brown sandy silt with occasional charcoal flecks. 1.09m diameter x 0.09m deep.
174	Cut of pit	Moderate sloping sides – concave base, elongated oval plan. 1.25m long x 0.45m wide x 0.2m deep.
175	Fill of 174	Mid orange brown sandy silt with occasional limestone fragments. 1.25m long x 0.45m wide x 0.2m deep.
176	Cut of hollow	Irregular sided – shallow irregular base, irregular plan. Probable tree throw/bole. 2.15m long x > 1m wide x 0.2m deep.
177	Fill of 176	Mid grey brown clay silt with moderate limestone fragments (some burnt). 2.15m long x > 1m wide x 0.2m deep.
178	Cut of hollow	Shallow sloping sides – irregular base, sub-rounded plan. Probable nature feature. < 3.5m long x < 2.25m wide x 0.44m deep.
179	Fill of 178	Mid grey brown clay silt with moderate limestone fragments. < 3.5m long x < 2.25m wide x 0.44m deep.
180	Cut of furrow Ditch F	Shallow-moderate sloping sides – shallow concave base of c. NW-SE aligned furrow. > 1m long x 1m wide x 0.07m deep.
181	Fill of 180 Ditch F	Mid orange brown sandy silt with occasional limestone fragments. > 1m long x 1m wide x 0.07m deep.
182	Cut of ditch Ditch H	Shallow-moderate sloping sides – shallow concave-flat base, linear-slightly curving/irregular plan of c. NE-SW aligned ditch. > 1m long x 0.7m wide x 0.16m deep.
183	Fill of 182 Ditch H	Mid red brown sandy silt with occasional limestone fragments. > 1m long x 0.7m wide x 0.16m deep.

184	Re-cut of ditch Ditch H	Shallow-moderate sloping sides – shallow concave-flat base of c. NE-SW aligned ditch. > 6m long x 0.65m wide x 0.3m deep.
185	Fill of 184 Ditch H	Mid grey brown clay silt with moderate limestone fragments and occasional charcoal flecks. > 6m long x 0.65m wide x 0.3m deep. SAMPLE No. 4
186	Cut of pit	Moderate sloping sides – concave base, rounded plan. 0.75m diameter x 0.08m deep.
187	Fill of 186	Mid orange brown sandy silt with occasional limestone fragments. 0.75m diameter x 0.08m deep.
188	Cut of ditch Ditch C	Moderate-steep sloping sides – shallow concave-flat base of c. NE-SW aligned short ditch. > 1m long x 0.97m wide x 0.35m deep.
189	Fill of 188 Ditch C	Mid orange-grey brown sandy silt with occasional limestone fragments and charcoal flecks. > 1m long x 0.97m wide x 0.35m deep. SAMPLE No. 7
190	Cut of truncated gully	Plough truncated sides – flat base, linear plan, ploughed out to northwest. > 1m long x 0.4m wide x < 0.02m deep.
191	Fill of 190	Mid orange brown sandy silt with occasional limestone fragments. > 1m long x 0.4m wide x < 0.02m deep.

Appendix 3: Specialists reports

A report on Iron Age and Roman Pottery from excavations on land at Castle Quarry, Ancaster, Lincolnshire, CQAN09

(OS Grid Ref. SK 9878 4337)

LM. Rowlandson

October 18th 2009

The pottery has been archived using count and weight as measures according to the guidelines laid down for the minimum archive by *The Study Group for Roman Pottery* (Darling 2004) using the codes developed by the City of Lincoln Archaeological Unit- CLAU (see Darling and Precious *forthcoming*). Rim equivalents (RE) have been recorded and an attempt at a 'maximum' vessel estimate has been made following Orton (1975, 31). The pottery has been bagged by fabric and vessels selected as suitable for illustration have been bagged separately for ease of future reference. The archive record (Appendix 1) is an integral part of this report and will be curated in an Access database, available from the author in a digital format. The report was produced on the basis of site information provided by PCA Lincoln.

CONDITION

The ceramics presented for totalled 81 manually retrieved sherds, weighing 562g, RE 0.6, from 16 contexts from a scheme of archaeological monitoring and excavation. The majority of the Iron Age pottery is abraded for small. No evidence of wear patterns or sooting was evident, probably due to the level of abrasion. The average sherd weight was low at 6.94g per sherd. No cross context joins or 'sherd families' were evident during recording. An additional 23 scraps of pottery weighing 22g, were retrieved from soil samples, these have not been added to the analysis tables as they were received after the report was completed. The pottery from samples has been included in Appendix 2. With the exception of an intrusive scrap of modern pottery in context 163 these additional sherds do not affect the general interpretations of this report. The pottery should be deposited with the relevant museum.

The pottery presented for study is a small group of Iron Age and Roman pottery much of which is abraded. The pottery can be considered in three groups- an Iron Age phase (G1), probably relating to occupation in the last century of the first millennium BC or early in the 1st century AD. One vessel has a decorative style more commonly found on Iron Age sites in Northamptonshire. Following the Iron Age occupation there appears to have been a short lived 1st century AD marching camp (G2). The pottery from this phase all fits into the 'native tradition' and no imported Roman finewares were presented for study. A small group, consisting of 1st century AD pottery was also retrieved from a later feature, probably a furrow (G3).

DATING

The detailed archive is presented as Appendix 1. Table 1 provides a quantified spot dating summary by context. It should be noted that nearly all of the groups are dated on a small number of vessels. The pottery has been presented in the groups discussed above.

Table 1- Dating Summary									
G	F No	Context	Feature Type	F Notes	Comments	Spot date	Sherds	Weight (g)	Rim eve
1	108	109	Pit		A single sherd of shell tempered pottery	IA-ROM	1	6	0
1	110	111	Pit		Tiny scrap	IA-ROM	1	2	0
1	152	153	Post hole		A single shell tempered rim sherd	LIA+?	1	4	2
1	155	155	Gully		Scraps of shell tempered vessel	IA-ROM	5	7	0
1	162	163	Ditch	Drove way?	Scraps of a scored ware jar- Intrusive scrap of modern pottery retrieved from sample <3>	M-LIA	6	26	6
1	166	169	Pit		Scored lattice decorated vessel and rouletted decorated vessels	MLIA	11	56	0
1	170	171	Pit	Pit	Scraps of shell tempered pottery	IA-ROM	6	13	0
1	182	183	Ditch	Ditch	Scraps of shell tempered pottery	IA-ROM	5	12	0
1	184	185	Ditch		Scored ware sherds and a single burnished IA fine ware sherd	MLIA	19	120	6
2	104	105	Ditch	Fort ditch 103 terminus	A large storage jar and wheel-made sherd	M-ML1	2	80	3
2	124	125	Ditch	Fort ditch 103	A small group mostly consisting of a necked bowl in a local fabric	M1	14	189	32
2	128	129	Ditch	Fort ditch	Tiny scrap	IA-ROM	1	1	0
2	130	131	Ditch	Fort ditch 103	A single necked jar	M-ML1	2	30	11
2	133	134	Ditch	Titulum	A single sherd of shell tempered pottery	IA-ROM	1	5	0
2	135	136	Ditch	Titulum	Abraded shell tempered sherds	IA-ROM	4	5	0
3	164	165	Furrow		Two abraded sherds from a possible furrow	M1+	2	6	0

As discussed above the features have been formed into three simple groups for ease of discussion. Many of the groups are small and therefore given how common calcareous fabrics are during both the Iron Age and early Roman period in this area some of the G1 features may be of Roman date.

OVERVIEW OF FABRICS & FORMS

Table 2- Fabric Overview						
Fabric	Fabric details	Sherds	Sherd %	Weight (g)	Weight %	RE total %
GROGF	Fine Grog tempered ware	1	1.23%	5	0.89%	0
GYMS	Grey wheel-made with minimal fine shell	3	3.70%	44	7.83%	11
LOOL	Oolitic tempered	15	18.52%	254	45.20%	35
SHCF	Shell- common fine	6	7.41%	13	2.31%	0
SHMM	Shell- moderate medium shell	1	1.23%	6	1.07%	0
SHSC	Shell- sparse coarse shell	32	39.51%	149	26.51%	12
SHSF	Shell- sparse fine shell	18	22.22%	84	14.95%	2
SHSM	Shell- sparse medium shell	5	6.17%	7	1.25%	0

Table 3- Form Overview							
Form	Form Type	Form Description	Sherds	Sherd %	Weight (g)	Weight %	RE total %
-	Unknown	Form uncertain	29	35.80%	70	12.46%	0
BNK	Bowl	Necked	13	16.05%	186	33.10%	32
CLSD	Closed	Form	2	2.47%	20	3.56%	0
J?	Jar	Unclassified form	14	17.28%	74	13.17%	0
JBEV	Jar/Bowl	Everted rim	1	1.23%	4	0.71%	2
JNK	Jar	Necked	2	2.47%	30	5.34%	11
JS 52	Jar	Storage (form as Webster 1949 Fig 12.48)	1	1.23%	66	11.74%	3
JUP	Jar	Upright rim	8	9.88%	44	7.83%	12
OPEN	Open	Form	1	1.23%	18	3.20%	0

Iron Age- Group 1

The pottery from this group is mostly small and fragmentary and in the shelly fabrics typical of this area with some examples containing the Punctuate Brachiopod fossil shells typical of this region. The most notable group was 169 which contained a number of decorated sherds. Examples of the double spaced rouletting typical of the Ancaster area are present (D4 as Elsdon 1996 C10) along with the rarer 'clumsy' wide spaced motif also found at the unpublished Ancaster Gap site (eg AC68 context UA). Along with these

more common decorated styles there are also sherds from a bowl decorated with zones of scored lattice within freehand scored horizontal lines (D3). This scoring motif appears on a vessel from The Lawn, Lincoln (Darling 1988) but these sherds appear to be more similar to Iron Age examples from Northamptonshire. At Weekley, Northamptonshire this decorative scheme occurs most commonly on the upper zones of globular bowl forms (Jackson and Dix 1987, Fig 34. 61, 66, 66; Fig 35.83; Fig 36.93, also on the lower zone Fig 34.67). A similar example to D3 with multiple bands of incised lattice to this example is illustrated by Elsdon from Aldwick, Northamptonshire (1996, E5 Group2). Jackson and Dix dated this form at Weekley to 175BC- AD20 on the basis of 5 separate charcoal C14 dates (1987, 77).

Roman- Groups 2 and 3

A small quantity of 'native tradition' pottery was retrieved from the ditches and titulum attributed to the marching camp or fort. Few of the vessels could be attributed to a form and much of the pottery was fragmentary. The notable vessels are a necked bowl and carinated (D1) which, although heavily abraded, appears may have been wheel made or wheel finished in an oolitic and limestone tempered fabric. A necked jar or perhaps beaker in a grog tempered fabric (D2) and the fragment of a rim of a large storage jar in an oolitic tempered fabric (context 105) represent the other vessel forms present.

The pottery from Group 3 contained an early Roman group interpreted as being from a possible furrow.

DISCUSSION

The Iron Age pottery represents an interesting addition to the pottery from the Castle Quarry site and the lattice decorated vessel, in a style more commonly found in Northamptonshire and not represented amongst the pottery from the Ancaster Gap site, hints at stylistic or trade links with communities to the south of Ancaster.

The group of pottery from the Roman camp is interesting if a little inconclusive. The range of pottery is limited to 'Native Tradition' types. Although the lack of Roman imports from these features prevents the this author from refining the date of activity of the camp it is not unexpected as many of the Claudian and Neronian groups from the Ancaster Gap site contain little or no Roman wheel-thrown pottery. The conquest period is difficult to recognise on the basis of the ceramic evidence and much of the pottery must have been sourced locally (Willis 1996, 187, 193, 196 and 217). Pottery from a nearby rural site at Wilsford, of a similar date, has a similar range of fabrics to those present in this group (Precious 2008). In the knowledge that many Roman campaigning forts often produce only small groups of pottery as metalwork was probably more portable for the army in the field the small quantity of pottery might be considered appropriate for a marching or temporary construction camp.

RECOMMENDATIONS

All of the pottery should be retained and deposited in the relevant museum to enable future scrutiny.

The pottery from this site is of interest due to the proximity of the site to both Jeffery May's Castle Quarry site and the 'Ancaster Gap' site. The pottery from this investigation, the evaluation, and subsequent excavations on the site should be published in a local journal to highlight the significant Iron Age evidence and the new Roman marching camp. For this publication the selected vessels D1-4 should be illustrated.

It should be highlighted in this report the recommendations made for the evaluation report (Rowlandson 2008). Subsequent excavations should take the opportunity to utilise scientific dating techniques to try to help resolve some of the chronological issues which remain a problem for the understanding of Iron Age pottery in the region. It is also recommended that as this site is extremely important that subsequent excavations should endeavour to retrieve larger artefact assemblages. The camp ditch and any Iron Age pits with good groups of pottery would merit greater sampling by subsequent excavations.

BIBLIOGRAPHY

- Darling, M.J., 2004, Guidelines for the archiving of Roman Pottery. *Journal of Roman Pottery Studies* 11, 67-74.
- Darling, M.J. and Precious, B.J., *forthcoming*, *Corpus of Roman Pottery from Lincoln*, Lincoln Archaeological Studies No. 6, Oxbow Books, Oxford
- Elsdon, S.M., 1996, *Iron Age Pottery in the East Midlands. A Handbook*. Dept of Classics and Archaeology, University of Nottingham
- Jackson, D.A. & Dix, B., 1987 Late Iron Age and Roman settlement at Weekley, Northants. *Northants. Archaeol.*, 21, 41-94.
- Knight, D. 2002, A Regional Ceramic Sequence: Pottery of the First Millennium BC between the Humber and the Nene, in *Woodward and Hill (eds)*, 119-142
- May, J., 1976, *Prehistoric Lincolnshire*, History of Lincolnshire I, History of Lincolnshire Committee, Lincoln
- Orton, C. R., 1975, Quantitative pottery studies, some progress, problems and prospects. *Science and Archaeology* 17, 30-5.
- Precious, B.J., 2008, An Archive report on the Iron Age and Roman pottery from the Wilsford Rauceby Reinforcement Main Scheme, Lincolnshire (WURM06) for Lindsey Archaeological Services (SK 9906 4185- TK 0112 4393)
- Rowlandson, I.M. with Darling M.J., 2008, A report on Iron Age and Roman Pottery from an Evaluation on Land at Castle Quarry, Ancaster, Lincolnshire, CQEA08
- Todd, M., 1981, *The Roman Town at Ancaster, Lincolnshire*, Univ Nottingham & Exeter.

- Webster, G., 1949 The legionary fortress at Lincoln, *J Roman Stud*, 39, 57-80.
- Welfare, H. and Swan, V., 1995, *Roman Camps in England*, HMSO, London
- Willis, S., 1996, The Romanization of Pottery Assemblages in the East and North-East of England during the First Century A.D.: A Comparative Analysis, *Britannia* 27, 179-221
- Woodward, A. and Hill, J.D. (eds), 2002, *Prehistoric Britain: The Ceramic Basis*, Prehistoric Ceramics Research Group Occasional Publication 3, Oxbow, Oxford

Appendix 1- CQAN09 Iron Age and Roman pottery archive												
Context	Fabric	Form	Decoration	Vess	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve
I05	LOOL	JS 52	WF?	1	ABR		RIM; BROWN FABRIC; COMMON OOL; SP SHELL		1	66	44	3
I05	GYMS	CLSD	WM	1	ABR		RIM; AS CONTEXT D2		1	14	0	0
I09	SHMM	-	HM	1	ABR		BS; BLACK		1	6	0	0
I11	LOOL	-	HM	1	VAB		BS; OX/R/OX; COMMON OOL; SP LIM		1	2	0	0
I25	SHSC	-	HM	1	VAB		BS; OX/R/OX; SP QU & FE		1	3	0	0
I25	LOOL	BNK	WM/WF	1	ABR	D1	RIM BS BASE; COMMON CALC OOLITHS; LIM; SPARSE FE GRAINS; APPEARS AT LEAST WHEEL FINISHED; TODD 1981-FIG 14.35		13	186	14	32
I29	SHSF	-		1	VAB		BS TINY SCRAP		1	1	0	0
I31	GYMS	JNK	WF?	1	ABR	D2	RIM SHLDR; BROWN SURFACES; SPARSE QUARTZ AND FE ROUNDED C 0.3MM; SPARSE SHELL?		2	30	14	11
I34	SHSC	-	HM	1	ABR		BS; OX/R		1	5	0	0
I36	SHSF	-	HM?	1	ABR		BS; OX/R/OX; SCRAPS		4	5	0	0
I53	SHSF	JBEV	HM	1	ABR		RIM; BLACK		1	4	14	2
I55	SHSM	-	HM	1	ABR		BS; SCRAPS; OX/R		5	7	0	0
I63	SHSC	JUP	HM; SCRD	1	ABR		RIM SHLDR; BLACK; SMALL SCOREDWARE JAR		6	26	11	6
I65	GROG F	-	WM	1	ABR		BS; R/OX/R; LIGHT GREY SURFACE; SPARSE QU 0.3 ROUNDED		1	5	0	0
I65	SHSC	-	HM	1	ABR		BS; SCRAP; SHL-PB		1	1	0	0
I69	SHSF	B?	HM; LA	1		D3	BS; OXID THROUGHOUT; SHL-PB; SP QU; ZONES OF SCORED OBTUSE AND ACCUTE LATTICE WITHIN FREE HAND SCORED HORIZONTAL LINES AS ELSDON 1996 E5 GROUP 2		8	39	0	0
I69	SHSF	B?	HM; ROU 1A	1		D4	BS; OX/R; FINE DOUBLE SQUARE TOOTHED ROULETTE TYPICAL OF ANCASTER AS ELSDON 1996 C10		2	11	0	0
I69	SHSF	CLSD	ROU 1A; HM	1			BS; OXID; POORLY FORMED ?ROULETTE AS EXAMPLES FROM ANCASTER GAP-AC68 UA		1	6	0	0
I71	SHCF	-	HM	1	ABR		BS		2	10	0	0
I71	SHCF	-	HM	1	ABR		BS		4	3	0	0
I83	SHSC	-	HM?	1	VAB		BS; SCRAPS; ? NUMBER OF VESSELS		5	12	0	0
I85	SHSF	OPEN	B EXT; B	1			BS; BLACK; HIGH BURNISH; SPARSE QU SAND AND GROG-		1	18	0	0

Appendix 1- CQAN09 Iron Age and Roman pottery archive												
Context	Fabric	Form	Decoration	Vess	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve
			INT; HM				11A FINE WARE					
185	SHSC	J?	SCRV; HM	10			BS; OX/R/OX; ?VESSELS?; SCORED WARE FRAGMENTS		14	74	0	0
185	SHSC	JUP	SCRD; HM	1			RIM; R/OX;		2	18	11	6
185	SHSC	-		1			BS; SCRAP		1	1	0	0
185	SHSC	-	SHRD; HM	1			BS; LIGHT BROWN; SCORED SHERD		1	9	0	0

Appendix 2- CQAN09 Pottery retrieved from soil samples													
Sample	Context	Fabric	Form	Decoration	Vessels	Alt	Drawing	Comments	Join	Sherd	Weight	Rim diam	Rim eve
1	109	VESIC	-		1 VAB			BS; TINY SCRAP; SAMPLE 1		1	1	0	0
1	109	SHSC	-	HM?; SHG	1 ABR			BS; SCRAPS; OX/R; SCORED GROOVE; 1A?; SAMPLE 1		1	5	0	0
3	163	PROM	-		1 ABR			BS; SCRAP OF POST MED/MODERN CREAMWARE; SAMPLE 3		1	1	0	0
4	185	SHSC	-	HM?	4 VAB			BS; SCRAPS; OX/R; 1A; SAMPLE 4		4	10	0	0
5	169	SHSF	-		14 VAB			BS; SCRAPS OF VESSELS- NUMBER PRESENT?; PROBABLY FEWER; SAMPLE 5		14	12	0	0
5	169	SHSF	-	ROU 1A	1 ABR			BS; SCRAP TOOTHED ROULETTING?; OX/R; SPARSE QUARTZ; SAMPLE 5		1	1	0	0
5	169	SHSF	-	ROU 1A	1 ABR			BS; SCRAP; SQUARE TOOTHED ROULETTING; OX/R; SPARSE QUARTZ; SAMPLE 5		1	1	0	0

Castle Quarry, Ancaster, Lincolnshire (CQAN 09)

The Animal Bone

By Jennifer Wood

Introduction

A total of 172 (2706g) refitted fragments of animal bone were recovered by hand during the scheme of archaeological works undertaken by Pre-Construct Archaeology Lincoln at Castle Quarry, Ancaster, Lincolnshire.

The remains were mainly recovered from a series of ditch systems dated from the late Iron Age to the early Roman period, and from a gully, pits and post holes of the same date.

Methodology

The entire assemblage has been fully recorded into a database archive. Identification of the bone was undertaken with access to a reference collection and published guides. All animal remains were counted and weighed, and where possible identified to species, element, side and zone (Serjeantson 1996). Ribs and vertebrae were only recorded to species when they were substantially complete and could accurately be identified. Undiagnostic bones were recorded as micro (rodent size), small (rabbit size), medium (sheep size) or large (cattle size). The separation of sheep and goat bones was done using the criteria of Boessneck (1969) and Prummel and Frisch (1986) in addition to the use of the reference material. Where distinctions could not be made the bone was recorded as sheep/goat (S/G).

The quantification of species was carried out using the total fragment count, in which the total number of fragments of bone and teeth was calculated for each taxon. Where fresh breaks were noted, fragments were refitted and counted as one. The data produced the basic NISP (Number of Identified Specimen) counts.

The condition of the bone was graded using the criteria stipulated by Lyman (1996). Grade 0 being the best preserved bone and grade 5 indicating that the bone had suffered such structural and attritional damage as to make it unrecognisable. Also fusion data, butchery marks (Binford 1981), gnawing, burning and pathological changes were noted when present.

Tooth eruption and wear stages were measured using a combination of Halstead (1985), Grant (1982), Levine (1982) and Payne (1973), and fusion data was analysed according to Silver (1969). Measurements of adult, that is, fully fused bones were taken according to the methods of von den Driesch (1976), with asterisked (*) measurements indicating bones that were reconstructed or had slight abrasion of the surface.

Results

Condition and Taphonomy

The remains were generally of a moderate to poor condition, averaging between grades 3 on the Lyman criteria (1996). Many of the bone fragments displayed evidence of chemical etching from roots and leaching; this may have masked or obliterated any subtle signs of butchery, pathology and gnawing if present.

Table 1. Condition

Condition (Lyman, 1996)	N=
2	5
3	104
4	63

A total of 3 fragments displayed evidence of butchery. A cattle humerus recovered from gully [154] and a cattle and an equid first phalanx from ditch re-cut [184] displayed cut marks consistent with the disarticulation of the carcass.

Carnivore gnawing was noted on four fragments of bone recovered from ditch re-cut [184], gully [154] and ditch [156], suggesting that the remains were open to scavengers during or after the disposal process.

A total of 12 fragments of bone recovered from pits [108], [112] and [171], posthole [152], ditch [156] and [184]. These few fragments of burnt bone probably represent hearth sweepings and incidental burning events.

No evidence of pathology or bone working was noted within the assemblage.

Species Representation

As can be seen from Table 2, the most abundant remains identified were from sheep/goat, with one fragment positively identified as sheep, almost equal numbers of *equid* and cattle were also identified. Two fragments identified as dog were also present.

Table 2, Identified Taxa

Taxon	Date						Total
	Iron Age-Roman	Mid-Late Iron Age	Late Iron Age+?	Mid 1 st Century	Mid-Mid Late 1 st Century	Undated	
<i>Equid</i> (Horse Family)	6	4		2	1		13
Cattle	5	7				1	13
Sheep/Goat	6	7					13
Sheep	1						1
Dog (<i>Canis Sp.</i>)	1				1		2
Large Mammal	24	19		5	1	10	59
Medium Mammal	14	9				5	28
Unidentified	13	23	1	5		1	43
N=	70	69	1	12	3	17	172

Earlier archaeological works undertaken on the site, revealed an identical pattern of identified taxa (Wood, 2008). Although the assemblage from both phases of work were small in size and therefore providing limited information on underlying animal utilisation and husbandry practices undertaken on site, brief generalisations can be made. The site was most likely serviced by a rather mixed economy, with sheep/goat taking very slight precedence over the other species present.

The aging data for the assemblage is too limited to produce a formal age at death profile. However, the presence of a cattle mandible from an old adult animal, recovered from [184] would suggest that some animals were being kept to an old age for milk production and traction, rather than cattle just being used for meat. A sheep/goat mandible from an animal aged 3-10 months recovered from the same context may further support the evidence noted in the earlier works (Wood, 2008) that the breeding of Sheep/Goat may have taken place on site.

Jennifer Wood
Osteoarchaeology Services
October 2009

References

- Baker, J, and Brothwell, D, 1980 *Animal Diseases in Archaeology*, Academic Press
- Binford, L., 1981, *Ancient Men and Modern Myths*, New York: Academic Press.
- Boessneck, J, 1969 Osteological Differences in Sheep (*Ovis aries* Linné) and Goat (*Capra hircus* Linné), in D Brothwell and E Higgs (eds) *Science in Archaeology*, Thames and Hudson, 331-358
- von den Driesch, A, 1976 *A Guide to the Measurement of Animal Bones from Archaeological Sites*, Peabody Museum
- Grant, A, 1982 'The Use of Tooth Wear as a Guide to the Age of Domestic Ungulates', in B Wilson *et al.* *Ageing and Sexing Animal Bones from Archaeological Sites*, BAR British Series 109, 91-108, Oxford
- Halstead, P, 1985 A Study of Mandibular Teeth from Romano-British Contexts at Maxey, in F Pryor, *Archaeology and Environment in the Lower Welland Valley*, East Anglian Archaeology Report 27:219-224
- Levine, M A, 1982 The Use of Crown Height Measurements and Eruption-Wear Sequences to Age Horse Teeth. In Wilson, B et al. *Ageing and Sexing Animal Bones from Archaeological Sites*. BAR British Series 109. 223 – 250
- Lyman, R L, 1996 *Vertebrate Taphonomy*, Cambridge Manuals in Archaeology, Cambridge University Press, Cambridge
- Payne, S. 1973. Kill-off patterns in sheep and goats: the mandibles from Asvan Kale. *Anatolian Studies* 23, 139-47.
- Prummel, W and Frisch, H-J, 1986 A Guide for the distinction of species, sex and body size in bones of sheep and goat, *Journal of Archaeological Science* XIII., 567-77

- Serjeantson, D, 1996 The Animal Bones, in *Refuse and Disposal at Area 16, East Runnymede: Runnymede Bridge Research Excavations*, Vol. 2, (eds) E S Needham and T Spence, British Museum Press, London
- Silver, I, A, 1969, The Ageing of Domestic Animals, in D. Brothwell and E.S. Higgs, *Science in Archaeology*, Thames and Hudson.
- Wooč, J. 2008, *The Animal Bone, Castle Quarry, Ancaster, Lincolnshire (CQEA 08)*
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Environmental Assessment

on behalf of

Pre-Construct Archaeology (Lincoln)

Report 2285

October 2009

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Castle Quarry, Ancaster, Lincolnshire

environmental assessment

Report 2285

October 2009

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1. Summary

The project

- 1.1 This report presents the results of environmental assessment of seven bulk samples taken during archaeological works by Pre-Construct Archaeology (Lincoln), at Castle Quarry, Ancaster, Lincolnshire. The features include prehistoric pits and ditches, and a Roman marching camp ditch.

Results

- 1.2 The results indicate that hazelnuts and barley formed a part of the diet during the Iron Age occupation of the site. Few charred plant remains were preserved in the Roman marching camp ditch.

Recommendations

- 1.3 No further plant macrofossil analysis is required for these samples due to the low diversity of charred remains. If additional works are undertaken on the site, the results from this assessment should be added to any further environmental data produced. Assessment of the snail assemblages in the flots by a mollusc specialist, would establish if they are of interpretative value.

2. Project background

Location and background

- 2.1 Archaeological works were undertaken by Pre-Construct Archaeology (Lincoln) at Castle Quarry, Ancaster. Iron Age and Roman features were uncovered, including a 1st century AD marching camp ditch. This report presents the results of the environmental assessment of bulk samples from prehistoric ditch fills (contexts 163, 185 and 189), prehistoric pit fills (contexts 109 and 169), and the fills of a Roman marching camp ditch (contexts 105 and 125).

Objective

- 2.2 The objective was to establish the potential of the samples to provide information about diet, land use and the palaeoenvironment of the site.

Dates

- 2.3 Samples were received by Archaeological Services Durham University on 21st September 2009. Assessment and report preparation was conducted between 21st September – 8th October 2009.

Personnel

- 2.4 Sample processing was undertaken by Dr Charlotte Henderson. Assessment and report preparation was by Dr Charlotte O'Brien. The bone fragments were examined by Ms Louisa Gidney and Dr Charlotte Henderson.

Archive

- 2.5 The site code is **CQAN09**. The flots are currently in the Environmental Laboratory at Archaeological Services Durham University. The small finds have been returned to PCA (Lincoln) on 7th October 2009.

3. Methods

- 3.1 The entire quantity of each bulk sample was manually floated and sieved through a 500 μ m mesh. The residues were examined for shells, fruitstones, nutshells, charcoal, small bones, pottery sherds and industrial residues, and were scanned using a magnet for ferrous fragments. The flots were dried slowly and examined at up to $\times 60$ magnifications using a Leica MZ7.5 stereomicroscope. Identification of the plant remains was undertaken by comparison with modern reference material held in the Environmental Laboratory at Archaeological Services Durham University. Plant taxonomic nomenclature follows Stace (1997).

4. Results

- 4.1 Bone fragments were recorded in five of the contexts, some of which in pit fills (109) and (169), and ditch fill (185), were burnt or calcined. Most of the fragments were indeterminate, but a sheep/goat carpal was identified from ditch fill (185). A few of the fragments in the marching camp ditch fills (105) and (125) may be human, although the identification is uncertain due to the

poor condition of the bone. Tooth fragments included a cattle maxillary in ditch fill (185), a sheep/goat incisor and unerupted premolar in pit fill (109) and indeterminate tooth fragments in the marching camp ditch terminus fill (105).

- 4.2 Small amounts of hammerscale and snail shells were present in all of the residues, and pottery was recorded in pit fills (109) and (169), and ditch fills (163) and (185). CBM, charcoal and pieces of flint were occasionally noted, and a small glass shard was present in context (105).
- 4.3 The flots ranged in size from 10-100 ml, with snail shells and modern roots present in all of them. Small amounts of bone, charcoal, coal and fuel waste were also recorded in a few. The non-waterlogged nature of the contexts, coupled with the presence of modern roots, suggests that the few uncharred seeds and insect fragments are modern intrusive material. This is supported by the fact that some of the insects are still articulated. The small snail assemblages may also represent later material introduced through burrowing or bioturbation, although assessment by an appropriate specialist would establish if they are of interpretative value.
- 4.4 Charred plant remains were few in number or absent from most of the flots, with the exception of pit fill (169), which comprised a large number of hazel nutshell fragments. Other remains were a barley grain and black bindweed nutlet in pit fill (109), three barley grains in ditch fill (185) and an indeterminate cereal grain in the marching camp ditch terminus fill (105). Material suitable for radiocarbon dating is present in contexts (109), (125), (169) and (185). The results are presented in Appendix 1.

5. Discussion

- 5.1 Iron Age pottery was recovered from pit fills (109) and (169), and ditch fills (163) and (185) (Rowlandson 2009), suggesting a late prehistoric date for these features. The large number of hazel nutshell fragments in pit fill (169) indicates that wild foods formed an important part of the diet, which is in common with other prehistoric sites in Britain (Hall & Huntley 2007). The presence of charcoal, calcined bone and pottery in this context, may point to an accumulation of domestic waste in the pit, rather than the use of the feature for food storage. The few barley grains in ditch fill (185) and pit fill (109) suggest that this cereal was also used; barley was a common crop cultivated throughout Britain during the Iron Age (Greig 1991). The single charred black bindweed nutlet in pit fill (109) may derive from weeds growing amongst the cereal crops, or opportunistic plants inhabiting areas of disturbed ground. The presence of small amounts of hammerscale in all of the contexts may reflect some metalworking activity at the site.
- 5.2 The assessment can provide little information about the diet during the Roman occupation of the site, as the only charred plant remain recovered from the Roman marching camp ditch was a single indeterminate cereal grain from the terminus fill (105).

6. Recommendations

- 6.1 No further plant macrofossil analysis is required for these samples due to the low diversity of charred remains. If additional works are undertaken on the site, the results from this assessment should be added to any further environmental data produced. Assessment of the snail assemblages in the flots by a mollusc specialist, would establish if they are of interpretative value.

7. Sources

Greig J R A, 1991 The British Isles, in W Van Zeist, K Wasylikowa & K-E Behre (eds) *Progress in Old World Palaeoethnobotany*, Rotterdam

Hall, A R, & Huntley, J P, 2007 *A review of the evidence for macrofossil plant remains from archaeological deposits in northern England*, Research Department Report Series no. 87, English Heritage, London

Rowlandson, I M, 2009 *A Report on Iron Age and Roman Pottery from an excavation on Land at Castle Quarry, Ancaster, Lincolnshire, CQAN09*, unpublished report for PCA (Lincoln)

Stace, C, 1997 *New Flora of the British Isles*, 2nd Edition, Cambridge

Appendix 1: Data from environmental assessment

Context		109	163	169	185	105	125	189
Sample		1	3	5	4	2	6	7
Feature		Pit	Ditch	Pit	Ditch	Terminus	Ditch	Ditch
*Pottery group		IA	IA	IA	IA	Roman	Roman	-
Material available for radiocarbon dating		✓	-	✓	✓	-	✓	-
Volume processed (l)		8	20	9.5	10	9.5	10.5	9
Volume of flot (ml)		30	100	100	50	10	25	10
<i>Residue contents (relative abundance)</i>								
Bone (burnt)	indet. frag.	1	-	-	1	-	-	-
Bone (calcined)	indet. frag.	1	-	2	1	-	-	-
Bone (unburnt)	indet. frag.	2	-	-	3	2	1	-
Bone (unburnt) (total no.)	possibly human	-	-	-	-	2	1	-
Bone (unburnt) (carpal) (total no.)	sheep / goat	-	-	-	1	-	-	-
CBM		1	-	2	-	-	-	-
Charcoal		-	-	1	-	-	-	-
Hammerstone / ferrous material		2	1	2	2	1	1	2
Flint (total no.)		1	-	-	1	-	-	-
Flint flakes (total no.)		-	-	23	2	-	-	-
Glass (total no. of shards)		-	-	-	-	1	-	-
Mollusca (freshwater / terrestrial)		1	1	2	1	2	2	1
Pottery (total no.)		2	1	16	4	-	-	-
Tooth	indet. frag.	-	-	-	-	2	-	-
Tooth (maxillary) (total no.)	cattle	-	-	-	1	-	-	-
Tooth (incisor) (total no.)	sheep / goat	1	-	-	-	-	-	-
Tooth (unerupted premolar) (total no.)	sheep / goat	1	-	-	-	-	-	-
<i>Flot matrix (relative abundance)</i>								
Bone (burnt)	indet. frag.	1	-	-	-	-	-	-
Bone (calcined)	indet. frag.	1	-	-	-	-	-	-
Bone (unburnt)	indet. frag.	-	-	-	1	1	-	-
Charcoal		2	-	2	2	-	1	1
Coal		-	1	-	-	1	1	-
Fuel waste		-	1	-	-	-	-	-
Insects		-	-	-	-	2	-	-
Modern roots		2	3	2	2	2	1	2
Mollusca (freshwater / terrestrial)		2	2	2	2	3	3	2
Uncharred seeds		1	1	-	1	1	1	-
<i>Charred remains (relative abundance)</i>								
(a) <i>Fallopia convolvulus</i> (Black Bindweed)	nutlet	1	-	-	-	-	-	-
(c) <i>Cerealia</i> indeterminate	grain	-	-	-	-	1	-	-
(c) <i>Hordeum</i> spp (Barley species)	grain	1	-	-	2	-	-	-
(t) <i>Corylus avellana</i> (Hazel)	nutshell frag.	-	-	5	-	-	-	-

[a-arable; c-cultivated; t-tree]. Relative abundance is based on a scale from 1 (lowest) to 5 (highest). * Following Rowlandson (2009).

Osteological report on the human remains

L.L.Keal

1.0 Introduction

In the summer of 2009 Pre-Construct Archaeology (Lincoln) undertook a strip, map and recording programme on land at Castle Quarry Ancaster, Lincolnshire (CQAN 09, PCA/568). These works uncovered finds and features dating to the late Iron Age and early Roman periods, including part of a Roman marching camp. Within the southwest terminal of this, the partial remains of two individuals were recovered. This report contains a comprehensive account on the inhumed remains and the scientific inferences that emerge from this data. Details of the methodology used are presented in Appendix 1.

2.0 The Assemblage

The human remains were recovered from the southwest terminus at the entrance to the marching camp [104]. They were initially interpreted as a partially articulated single skeleton which, on assessment, was found to incorporate the remains of two individuals.

The spine and ribs of Skeleton 1 (Sk 1) were articulated and the skeleton was supine (on its back), tilting to its right side. The arms, hands and other bones present were disarticulated, lying haphazardly at the base of the spine (where the legs should have been). The remains were not flat within the base of the ditch but were lying more upright against the side of the ditch edge.



Plate 1: Skeleton 1 can be seen within the southwest ditch terminus of the marching camp, context [104].



Plate 2: The remains of Skeleton 1, situated at an unusual angle within fill context (105). The spine and ribs are articulated, while the arm bones can be seen upside down at the base of the vertebrae, where the legs would normally be expected.

The positioning of Skeleton 2 (Sk2) cannot be described, as this was not identified until the post-excavation assessment took place.

The apparent absence of a grave cut and the stratigraphic position of the remains suggests that the individuals were deposited within the ditch whilst open and in use. Recovered within the terminus were pottery sherds dating to the mid-late 1st century AD and the partial skeletal remains of dog, sheep/goat and large mammals.

3.0 Results

For a comprehensive verification of the results for each skeleton, the reader is directed to the primary record. Below the results for each skeleton are summarised.

3.1 Skeleton 1

This was between 50% and 75% complete, consisting of the thorax, upper limbs and hands, the pectoral and pelvic girdles, and the vertebral column. The remains were moderately well preserved with moderate fragmentation. Skeleton 1 was that of a young adult Male. No Pathologies were visible on the surviving bones.

3.2 Skeleton 2

This was less than 5% complete, consisting only of the clavicles and the first right upper rib. The skeletal remains were poorly preserved, with moderate fragmentation. Skeleton 2 was that of a young adult, the sex of which could

not be determined definitively, though the individual was far slighter and gracile than Skeleton 1. No pathologies were visible on the surviving bones.

4.0 Discussion and conclusion

Although the osteological data is limited due to preservation, fragmentation and the number of missing elements, the funerary context of the remains is of some considerable potential interest.

The assemblage comprises the articulated and disarticulated remains of two incomplete individuals. Site records indicate that the ditch containing the remains had not cut through any graves, nor had it been visibly disturbed by any later features. Therefore, the two individuals were almost certainly deposited within the ditch in their articulated but incomplete state.

The haphazard position of the remains suggests that they were not carefully interred but were unceremoniously discarded while the ditch was open and the marching camp in use. All of these factors combine to suggest a rather macabre interpretation.

Although Roman society was usually respectful of the dead, there are numerous examples where mutilation and maltreatment were carried out. According to Tacitus, those denied formal burial were often left exposed for the dogs and birds to eat (Taylor 2003).

It is possible at this Roman camp that, early in the conquest of the East Midlands, these particular individuals were maltreated, killed and left exposed at the entrance to act as a sign or warning.

5.0 Bibliography

Bass, W. M., 2005. *Human Osteology. A laboratory and field Manual*. Missouri Archaeological Society, Inc, Columbia.

Brickley, M., and McKinley, J.I. (eds) 2004 Guidelines to Recording Human Remains. *IFA Paper No7* in association with BABAO

Fremach, D., Schwidetsky, I., Stloukal, M. 1980. Recommendations for age and sex diagnoses of skeletons. *Journal of Human Evolution* 9: 517-549.

Krogman, W.M. and Iscan, M.Y. 1986 *The human skeleton on Forensic Medicine*. 2nd edition. Springfield, Thomas.

Loth, S.R and Henneberg, M.1996, Mandibular ramus flexure: a new morphological indicator of sexual dimorphism in the human skeleton. *American Journal of Physical Anthropology* 8:65-79.

Lovejoy, C.O., Meindl, R.S., Mensforth, R.D., Boston, T.J.1985. Multifactorial determination of skeletal age at death. *American Journal of Physical Anthropology* 68:1-14.

Miles, A. 1962. Assessment of Ages of a Population of Anglo-Saxons from their Dentitions. *Proceedings of the Royal Society of Medicine* 55:881-886

Scheuer, L and Black, S. 2004. *The Juvenile Skeleton*. Elsevier Academic Press, California.

Schwartz, J.1995. *Skeleton Keys*. New York. Oxford University Press.

Taylor, A. 2003. Burial with the Romans, in *British Archaeology*.
<http://www.britarch.ac.uk/ba/ba69/feat2.shtml>

Appendix 1: Methodologies

The skeletal material was analysed according to the standards laid out in the guidelines recommended by the British Association of Biological Anthropologists and Osteologists in conjunction with IFA guidelines (Guidelines to the Standards of Recording Human Remains, Brickley and McKinley (eds) 2004) as well as by English Heritage (Human Bones From Archaeological Site: Guidelines for producing assessment documents and analytical reports, Centre for Archaeology Guidelines 2004).

Preservation and Completeness

An inventory for each inhumation was carried out recording percentage of each bone present or for long bones which segment and joint surfaces were present. Thus allowing a better understanding of what the skeleton consisted of and allowing a proper analysis to take place. Due to the absence of teeth from the assemblage a simple presence-absence dental inventory was completed.

For this six stages were devised, ranging from 1, the most complete to 6, the least complete. The following stages were used:

- Stage1= >95%
- Stage 2= 75<95%
- Stage 3= 50<75%
- Stage4= 25<50%
- Stage5= 5<25%
- Stage6= <5%

Each skeleton was then assessed for its state of preservation to record its level of bone surface erosion and fragmentation. Again six stages of preservation (Brickley and McKinley, 2004) were devised, ranging from 0, the bone is still strong with no modifications of the surface or fragmentation to 5, the bone is very fragile with a highly eroded surface and is highly fragmented.

Metric Data

Metrics are important to help analysis stature and sex and to highlighted pathological and cultural processes that have acted on the bones. Due to the nature of this assemblage only post cranial metrics were recorded. Twenty-Five post cranial metrics were recorded bilaterally, where possible, for each skeleton following Bass, 1978.

Non-Metrics

Due to the nature of this assemblage non- metric variants were only recorded for the post cranial skeleton. The presence, absence or instances when the observable trait could not be assessed were recorded for each unilateral and bilateral trait. For the post cranial skeleton the variants of Finnegan (1976) were recorded. The non metrics for this assemblage were recorded so as to provide a full catalogue of information gleaned from this source so that it is available to future studies. This data is not discussed in the report but is contained with the primary archive.

Pathologies

Each skeleton from the assemblage was visual assessed for evidence of skeletal and dental congenital and acquired abnormalities.

Sex Estimation

As males and females differ in both size and shape sex was determined using measurements of dimorphic dimensions and visual assessment of dimorphic aspects of the pelvis (Measurements following Bass 1976) (Aspects following Schwartz, 1995; Ferembach et al, 1980; Krogman and Iscan, 1986; Phenice, 1969; Loth and Henneberg, 1996).

Age Estimation

Age was estimated based on the ephyseal fusion of late fusing skeletal elements such as the clavicles and the sacrum (Schwartz, 1995).

Where possible multivariate analysis was utilised however due to preservation or completeness this was not always possible.

Where possible the separate age estimates from different aspects of a single skeleton were combined to produce a summary age estimate, which produced an age in years. Due to the inherent risk of under or over aging the individuals age brackets for life stages were also recorded.

These age brackets were defined as:

- FE (fetus)
- NE (neonate-11 months)
- I (infant/young child: 1-5years)
- C (child: 6-11 years)
- JU (juvenile: 12-17 years)
- YA (young adult: 18-29 years)
- PA (prime adult: 30-44 years)
- MA (mature adult: 45-)
- AA (adult: age unspecified)

Stature

As no complete long bones were recovered stature could not be estimated for either of the individuals.

Castle Quarry, Ancaster, Lincolnshire

CQAN 09

Lithic Materials: Catalogue

Report by Jim Rylatt – October 2009

1.0 Introduction

This report concerns one piece of worked flint recovered during a programme of archaeological strip, map and record at Castle Quarry, Ancaster.

2.0 Method of study

The lithic artefact was physically examined in order to create an archive catalogue. Its attributes were noted in order to determine its place in the reduction sequence, describe observable characteristics of the lithic technology utilised and provide an assessment of its functional potential. The catalogue also records the presence of patination, cortex and whether the piece has been burnt. The piece has been weighed and metrical data is recorded if it is a complete flake, tool or core. It was examined with a x3 hand-lens to determine whether there is any evidence of localised modification that could be indicative of use.

3.0 Catalogue

Context	Type	Dimensions	Description
111	retouched flake (end scraper/ knife)	40x24x9mm 8.0g	Tertiary hard hammer flake with flat platform (some crushing), pronounced bulb and feathered termination; dorsal scars indicate removal of 3 or 4 similar flakes from same platform, and 2 or 3 relatively abrupt trimming flakes from platform edge; v. small area of thin & abraded cortex (< 5%); very slight milky patination to proximal half of flake; small semi-abrupt spalls detached from distal end, with v. small chips removed from one adjoining lateral margin – latter displays evidence of rounding and wear to facets slight chipping to margins – from suggest use of lateral edge as a knife/cutting flake, while the semi-abrupt (rather than abrupt) retouch to the distal end suggests utilisation as a scraper rather than backing; possibly some slight post-depositional damage; mid greyish-brown translucent flint (L.Neo/EBA)

NB: measurements are only given for complete flakes, tools and pieces - the first figure relates to the maximum length, measured perpendicular to the striking platform; the second to maximum breadth, measured at a right angle to the length; the third to maximum thickness.

4.0 Comments

This retouched flake provides an indication of a prehistoric presence on the site. Its morphological traits are characteristic of later Neolithic and early Bronze Age core reduction strategies. It was selected from a series of similar hard hammer flakes, which were removed from the same core, and then received further modification. The relatively regular semi-abrupt retouch along the distal margin suggests use as a scraper, while the very small and slightly more irregular removals along the lateral margin are indicative of more expedient use as a cutting flake: essentially a combination tool. The wear along the lateral margin suggests the piece was used for repeated cutting, rather than in a single instance.

The fact that only a single piece of worked lithic material was recovered suggests that it was associated with a brief and ephemeral episode of activity, rather than with more prolonged occupation or settlement within the area examined during this archaeological fieldwork.

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File submission and form progress

Grey literature report submitted?	No	Grey literature report filename/s
Boundary file submitted?	No	Boundary filename
HER signed off?		NMR signed off?