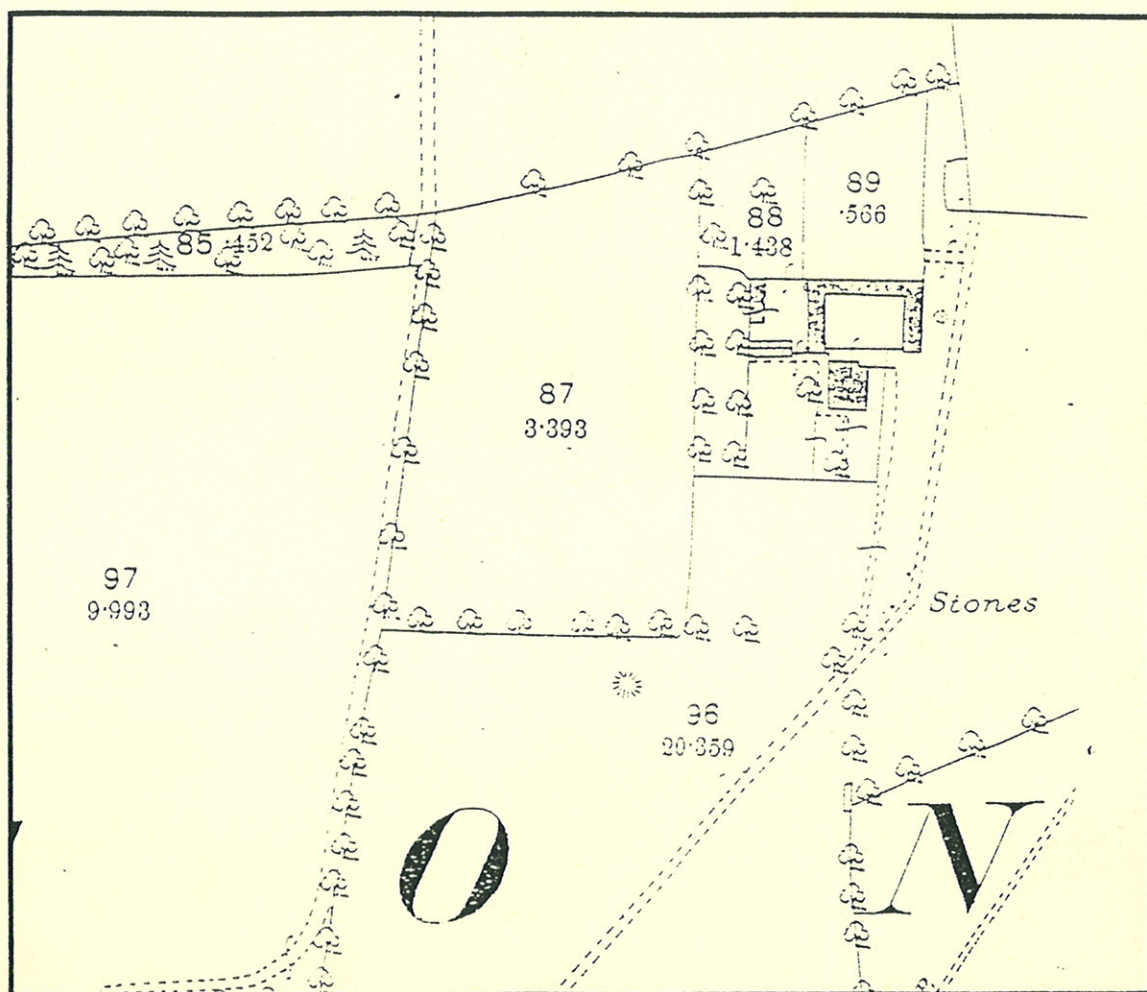


[Tesco Stores Limited]

Proposed Tesco Store, Hamilton, Leicester, Leicestershire

NGR SK 6310 0640

Archaeological Evaluation Report



Oxford Archaeological Unit

September 1997

Tesco Stores Limited

PROPOSED TESCO STORES, HAMILTON, LEICESTER
ARCHAEOLOGICAL EVALUATION REPORT

NGR. SK 6310 0640

Planning ref. 97/0216

OXFORD ARCHAEOLOGICAL UNIT

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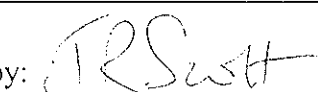
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Prepared by:	
Date:	15 Sept 1997
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Date:	16th September 97
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Date:	17th September 97

OXFORD ARCHAEOLOGICAL UNIT

September 1997

PROPOSED TESCO STORES, HAMILTON, LEICESTER

ARCHAEOLOGICAL EVALUATION

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SUMMARY

The Oxford Archaeological Unit carried out a field evaluation, in August 1997, at Hamilton, Leicester (centred at NGR SK 6310 0640), on behalf of Tesco Stores Limited. The evaluation revealed an area of middle to late Iron Age occupation. The archaeological features comprised a concentration of ditches which extended over an area of at least one hectare. The Iron Age pottery included East Midlands Scored ware, and the quantity of pottery and a probable fired clay loomweight indicate the presence of Iron Age domestic settlement within this complex of ditches, although no houses were located. The environmental data including charred plant material were well preserved. Ditches peripheral to the main area of Iron Age occupation are tentatively identified as a field system associated with the Iron Age site. A mound on the site was confirmed as the site of a windmill. A spread of large pebbles on the southern edge of the mound probably formed the cross shaped foundation for the wooden base support ('cross trees') of a late medieval post mill. The pottery from amongst these pebbles was late medieval in date. It is likely the present mound was the site of a later post-medieval post mill which had the timber cross trees mounted clear of the ground.

1. INTRODUCTION

1.1. Location and scope of work

In August 1997 the Oxford Archaeological Unit carried out a field evaluation at Hamilton on behalf of Tesco Stores Limited in respect of planning permission for the erection of a retail food store with car parking and petrol station, four shops, a public house and health facilities along with community and leisure facilities (Planning Application No. 97/0216). A WSI was agreed following discussions with the Leicester City Archaeologist. The site is located to the north of Keyham Lane at Elms Farm (centred at NGR SK 6310 0640). Maidenwell Avenue runs along the south-eastern and eastern boundary and the new A46/A47 Link road will form the western boundary.

1.2. Geology and topography

The site lies at 101m above Ordnance Datum (OD). The site is situated on high ground and is presently rough pasture with well preserved ridge and furrow in the western half of the site. The site occupies 7.92 hectares in total, of which 5.25 ha was evaluated.

1.3 Archaeological background (see Gazetteer and Fig. 2)

1.3.1. The SMR records show the area north of the site to have produced finds from a number of periods (see Fig.2). The concentration of archaeological finds in this area reflects the work carried out by Peter Liddle of Leicestershire County Council to provide archaeological data in advance of the development of the Hamilton Northern Housing Area (Liddle 1994) and involved fieldwalking and examination of the existing archaeological information. There is a more detailed list in the Gazetteer and Fig. 2 and (OAU No. 1-18). A brief summary is outlined below:

1.3.2. Prehistoric flint

All the 11 fields surveyed produced prehistoric flint, although it is not certain whether these relate to below ground features. The quantity of flint cores recovered suggest the area had some significance during the early prehistoric period.

1.3.3. Iron Age and Bronze Age

A small quantity of Iron Age and Bronze Age pottery was recovered from the fieldwalking (OAU No.4).

1.3.4. Roman

The Roman pottery is concentrated at a Roman farmstead and lesser scatters probably reflect material carried out into the fields in manure scatters (OAU No.5).

1.3.5. Saxon

A single sherd of Early/Middle Saxon pottery was recovered from the fieldwalking (OAU No.3).

1.3.6. **Medieval**

The medieval pottery was scattered generally throughout the fieldwalking area and probably reflects pottery brought to the fields in manure. Ridge and furrow fields occur on the site and are found throughout the area to the north, and indicate widespread cultivation in the medieval period.

1.3.7. **“Windmill” Mound**

The main archaeological feature known to be within the development site is a small mound (OAU No.14) which measures c.15m across. This has been surveyed by R. Hartley and is included in 'The Medieval Earthworks of Central Leicestershire', 1989. A similar mound is found 150m to the west of the site (see OAU No. 15), the latter is interpreted as a post-medieval windmill mound which probably dates to the 18th century. The mound is clearly shown on the 25 inch 1st edition OS map c.1889. Similar mounds are known in and around the city of Leicester. In the Humberstone area they are usually located within a field pattern of ridge and furrow, which is presumed to be medieval in date. The mill would have been mounted on a post, which could be turned to permit the sails to face the wind. The central post was fixed to cross timbers which were sunk into the ground. The legs were also supported by the mound and a surrounding ditch resulted from spoil removed to build up the mound. The surviving mounds usually resemble a hot cross bun, where the criss-cross shape cut into the it are the remains of the slots for the timbers. Ideally they built on high ground to catch the wind and in proximity to the village and near to, or within, the cornfields. Fragments of millstones are usually scattered on such sites (Steane 1985).

2 EVALUATION AIMS

- 2.1. To determine the extent, condition, nature, character, quality and date of any archaeological remains present.
- 2.2. To examine the probable windmill mound and any features associated with it.
- 2.3. To establish the ecofactual and environmental potential of archaeological deposits and features.
- 2.4. To make available the results of the investigation.

3 EVALUATION METHODOLOGY

- 3.1. The evaluation comprised a series of trenches excavated by machine down to archaeological levels and supplemented by hand investigation of archaeological deposits.
- 3.2. A total of 19 trenches (each 30m in length) were excavated. The total 540 m in length and form a 2% sample of the area (Fig. 3). Trench 19 was an additional trench placed to examine the eastern extent of the Iron Age occupation.
- 3.3. Trench 12 was positioned to examine the south side of the mound, the depression on the south side and any features in the immediate area of the mound.

- 3.4. Trenches 11, 10, & 13, were positioned to examine the indistinct line of earthworks which may either be associated with the mound or associated with the boundary between two fields of ridge and furrow. They run approximately east-west along the higher ridge which crosses the site the site. Trench 11 examined a well defined bank.
- 3.5. Trenches 3 & 5 examined the immediate area around the former site of Elm Farm to identify any possible earlier phases of the farm.
- 3.6. The remaining trenches are positioned in a regular array to provide an overall coverage of the remainder of the site.
- 3.7. All trenches will initially be 2.00m wide and excavated by a 360° tracked excavator.
- 3.8 **Fieldwork methods and recording**
 - 3.8.1. After machine stripping the trenches were cleaned by hand and the revealed features were sampled to determine their extent and nature, and to retrieve finds and environmental samples. All archaeological features were planned at 1:50 or 1:20 were appropriate and where excavated their sections drawn at a scale of 1:20. Features were photographed using colour slide and black and white print film. Recording followed procedures laid down in the *OAU Fieldwork Manual* (ed. D. Wilkinson, 1992).

4 RESULTS: GENERAL

- 4.1.1. The general soil type was a sandy clay and the ground conditions were dry and no waterlogged deposits were encountered.
- 4.2.1. The archaeological features were predominantly ditches, filled with a dark grey silty to sandy clay fill which were concentrated in the area defined by Trenches 4, 6, 7, & 19. The finds from this area suggests Iron Age domestic occupation. A few ditches were located away from the main area of occupation and the character of the fill and the paucity of finds suggest they are peripheral to the main area of occupation and would be consistent with an adjoining field system.

5 DESCRIPTIONS (Figs. 4-9) (For a summary of contexts and finds see Appendix 1)

5.1. *Iron Age Occupation: Trenches 1, 4, 6, 7, 8, & 19,*

- 5.1.1. The initial trenching located a concentration of Iron Age features in Trenches 4, 6, & 7. An additional Trench, 19, was excavated to identify the extent of Iron Age occupation in the eastern area.

The Iron Age features were mainly comprised ditches. The later fills were typically dark grey silty clay. These produced significant amounts of Iron Age pottery, and bone as well as a fragment of a probable loomweight. Notable concentrations of pottery were collected from Ditch 706 in Trench 7.

5.1.3 Trench 4 (Fig. 5)

- 5.1.3.1. Two intercutting ditches (404 & 405) were revealed in Trench 4. The earliest ditch (405) had a steep sided U-shaped profile and was orientated north-south. Ditch 405 measured 1.60m in width and 0.78m in depth, it produced Iron Age pottery and bone. Ditch 404 cut Ditch 405 on the west side. Ditch 404 also had a steep U-shaped profile and orientated north-south. It measured 1.14m in width and 0.56m in depth. It is possible Ditch 404 is a recut of Ditch 405.

5.1.4 Trench 6 (Fig. 6)

- 5.1.4.1. Trench 6 identified three ditches, (606, 612, & 614) and a pit, (609). A pit, (609) at the south end of the trench measured 0.85m in width and 0.58m in depth. No datable finds were recovered from pit 609, although similarity with the fills of other features in the trench means it is almost certainly Iron Age in date.
- 5.1.4.2. A ditch (612) measured 0.90m in width and 0.38m in depth and a hand dug section produced only bone. This feature terminated within the trench and it was not altogether clear whether it was in fact a ditch. There was some disturbance around the northern edge of 612.
- 5.1.4.3. A ditch (606) was orientated southeast-northwest and appeared to be curving. A hand excavated section across the ditch identified a U-shaped ditch which measured 1.20m in width and 0.54m in depth. Iron Age pottery and bone was recovered from the fills (603) and (604). Bulk 40 litre environmental samples were taken from Ditch 606 (fills 603 and 604), (See Environmental data section 7). The samples produced more bone and Iron Age pottery as well as small fragments of burnt bone.
- 5.1.4.4. A curving ditch (614) was located towards the northern end of the trench. The ditch was truncated by a furrow and this ditch was left unexcavated.

5.1.5 Trench 7 (Fig. 6)

- 5.1.5.1. Trench 7 contained seven Iron Age ditches. Ditch 708 was orientated southeast - northwest and measured 1.19m in width and 0.40m in depth. The ditch contained no pottery but did produce some bone. This ditch was cut by Ditch 706 which had a darker fill than 708.
- 5.1.5.2. Ditch 706 was U-shaped and orientated northwest-southeast and measured 1.20m in width and 0.45m in depth. The upper fill, 704, was a dark grey silty clay which contained 124 pottery sherds, dated to the Iron Age.
- 5.1.5.3. Ditch 712 was orientated northeast-southwest and is possibly curving. The ditch was steep sided on the west side but shallow sided with a broad U-shaped profile. The profile of the ditch and the thin deposit of 'clean' clay in 713 would suggest this ditch has been recut on the east side. Ditch 712 produced 57 sherds of Iron Age pottery (55 sherds from the latest ditch fill (709). The top of Ditch 712 was truncated by a modern field drain.

5.1.5.4. Two ditches were revealed at the west end of Trench 7 (721 & 723); 721 orientated northeast-southwest and 723 orientated north-south. These two ditches were left unexcavated although in plan it appeared as if Ditch 723 cut across Ditch 721. Although no finds were recovered from the surface, these ditches are almost certainly Iron Age in date.

5.1.5.5. Two linear features were excavated the eastern end of the trench (714 & 719). Neither of these features; probably ditches, produced finds although certainly Iron Age in date. Ditch 719 was orientated northeast-southwest and measured 1.50m wide and 0.39m in depth. Ditch 714 was orientated northwest-southeast and measured 1.00m in width and 0.70m in depth.

5.1.6 Trench 19 (Fig. 9)

5.1.6.1. Trench 19 was excavated to identify the extent of Iron Age features. The trench was hand cleaned and features planned and finds were collected from the surface of features. The trench identified three ditches (1905, 1907, and 1910), and a pit (1915). The ditch 1910 was curving across the trench and is probably part of a circular feature, possibly a gully around a circular Iron Age house. The other two ditches (1905 & 1907) were orientated approximately east-west and not enough of each ditch was exposed to determine if they were curving.

5.1.6.2. The ridge and furrow cultivation had truncated some of the Iron Age features and this was most clearly demonstrated in Trench 19 where levels under ridges and within furrows indicate at least 0.31m of ditch 1909 had been removed by the ridge and furrow ploughing.

5.2 Ditches located away from the main area of Iron Age settlement (Trenches 3, 8, 13, 17 & 18) (Figs. 5, 8, 9,)

5.2.1. Ditches were located peripheral to the main area of Iron Age occupation. The dating evidence from these ditches was sparse and they lacked the dark fills identified in the Iron Age settlement.

5.2.2. There were only two archaeological features located in the area of the site south of Trench 12. A V-shaped ditch (1705), in Trench 17, was orientated northwest-southeast and measured 0.98m in width and 0.56m in depth. The ditch produced a significant amount of bone and a single sherd of Iron Age pottery. The fill of the ditch was similar to the natural clay and consequently it did not show clearly in plan.

5.2.3. A broad U-shaped ditch (1804) was orientated east-west and measured 2.60m in width and 0.50m in depth. No finds were recovered from the hand dug section. Both ditches in Trenches 17 and 18 were cut in to the natural subsoil and overlain by later ploughsoils

5.3 Windmill Mound: Trench 12 (Fig.7)

5.3.1. Trench 12 was excavated across the southern half of the 'windmill' mound. The mound was circular and measured 15m across, and 1.4m in height from the top down to the natural subsoil. To the west of the mound a broad headland deposit stops just

short of the mound and runs parallel to the present hedge boundary and is recorded in the north end of Trench 11. Just beyond the southern side of the mound a headland appears to curve around the mound and continue to Trench 10.

- 5.3.2. A large oval depression which measured 5.40m x 4.10m in plan, was visible on top of the mound. The evaluation trench revealed a corresponding cut (1208), directly below the topsoil. The cut continued below the level of the natural and the fill (1207) contained roof slate and red roof tile suggesting it may date to recent times and is probably associated with Elms Farm.
- 5.3.3. The mound was composed of a homogenous deposit of orangey brown sandy clay with occasional pebbles (1206). This layer directly overlaid the natural (1203) and there was no sign of a buried soil beneath the mound.
- 5.3.4. There were no structural remains located beneath the main body of the mound however a well defined deposit of sub-rounded pebbles (1205), was exposed on the southern edge of the mound. The pebbles were fairly large, typically 0.13m across, but some up to 0.28m in size. The pebble spread was linear and orientated northeast-southwest. It had well defined limits and measured 1.60m across. The pebbles continued beyond the trench edge to the northeast. The pebbles were not worn on the surface and appeared to thin out at the southwest end of the spread. A number of late medieval pottery sherds were recovered from amongst the pebble spread as well as a large quartzite millstone fragment. The pebbles (1205) appeared to be set into the outer southern limits of the mound deposit (1206). The pebbles were overlain by a ploughsoil (1202) which produced a horseshoe. A disparate spread of pebbles was located on the southern slope of the mound at the interface between the ploughsoil (1202) and the topsoil (1201). Some of these pebbles were within the topsoil.

5.4 Ridge and Furrow

- 5.4.1. Ridge and Furrow cultivation was evident throughout the site but was well preserved in the western half. The eastern half of the site appeared to have been reduced by farming activity associated with the former site of Elms Farm (now demolished).
- 5.4.2. In the northern half of the site the ridge and furrow was orientated approximately east-west and in the southern half it was orientated approximately north-south. In Trench 17 the width from the top of ridge to the top of ridge was 8.50m and the height of ridges from the top to the level of the natural subsoil was 0.72m.
- 5.4.3. A headland between the two fields was orientated east-west through the north end of Trench 11 and parallel to the existing hedge boundary. This ended just short of the windmill mound.

6. FINDS

The evaluation produced 276 sherds (3947 g) of Iron Age pottery and 22 sherds (420 g) of medieval and post-medieval pottery. Iron Age pottery occurred in Trenches 1, 4, 6, 7, 17 and 19, and later material was recovered from Trenches 3, 11 and 12. A complete separation of the two components of the ceramic assemblage was thus notable. In

addition, fired clay was found exclusively in those trenches which produced Iron Age pottery, and was probably all of comparable date.

6.1 **Worked Flint** by Philippa Bradley

- 6.1.1. Five pieces of worked flint were recovered from later contexts. The flint is good quality, dark brown in colour with a buff cortex. Cortication is light, except for a blade-like flake from context 603. The material consists of a very worn serrated flake (1904), a blade-like flake (603), a burnt flake (706), a flake (1308) and a core (402). The serrated flake and blade-like flake are well made and are probably of Neolithic or earlier Mesolithic date. The other flakes are relatively undiagnostic.

6.2 **Iron Age pottery** by Paul Booth

- 6.2.1. The material was in moderate condition. While the average sherd weight was quite high (14.3 g) a number of context groups contained many small fragments in addition to larger, robust sherds. Burnished surfaces and organic residues survived on at least some sherds. The pottery was scanned quite rapidly by context and divided into five fabric types, quantities of which were recorded on the standard forms employed in the OAU later prehistoric and Roman pottery recording system. The material was quantified by sherd count, weight and vessel count based on rim sherds.

6.2.3 *Fabrics*

- 6.2.3.1. The five fabric types tentatively identified are not described in detail, but summary descriptions (with quantities) are given below.

Fabric 1. Coarse, rough fabric with ?metamorphic inclusions, including large flakes of mica in some examples. 191 sherds (3128 g)

Fabric 2. As fabric 1 but considerably finer. 9 sherds (124 g).

Fabric 3. As fabric 1, but less coarse and with occasional shell inclusions. 46 sherds (398 g).

Fabric 4. Medium to coarse fabric with abundant shell inclusions or voids and very sparse quartz sand. 24 sherds (237 g).

Fabric 5. Fabric with moderate voids, usually rounded, quartz sand and mica, and occasional ?limestone. 6 sherds (60 g).

- 6.2.3.2. Fabric 1 and its variants dominated the assemblage, fabric 1 alone totalling 69% of sherds and 79% of weight. These fabrics are of fairly local origin, utilising the geology of the Charnwood Forest area west of Leicester. The origin of fabrics 4 and 5 is uncertain but may also be relatively local. Manufacture of all fabrics was by hand and was commonly crude, many vessels being thick-walled. Decoration was very limited in scope. Burnishing was applied regularly to sherds in fabric 2 and occasionally to fabric 3, but was otherwise absent. Scratching or scoring, however, a well-known regional technique (Elsdon 1992), was very widely applied to sherds of all fabrics

except 2, being found on 33% of all sherds. One large vessel had scoring on the upper internal face of the (upright) rim, otherwise scoring was confined to the shoulder and body of jars.

6.2.4 *Vessel Forms and Function*

6.2.4.1. Twelve vessels were represented by rim sherds. All appeared to be simple jar or possibly jar/bowl forms (none of the profiles was sufficiently complete for the presence of bowls to be confidently demonstrated), most if not all approximately barrel-shaped. Rims also were generally quite simple, being either tapered and upright or slightly everted (cf Elsdon 1992, 85 No.4), or thickened and again usually upright (cf ibid, No. 6). One slightly thickened rim in fabric 4 had a groove and rough oblique incisions along the top, but this was the only rim to have any decoration. There was some evidence for vessel use. One jar had a single hole neatly drilled through the middle of the base, a characteristic seen more frequently in the late Iron Age, and one vessel in fabric 1 (from feature 706) had a substantial burnt residue on the interior of a number of joining sherds, consistent with its use as a cooking pot. Slight traces of burning were occasionally present on other sherds, but were not recorded systematically at this stage.

6.2.5 *Context*

6.2.5.1. The great majority of the Iron Age pottery (65.5% of sherds, almost 80% of weight) derived from Trench 7, with smaller amounts in Trench 6 and a few sherds in Trenches 1, 4, 17 and 19. There was no conclusive indication of variations in the character of the assemblage - ie either the range of fabrics and forms, or date - from one trench to another. In fact the pottery derived from a quite limited number of features, and with the exception of a pit fill 607 (which produced eight sherds) came entirely from ditches, though this reflects the limited range of excavated feature types, rather than any particular pattern of rubbish disposal.

6.2.6 *Chronology and General Discussion*

6.2.6.1. The assemblage appears to indicate a relatively restricted chronological range for the prehistoric activity on the site, which can be assigned to the Middle Iron Age. The fabrics, vessel forms and characteristic surface treatment are all typical of that period within the region, but closer dating within the overall range for scored wares is not possible. This style is thought not to be common before the mid 3rd century BC, and may have continued into the 1st century AD in the Trent, Soar and lower Nene Valleys (Elsdon 1992, 89). The quantity and condition of the pottery indicates that it derives from domestic settlement located close to if not partly within the excavated trenches.

6.3 **Medieval pottery and post-medieval pottery** by Paul Blinkhorn

6.3.1. The medieval and post-medieval pottery assemblage comprised 22 sherds with a total weight of 420g. The number and weight of sherds per fabric type per context is shown in table 1.

Table 1: Medieval and post-medieval pottery, number and weight of sherds per fabric type. per context.

Context	Medieval Sandy Ware	Medieval Shelly Ware	Brill/Boarstall Ware	Late Medieval Oxidized Ware	Post-Medieval Wares	Assemblage Date	Comments
301					1 (96)	18th/19thC	18th/19thC Ironglazed Earthenware
1102					1 (67)	18th/19thC	18th/19thC Ironglazed Earthenware
1201			1 (4)	2 (32)		M15thC+?	
1202		1 (4)				1100+?	
1205		4 (32)		8 (162)		M15thC+?	
1207	3 (20)			1 (3)		M15thC+?	
Total	3 (20)	5 (36)	1 (4)	11 (197)	2 (163)		

- 6.3.2. All of the assemblages appear to be mid-15th century or later, with the exception of 1202, which produced a single sherd of medieval shelly coarseware. This can be given a broad date range of c. AD1100-1400. The presence of such wares in the later features, along with sandy coarsewares of a similar date, and a single abraded sherd of Brill/Boarstall ware (c. AD1200-1500) means that it seems likely that there was earlier medieval activity at the site.

6.4 *Fired clay*

- 6.4.1. Fired clay was recovered from features in Trenches 1, 4, 6, 7 and 19 and therefore almost certainly all Iron Age in date. A large fired clay object with a hole from Ditch 706 is possibly a fragment of a loomweight although it may also be an oven fragments which occur on Iron Age sites such as Grove Farm in Enderby (Clay 1992).

7. ENVIRONMENTAL

7.1 **Animal Bones** By Nicky Scott

- 7.1.1. All the bones from the evaluation were quickly scanned to assess the condition and most represented species, exact bone counts were not calculated.
- 7.1.2. In general the bone was rather fragmented but the surface condition was reasonable and a number of cut marks were associated with carcass dismembering eg. astragalus from context 704.
- 7.1.3. The most predominant species was cattle, although caprine bones were also significant. There were several horse bones and occasional pig.

7.2 Environmental Analysis by Greg Campbell

Bulk samples were taken from two ditches:

Context	603	604	704
Sample No.	1	2	3
Type	ditch fill	ditch fill	ditch fill
Vol (litres)	40	40	40
Grain	-	5	15
Chaff	2	4	1
Weeds	20	50	150
Total	22	59	166

Introduction and Methods

- 7.2.1. In order to assess the preservation of the various environmental indicators at the site, samples from three deposits were collected. All three were ditch fills, two from the ditch complex in Trench 6 (fills 603 and 604), and the upper fill of the ditch in Trench 7 (fill 704).
- 7.2.2. Following pre-processing treatment to break down these clay-rich deposits, 40 litres of each was processed to extract the charred plant remains by flotation in a modified Siraf flotation machine, with the sample held on 0.5 mm mesh and the flot collected on 0.25 mm mesh. The mineral residue that remained following the processing was washed through a stack of 10 and 4 mm sieves. The coarse residue fraction (<10 mm) was sorted for bones and artefacts, and the medium residue fraction (10-4 mm) was sorted for bone, artefacts other than fired clay, and wood charcoal (which was added to the flot). The finest fraction (4-0.5 mm) was scanned to determine if recovery of the charred material by machine flotation was satisfactory; no sample required bucket-flotation of the finest fraction was required.
- 7.2.3. To act as a qualitative measure of the bones of small animals and fish at the site, the finest residue of the sample richest in bone (fill 704) was sieved through a 2 mm sieve, partly air-dried, and rapidly sorted.

Results

- 7.2.4. The flots were assessed by sieving through a stack of 4, 2, 1 and 0.3 mm sieves and then scanning each portion rapidly for charred remains under binocular magnification, without consulting any reference material. All generic or specific identifications are therefore provisional, and all quantities are likely to be underestimated. Individual sample results are presented below, and are summarised here.
- 7.2.5. Very recent contamination (principally herbaceous plant roots, with some coal in small fragments) made up the bulk of all the flots. All the flots were small, and remains were not highly concentrated.
- 7.2.6. Wood charcoal made up the bulk of the charred remains, but was badly preserved and broken up into small fragments; only about a fifth of the charcoal would be

identifiable. Charred grains were found, but never in large numbers, and most were abraded or ruptured during charring. Chaff was also present in small amounts, mostly glume bases of probable hulled wheat, with oat (*Avena*) awn fragments from fill 604. By far the largest amount of identifiable charred plant remains were small seeds. These were noted in all the samples, and made up about 150 items in the richest flot (from ditch fill 704).

- 7.2.7. This quality of charred plant preservation is unusual in ditch fills, where charred remains are relatively seldom discarded and can be subjected to destruction by repeated wetting and drying, and by abrasion in flowing water. It also is unusual in the high concentration of weeds, which may indicate that sieving of crops to remove their weed seeds (the stage of processing between threshing and milling) was a prominent activity at the site.
- 7.2.8. The bones of large animals were very plentiful in the samples, and were well-preserved, reinforcing the view of excellent preservation of bone from hand-excavation. Surface pitting, abrasion and leaching-induced weakness were almost absent, and some butchery-marks were very clear. However, breakage during recovery was probably reduced by sieving compared to the hand-recovered material, and the smaller elements of the large animals (teeth, wrist-, ankle- and finger-bones) were obviously present in the sieved material.
- 7.2.9. Bones of small animals and fish appeared absent during the sieving and the recovery on site. The fine residue from the bone-rich sample (fill 704) produced virtually no small animal bones, and absolutely no fish. These absences may be the result of all the sampled deposits being ditch fills, and preservation may be different in pit fills (for example).
- 7.2.10. Land- and fresh-water snails were absent from the deposits. This is unexpected given the good preservation of bone, and is probably due to the calcium carbonate required to make shells not being available in the local geology.

Conclusions

- 7.2.11. Charred remains are preserved at the site. The number of charred remains recovered was small, so larger sample sizes (40-50 litres) would appear to be required to recover useful assemblages. Wood charcoal appears badly preserved, and need not be a high priority. The other charred remains appear to be dominated by sieving of grain for weeds; this bias needs to be tested. The large numbers of weeds (the precise indicators of crop ecology) should allow the reconstruction of the nature of the arable cultivation.
- 7.2.12. Subsistence information based on the use of animals appears unusually rich at the site, but the clay nature of the deposits is likely to inhibit recovery. This amplifies the usual bias in hand-retrieved material against the smaller bones of the large animals (needed to indicate the balance between butchery, kitchen and table waste) and all the bones of the smaller animals (needed to identify the full range of animals exploited at the site). The apparent lack of small animals and fish needs to be confirmed. A similar recovery bias is likely to exist for pottery and other artefacts. The clay-rich nature of the deposits also means dry sieving on site will lead to heavy

breakage of the items sought. A programme of wet-sieving of large volumes of fill (100-120 litres) from a range of features is recommended, probably in conjunction with the recovery of charred remains.

- 7.2.13. Land-use reconstruction cannot be based on the terrestrial snails, but will have to be based on pedological and micromorphological studies of buried ground surfaces (if any), and on pollen and plant-tissues preserved in permanently waterlogged deposits in the bases of deep features (if any).

8. DISCUSSION AND INTERPRETATION

8.1 *Iron Age Occupation (Trenches 4, 6, 7, & 19)*

- 8.1.1. The evaluation identified an Iron Age settlement site centred on the trenches 4, 6, 7 & 19. The results indicate:

i) The site was occupied over a relatively well defined period in the middle Iron Age.

ii) A significant assemblage of pottery was recovered from the evaluation, with no indications of contamination of pottery from other periods. Other Iron Age sites in the area have produced few features and only small amounts of pottery (Liddle 1994).

iii) It is very likely that domestic post-built Iron Age houses lie within this area. Although none were located in the evaluation the quantity of pottery, sooty deposits on one piece of pottery and the probable loomweight; would all indicate domestic occupation in the immediate area. The curving ditch 1910 may well be a gully surrounding a house.

iv) The medieval ridge and furrow has truncated some of the Iron Age features by about 0.30m, although generally the preservation of the site is good. There were some clay field drains which cut across some of the Iron Age features, notably across ditch 712.

v) The preservation of bone is good and the analysis of the environmental samples show that carbonised plant material is widespread, especially in the later dark grey ditch deposits.

vi) Intercutting ditches were recorded and demonstrate that the layout of the settlement probably changed over time and therefore different phases could be evident over the site as a whole.

vii) The Iron Age occupation is well defined within the area of the trenches mentioned above and occupies an area of approximately one hectare. The extent of the Iron Age occupation west of Trench 6 is not known as this is outside the area evaluated.

viii) Peripheral ditches were located away from the main area of occupation in Trenches 3, 8, 13, 17 & 18. The dating evidence from these ditches was sparse

although the presence of French burr indicates a post-medieval date. However post-medieval mills associated with a farm would often have French burr stones to mill flour and monolithic quartzite for grinding animal feed (Tucker 1977).

- 8.2.6. There is no obvious explanation for the disturbance 1208 which formed a substantial hollow in the top of the mound. This is almost certainly of a recent date and in the absence of any similar disturbance on the site, its position in the centre of the mound is probably deliberate; indicating it may be an earlier investigation into the mound. In 1940 an investigation into a supposed barrow at Silverstone, Northamptonshire was abandoned after it was found to be a post mill (Zeepvat 1980).

8.3 Impact of the development

- 8.3.1. The impact of the development on the area of Iron Age settlement (Trenches 4, 6, 7 and 19) is shown in Fig. 4. This is based on the plans prepared by Gordon White and Hood (Drawing No. 4949 77 D) and dated May 1997. The east side of the retail food store encroaches onto Trench 6 and Trench 4 is within the footprint of the adjacent non food retail unit. Trenches 7 and 19 are within the area of disabled and parent child parking and walkways on the north side of the car park.
- 8.3.2. This area is the highest on the site and any reduction in level even if limited to topsoil stripping will have significant impact on the Iron Age features.

A. Parkinson
OAU
Sept. 1997

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Sites and Monuments Record (SMR), See Gazetteer.
Earthwork survey of mound 1:1000

GAZETTEER

Gazetteer of archaeological information from SMR data in the vicinity of Tesco development,
Hamilton, Leicester

OAU NO	Description	SMR	Reference
1	Anglo Saxon Pottery	CW	SK 631 071
2	Flint scatter: Flakes, cores and scraper	DF	SK 635 071 (c)
3	Anglo Saxon Pottery	DE	SK 6332 0742
4	Prehistoric flint scatter Iron Age pottery (6 sherds) Romano-British pottery (16 sherds) "Various" Roman bronzes found by metal detector	DD	SK 631 076
5	Bronze Age occupation ? suggested by finds which included a bronze Awl usually associated with beaker burials. Romano-British Structure excavated by Leicestershire Archaeological Unit in 1985 and 1987/8 revealed the site a low status Roman farmstead which comprised of timber buildings, drainage gullies along with cobbled surfaces and a large ditch dated to the 3rd and 4th centuries AD. The pottery suggest the site was occupied from the very late Iron Age through to the end of the Roman period. Two inhumations were disturbed by later Roman ditches. Fieldwalking produced Roman pottery as well as a flint scatter.	AP	SK 629 072
6	Flint Scatter	DH	SK 631 072 (c)
7	Flint Scatter	AT	SK628 073
8	Prehistoric pottery	DG	SK 638 074 (c)
9	Iron Age occupation: and Iron Age coin and included pottery of E. Midlands scored ware, grog and stone tempered.	DA	SK 629 069
10	Neolithic axe, hammer stone and four flint scrapers.	CR	SK 623 063
11	A watching brief between Abbots Road and Scraftoft Lane found a moulded and dressed sandstone block.	DP	SK 628 055 (c)
12	Roman occupation ? Medieval occupation An L-shaped ditch shown as a "moat" on OS maps; 4-7 feet deep with an outer bank. These features enclosed an area of c. 2 acres. Test holes showed that the associated raised platform was focus of occupation in the 13th century AD. Roman finds consisted of eight pottery sherds, a coin and one tessera.	CN	SK 626 059

Gazetteer of archaeological information from SMR data in the vicinity of Tesco development,
Hamilton, Leicester

OAU NO	Description	SMR	Reference
13	Medieval manor house, excavated P. A. Rahtz 1959. Excavations revealed substantial masonry structures along with a silver shilling 1558/60. Two coins of Edward II and Edward IV are supposedly found within this area.	CM	SK 630 058
14	Mound with hollow situated among the ridge and furrow: Medieval or post-medieval. Shown on 1886 edition of OS map and surveyed at 1:1000 (Hartley 1989, The Medieval Earthworks of Central Leicestershire) .	BT	SK 631 064
15	Windmill mound: Medieval or post-medieval	BJ	SK 628 063
16	Medieval village core?	DQ	SK 625 061 (c)
17	Medieval Manorial complex consisting of a barn, church, chapel, three fishponds and ?medieval rabbit warren. The Manor house is 16th century and enlarged in the 18th century (a date of 1789 on the gable). The fish ponds are represented by shallow depressions.	CL	SK 624 060 (c)
18	Deserted Medieval Village of Hamilton		

Appendix 1 Archaeological Context Inventory

Trench	Ctxt	Type	width (m)	thick. (m)	Comment	Finds	No.	Date
TRENCH 1								
	101	Layer		0.18	Topsoil			
	102	Layer		0.30	Earlier ploughsoil			
	103	Fill		0.30	Fill of Ditch 106			
	104	Fill		0.18	Fill of Ditch 106	fired clay	6	
						pot	7	IA
						bone		
	105	Fill		0.10	Fill of Ditch 106	bone		
						fired clay	1	
	106	Cut	1.90	0.48	Ditch			
	107	Layer			Natural			
TRENCH 2								
	201	Layer		0.20	Topsoil			
	202	Layer		0.20	Earlier ploughsoil			
	203	Layer			Natural			
TRENCH 3								
	301	Layer		0.25	Topsoil	pot	1	18th/ 19th century
	302	Layer		0.38	Earlier ploughsoil			
	303	Layer			Natural			
	304	Fill		0.56	Fill of Ditch 305			
	305	Ditch	2.35	0.56	Ditch			
TRENCH 4								
	401	Layer		0.18	Topsoil			
	402	Layer		0.20	Earlier ploughsoil	Flint core	1	
	403	Layer			Natural			
	404	Ditch	1.14	0.56	Ditch			
	405	Ditch	1.60	0.78	Ditch			
	406	Fill		0.26	Fill of Ditch 405			
	407	Fill		0.14	Fill of Ditch 405	bone		
						pot	1	IA

Appendix 1 Archaeological Context Inventory

Trench	Ctxt	Type	width (m)	thick. (m)	Comment	Finds	No.	Date
	408	Fill		0.50	Fill of Ditch 405	pot	5	IA
	409	Fill		0.26	Fill of Ditch 404	bone		
	410	Fill		0.40	Fill of Ditch 404	fired clay	4	
TRENCH 5								
	501	Layer		0.18	Topsoil			
	502	Layer		0.16	Earlier ploughsoil			
	503	Layer		0.20	Earlier ploughsoil			
	504	Layer			Natural			
TRENCH 6								
	601	Layer		0.20	Topsoil			
	602	Layer		0.28	Earlier ploughsoil	flint	1	
	603	Fill		0.30	Fill of Ditch 606	bone		
						fired clay	1	
						pot	27	IA
	604	Fill		0.12	Fill of Ditch 606	fired clay	3	
						pot	39	IA
						Bone		
	605	Fill		0.20	Fill of Ditch 606			
	606	Ditch	1.20	0.54	Ditch			
	607	Fill		0.45	Fill of Pit 609	bone		
						pot	8	IA
	608	Fill		0.12	Fill of Pit 609			
	609	Pit	0.85	0.58	Pit			
	610	Fill		0.28	Fill of ?Ditch 612	bone		
	611	Fill		0.10	Fill of ?Ditch 612			
	612	?Ditch	0.90	0.38	?Ditch			
	613	Fill			Fill of Ditch 614			
	614	Ditch	0.51		Ditch: unexcavated			
	615	Layer			Natural			
TRENCH 7								
	701	Layer		0.18	Topsoil			
	702	Layer		0.22	Earlier ploughsoil	CBM		

Appendix 1 Archaeological Context Inventory

Trench	Ctxt	Type	width (m)	thick. (m)	Comment	Finds	No.	Date
						bone		
	703	Layer			Natural			
	704	Fill		0.40	Fill of Ditch 706	flint	1	
						bone		
						pot	124	IA
						fired clay probable loomweight		
						fired clay	7	
	705	Fill		0.32	Fill of Ditch 706			
	706	Ditch	1.20	0.45	Ditch			
	707	Fill		0.40	Fill of Ditch 708	bone		
	708	Ditch	1.19	0.40	Ditch			
	709	Fill		0.25	Fill of Ditch 712	bone		
						pot	55	IA
						fired clay	3	
	710	Fill		0.25	Fill of Ditch 712			
	711	Fill		0.23	Fill of Ditch 712	bone		
	712	Ditch	2.20	0.55	Ditch			
	713	Fill		0.15	Fill of Ditch 712	bone		
						pot	2	IA
	714	Ditch	1.00	0.70	Ditch			
	715	Fill		0.20	Fill of Ditch 714			
	716	Fill		0.30	Fill of Ditch 714			
	717	Fill		0.22	Fill of Ditch 714			
	718	Fill		0.34	Fill of Ditch 719			
	719	Ditch	1.50	0.39	Ditch			
	720	Fill			Fill of Ditch 721			
	721	Ditch	1.12		Ditch: unexcavated			
	722	Fill			Fill of Ditch 723			
	723	Ditch	0.76		Ditch: unexcavated			
TRENCH 8								
	801	Layer		0.28	Topsoil			

Appendix 1 Archaeological Context Inventory

Trench	Ctxt	Type	width (m)	thick. (m)	Comment	Finds	No.	Date
	802	Layer		0.20	Earlier ploughsoil			
	803	Layer		0.08	Earlier ploughsoil			
	804	Layer		0.08	?Earlier ploughsoil			
	805	Layer			Natural			
	806	Ditch	1.26	0.52	Ditch			
	807	Fill		0.20	Fill of Ditch 806			
	808	Fill		0.44	Fill of Ditch 806	bone		
	809	Cut	1.30	0.70	? Treehole			
	810	Fill		0.10	Fill of 809			
	811	Fill		0.28	Fill of 809			
	812	Fill		0.44	Fill of 809			
TRENCH 9								
	901	Layer		0.20	Topsoil			
	902	Layer		0.20	Earlier ploughsoil			
	903	Layer		0.16	Earlier ploughsoil			
	904	Layer		0.22	?Natural			
	905	Layer			Natural			
TRENCH 10								
	1001	Layer		0.20	Topsoil			
	1002	Layer		0.25	Earlier ploughsoil			
	1003	Layer		0.28	Earlier ploughsoil			
	1004	Layer		0.15	Earlier ploughsoil			
	1005	Layer		0.12	Natural			
	1006	Layer			Natural			
TRENCH 11								
	1101	Layer		0.20	Topsoil			
	1102	Layer		0.20	Earlier ploughsoil	pot	1	18th/ 19th century
	1103	Layer			Natural			
	1104	Layer		0.20	Earlier ploughsoil			
TRENCH 12								
	1201	Layer		0.15	Topsoil	slate	1	

Appendix 1 Archaeological Context Inventory

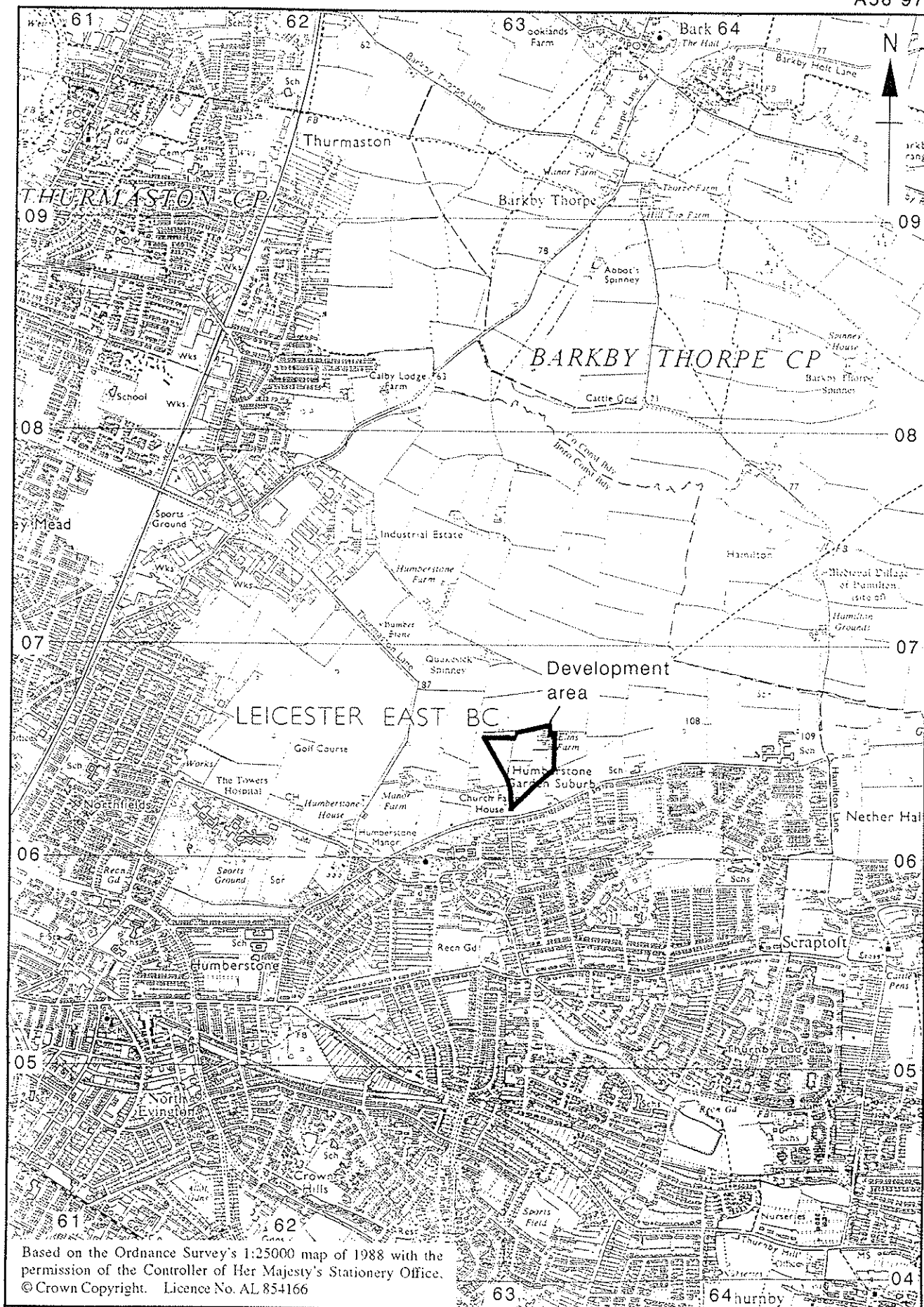
Trench	Ctxt	Type	width (m)	thick. (m)	Comment	Finds	No.	Date
						pot	3	Med.
						CBM		
	1202	Layer		0.30	Earlier ploughsoil	horseshoe	1	
						pot	1	Med.
	1203	Layer			Natural			
	1204	Layer		0.15	Redeposited bunter pebbles and stone	millstone frags.	2	
	1205	Layer		0.12	Bunter pebbles, base for windmill cross trees.	Fe Object	1	
						pot	12	Med.
						millstone	1	
						bone		
	1206	Layer		0.45	Mound material			
	1207	Fill		0.90+	Fill of pit/disturbance 1208	pot	4	Med.
						millstone frag.	1	
	1208	Cut	4.00	0.90+	Pit/ disturbance			
TRENCH 13								
	1301	Layer		0.20	Topsoil			
	1302	Layer		0.18	Earlier ploughsoil			
	1303	Layer		0.20	Earlier ploughsoil			
	1304	Layer		0.20	?Earlier ploughsoil			
	1305	Layer			Natural			
	1306	Ditch	0.96	0.70	Ditch			
	1307	Fill		0.32	Fill of Ditch 1306			
	1308	Fill		0.46	Fill of Ditch 1306	flint	1	
						bone		
	1309	Cut	0.36	0.18	Gully			
	1310	Fill		0.18	Fill of gully 1309			
	1311	Cut	0.36	0.18	Gully			
	1312	Fill		0.18	Fill of gully 1311			
TRENCH 14								
	1401	Layer		0.20	Topsoil			

Appendix 1 Archaeological Context Inventory

Trench	Ctxt	Type	width (m)	thick. (m)	Comment	Finds	No.	Date
	1402	Layer		0.36	Earlier ploughsoil			
	1403	Layer			Natural			
TRENCH 15								
	1501	Layer		0.24	Topsoil			
	1502	Layer		0.20	Earlier ploughsoil			
	1503	Layer			Natural			
TRENCH 16								
	1601	Layer		0.20	Topsoil			
	1602	Layer		0.20	Earlier ploughsoil			
	1603	Layer			Natural			
TRENCH 17								
	1701	Layer		0.30	Topsoil			
	1702	Layer		0.26	Earlier ploughsoil			
	1703	Layer		0.16	Earlier ploughsoil			
	1704	Layer			Natural			
	1705	Cut	0.98	0.56	Ditch			
	1706	Fill		0.34	Fill of Ditch 1705	?Quernstone frag.	1	
						pot	2	IA
						bone		
	1707	Fill		0.30	Fill of Ditch 1705			
TRENCH 18								
	1801	Layer		0.24	Topsoil			
	1802	Layer		0.24	Earlier ploughsoil			
	1803	Layer			Natural			
	1804	Cut	2.60	0.50	Ditch			
	1805	Fill		0.50	Fill of Ditch 1804			
TRENCH 19								
	1901	Layer		0.20	Topsoil			
	1902	Layer		0.25	Earlier ploughsoil			
	1903	Layer			Natural			
	1904	Fill			Fill of Ditch 1905	flint	1	
	1905	Cut	1.00		Ditch			

Appendix 1 Archaeological Context Inventory

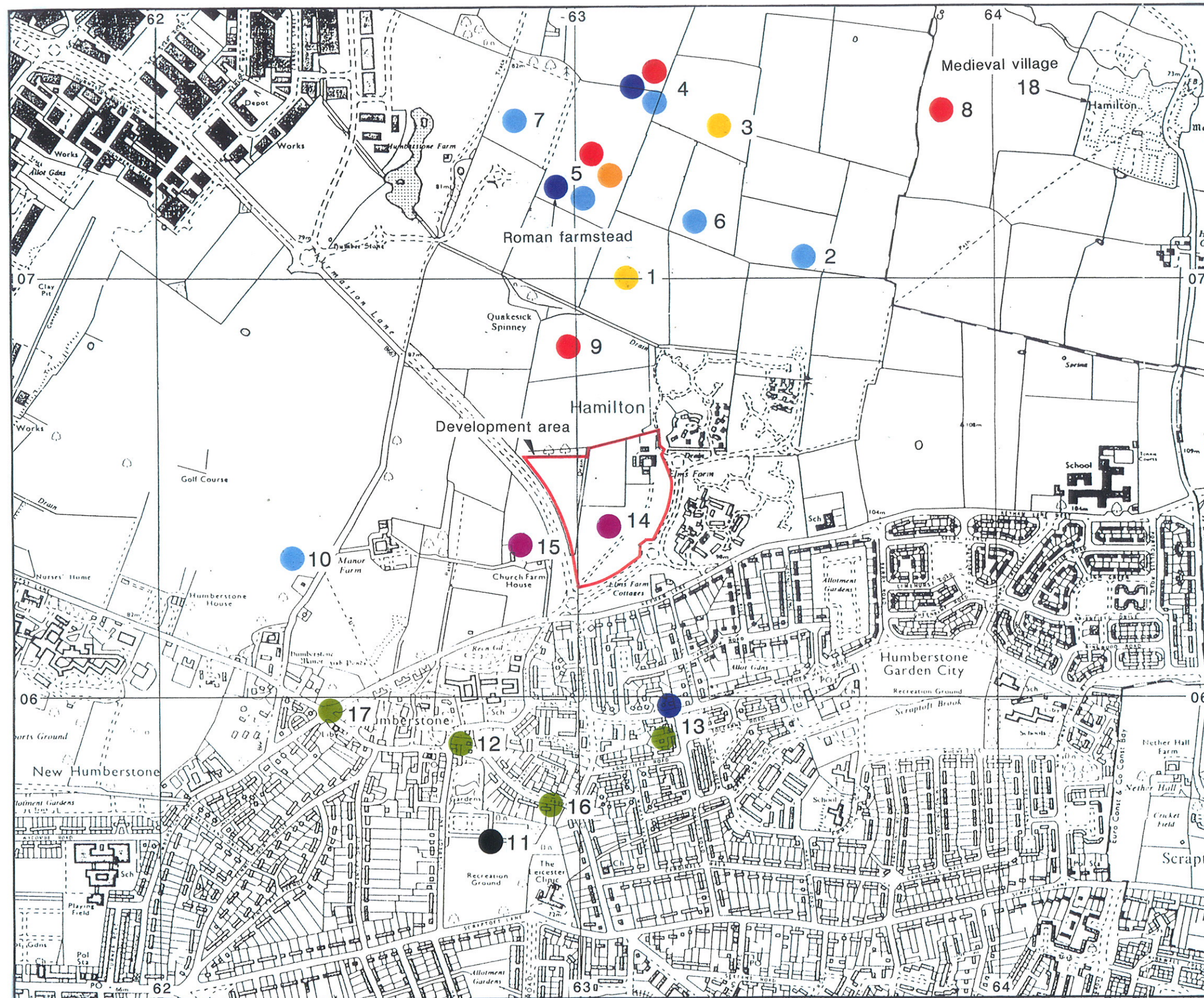
Trench	Ctxt	Type	width (m)	thick. (m)	Comment	Finds	No.	Date
	1906	Fill			Fill of Ditch 1907			
	1907	Cut	1.90		Ditch			
	1908	Layer			Part of Ditch 1909			
	1909	Fill			Fill of Ditch 1910	pot	1	IA
	1910	Cut	1.00		Curving Ditch			
	1911	Layer			?Same as 1902			
	1912	Fill			Same as 1909	bone		
						pot	5	IA
						fired clay	3	
	1913	Cut			Same as Ditch 1910			
	1914	Fill			Fill of Pit 1915	bone		
	1915	Cut	1.00		Pit			
<p>IA = Iron Age Med. = Medieval</p>								



Site location

scale 1:25000

Figure 1

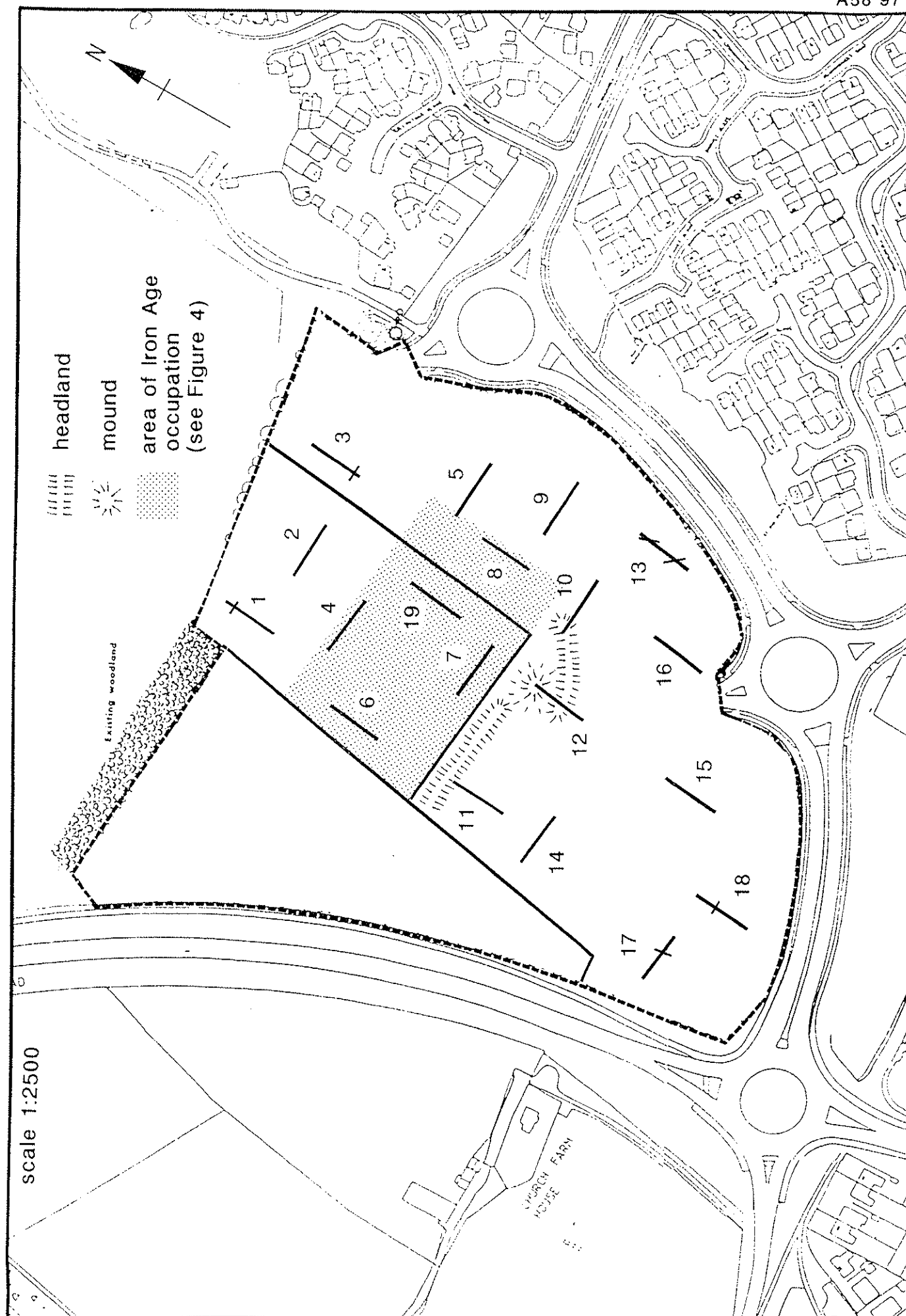


- Prehistoric flint scatter
- Bronze Age pottery
- Iron Age pottery
- Romano-British pottery
- Anglo-Saxon pottery
- Medieval
- Post-Medieval windmill mounds ?
- Unknown

scale 1:10,000

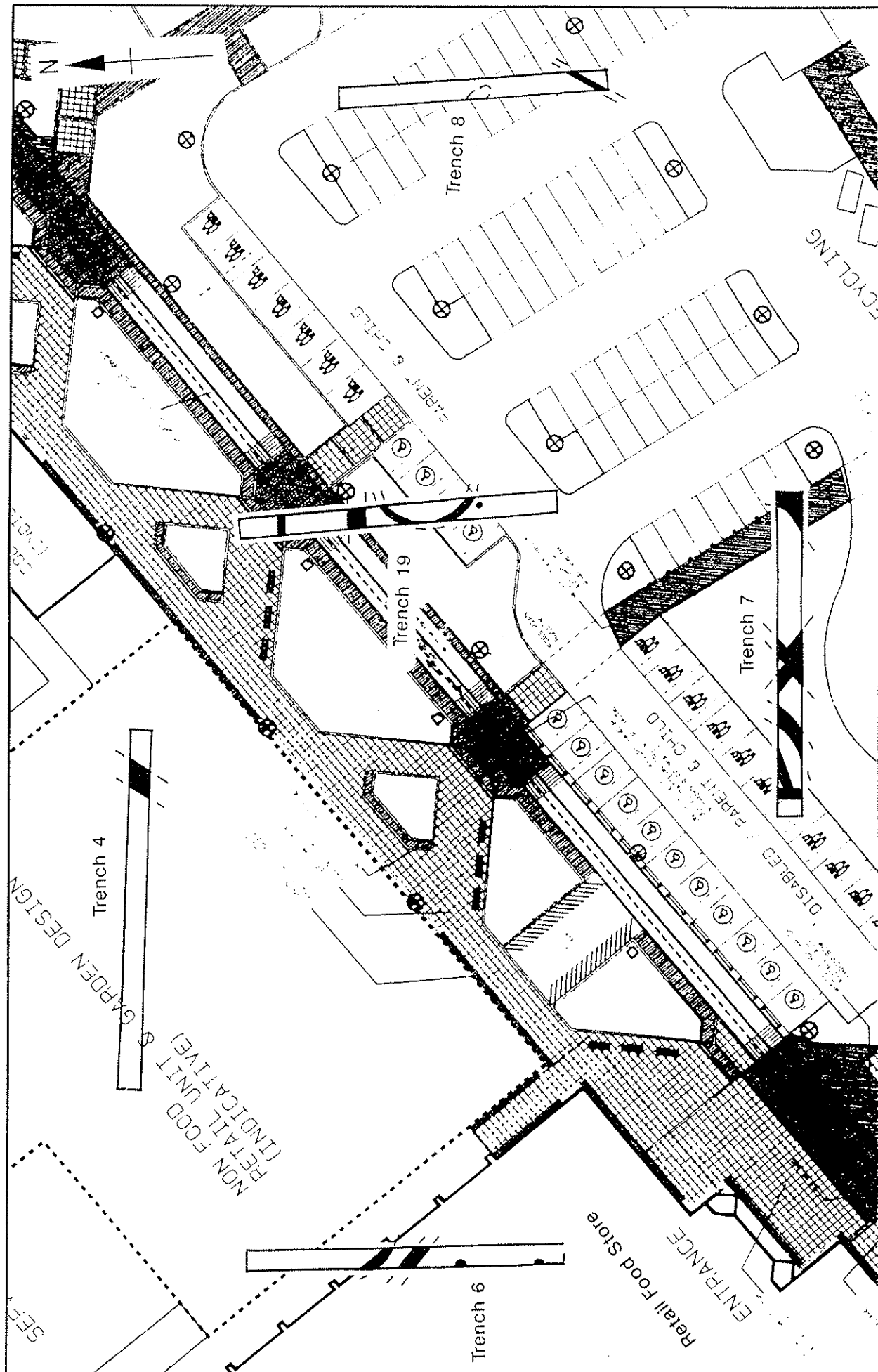


650m

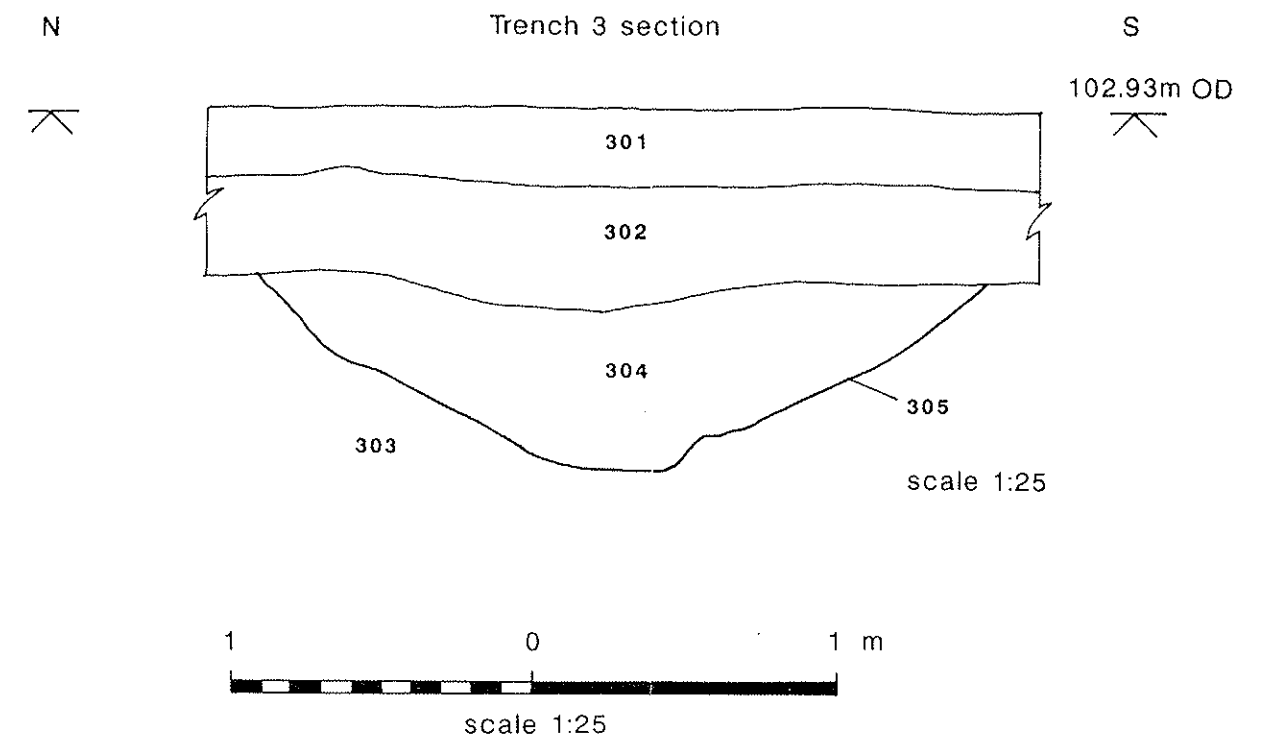
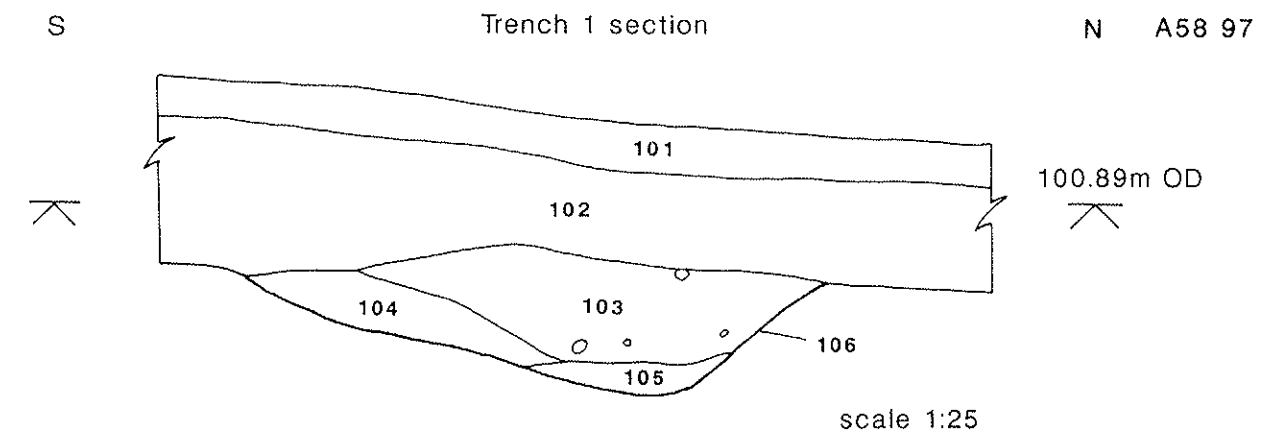
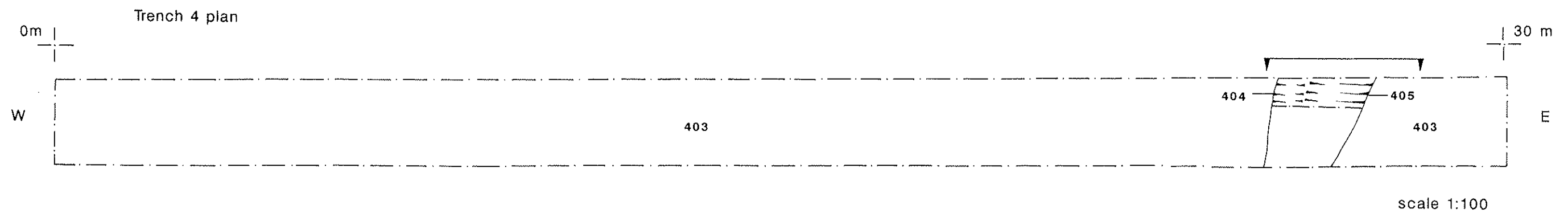
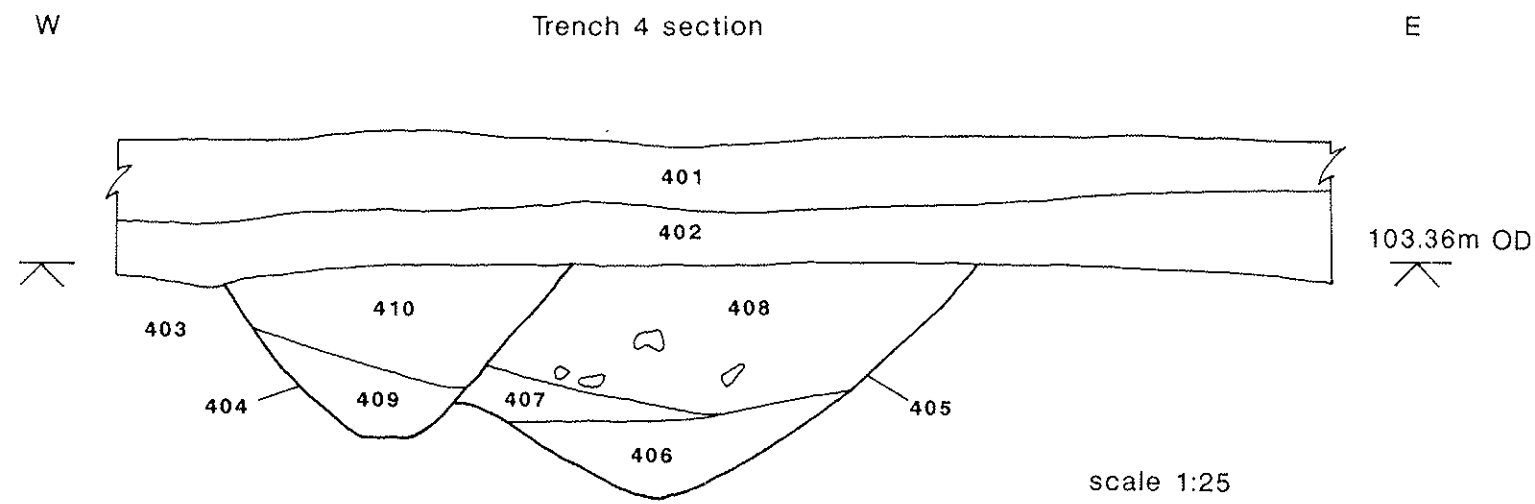
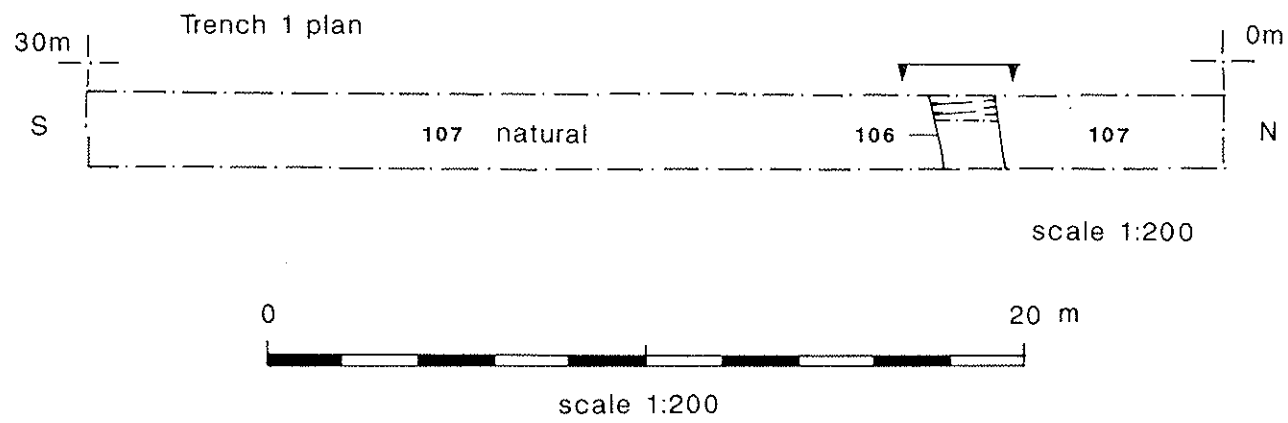


Trench locations

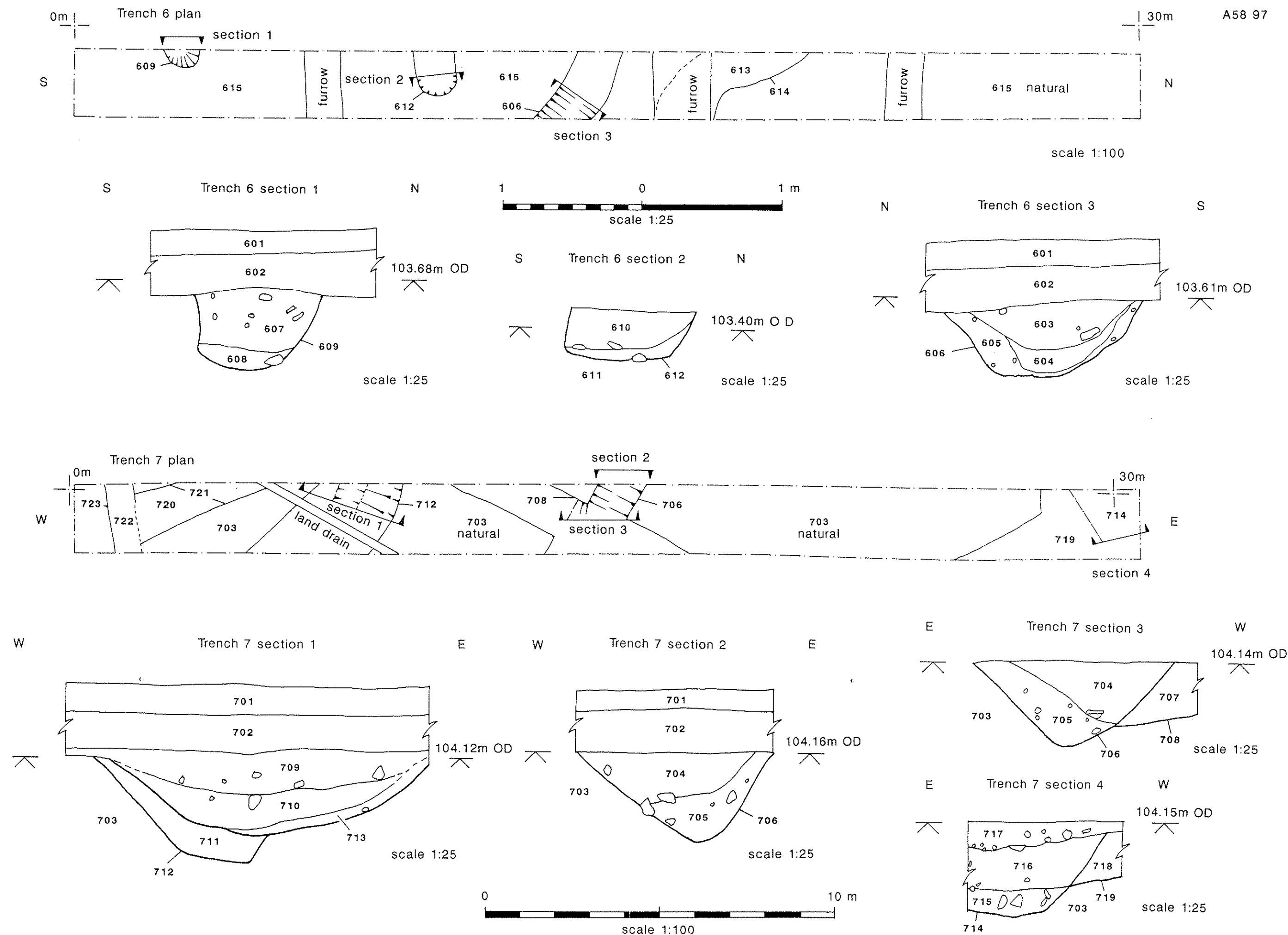
Figure 3



Trenches 4,6,7,8 and 19 showing Iron Age features in relation to proposed development

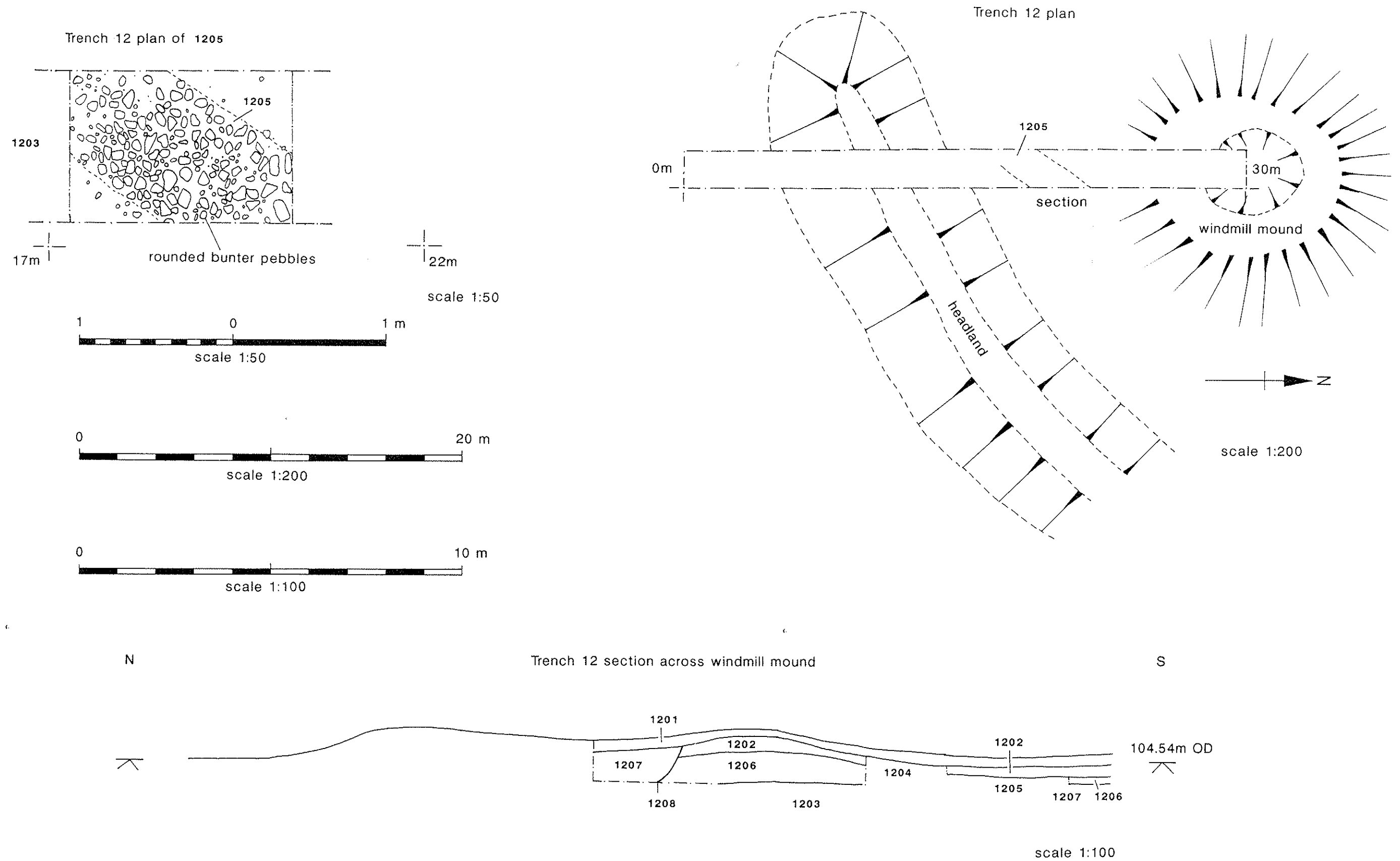


Trenches 1, 3 and 4: plans and sections



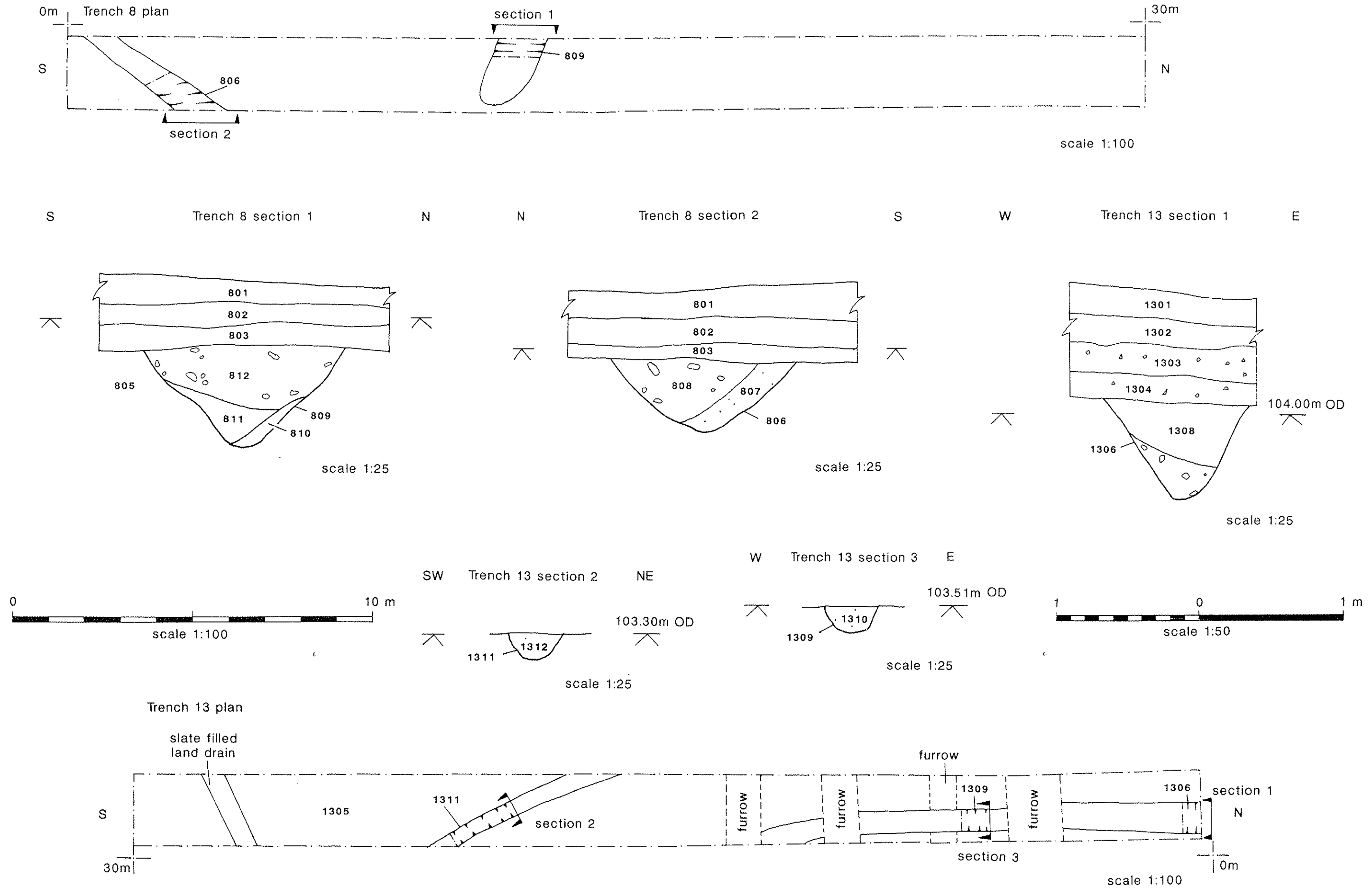
Trenches 6 and 7 : plans and sections

Figure 6



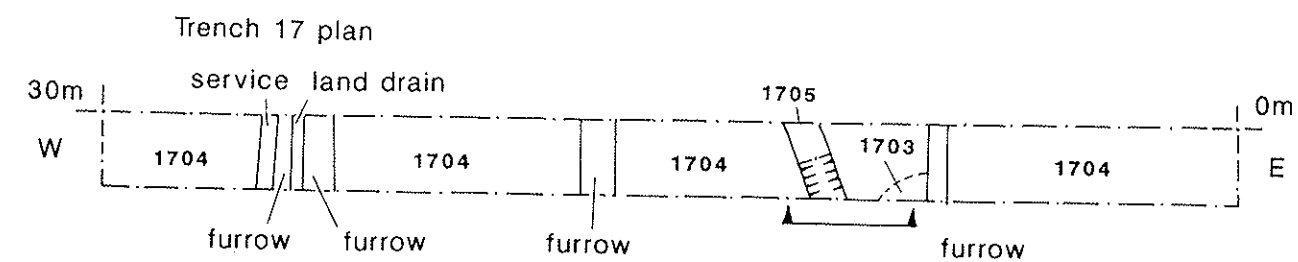
Trench 12: plans and section

Figure 7

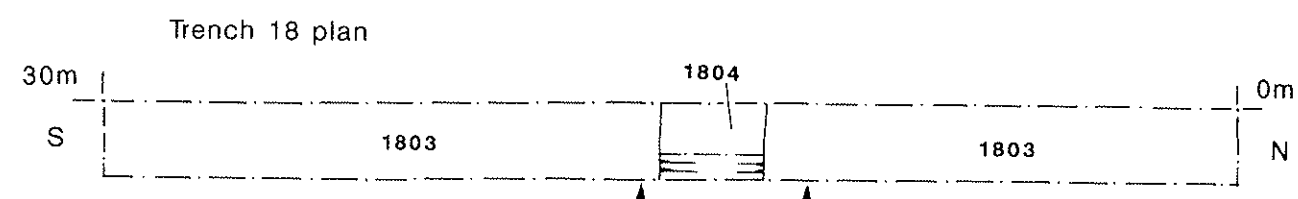


Trenches 8 and 13: plans and sections

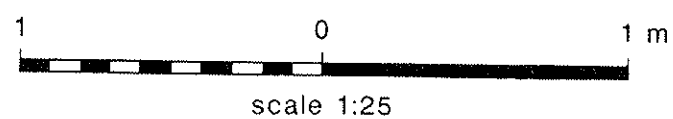
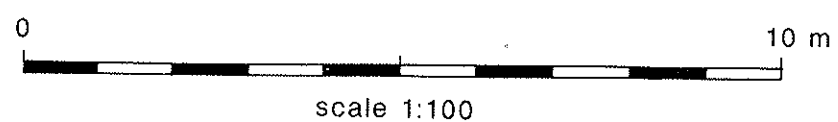
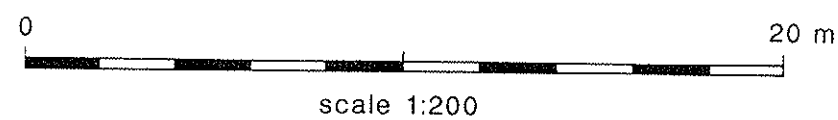
Figure 8



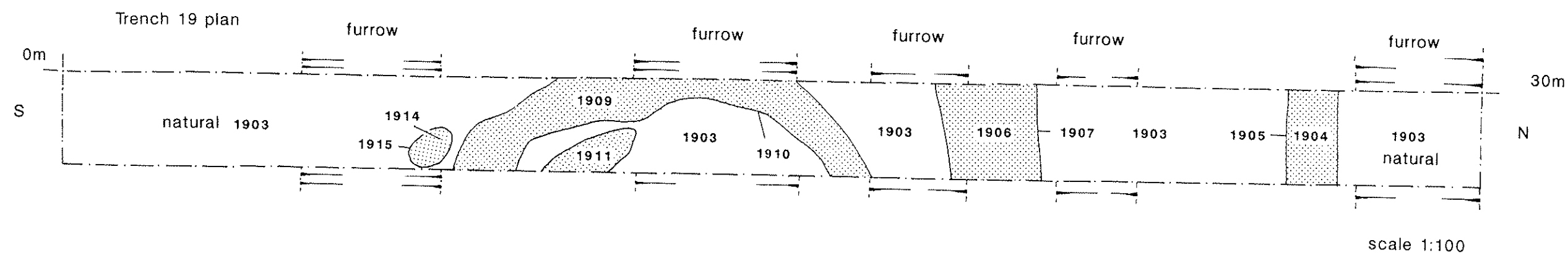
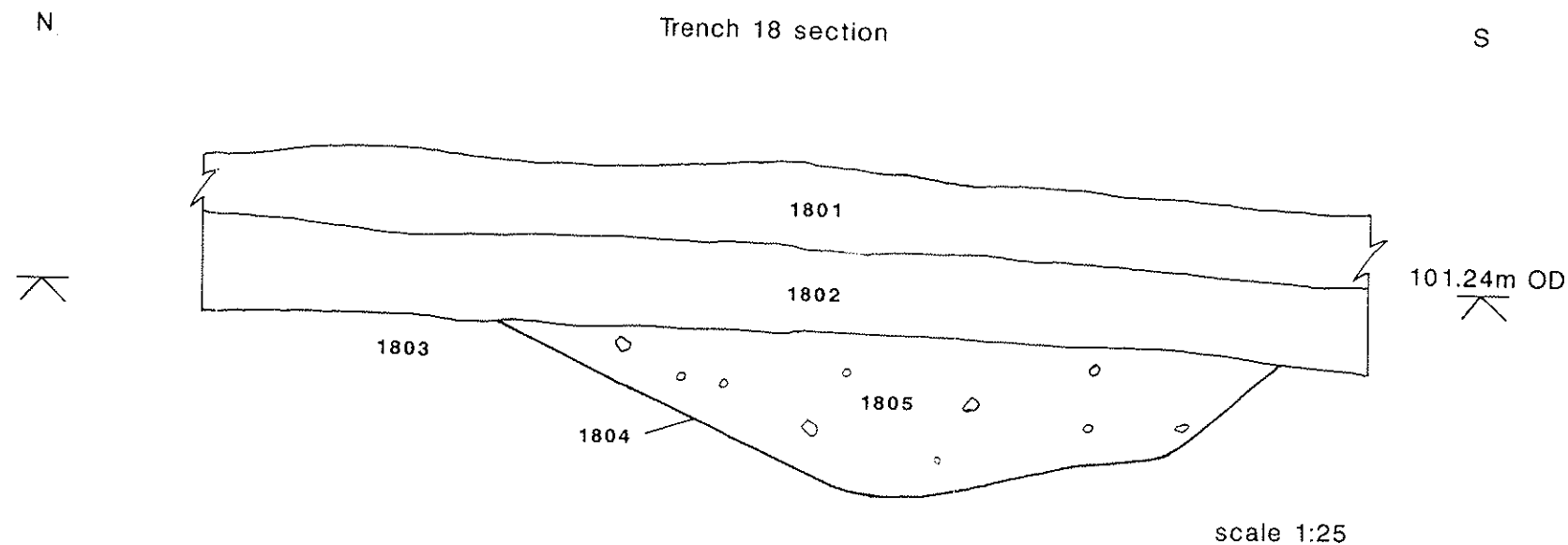
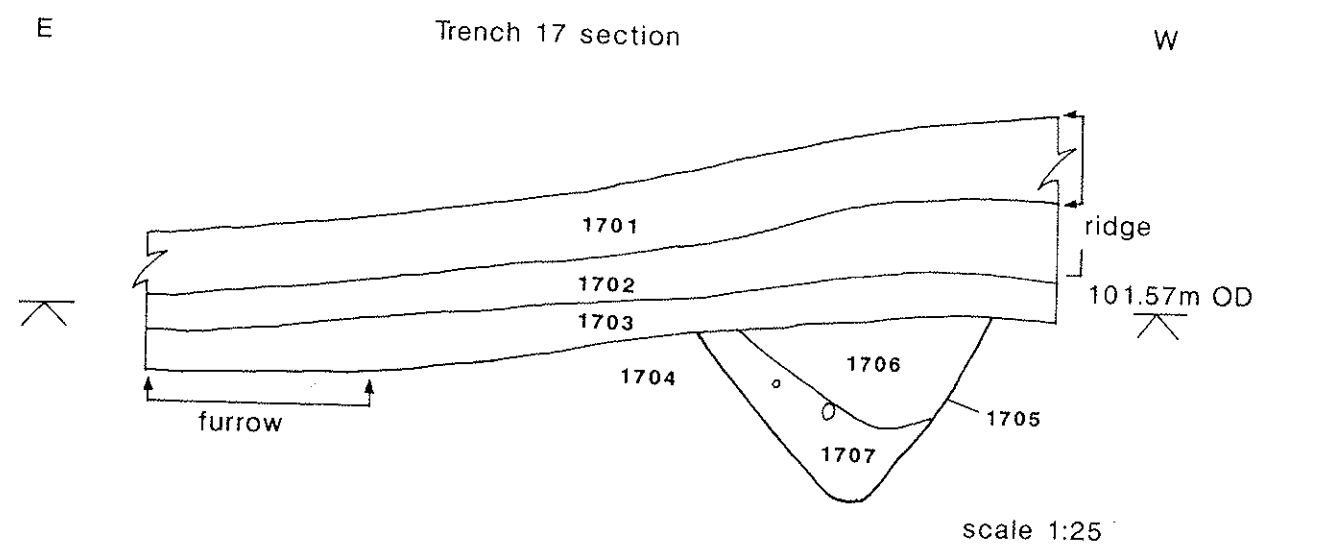
scale 1:200



scale 1:200



unexcavated features



Trenches 17, 18 and 19: plans and sections

Figure 9



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