ARCHAEOLOGICAL EVALUATION REPORT
LAND OFF CAISTOR ROAD,
SOUTH KELSEY, LINCOLNSHIRE

NGR: TF 0420 9820

LCCM ACC. NO. 2000.189

00128

Pre planning L15110
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Report Prepared for
Andrew Hancock Planning and Development Consultancy
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September 2000

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Summary

- *A programme of archaeological trial excavation took place on land situated in the angle between Caistor Road and Thornton Road, South Kelsey, Lincolnshire*

- *This intrusive fieldwork followed a detailed gradiometer survey, which produced results suggesting the presence of in-situ, sub-surface archaeological remains.*

- *Archaeological remains were identified and investigated in all four trenches. This suggests that similar remains, of variable density, exist across the site and that development may have some impact upon these deposits.*

- *The majority of the archaeological remains relate to late Anglo-Saxon and medieval settlement of the 10th to 15th centuries. However, one feature, and further residual artefacts incorporated into later fills, indicates that the area was utilised in the Iron Age.*

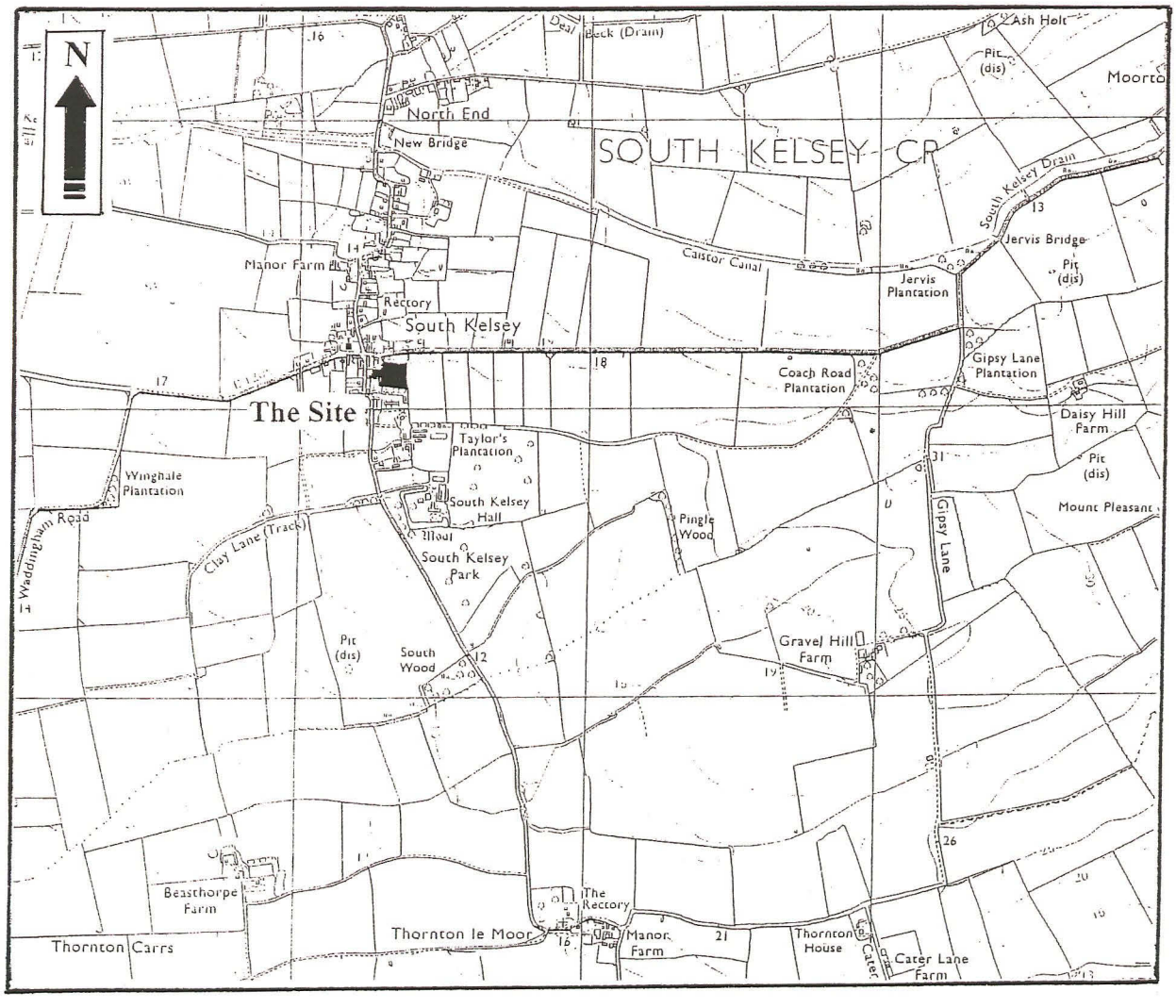

Figure 1: Site location at a scale of 1: 25,000
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1.0 Introduction

Mr Andrew Hancock, Planning and Development Consultant, commissioned Pre-Construct Archaeology (Lincoln) to undertake a programme of archaeological investigation on behalf of his client, on approximately 1.25 hectares of land at South Kelsey, Lincolnshire. These works were commissioned to prefigure and support an application for planning permission, should the client seek to use the site for residential development.

This report details the results of an archaeological evaluation that followed a geophysical survey of the site. It incorporates a series of assessments by specialist researchers who studied the archaeological materials recovered during excavation. The text follows current national guidelines (IFA, 1994) and the local guidelines set out in the Lincolnshire County Council document *Lincolnshire Archaeological Handbook: A Manual of Archaeological Practice* (LCC, 1998).

2.0 Location and description

South Kelsey lies approximately 26km north-east of Lincoln and 35km south-west of Grimsby, within the administrative district of West Lindsey. The village is one of several, including North Kelsey and Owersby, which are situated on a low, north-south orientated ridge. This slight rise is formed by the intersection of boulder clay and other glacial till deposits situated to the west, and cover sands to the east. The site is located toward the southern half of the village, an elongated ribbon development, c. 1.8km long, which runs toward North Kelsey along the crest of the ridge mentioned above. Located c. 100m to the south-east of St Mary's Church, the development area is a sub-division of a larger field situated immediately to the south of the B1205 Caistor Road, and to the east of Thornton Road (Fig. 1).

The western part of the site, a strip c. 50m wide east to west, contains footings and low walls representing the remains of a series brick built farm buildings of 19th and 20th century date; to the immediate east of this group is a derelict, but largely intact Dutch-barn constructed in concrete and asbestos. Vegetation is largely composed of tall grass, some nettles and a few scrubby bushes.

The majority of the site represents a 100m x 100m sub-division of a field, which is bounded by dwellings to the north, and south. Coniferous hedges define the boundaries to these properties. The larger part of this field is situated further to the east and will continue to be utilised as agricultural land. Coarse grass covers the majority of the field, but this is interspersed with patches of nettles, the latter becoming denser toward the edges of the field. The site appears to have been utilised as common land in recent years, and evidence of cultivation or grazing is not apparent. Garden and building waste occurs in intermittent dumps along the northern margin of the site.

The site occupies relatively high ground on the crest of the ridge, at c. 21.5m OD. However, there is some micro-topographical variation across the site. The most significant change is a break of slope c. 35m from the northern edge of the site, which

slopes down towards the north-west corner. Elsewhere, the ground surface undulates significantly, with variations in height of up to c. 0.5m over relatively short distances. None of these undulations could be resolved into morphologically distinct earthworks. Near the eastern edge of the site, a shallow north-south orientated depression runs between two short sections of dike, which are situated at the north-eastern and south-eastern corners of the field respectively. This suggests that a continuous dike once crossed the field and that this was backfilled to amalgamate adjacent blocks of land.

The Soil Survey of England and Wales has not mapped the local soils in any detail, but they can be summarised as sandy clay loams, containing moderate quantities of chalky pebbles, of unknown association. With respect to the site and its immediate surroundings, these soils have developed upon Quaternary glacial till, chalky deposits containing frequent flint fragments and occasional quartzite pebbles (G.S.G.B., 1982). There are occasional small pockets of aeolian sand within the village, but none were exposed during fieldwork. These drift deposits mantle Upper Jurassic Kimmeridge Clays of the Ancholme Group, which have lithified into dark blue-grey mudstones. These deposits emerge from beneath the till on the other side of the B1205 road to Caistor, c. 80m to the north of the site.

Central National Grid Reference TF 0420 9820.

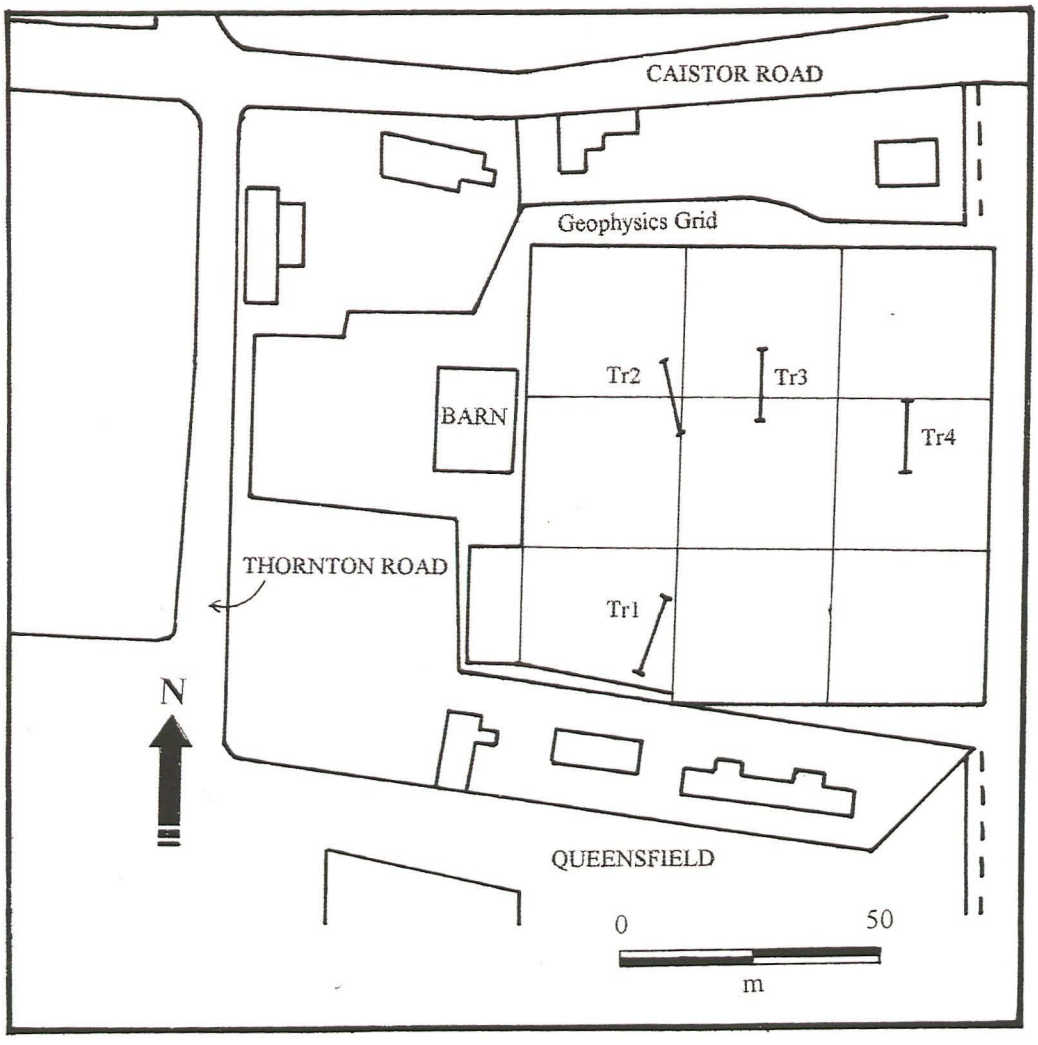

Figure 2: The location of the archaeological trenches

3.0 Planning background

The clients are currently considering whether to submit a planning application for residential development. Consequently, the archaeological works described in this document were commissioned to help determine whether the application will be presented to West Lindsey District Council, and if so, to assist in the satisfactory completion of any undertakings necessary to obtain full planning permission.

4.0 Archaeological and historical background

The oldest datable archaeological material recovered from South Kelsey is represented by a series of scatters and individual finds of lithic artefacts. Later Mesolithic microliths have been recovered from the cover sands to the east of the village, along with larger quantities of Neolithic and Bronze Age flint scatters (Hardwick, 2000). Most of these finds had a relatively localised distribution centred on an area approximately 3-4 km north-east of the site. This suggests that these prehistoric social groups were carefully selecting areas with particular soil types for settlement related activity. However, some isolated objects have been discovered much closer to the village; a Neolithic polished greenstone axe was found c. 700m to the north of the site.

Late prehistoric activity has been detected near the former site of Winghale Priory, c. 1.7km south-west of the proposed development. Small-scale gravel extraction uncovered evidence of occupation beginning in the Iron Age and continuing into the Romano-British period. The site of the priory continued to be a focus of human activity after the Roman period. A number of the features examined at the site contained quantities of Middle Saxon pottery, animal bone and slag.

South Kelsey is mentioned in the *Domesday Book* of 1086 as *Chelsei* (or *Colesi*). This name could be either Old English or Old Scandinavian in derivation. If Anglo-Saxon, it is likely to incorporate the *O.E.* personal name *Cēl* and a suffix denoting 'dry or higher ground in the marsh'. Alternatively, if the first component is Old Scandinavian, then it is a modification of *kæl* meaning wedge-shaped piece of land (Mills, 1993).

The lands recorded by the Domesday Survey came under the control of two feudal magnates. Three carucates of land belonged to the King and a further three carucates were managed for Roger of Poitou by Earnwine and 'Roger, Roger of Poitou's man' (Morgan & Thorn, 1986). The *Domesday Book* was essentially a list of places and individuals owing money to the crown. Six carucates represents a small part of the lands of the settlement, which suggests that the majority was owned by what was effectively a tax-exempt organisation. Church property would have had such a status; Winghale Priory was situated in the south-west corner of the modern parish and it appears to have been established by endowment shortly after the Norman Conquest. It is mentioned indirectly in the *Domesday Book*, with reference to land in Owersby belonging to Roger of Poitou, which was held by the '*ecclesia* of Wingeham'. Later manuscripts discussing the priory indicate that this establishment owned most of the village's land during the 12th to 14th centuries.

The priory is also mentioned in a document in which William, Count of Mortain, formally granted his manor of Winghale to the abbey of St. Martin of Marmoutier, Tours, in 1103-4, on the condition that a community of twelve monks was established within it (Hardwick, 2000). By the 13th century the priory had become a cell of the abbey of St Martin at Sees in Normandy, but during the 14th century Henry V suppressed it, along with other foreign holdings. Henry VI granted its lands to Kings College, Cambridge in 1441, and two years later these passed to Trinity College by exchange.

South Kelsey appears to have been a very large settlement in the medieval period. It was divided into two separate secular and ecclesiastical administrative units, each centred on a church; it is probably that a manor house also lay close to each church – only one is known, that situated at the southern end of the village (Everson, *et al*, 1991).

South Kelsey Hall is surrounded by a substantial moat, which is known to have enclosed a large Tudor house and courtyard (Pevsner & Harris, 1990). This hall and the associated gardens were constructed for the Ayscough's after they acquired the estate through a marriage to the heiress of the Hansard family in 1521; the latter had been resident in the Parish since at least the 13th century. The construction of moats for defence is relatively unusual at this time, due to the widespread use of gunpowder-based armaments. Consequently, while it is possible that the moat may have been a device to emphasise social separation, it seems more likely that the Tudor structure occupied the site of the Hansard's medieval hall.

The Ayscough family possessed the property until the end of the 17th century, when it passed by marriage to the Thornhagh family, who owned it until c. 1790. Around 1810, the hall was demolished and replaced by the present farmhouse, which retains some structural elements; these include one of the octagonal corner towers. This 19th century dwelling also retains the moat around its north, south and west sides; the eastern side has been drained and backfilled. The landscaped gardens of the hall covered a broad area just to the south of the study area.

St Nicholas' church was located at the north end of the village and St Mary's to the south. Both churches were in existence by 1254 and there are further references dating to 1291, 1341 and 1428. By 1795, St Nicholas' Church had apparently been in ruins for some time and it was demolished so that elements of its fabric could be used in the 'renovation' of St Marys' Church, which was carried out in that and the following year. This resulted in the demolition and rebuilding of the nave and chancel, with only the early 14th century ironstone tower being retained from the original structure.

The village's twin foci are still evident in the modern street arrangement. The site lies c. 130m to the south-east of St Mary's Church, and c. 350m to the north of the manor house.

Most of the fields in South Kelsey were enclosed between 1794 and 1797. Prior to this, 3281 acres of open field were recorded, with a further 900 acres having already been enclosed. There appear to have been two large blocks of pre-1794 enclosures (Russell and Russell, 1987) both of which seem to be associated with medieval land use. One block lay along the southern parish boundary and belonged to Winghale

Priory, while the other ran north to south through the centre of South Kelsey and up to North Kelsey; the site partially lies within this second block. The 18th century enclosures also resulted in the construction of several new roads, including the Waddingham/Caistor Road (B1205) that runs east-west, immediately to the north of the site.

Subsequent to enclosure, the structure of the field system in the study area appears to have been simplified. Comparison with the current Ordnance Survey map indicates that the site contains at least one former field boundary, orientated east-west, near its south-eastern edge, and another boundary and trackway orientated north-south, at the eastern perimeter. Additionally, the RCHME aerial photography overlay map of the area indicates that a series of connected, angular cropmarks extend across the present site, some of which are likely to be of post-medieval date. Some of these features also appear to correlate with geophysical anomalies detected by a gradiometer survey undertaken by Pre-Construct Geophysics (Bunn & Hardwick, 2000). Many of the features identified by aerial and gradiometer survey have morphological characteristics that suggest they were constructed as drainage ditches and/or property boundaries.

There are no records of any intrusive archaeological investigations undertaken in South Kelsey.

5.0 Methodology

Dr B. Lott, the Assistant Built Environment Officer, devised a specification for a trenching scheme, which was based on the results of the gradiometer survey; this took into consideration the possibility that some archaeological remains may not have been identified by that survey. Four 15m long trenches were opened; three on the northern half of the site and one near the southern boundary.

A JCB fitted with a 1.6m wide, toothless ditching blade was used to remove all topsoil and subsoil in spits no greater than 0.2m in depth. The removal of these deposits was monitored constantly to ensure that any archaeological features exposed by this process were identified. All further excavation was undertaken by hand.

Where exposed, archaeological features and deposits were sample excavated in order to assess their nature, dimensions and to attempt to recover datable materials. These investigations resulted in the production of written descriptions of all deposits and features on standard context record sheets, and complementary scale drawings were made in both plan and section. A photographic record (colour prints) of exposed features was maintained. Selective prints have been reproduced in this report, with the remainder forming part of the project archive.

An experienced archaeological team of four individuals carried out the excavation over a period of four days – on the 9th, 10th, 11th and 14th August.

Artefactual remains recovered from the site were washed and processed prior to their submission to researchers specialising in the examination of archaeological materials. Additionally, a recognised specialist has processed soil samples to extract palaeo-

environmental and artefactual remains for analysis. The results of these investigations have been included as independent appendices to this report, and the general conclusions of such accounts have been integrated within the main text.

6.0 Results

The topsoil, a sandy clayey silt, had an approximately even thickness across the site, but exhibited some localised variation; these ranged from c. 0.25m to c. 0.35m in depth. The fact that the RCHME have recorded cropmarks across the site suggests that the field has been under cultivation within the last few decades, because rough grass is not generally conducive to their production. Consequently, it is likely that ploughing has homogenised this layer to a large extent and in so doing has created a well-defined, horizontal lower interface by truncating the subsoil.

Trench 1

(See fig. 3)
This trench was located near the southern boundary of the site to investigate two magnetic anomalies identified by the gradiometer survey. One was an east to west orientated linear entity situated near the southern end of the trench. The other was a strong, sub-circular anomaly, which seemed likely to have been produced relatively recently by a bonfire or, the dumping of brick or ferrous materials.

Removal of the topsoil, (100), c. 0.28m deep, and the subsoil, (101), c. 0.20m deep, exposed a small portion of an archaeological feature, [107], in the south-west corner of the trench. This was probably either the corner of a large pit or a portion of the eastern side of a north to south aligned ditch. This feature cut through the natural, (108), and excavation revealed that it was in excess of 0.55m deep and had a stepped profile. The fill was a mid-grey brown sandy clay, (106), which was sealed by subsoil (101). Fill (106) showed evidence of having been deposited in several events; there was a slightly yellower band of material c. 0.15m thick situated within otherwise undifferentiated deposits, c. 0.1m from the top of the feature. A small quantity of animal bone and one sherd of 13^{th}-14^{th} century pottery were recovered from (106).

An east-west aligned land drain was exposed c. 1.5m from the southern end of the trench. This was revealed as a thin band of bright white chalk pebbles, which cut through (106). A few fragments of modern red ceramic land drain, which had small corrugations running the length of the outer surface, were incorporated into the chalk fill. It was decided not to excavate this feature, but it should be noted that this is the most likely source of the east-west orientated linear anomaly detected by the geophysical survey.

A gully, [105], also orientated east-west, was located some 4.0m from the southern end of the trench. This was a relatively ephemeral feature, with a flattened 'U'-shaped base a mere 0.19m deep. Both the sides and the base were very irregular, essentially consisting a series of small intercutting depressions. Examination of the natural deposits, (108)a, into which it was cut, provided an explanation for this. This was an area of boulder clay containing a large number of fist-sized pieces of flint and chalk.

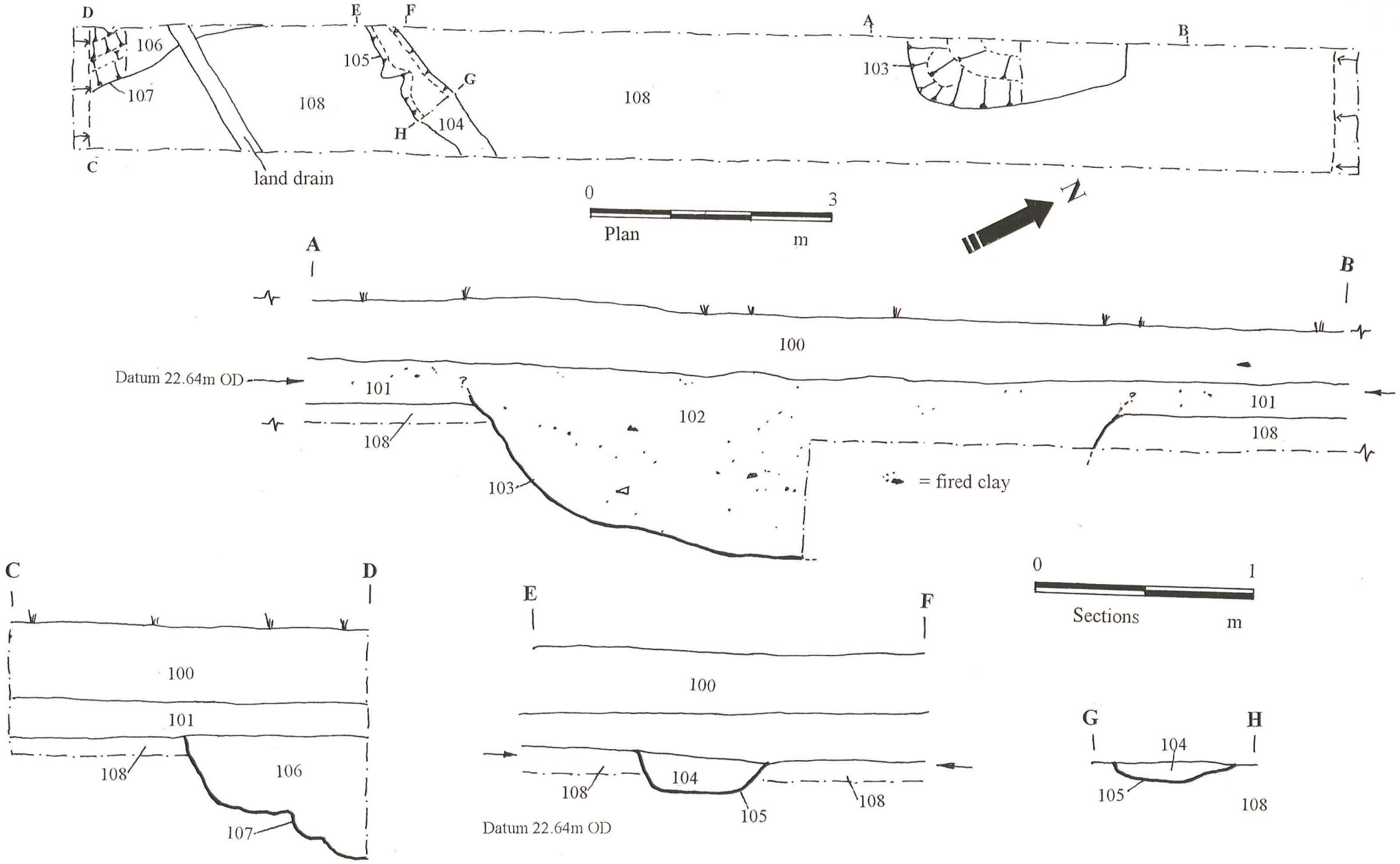

Figure 3: Plan and sections of features in trench 1

The latter must have caused significant problems to the people digging this ditch, who would have kept levering these coarse components out, leaving a series of voids. The gully was filled by a pale-grey brown sandy clay, (104), which contained two sherds of medieval pottery, and animal bone.

Situated some 3.0m from the northern end of the trench was a substantial pit, [103]. Only the eastern side of this feature was exposed in the trench, but this was sufficient to suggest that it was morphologically unusual. The feature was 2.70m long from north to south, but was distinctly different at each of these ends. To the south, the feature was semi-circular in plan, whereas to the north it terminated in a straight edge. Partial excavation of the exposed portion demonstrated that the sides sloped steeply (at c. 60 degrees to the horizontal), and there was some evidence of a flattish base near the section. The depth of the latter was c. 0.65m below the top of the natural (108).

The fill, (102), of this pit was a dark grey sandy clayey silt, which was relatively homogenous, but became slightly darker toward the base of the deposit. Contained within (102) was a significant quantity of fired clay, the orange to pale red colour of which contrasted sharply with the matrix of the fill itself. Initially, it was thought that this material represented fragments of brick or tile, but close examination demonstrated that it had been tempered with large quantities of chopped grass or straw.

A 21 litre sample of (102) was submitted for palaeo-environmental analysis. Coarse components within this material included chalk and flint pebbles, some of which were burnt, and fragments of coal and charcoal (Appendix 12.2); a quantity of animal bone was also recovered, which included the remains of sheep, fish, mouse and amphibians. A relatively large flot was extracted from the sample. This was composed of charred roundwood, twigs and straw, mixed with grains of barley, wheat and oats, pulses and weed seeds.

Two sherds of 14th century pottery provide a probable date for the filling of [103]; four sherds of Iron Age and one slightly abraded sherd of early Norman pottery were also recovered from this fill (Appendix 12.3).

The quantity of burnt material within (102) is likely to have greatly enhanced the magnetic susceptibility of this feature. This factor combined with the position and size of [103], indicate that this was the source of the strong, sub-circular anomaly detected by the magnetometer survey.

Trench 2

(See fig. 4)
This trench was placed c. 40m from the north-eastern corner of the site to investigate two magnetic anomalies. The most southerly appeared to represent a wide linear feature orientated east-west, which terminated before reaching Trench 3 to the east. The other seemed to be the north-west to south-east aligned arm of an 'L'-shaped feature. It was also possible that the western end of a large linear feature, which passed through the centre of Trench 3, would be detected.

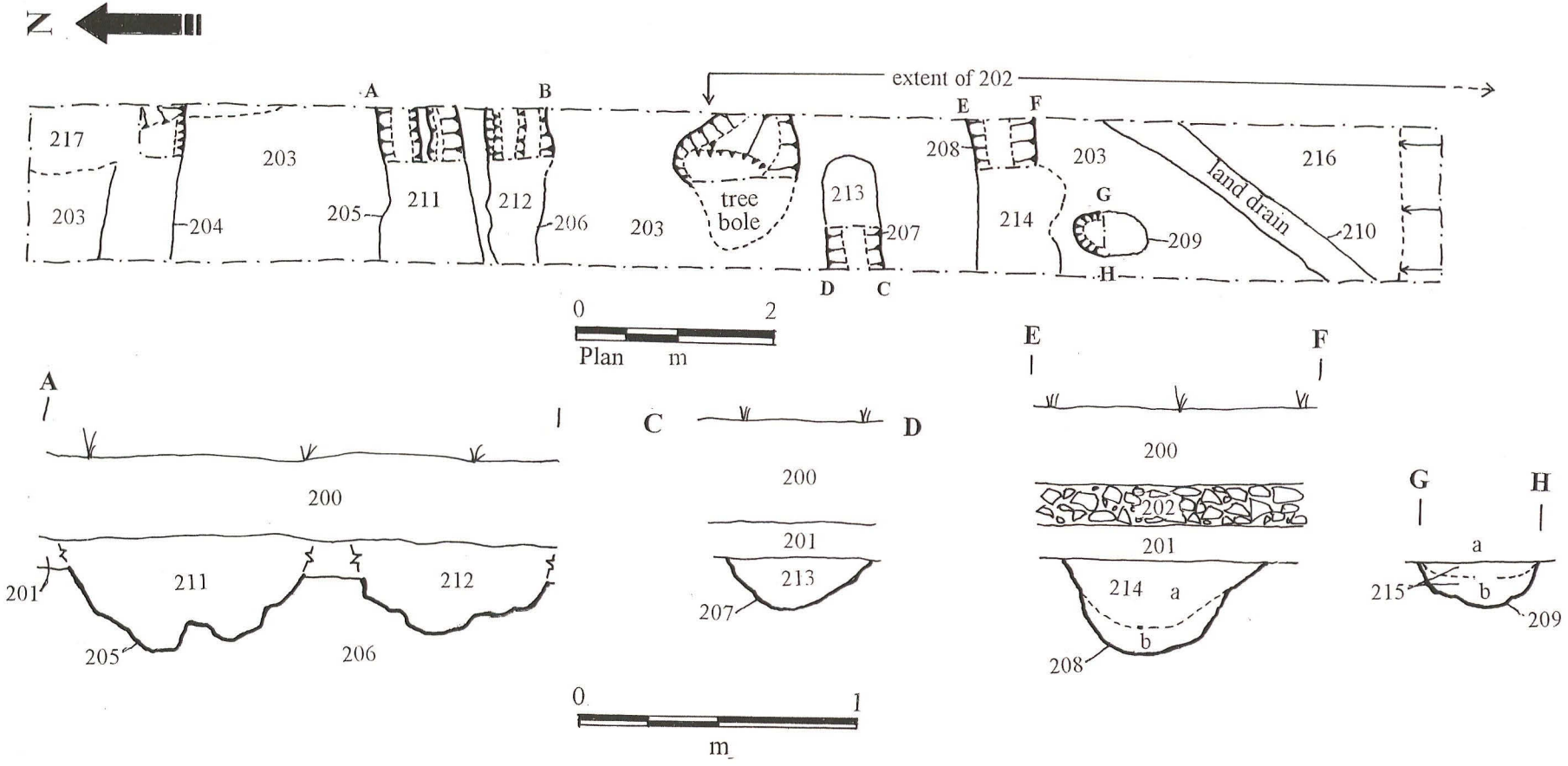

Figure 4: Plan and profiles of features in trench 2

The topsoil, (200), and subsoil, (201), had a combined depth of c. 0.42m in the area of Trench 2. Their removal revealed the presence of a number of archaeological features distributed across the whole length of the trench. The most northerly of these was exposed as an 'L'-shaped feature, [204], the segments of which were orientated along the cardinal directions; each arm was c. 0.65m wide and in excess of 1.5m long. This was recorded as one feature because it was not possible to distinguish any differentiation in the nature of the fill, (217), of the two sections. However, if a larger area had been opened around Trench 2 it is entirely possible that this would prove to be an east-west aligned gully with an intersecting pit on its the northern edge. No finds were recovered from (217).

Prior to excavation, a c. 1.0m wide deposit of mid-grey brown sandy clay, (211), suggested that there was an east-west aligned ditch c. 3.5m from the northern end of the trench. However, removal of (211) indicated that it was the homogenised fill of two, or possibly three, inter-cutting narrow gullies, [205], which followed the same general alignment. The profile of the most northerly of these gives slight indications that it may have been created to contain the base of a timber fence or similar structure.

A further east-west orientated gully, [206], c. 0.64m wide, was separated from the southern edge of [205] by an interval of 0.22m. Consequently, it was not possible to establish whether this was a feature existing contemporaneously with one of the incarnations of [205], or yet another re-cut. However, the fill, (212), was very similar in character to (211), and while both contained occasional fragments of charcoal, neither pottery nor other datable artefacts were discovered in either context.

The rounded eastern terminal of an east-west orientated gully, [207], was situated c. 2.7m to the south of [206]. This feature was c. 0.50m wide and c. 0.17m deep, with a flattened 'U'-shaped profile. It contained a mid to dark-grey sandy clay, (213), which incorporated some animal bone, charcoal and a fragment of 13th-14th century pottery.

Some 1.0m south of [207] and 3.5m from the southern end of the trench was a ditch, [208], also running east-west. While the northern edge was straight, the southern was fairly irregular, resulting in the feature varying in width from c. 0.60m to c. 0.85m. It had a 'U'-shaped profile c. 0.34m deep.

Excavation demonstrated that it contained two fills, (214) a and b. The primary fill, (214)b, was a browny-yellow sandy clay incorporating occasional to moderate quantities of charcoal; this was essentially natural clay, (203), with a small additional component of topsoil or similar humic material. Above this was a mid-grey brown sandy clay containing frequent flecks of charcoal and chalk grit.

Small sherds of 10th-12th century pottery were recovered from (214), this being the only datable material from the context. Additionally, a 10 litre sample of (214)b was analysed to establish its potential for palaeo-environmental reconstruction. This demonstrated that the constituents of (214) were essentially similar to those forming (102), but the organic component formed a much smaller percentage of the context.

A mere 0.15m to the south of ditch [208] lay a sub-oval posthole, [209]. It was c. 0.4m wide and c. 0.7m along the north-south axis. Despite only surviving to c. 0.16m

in depth, this feature also contained two fills, (215) a and b, which were directly comparable to (214). This suggests that [208] and [209] were contemporaneous components of the same structure.

The south-eastern corner of the trench was occupied by part of a large pit or the north-western side of a north-east to south-west aligned ditch, [210]. A narrow slot excavated to contain a land drain had removed the edge of this feature. This drain was formed from handmade, red ceramic pipes, with a circular cross-section, probably dating to the mid to late 19th century. The fact that the land drain so closely followed the same alignment suggests that [210] must still have been visible as a slight earthwork. This also provides tentative support for the notion that it is a linear feature rather than a pit.

A section through [210] was not fully excavated, but sufficient material was removed to demonstrate that the exposed area of the feature was relatively shallow with a gently sloping base. The fill of [210] was an homogenous pale to mid grey brown sandy clay, (216), containing a moderate quantity of flinty pebbles. Two sherds of 10th-11th century pottery were recovered from this deposit.

Examination of the west facing vertical section established the presence of a layer of brick rubble, (202), c. 0.15m thick, sandwiched between the topsoil, (200), and the subsoil, (201). While there were a few small fragments of rubble in the corresponding east facing section, it was evident that this marked the approximate location of the eastern edge of the deposit; (202) had appeared to extend across the full width of the trench when it was observed during machining. Another edge to this deposit was situated c. 7.0m from the northern end of the trench, (202) extending southward to some point beyond the limit of excavation.

The layer, (202), was composed of fragments of handmade brick in a slightly purplish, sand-tempered red ceramic. The fragments were all relatively small and none of the pieces observed exceeded a maximum dimension of 0.1m. Consequently, it is not possible to provide any sizes for complete bricks. It seems likely that this material represents the remains of a building situated immediately to the east of Trench 2. However, no such building appears on the 1st edition Ordnance Survey map of 1824 (see Hardwick, 2000: Appendix 1), which either suggests that demolition of the building pre-dated this, or that the bricks represent a highly localised, imported dump-deposit, which could have been made at any time during the last 200-300 years.

Trench 3

(See fig. 5)
This trench was located c. 15m to the east of Trench 2 to investigate two magnetic anomalies. One was an extremely well defined east-west orientated linear anomaly situated at the centre of the trench, while the other, a more diffuse linear feature, was located at the southern end of the trench.

Removal of the topsoil revealed a relatively homogenous band of dark-brown silty clay, c. 5.75m wide, situated toward the centre of the trench. Excavation of this deposit demonstrated that it represented the fills of a series of inter-cutting ditches,

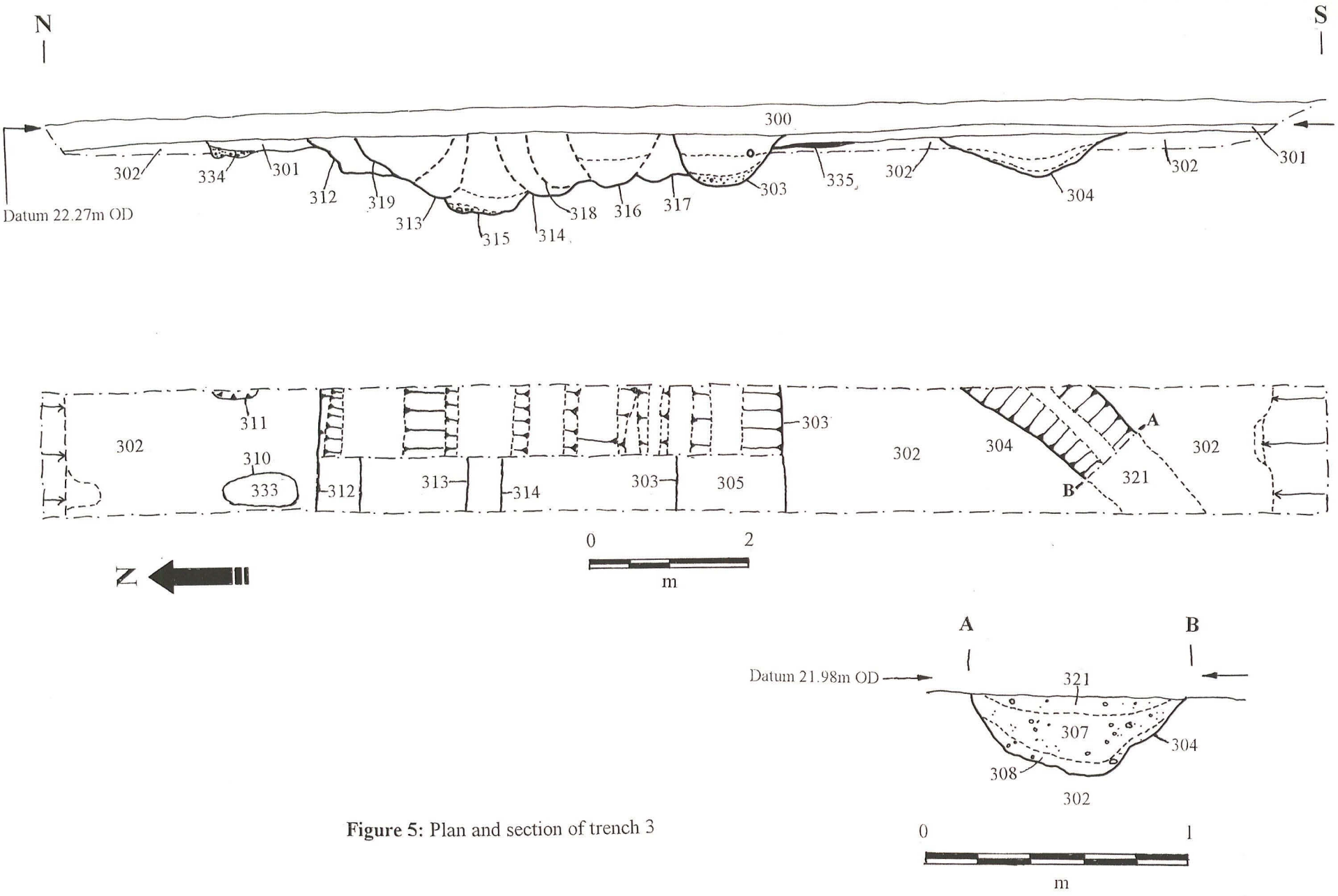

Figure 5: Plan and section of trench 3

which had all cut through the sub-soil, (301). All of these linear features had approximately the same east to west orientation.

Examination of the section suggested that the deepest feature, ditch [315], which extended to c. 1.30m below the ground surface, was also among the earliest of these boundary features. The upper fill, (329), of [315] was cut through on its northern edge by ditch [313]. Following the infilling of [313] with a mid-brown clayey silt, (328), a further recut, [319], was made to the north. The latter, a 'V'-shaped ditch, c. 1.2m wide and 0.55m deep, divided [313] from [312], to which it was possibly related.

The southern edge of fill (329) was also cut through by another ditch, [314]. Progressing southwards, a sequence of 'U'-shaped ditches [318], [317] and [316] had been cut successively to replace [314] after it had become filled by a clayey silt, (326). The most southerly of these recuts was a 'U'-shaped ditch, [303], c. 1.3m wide and 0.60m deep. It is probable that this is the latest feature in this series of linear boundaries. It certainly cuts through the fill, (324), of its northern neighbour [317], and additionally, its upper fill (320) contains a circular-section, red ceramic land drain comparable with that in [210] (above). Although a cut for the insertion of this pipe was not detected, it is probable that (320) was an *in-situ* deposit at the time the drainage scheme was implemented. However, as with [210], [303] may have survived as a slight linear depression in the field

Although there is a slight lateral shift in the relative position of these ditches, they are all sited along the upper edge of a slope, thus dividing a flat plateau at the centre of the field from lower ground to the north and west. This location at the top of a slope suggests that it is very unlikely that they were intended to drain the plateau, as gravity induced overland flow would have adequately accomplished this task. Consequently, it seems most plausible that they served primarily as a boundary. Reaffirmation of this landscape division on seven or eight occasions indicates that this was a remarkably persistent, socially imposed spatial discontinuity. However, the pottery recovered from (322), (324) and (329), which appears to account for a sequence of four or five of these phases, is all broadly datable to the 13th-14th centuries, suggesting that each successive ditch filled relatively quickly.

An area of deep-red, fired clay, (335) was exposed in the west facing section, and was truncated by the southern edge of [303]. This appears to represent *in-situ* burning, being a c. 0.04m thick area of oxidised natural, (302), immediately below the subsoil, (301). It is possible that (335) is related to (334), a deposit of iron-smithing slag, located c. 6.30m to the north; while (334) is also situated beneath the subsoil, any direct stratigraphical relationship has been removed by the complex of inter-cutting ditches.

A 'U'-shaped ditch, [304], c. 0.80m wide and c. 0.30m deep, was situated c. 2.3m to the south of the complex of boundaries discussed above. It had a different orientation to the latter, being aligned north-east to south-west and was sealed beneath the sub-soil (301). The upper fill, (321), was a mid to dark-brown sandy clayey silt, which sealed an orangey-brown sandy silty clay, (307). This latter deposit contained eight sherds of mid to late Iron Age pottery.

Trench 4

(See fig. 6)
Trench 4 was positioned c. 30m to the east-south-east of Trench 3, to investigate two linear anomalies distinguished by the gradiometer survey. Both were aligned approximately east-west, passing through the centre of the trench before appearing to converge slightly to the east.

The removal of the topsoil revealed a relatively homogenous band of mid-grey brown silty clay, c. 6.50m wide. As with Trench 3 this was situated in the centre of the trench. Excavation again demonstrated that this deposit represented the fills of a series of inter-cutting, east-west orientated ditches, all of which cut the sub-soil, (401).

The initial ditch, [408], was the largest, with a width exceeding 6.0m and a base c. 1.40m below the modern ground surface. It had a slightly irregular, asymmetrical profile, which was essentially a flattened 'U'-shape; the southern edge had been removed by later recuts. The primary fill of this ditch, (407), was a mid-grey brown silty clay, which contained pottery dating from the 11th to the 14th centuries. The secondary fill, (406), was a paler deposit of similar consistency, which also contained pottery manufactured over a similar range of dates.

The first recut of this feature, [418], is situated toward the centre of (406). It is difficult to determine its original profile, as the upper portion and southern side have been severely truncated by later recuts. A ditch directly to the south, [417], was the next in the sequence, being a 'U'-shaped linear feature exceeding 1.10m in width. The fill of [417], a mid to dark-grey brown silty clay, was partially removed on the southern side by the next recut, [416]. This was a relatively wide ditch, with a flattened 'U'-shaped profile, the base of which was c. 0.85m below the ground surface.

The next feature in the sequence was situated above, and truncated the fills of, [416], [417] and [418]. This was a flat-bottomed channel, [419], the northern side of which sloped up at c. 70° to the horizontal. While over 3.6m wide, it was a mere 0.6m deep, which may have limited its functionality if intended to control livestock.

The last ditch in the series, [414], was also the most southerly. It was a steep sided feature with a 'U'-shaped profile, which was cut on its southern side by a narrow slot, [404], containing a ceramic land drain (403). The latter was comparable with the examples observed in Trenches 2 and 3.

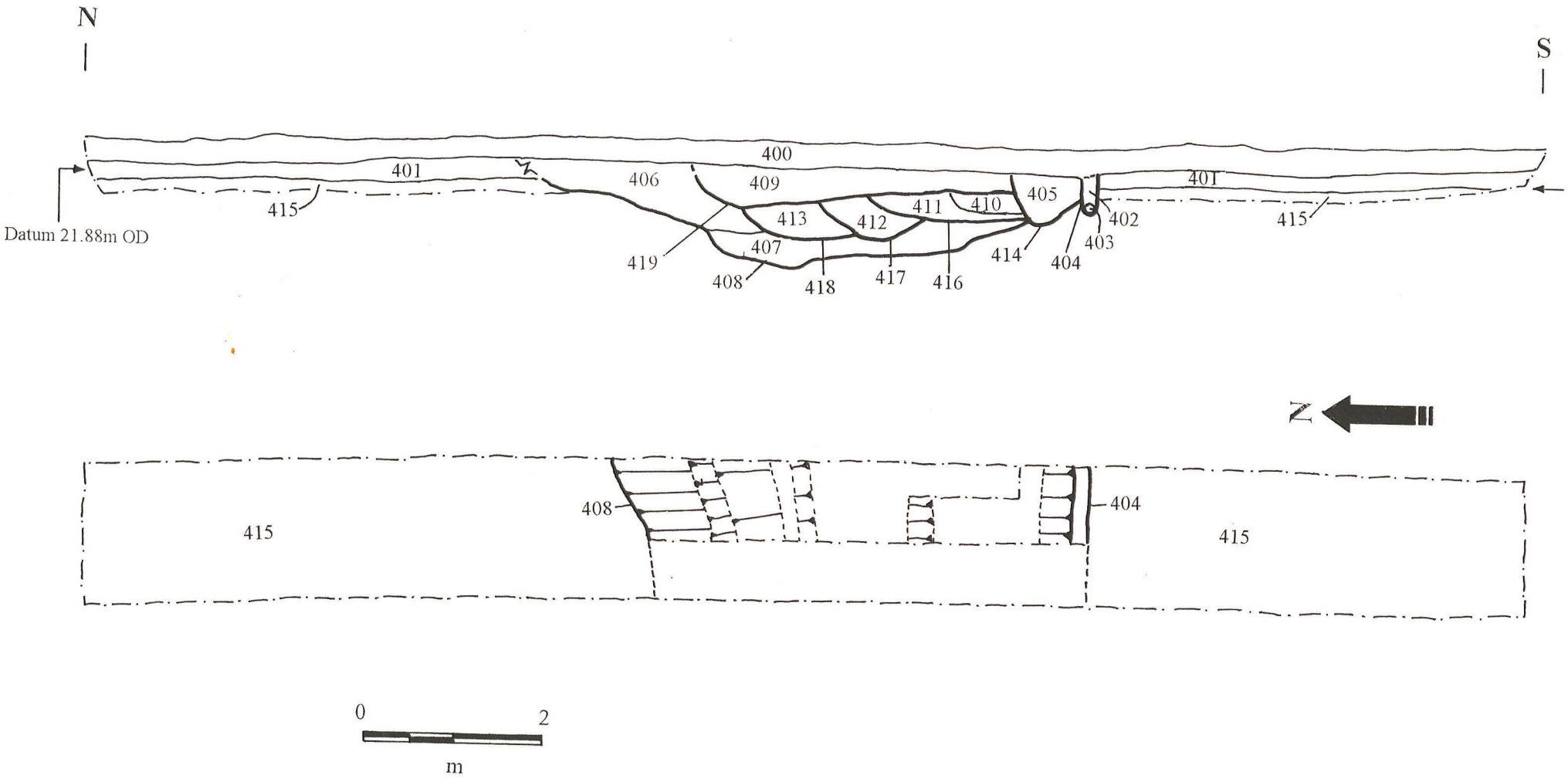

Figure 6: Plan and section of trench 4

7.0 Interpretation, discussion and conclusions

Primarily, the evaluation has demonstrated that the development site contains archaeological deposits, the relative density and distribution of which is indicated by the gradiometer survey. However, intrusive fieldwork also proved that there are a number of other archaeological features dispersed across the site, which did not register as geophysical anomalies.

The majority of the artefactual material recovered during the evaluation results from a relatively limited period of activity during the late Anglo-Saxon and medieval periods. However, there is a notable exception to this chronologically restricted utilisation of the site. Several sherds of Iron Age pottery were recovered from the fill of ditch [304], suggesting that this feature was constructed toward the end of the 1st millennium BC. Additionally, further ceramic material of this date was retrieved from (102), the fill of pit [103]; while it is clear that these sherds were in a secondary context, having been found in association with 14th century pottery, their presence appears to indicate that there are further Iron Age features situated in the immediate vicinity of Trench 1.

Based purely on the discovery of one feature and a few residual sherds, it is impossible to present any proposals for the nature of activity at the site during the Iron Age. Moreover, late prehistoric activity throughout South Kelsey is poorly understood, with the only other material known to be of Iron Age date having been recovered from the site of Winghale Priory, which is situated c. 2km to the south-west of the site (Hardwick, 2000).

Cartographic evidence suggests that the western half of the site is located within a narrow strip of land, abutting a precursor of Thornton Road, that appears to have been enclosed during the later medieval period (*q.v.* Russell & Russell, 1987). This part of the site seems to have been divided into a number of small, irregular sub-rectangular enclosures. There are slight indications of such compartmentalisation in both the gradiometer survey results and the cropmark evidence, but it has proved difficult to resolve either source into a coherent system of landscape division. However, it is evident that elements of this system were examined during the evaluation.

The apparent repetition in the sequence of ditches exposed in Trenches 3 and 4 suggests that this scheme of partition had reasonable longevity. This proposal is partially supported by the recovery of pottery distributed across three of the trenches, which was found to represent components of a single vessel (Appendix 12.3). One sherd came from the fill, (215), of posthole [209]; the general similarity of (215) and (214), the fill of adjacent gully [208], suggests that these two features are contemporaneous, despite the contrasting dates provided by the pottery. Another matching sherd came from (329), the fill of ditch [315]. The final fragment of this vessel was recovered from (407), but this particular piece was abraded, which possibly indicates that ditch [408] was created later than [209]/[315].

The pottery analysis also provides the basis for a series of more general observations. Apart from the Iron Age material, all of the pottery was produced between the 10th and 15th centuries, which suggests that there was little or no activity in the immediate vicinity of the site during the Romano-British period. Additionally, the apparent

absence of post-medieval pottery suggests that the site was not utilised for any form of settlement or domestic activity after the 15th century. Furthermore, it is tentatively suggested that it was primarily exploited as pasture after this date; there is a tendency to periodically improve the fertility of arable land through the spreading of midden material, the latter generally containing fragments of pottery.

Pottery from the both ends of the sequence was recovered from all four trenches. It should be noted that there are significant limitations to the formulation of hypothetico-deductive interpretations, which are imposed by the small size of the assemblage. However, this considered, there does seem to be a greater quantity of 10th-12th century material toward the western half of the site. This spatial variation may indicate that there was a late Saxon or Saxo-Norman precursor to Thornton Road, which acted as a focus for development, with later settlement radiating out from this core as the settlement expanded in size.

There are also slight indications that there is a discontinuity in the pottery sequence occurring between the 12th and 13th centuries; in general terms, there seems to be two periods of production, 10th-12th and 13th-15th centuries. This chronological variation may mean that there were two distinct phases of occupation on the site. However, it is distinctly possible that there was no such break in the utilisation of the site, the apparent change could be merely a product of the limited amount of knowledge regarding medieval pottery production and use in this part of the county (J. Young, *pers. comm.*).

The provenance of different wares also has some significance. In addition to a number of previously unrecognised local fabrics, there was a range of imports. During the late Saxon to Saxo-Norman periods Torksey (29km away, presuming that this is the actual place of production) and Thetford (140km) type fabrics were reaching the site. Later, during the medieval period, wares arrived from the Humber Basin (26km), Lincoln (29km) and Beverley (43km). In some respects this distribution may be seen as relatively unusual, because it would involve the overland transportation of fairly heavy items, either from source or the nearest navigable waterway. Consequently, the factors of distance and expense could indicate that there was a relatively high status centre in the vicinity of the site (J. Young, *pers. comm.*). It has been suggested that South Kelsey Hall, c. 350m to the south of the site, was constructed on the site of the medieval manor house (Hardwick, 2000); this may have provided such a prestigious focal point, in which case, the imported pottery could indicate that the site was located within its demesne.

The palaeo-environmental remains recovered from (102) suggest that there is something slightly unusual happening on at least part of the site. This charcoal rich deposit appears to result from some form of agricultural processing. It has not been possible to match the morphological characteristics of the exposed portion of [103] with any known medieval structure, but the geophysical survey data appears to indicate that only a small portion of this feature was exposed. The shape in plan of the visible portion appeared to be quite deliberate, rounded at the southern end with a right-angled return at the north. Rackham (Appendix 12.2) has raised the possibility that it may be a corn drier, and the frequent fragments of fired clay within (102) may represent the remains of the superstructure of such a device.

Whether [103] is part of a drier or just an adjacent pit, the range of produce being processed, including grain, peas and beans, indicates that the structure was being put to a variety of uses; it also suggests that the owners had facilities for bulk storage of dried foodstuffs. Multi-functionality makes good economic sense and suggests that it was possible to control the temperature according to crop type. This latter factor also raises the possibility that the structure was used for parching grain prior to grinding, and for malting barley and oats for brewing (J. Rackham, *pers. comm.*).

The sheer volume of burnt material, representing both fuel and crop residues, implies that this is crop processing beyond the scale of an individual household. Furthermore, other anomalies similar in size and shape were detected elsewhere in the field, and could therefore represent further examples of this type of feature. The possibility that the site lay within the demesne of the manor has been raised above, based upon an extrapolation of the pottery data. Possible evidence of almost 'industrial' levels of crop processing could therefore provide further circumstantial support for this hypothesis.

While it is likely that the groundwork phase of any residential development would disturb the archaeological resource, the results of the evaluation suggest that a protracted programme of intrusive investigation would provide only a relatively limited amount of additional information. Consequently, it is questionable as to whether such a scheme of work would justify the necessary expenditure of resources. Rather, it may be better to target particular elements of the site. It has been proposed above that the large pit, [103], partially exposed in Trench 1 is part of a feature such as a corn drier or kiln. This hypothesis could be tested and the form of the whole feature ascertained, by the excavation of a small trench centred on the geophysical anomaly that appears to correlate with this feature (see Bunn & Hardwick, 2000). The other area of particular significance regards the nature and density of Iron Age features. The results of the evaluation suggest that such features are restricted to the south-west quadrant of the site; accordingly, the most comprehensive record of their distribution may be ascertained through a watching brief conducted in this area.

8.0 Effectiveness of methodology

All of the trenches opened contained archaeological remains. The density of these features and deposits varied across the site: from c. 15% of the exposed surface area in trench 1, to c. 50% in trench 3.

All the features exposed were sampled to a varying extent and artefactual material was recovered from many of the deposits so encountered. Consequently, it is felt that the evaluation served its primary purpose by determining the density, nature and date of archaeological features located in the area of the proposed development.

9.0 Acknowledgements

Pre-Construct Archaeology (Lincoln) would like to thank Mr Andrew Hancock for this commission. Thanks are also extended to the owners of the Olde Farmhouse, South Kelsey for their assistance. Finally, the author wishes to express his gratitude to the field team, R. Mouraille, W. Livesey, D. Bower and P. Barnes, for their endeavours despite somewhat unusual and adverse circumstances.

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11.0 Site archive

The site archive (documentary and physical) for this project is in preparation and will be deposited at the Lincoln City and County Museum and the Lincolnshire Archives Office (documentary) within six months. Access to the archive may be granted by quoting the global accession number 2000.189.

Appendix 12.1: Colour photographs

Plate 1: Trench 1 pre-excavation shot, showing the location of pit [103], to the immediate west of the nearest photographic scale, looking south-south-west.

Plate 2: Trench 1, pit [103] following excavation. Note that the exposed portion of this feature is asymmetrical in plan, looking west.

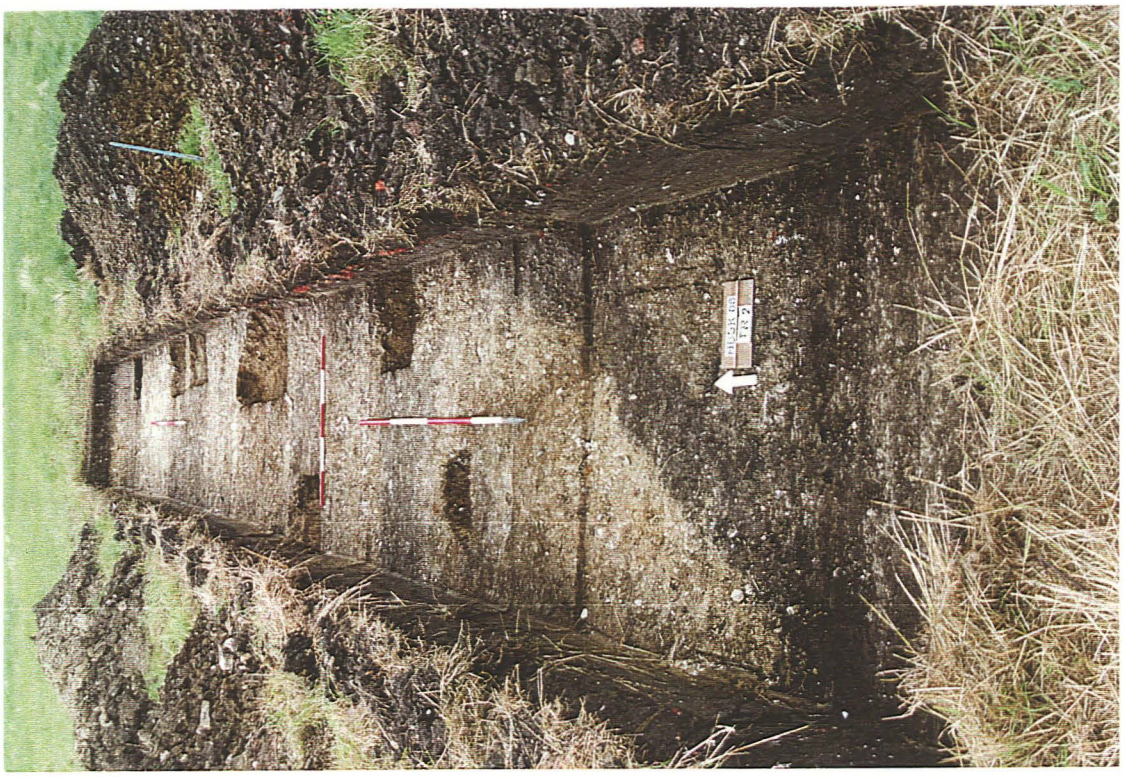

Plate 3: Trench 2 following excavation. Gully [208] and post-hole [209] lie adjacent to the nearest photographic scale, looking north.

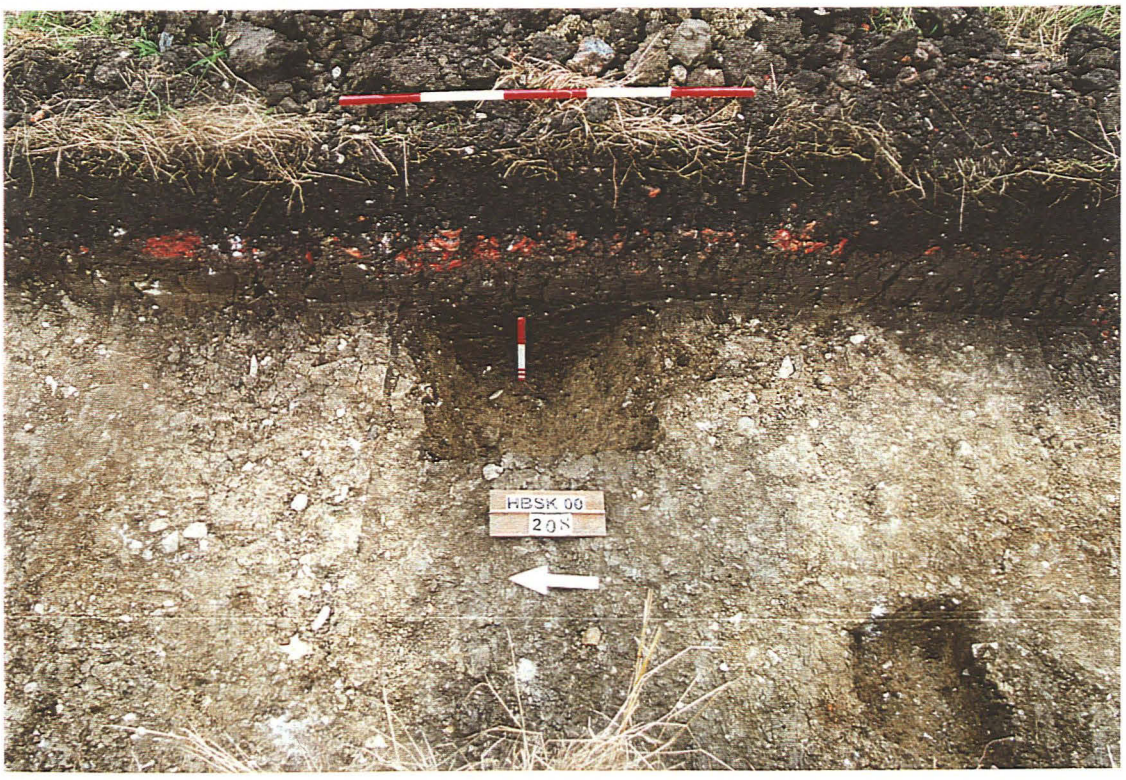

Plate 4: Trench 2, gully [208], with post-hole [209] in the bottom right hand corner. The rubble, (202), visible in the section is comprised of small fragments of handmade brick, which does not appear to have any direct relationship with any of the earth-cut features examined, looking east.

Plate 5: Trench 3, showing the complex of inter-cutting ditches situated at the centre of the trench, looking north-east.

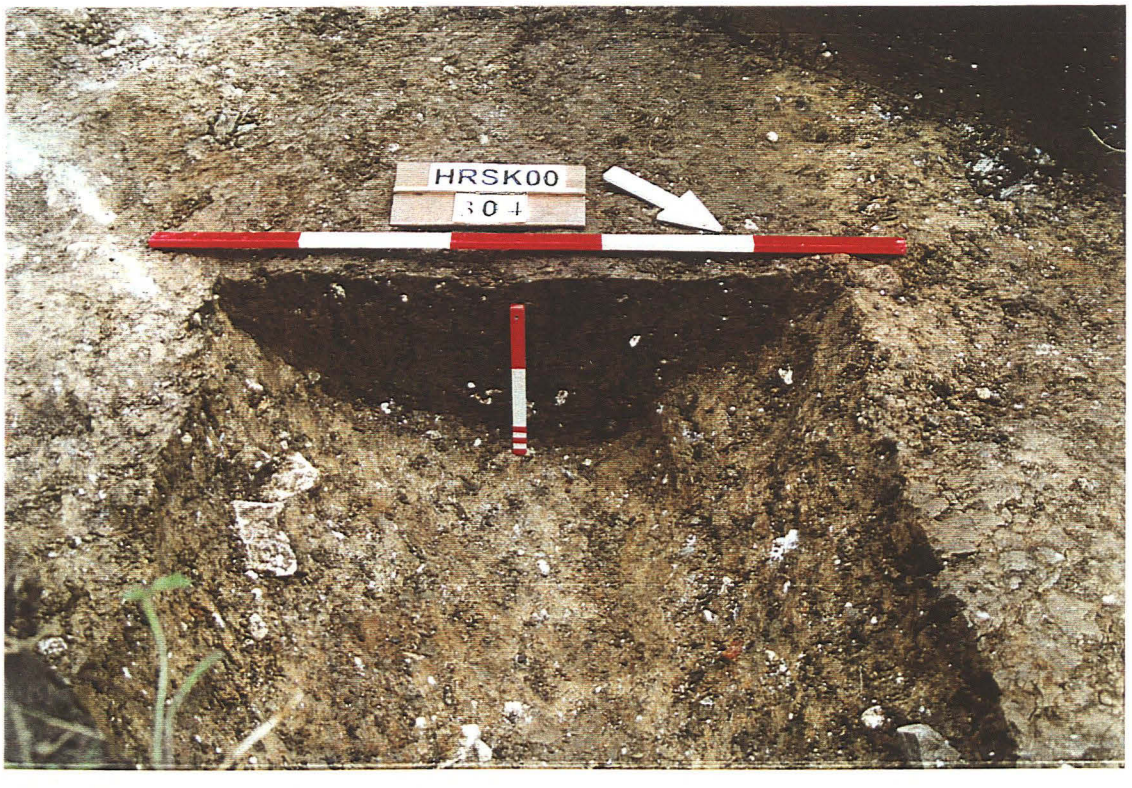

Plate 6: Trench 3, section excavated through the probable Iron Age ditch [304], looking south-west.

Plate 7: Trench 4, showing the complex of inter-cutting ditches situated at the centre of the trench, looking north-east.

Caistor Road, South Kelsey – HBSK00

Environmental Archaeology Assessment

Introduction

Evaluation excavations conducted by Pre-Construct Archaeology at South Kelsey uncovered a number of medieval features. During the course of the evaluation a small collection of animal bone was recovered by hand and two soil samples were taken for environmental assessment from a pit and a gulley (Table 1).

Table 1: Samples taken for environmental analysis

Site	sample	context	volume in l.	description	date
HBSK00	1	102	21	Fill of a large pit with much fired clay and charred material	Med.
HBSK00	2	214	10	Fill of gulley with much charcoal	Med.

Methods

The soil samples were processed in the following manner. Sample volume and weight was measured prior to processing. The samples were washed in a 'Siraf' tank (Williams 1973) using a flotation sieve with a 0.5mm mesh and an internal wet-sieve of 1mm mesh for the residue. Both residue and float were dried and the residues subsequently re-floated to ensure the efficient recovery of charred material and mollusc shells. The dry volume of the flots was measured, and the volume and weight of the residue recorded.

The residue was sorted by eye, and environmental and archaeological finds picked out, noted on the assessment sheet and bagged independently. A magnet was run through each residue in order to recover magnetised material such as hammerscale and prill. The residue was then discarded. The float of each sample was studied under a low power binocular microscope. The presence of environmental finds (ie snails, charcoal, carbonised seeds, bones etc) was noted and their abundance and species diversity recorded on the assessment sheet. The float was then bagged. The float and finds from the sorted residue constitute the material archive of the samples.

The individual components of the samples were then preliminarily identified and the results are summarised below in Table 1.

Results

A few uncharred seeds were present in the samples. These included elder, *Sambucus* sp., sedge, *Carex* sp. and stonewort, *Chara* sp. and a few other seeds. Both samples had modern rootlets in and it is probable, given the calcareous nature of the soils, that these seeds and roots are of recent origin.

Sample 1, context 102.

This sample contained a residue of chalk and flint, with some burnt flint and bone and an abundance of fired earth, the large fragments of which were extracted (Table 2). The field archaeologists recorded quantities of grass tempered fired clay which has been interpreted as

hearth lining. Two fragments of coal (>1cm) seem too large to have moved down through the soil and may indicate use of coal as a fuel although charcoal is abundant in the flot. Pottery, a small non-ferous object fragment, a few grammes of bone, some burnt and including sheep, small fish, house mouse, newt and frog/toad, were sorted from the residue.

Table 2: Finds from the samples

sample	cont.	vol	residue vol in l.	pot *	metal	fired earth wt g	coal wt g	burnt flint wt g	bone	comment
1	102	21	0.9	3/2	Cu x1	86	4	16	15	chalk and flint residue
2	214	10	0.45	3/<1		1			4	chalk and flint residue

(* sherd count/weight)

The flot was rich and included numerous charred cereal grains of wheat and barley with some oats or rye, a few charred pea, bean and pulses, many charred weed seeds, one or two chaff fragments and frequent charcoal fragments of wood, twigs, some roundwood and straw (Table 3). The concentration of this material in the sample and the context and fired earth perhaps indicates a structure that may have been associated with corn drying rather than any industrial or metal working activity. No slag was recovered from the residue and no hammerscale was present either. An agricultural association seems more likely for the feature

Table 3: Environmental finds from the samples

Sample	cont.	vol	residue vol in l.	char coal	charr'd grain	chaff	charr'd seed *	egg-shell	snail *	
1	102	21	0.9	3	4	1	4/3	2	4/2	wheat, barley, oat/rye, pulse, bean, pea?, straw, sheep, house mouse, newt, frog/toad, small fish
2	214	10	0.45	2	2		2/2	1	2/2	wheat, barley, oat?, pulse, rodent, newt, frog/toad, small fish

* frequency/diversity
frequency 1=1-10; 2=11-50; 3=51-150; 4=151-250; 5=>250 items
diversity 1=1-3; 2=4-10; 3=11-25 taxa

Sample 2, context 214

This sample has a similar residue to Sample 1 but without the fired clay, and a much reduced archaeological and burnt component. The only finds were three tiny sherds of pottery, one piece of fired clay, and a few tiny fragments of animal bone (Table 2).

The flot was much smaller than that from Sample 1 with a few charred cereal grains and weed seeds, a pulse fragment, a single fish vertebra and bones of rodent, newt and frog/toad (Table 3).

Snails

Both samples contain an assemblage of terrestrial snails. These include *Hygromia hispida*, *Cochlicopa* sp., *Oxychilus* sp., *Oxychilus cellarius*, *Vallonia excentrica*, *Cecilioides acicula*, *Vertigo pygmaea*, *Vitrea crystallina*, *Pupilla muscorum*, *Cepaea* sp. and slugs. The dominant taxa, other than *C.acicula* which is a burrowing snail and may not be contemporary, is

Vallonia excentrica, a species typical of calcareous grassland and open habitats. Nevertheless the presence of numerous shells of *Oxychilus* sp. and *Vitrea* sp., both taxa considered characteristic of woodland or shaded habitats (Evans 1972), indicates some shaded habitats adjacent to the features. Contexts 406 and 407 in Trench 4 also produced a number of shells of the *snail Helix aspersa* which were collected by hand.

Discussion
Context 102 rather than being associated with an industrial activity is clearly a result of agricultural processing activities, although whether the charred cereals were discarded, accidentally burned or an accumulation within a structure used for corn drying or something similar cannot be established on the basis of this assessment. The fired clay derived from the context is probably from the 'structure' involved in this process. The deposit also contains a range of other debris, most plausibly seen as domestic rubbish, such as the animal and fish bones, pottery and other debris.

Context 214 has a less dramatic assemblage. Despite this deposit containing much lower concentrations of material than context 102 these concentrations are about average for deposits with domestic rubbish on medieval sites and should be considered as relatively rich and indicative of local settlement activity in the immediate vicinity.

Animal Bone
A small collection of animal bones, 75 fragments, was recovered during the evaluation. These bones have been identified and recorded following the procedures of the Environmental Archaeology Consultancy (see attached Key) and the catalogue is attached to this report. The bone was recovered from four of the evaluation trenches and horse, cattle, sheep (or goat), pig, dog and goose were identified. The bone is generally in good condition although one or two fragments show evidence of surface erosion. Context 407 includes a small part of the skeleton of a small dog, and a horse humerus in context 213 is probably re-deposited from a burial. Otherwise most of the material appears to be characteristic bone debris from occupation. Cattle bones are the most frequent (14), but there are also several dog bones (10 +skeleton) all from adult, but relatively small dogs. The sheep bones include mandibles indicating the presence of immature and adult animals. A number of the bones are butchered and several have been gnawed by dogs.

One small bone fragment in context 215 is probably part of the shank of a bone pin or needle.

Conclusions
The concentrations of charred plant remains in context 102 suggests that this feature has some association with agricultural crop processing activities or the disposal of waste from such activities. Both this feature and the fills of the gulley that were sampled also include debris probably of domestic origin indicating that settlement is probably located close by. A conclusion re-inforced by the quntity of animal bone recovered. The preservation of the charred material is average to good and considerable further information could be obtained concerning these features if the plant assemblage was subject to post-excavation analysis.

Recommendations
Both the animal bone and the charred plant assemblages have good potential for reconstructing the agricultural and pastoral economy of the site. If the feature filled by context

102 is associated with agricultural crop processing then the site may include structural evidence of this and other farming activities, aswell as the associated domestic buildings. The charred plant and animal remains would be an important source of information for the farming economy.

Any further fieldwork should include a programme of bulk sampling (30 litres) for charred plant remains and efficient recovery of animal bone. If the excavated area is of any extent, sampling should ensure a good spatial coverage of the site in order that the specific activities reflected in the environmental assemblages can be related to the spatial divisions across the site and any structural evidence.

In the event that no further fieldwork takes place a more confident interpretation of the charred plant assemblage from context 102 could be made if the material was identified and reported on by an archaeobotanist.

Acknowledgments
I should like to thank Alison Foster and Paul Westron for the sample processing.

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THE ENVIRONMENTAL ARCHAEOLOGY CONSULTANCY

Key to codes used in the cataloguing of animal bones

SPECIES

BOS	cattle
CSZ	cattle size
SUS	pig
OVCA	sheep or goat
OVI	sheep
SSZ	sheep size
EQU	horse
CER	red deer
CAN	dog
MAN	human
UNI	unknown
CHIK	chicken
GOOS	goose, dom
LEP	hare
UNB	indet bird
MALL	duck, dom.
GULL	gull sp.
FISH	fish
UNIB	bird indet
UNIF	fish indet
GSZE	goose size
BEAV	beaver
CORV	crow or rook
POLE	polecat/ferret
PART	partridge
ORC	rabbit
ROD	rodent
JACK	jackdaw
OWL	owl indet.
AUR	aurochs
DUCK	duck sp.
CRA	goat
FER	feral dove
DAM	fallow deer
TURK	turkey

BONE

SKL	skull
TEMP	temporal
FRNT	frontal
PET	petrous
PAR	parietal
OCIP	occipital
ZYG	zygomatic
MAN	mandible
MAX	maxilla
ATL	atlas
AXI	axis
CEV	cervical vertebra
TRV	thoracic vertebra
LMV	lumbar vertebra
SAC	sacrum
CDV	caudal vertebra
SCP	scapula
HUM	humerus
RAD	radius
MTC	metacarpus
MC1-4	metacarpus 1-4
INN	innominate
ILM	ilium
PUB	pubis
ISH	ischium
FEM	femur
TIB	tibia
AST	astragalus
CAL	calcaneum
MTT	metatarsus
MT1-4	metatarsus 1-4
PH1	1st phalanx
PH2	2nd phalanx
PH3	3rd phalanx
LM1-LM3	Lower molar 1 - molar 3
UM1-UM3	upper molar 1 - molar 3
LPM1-LPM4	lower premolar 1-4
UPM1-UPM4	upper premolar 1-4
DLPM1-4	deciduous lower premolar 1-4
DUPM1-4	deciduous upper premolar 1-4
MNT	mandibular tooth
MXT	maxillary tooth
LBF	long bone
UNI	unidentified
STN	sternum
INC	incisor
TTH	indet. tooth
CMP	carpo-metacarpus
SKEL	skeleton

SIDE

W - whole
L - left side
R - right side
F - fragment

FUSION

Records the fused/unfused condition of the epiphyses
P - proximal; D - distal; E - acetabulum;
N - unfused; F - fused; C - cranial; A - posterior

TOOTH WEAR - Codes are those used in Grant, A. 1982 The use of tooth wear as a guide to the age of domestic animals, in B.Wilson, C.Grigson and S.Payne (eds) *Ageing and sexing animal bones from Archaeological sites, 91-108.*

Teeth are labelled as follows in the tooth wear column:

h ldpm4/dupm4	f ldpm2/dupm2
H lpm4/upm4	g ldpm3/dupm3
I lm1/um1	
J lm2/um2	
K lm3/um3	

ZONES - zones record the part of the bone present.
The key to each zone on each bone is on page 2

MEASUREMENTS - Any measurements are those listed in A.Von den Driesch (1976) *A Guide to the Measurement of Animal Bones from Archaeological Sites*, Peabody Museum Bulletin 1, Peabody Museum, Harvard, USA

PRESERVATION
1 - enamel only surviving
2 - bone very severely pitted and thinned, tending to break up teeth with surface erosion and loss of cementum and dentine
3 - surface pitting and erosion of bone, some loss of cementum and dentine on teeth
4 - surface of bone intact, loss of organic component, material chalky, calcined or burnt
5 - bone in good condition, probably with some organic component

ZONES - codes used to define zones on each bone

SKULL -
1. paraoccipital process
2. occipal condyle
3. intercornual protuberance
4. external acoustic meatus
5. frontal sinus
6. ectorbitale
7. entorbitale
8. temporal articular facet
9. facial tuber
0. infraorbital foramen

MANDIBLE
1. Symphyseal surface
2. diastema
3. lateral diastemal foramen
4. coronoid process
5. condylar process
6. angle
7. anterior dorsal acsending ramus posterior M3
8. mandibular foramen

VERTEBRA
1. spine
2. anterior epiphysis
3. posterior epiphysis
4. centrum
5. neural arch

SCAPULA
1. supraglenoid tubercle
2. glenoid cavity
3. origin of the distal spine
4. tuber of spine
5. posterior of neck with foramen
6. cranial angle of blade
7. caudal angle of blade

HUMERUS
1. head
2. greater tubercle
3. lesser tubercle
4. intertuberal groove
5. deltoid tuberosity
6. dorsal angle of olecranon fossa
7. capitulum
8. trochlea

RADIUS
1. medial half of proximal epiphysis
2. lateral half of proximal epiphysis
3. posterior proximal ulna scar and foramen
4. medial half of distal epiphysis
5. lateral half of distal epiphysis
6. distal shaft immediately above distal epiphysis

ULNA
1. olecranon tuberosity
2. trochlear notch- semilunaris
3. lateral coronoid process
4. distal epiphysis

METACARPUS -
1. medial facet of proximal artciulation, MC3
2. lateral facet of proximal articulation, MC4
3. medial distal condyle, MC3
4. lateral distal condyle, MC4
5. anterior distal groove and foramen
6. medial or lateral distal condyle

FIRST PHALANX
1. proximal epiphysis
2. distal articular facet

INNOMINATE
1. tuber coxae
2. tuber sacrale + scar
3. body of illium with dorso-medial foramen
4. iliopubic eminence
5. acetabular fossa
6. symphyseal branch of pubis
7. body of ischium
8. ischial tuberosity
9. depression for medial tendon of rectus femoris

FEMUR
1. head
2. trochanter major
3. trochanter minor
4. supracondyloid fossa
5. distal medial condyle
6. lateral distal condyle
7. distal trochlea
8. trochanter tertius

TIBIA
1. proximal medial condyle
2. proximal lateral condyle
3. intercondylar eminence
4. proximal posterior nutrient foramen
5. medial malleolus
6. lateral aspect of distal articulation
7. distal pre-epiphyseal portion of the diaphysis

CALCANEUM
1. calcaneal tuber
2. sustentaculum tali
3. processus anterior

METATARSUS
1. medial facet of proximal artciulation, MT3.
2. lateral facet of proximal articulation, MT4
3. medial distal condyle, MT3
4. lateral distal condyle, MT4
5. anterior distal groove and foramen
6. medial or lateral distal condyle

Archive Catalogue of Animal Bone from South Kelsey - HBSK00

site	cont.	species	bone	no.	side	fusion	zone	butchery	gnawing	toothwear	measurement	path	comment	preservation
HBSK00	100	BOS	FEM	1	F								DISTAL SHAFT FRAGMENT	3
HBSK00	100	BOS	FEM	1	R		4						DISTAL THIRD OF SHAFT	4
HBSK00	100	BOS	SCP	1	L		25						FRAG OF GLENOID AND DISTAL CAUDAL MARGIN OF BLADE- 4 PIECES	4
HBSK00	100	CAN	MC4	1	R								PROX HALF	4
HBSK00	100	CS Ż	LBF	6	F								SHAFT FRAGMENT	4
HBSK00	102	SUS	LM3	1	W					K8	L-34			4
HBSK00	102	UNI	UNI	1	F								LBF OR JAW FARG	4
HBSK00	104	EQU	UM	1	F								UNWORN CUSP FRAGMENT	4
HBSK00	106	BOS	SKL	1	R								NASAL- 4 PIECES	4
HBSK00	106	OVCA	MAN	1	F								MEDIAL FRAG HORI RAMUS	4
HBSK00	106	OVCA	UPM4	1	R					H13				4
HBSK00	106	SUS	LI	1	W								SL WEAR-POSS DEC	4
HBSK00	106	SUS	LM2	1	W					J8			COMPLETE	4
HBSK00	106	UNI	UNI	1	F								INDET	4
HBSK00	213	EQU	HUM	1	R	PFDF	12345678 90						COMPLETE BUT BROKEN-LARGE- 8 PIECES	4
HBSK00	214	BOS	SCP	1	F								PART OF SPINE	4
HBSK00	214	OVCA	MAN	1	L		237			FGH11I12J1 1K7	7-71.5		COMPLETE TOOTH ROW	4
HBSK00	215	SUS	LPM2	1	F								CUSP FRAGMENT	4
HBSK00	215	UNI	UNI	1	F								INDET	4
HBSK00	215	UNI	UNI	1	F			W					PIN SHANK?	4
HBSK00	305	BOS	TRV	1	R	CJAN	24	CH					RIGHT SIDE CENTRUM-CHOPPED DOWN MIDDLE	4
HBSK00	305	EQU	LMV	1	F								POST SPINE FRAGMENT	4
HBSK00	305	OVCA	TIB	1	L				DG				DISTAL HALF SHAFT-DISTAL END CHEWED	4
HBSK00	307	CAN	MAN	1	L		3						PART HORI RAMUS-NO TEETH	4
HBSK00	307	CSZ	VER	1	F	CN							FRAGMENT ANT EPIPHYSIS	4
HBSK00	322	BOS	FEM	1	L			CH	DG				PROX HALF SHAFT-EPI CHEWED OFF-MIDSHAFT CHOPPED	4
HBSK00	324	CAN	MAN	1	L		7						POST RAMUS WITH M2	4
HBSK00	324	CSZ	LBF	1	F								SHAFT FRAGMENT-POSS HORSE?	4
HBSK00	324	SSZ	RIB	1	F								SHAFT FRAGMENT	4
HBSK00	328	BOS	MAN	1	R		5						POST FRAG ASC RAMUS WITH CONDYLE- 2 PIECES	4
HBSK00	328	BOS	MTT	1	F								MIDSHAFT-SMALL-POROUS-JUV/CALF-2 PIECES	4
HBSK00	328	EQU	FEM	1	F								MIDSHAFT FRAGMENT	4
HBSK00	328	OVCA	RAD	1	R		3		DG				SHAFT-DISTAL CHEWED	4
HBSK00	328	SUS	MAN	1	R		7			J10K4			POST HORI RAMUS WITH M2 AND 3	4
HBSK00	329	BOS	CAL	1	R		2						FRAGMENT WITH TUBEROSITY	4
HBSK00	329	OVCA	MAN	1	R					J13J12				4
HBSK00	405	CAN	ATL	1	W								COMPLETE-SMALL DOG-BIGGER THAN FOX	4

site	cont.	species	bone	no.	side	fusion	zone	butchery	gnawing	toothwear	measurement	path	comment	preservation
HBSK00	405	CAN	HUM	1	L	DF	567890						DISTAL END AND MOST OF SHAFT-SMALL TO MEDIUM SIZE ANIMAL	4
HBSK00	405	OVCA	TIB	1	R	DF	567				Bd-28 Dd-20.3 SD-15.3		DISTAL HALF	4
HBSK00	406	BOS	PH2	1	R	PF	1						PROX FRAGMENT-DAMAGED	3
HBSK00	406	BOS	SKL	1	L								FRAG PREMAXILLA	4
HBSK00	406	CAN	HUM	1	R	DF	6789						DISTAL END- 2 PIECES-SMALL-MEDIUM ANIMAL	4
HBSK00	406	CSZ	ATL	1	F								ANT FRAG	4
HBSK00	406	GOOS	MTT	1	F								SHAFT	4
HBSK00	406	OVCA	INN	1	F								ILIAL SHAFT FRAG	4
HBSK00	406	OVCA	RAD	1	L								SPLIT MIDSHAFT FRAGMENT	4
HBSK00	406	SSZ	LBF	1	F								SHAFT FRAGMENT	4
HBSK00	406	UNI	SKL	2	F								CRANIAL FRAGMENTS	4
HBSK00	406	UNI	SKL	2	F								FRONTAL FRAG	4
HBSK00	407	BOS	INN	1	L		2						FRAGMENT OF SCAR- 2 PIECES	3
HBSK00	407	BOS	INN	1	L	EF	9						ILIAL FRAG ACETAB	3
HBSK00	407	CAN	CEV	1	F								DORS-LATERAL FRAG	4
HBSK00	407	CAN	FEM	1	R	PFDF	1347						MOST PRESENT- 3 PIECES-BIGGER THAN SKELY	4
HBSK00	407	CAN	LC	1	W								CANINE	4
HBSK00	407	CAN	LMV	1	F								POST CENTRUM	4
HBSK00	407	CAN	MAN	1	R		7						POST HORI RAMUS WITH M2	4
HBSK00	407	CAN	SKEL	1	P								ADULT-SMALL-MED- TIBIA-FEMUR-INN-SKL-MAN - IN PIECES	4
HBSK00	407	CSZ	UNI	7	F								INDET-PORB PARTS OF BOS INNOMINATE	3
HBSK00	407	EQU	AST	1	L		1						COMPLETE	4
HBSK00	407	OVCA	UM3	1	L					K12				4
HBSK00	407	SSZ	LBF	1	F								SHAFT FRAG	4
HBSK00	407	UNI	UNI	1	F								INDET	4

Archive Report on the Pottery and Ceramic Building Material from Excavation at South Kelsey, Lincolnshire (HBSK00)

Jane Young Lindsey Archaeological Services

Introduction

A total of 54 sherds of pottery (representing 32 vessels) and six fragments of ceramic building material were recovered from the site. The material ranges in date from the Iron Age to the post-medieval period. The pottery was examined both visually and using a x20 magnification, then recorded using locally and nationally agreed codenames and entered on an Access Database.

Condition

The assemblage is in a mixed condition with variable degrees of abrasion. The poor state of material from contexts 406 and 407 is consistent with plough damage.

Overall Chronology and Source

A range of 14 different, identifiable pottery types were found on the site, the type and general date range for these fabrics are shown in Table 1 with the suggested deposition date for contex groups, based on the recovered ceramic evidence given in Table 2.

Table 1: Post-Roman pottery codenames and total quantities by sherd count and vessel count where appropriate

codename	full name	sherds	vessels	earliest date	latest date
BEVO2	Beverley Orange ware Fabric 2	1	1	1230	1350
BEVO2T	Beverley Orange-type ware Fabric 2	1	1	1230	1350
BRKDISC	Discarded brick	1	-	1700	1800
FIRE CLAY	Fired clay	5	-	-	-
HUM	Humberware	8	3	1250	1550
HUMB	Humber Basin fabrics	3	3	1250	1500
IA	Iron Age	12	5	Mid Iron Age	Late Iron Age
LFS	Lincolnshire Fine-shelled ware	4	4	970	1200
LSLOC	Late Saxon Local Fabrics	3	3	850	1050
LSW3	14th to 15th century Lincoln Glazed Ware	1	1	1280	1450
MEDLOC	Medieval local fabrics	6	6	1150	1450
MEDX	Non Local Medieval Fabrics	9	3	1150	1450
MISC	Unidentified types	1	1	400	1900
SNLOC	Local Saxo-Norman fabrics	2	2	870	1150
THETT	Thetford-type fabrics	2	1	1000	1150
TORK	Torksey ware	1	1	850	1100

Table 2: Suggested deposition date of pottery groups from contexts

context	date	comments
100	13th to 15th	
102	14th	
104	11th to 12th	
106	13th to 14th	
200	14th	
213	13th to 14th	
214	10th to 12th	
215	13th to 14th	
216	10th to 11th	
307	Mid to Late Iron Age	
322	13th to 14th	
324	late 13th to 14th	
328	undatable	fired clay only
329	13th to 14th	
400	18th	brick only
405	13th to 15th	
406	14th	
407	14th	

The post-Roman pottery is confined to the period between the 11th and 14th centuries. A range of fabric types is present including a number of previously unrecognised local types. The medieval pottery includes Lincoln, Beverley and Humber types. A small number of 10th to 12th century sherds were recovered from the site, these were found in every trench with a slight concentration in trench 2. Two vessel appear to join across contexts, one - vessel 1 joins across three trenches. Sherds of this vessel from trenches 2 and 3 are fresh whilst those from trench 4 are very abraded, probably indicating their presence in plough soil. No late or post-medieval pottery was recovered from the site.

4. Summary and Recommendations

The material recovered is a small collection, mainly of local Saxo-Norman to medieval pottery. Ceramic assemblages from this area have not yet been categorised as they are usually recovered in too poor condition to enable full recognition of fabric types. The entire group therefore should be kept for future research.

Pottery Archive HBSK00

trench	contex	cname	sub fabric	form type	sherds	vessels	decoration	part	ref no	description	date	condition
1	100	MEDLOC		?	1	1		base			13-15th	abraded
1	100	MEDLOC		jug?	1	1		base			13-15th	abraded
1	102	HUMB		jug	1	1		BS		light firing fabric	13-14th	slightly abraded
1	102	HUMB		jug	1	1		base		hard fabric	14-15th	
1	102	IA	shell	?	3	1		BS		soot;? ID	Iron Age?	
1	102	IA	shell		1	1		BS		? ID	Iron Age?	
1	102	LFS		jar	1	1		rim			late 11-mid 12th	slightly abraded
1	104	LFS		?	1	1		BS		tiny frag	11-12th	
1	104	TORK		jar	1	1		BS		tiny frag	10-11th	
1	106	MEDLOC		jar?	1	1		BS		tiny frag	13-14th	
2	200	LSW3		jug	1	1		handle		rod handle foliate LHJ	late 13-14th	very worn on exterior
2	200	MEDLOC		large jug/jar	1	1		BS		cu glaze;could be odd LSW3 butquartz looks too small	14-15th	
2	213	BEVO2T		jug?	1	1		BS		small frag	early/mid 13-early/mid 14th	
2	214	MISC	quartz	?	1	1		BS		minute frag	?	
2	214	SNLOC	quartz	?	1	1		BS		? ID	10-12th?	

trench	contex	cname	sub fabric	form type	sherds	vessels	decoration	part	ref no	description	date	condition
2	214	SNLOC	shell with quartz	?	1	1		BS		? ID;soot	10-12th?	
2	215	LSLOC	shell	?	1	1		BS		small frag	10-11th	
2	215	MEDX		jug	1	1		BS	vessel 1	minute frag	13-14th	
2	216	LSLOC	shell	?	1	1		BS		small frag	10-11th	
2	216	LSLOC	shell	?	1	1		BS		small frag	10-11th	
3	307	IA		jar	1	1		rim			probably mid to late IA	
3	307	IA			3	1		base & BS			probably mid to late IA	
3	307	IA			4	1		base & BS			probably mid to late IA	
3	322	MEDLOC		small jug/jar	1	1		BS		small fragment	13-14th	
3	324	BEVO2		jug	1	1		BS			early/mid 13-early/mid 14th	
3	324	HUM		jug	1	1		BS			late 13-14th	
3	324	HUMB		jug	1	1		BS			13-14th	
3	324	THETT		jar/pitcher	2	1	pressed strip	BS			11-12th	
3	329	MEDX		jug	4	1		BS	vessel 1	fresh breaks;very sandy white firing fabric;apple green glaze	13-14th	
4	405	MEDLOC		small jug	1	1		BS			13-15th	abraded
4	406	HUM		jug	3	1		BS	vessel 2		14-15th	very abraded
4	406	LFS		jar?	1	1		BS			11-12th	very abraded

trench	contex	cname	sub fabric	form type	sherds	vessels	decoration	part	ref no	description	date	condition
4	407	HUM		jug	4	1		BS	vessel 2		14-15th	very abraded
4	407	LFS		jar?	1	1		BS		soot	11-12th	
4	407	MEDX		jug	4	1		BS	vessel 1		13-14th	very abraded

Tile Archive HBSK00

trench	context	cname	frags	weight	description
1	106	FIRED CLAY	2	0	
2	215	FIRED CLAY	2	0	tiny frags
3	328	FIRED CLAY	1	0	
4	400	BRKDISC	1	160	handmade, 18th

Appendix 12.4: List of Archaeological Contexts

Trench 1

Context No.	*Category*	*Description*
100	Layer	Topsoil
101	Layer	Subsoil
102	Fill	Fill of large pit [103]
103	Cut	Large medieval pit (14th century?), only partially exposed
104	Fill	Fill of [105], (11th-12th century?)
105	Cut	Gully aligned NE-SW, probably medieval
106	Fill	Fill of [107], (14th century?)
107	Cut	Pit or N-S aligned ditch, only partially exposed, probably medieval
108	Layer	Natural

Trench 2

Context No.	*Category*	*Description*
200	Layer	Topsoil
201	Layer	Subsoil
202	Deposit	Demolition layer, largely comprised of fragments of handmade brick
203	Layer	Natural
204	Cut	Ditch turning through right angle, from E-W to N-S
205	Cut	Ditch aligned E-W
206	Cut	Gully aligned E-W
207	Cut	Ditch aligned E-W, with eastern terminal
208	Cut	Ditch aligned E-W
209	Cut	Possible post-hole
210	Cut	NW-SE aligned feature
211	Fill	Fill of [205]
212	Fill	Fill of [206]
213	Fill	Fill of [207], (13th-14th century?)
214	Fill	Fill of [208], (10th-12th century?)
215	Fill	Fill of [209], (13th-14th century?)
216	Fill	Fill of [210], (10th-11th century?)
217	Fill	Fill of [204]

Trench 3

Context No.	*Category*	*Description*
300	Layer	Topsoil
301	Layer	Subsoil
302	Layer	Natural
303	Cut	Ditch aligned E-W, post-medieval
304	Cut	Ditch aligned SW-NE, mid to late Iron Age
305	Fill	Secondary fill of [303]
306	Fill	Primary fill of [303]
307	Fill	Secondary fill of [304]
308	Fill	Primary fill of [304]
309	Cut	Possible N-S gully
310	Cut	Possible oval pit (or same as (309))
311	Cut	Deposit of, or feature containing, iron slag
312	Cut	E-W ditch, replaced by [319]
313	Cut	E-W ditch, replaced by [319]
314	Cut	E-W ditch, replaced by [318]
315	Cut	E-W ditch, replaced by [313] & [314]
316	Cut	E-W ditch
317	Cut	E-W ditch, replaced by [303] & [316]
318	Cut	E-W ditch
319	Cut	E-W ditch
320	Fill	Upper fill of [303]
321	Fill	Upper fill of [304]
322	Fill	Upper fill of [316], (13th-14th century?)

323	Fill	Primary fill of [316]
324	Fill	Fill of [317], cut by [303] & [316], (13th-14th century?)
325	Fill	Fill of [318], cut by [316]
326	Fill	Fill of [314], cut by [318]
327	Fill	Fill of [319]
328	Fill	Fill of [313], cut by [319]
329	Fill	Upper fill of [315], cut by [313] & [314], (13th-14th century?)
330	Fill	Secondary fill of [315]
331	Fill	Primary fill of [315]
332	Fill	Fill of [312], cut by [319]
333	Fill	Fill of [310]
334	Fill	Fill of [311]
335	Deposit	*In-situ* burning/possible hearth

Trench 4

Context No.	*Category*	*Description*
400	Layer	Topsoil
401	Layer	Subsoil
402	Fill	Fill of [404]
403	Drain	Ceramic field drain
404	Cut	Cut for field drain [403]
405	Fill	Fill of [414], (13th-15th century?)
406	Fill	Upper fill [408], (14th century?)
407	Fill	Lower fill [408], (14th century?)
408	Cut	Ditch aligned E-W, replaced by [418]
409	Fill	Fill of [414]
410	Fill	Upper fill of [416]
411	Fill	Lower fill of [416]
412	Fill	Fill of [417]
413	Fill	Fill of [418]
414	Cut	Ditch aligned E-W
415	Layer	Natural
416	Cut	Ditch aligned E-W, replaced by [419]
417	Cut	Ditch aligned E-W, replaced by [416]
418	Cut	Ditch aligned E-W, replaced by [417]
419	Cut	Ditch aligned E-W, replaced by [414]