

# Northamptonshire Archaeology

Archaeological excavation at  
Harlestone Quarry  
near Northampton  
October 2006



Leon Field & Andy Chapman

December 2006  
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Report 06/173

## Northamptonshire Archaeology

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**OASIS REPORT FORM**

| <b>PROJECT DETAILS</b>  |   |  |
|---|---|--|
| Project title   | Archaeological excavation at Harlestone Quarry, near Northampton, October 2006  |  |
| Short description<br>(250 words maximum)                        | An area of approximately 1.2ha was stripped. Radiocarbon dating indicates that residual charcoal of early Bronze Age date had been deposited in a pit alignment, while a single small pit containing burnt debris was also of early Bronze Age date. Major features included part of a pit alignment of probable late Bronze Age/early Iron Age date. A linear boundary ditch and a scatter of postholes and pits define an area of open settlement that included remnants of possible roundhouses and perhaps two four-post structures. A small pottery assemblage may be of early-middle Iron Age date. Furrows of a medieval ridge and furrow field system were also recorded. |  |
| Project type<br>(e.g. desk-based, field evaluation etc)         | Excavation  |  |
| Previous work<br>(reference to organisation or SMR numbers etc) | Desk-based assessment (JSAC 1999)<br>Geophysical survey (GSB 1999)<br>Geophysical and field walking survey (NA 2003)<br>Watching brief (NA 2002 and 2004)   |  |
| Future work<br>(yes, no, unknown)                               | On-going quarry work, with evaluation preceding each phase  |  |
| Monument type<br>And period                                     | Late Bronze Age to early Iron Age pit alignment<br>Early-middle Iron Age settlement   |  |
| Significant finds<br>(artefact type and period)                 | Early-middle Iron Age pottery<br>Early Bronze Age radiocarbon dates   |  |
| <b>PROJECT LOCATION</b>   |   |  |
| County  | Northamptonshire  |  |
| Site address<br>(including postcode)                            | Harlestone Quarry, Harlestone, Northamptonshire.  |  |
| OS co-ords<br>(use grid square letter code)                     | SP 709 640  |  |
| Height OD   | 100.93  |  |
| <b>PROJECT CREATORS</b>   |   |  |
| Organisation  | Northamptonshire Archaeology  |  |
| Project brief originator  | CgMs Consulting   |  |
| Project Design originator                                       | Northamptonshire Archaeology  |  |
| Director/Supervisor   | Leon Field  |  |
| Project Manager   | Anthony Maull   |  |
| Sponsor or funding body   | CgMs Consulting   |  |
| <b>PROJECT DATE</b>   |   |  |
| Start date  | 09 October 2006   |  |
| End date  | 19 October 2006   |  |
| <b>ARCHIVES</b>   | <b>Location<br/>(Accession no.)</b>   | <b>Content (e.g. pottery, animal bone etc)</b> |
| Physical  |   |  |
| Paper   |   |  |
| Digital   |   |  |
| <b>BIBLIOGRAPHY</b>   |   |  |
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**ARCHAEOLOGICAL EXCAVATION AT  
HARLESTONE QUARRY, NEAR NORTHAMPTON  
OCTOBER 2006**

*ABSTRACT*

*In October 2006 Northamptonshire Archaeology carried out an archaeological excavation at Harlestone Quarry near Northampton on behalf of CgMs Consulting. An area of approximately 1.2 hectares was stripped. Radiocarbon dating indicates that residual charcoal of early Bronze Age date had been deposited in a pit of a later pit alignment. A single isolated small pit containing burnt debris has also been radiocarbon dated to the early Bronze Age. A late Bronze Age/early Iron Age date would be expected for the pit alignment, but no dating evidence was recovered. The alignment appeared to comprise regular rectangular pits cut into both Ironstone and clay, but the pits cut into the clay had eroded sub-circular surface plans. A linear boundary ditch was also undated, but may be related to an area of open settlement that comprised a scatter of small pits and postholes, including remnants of possible roundhouses and four-post structures. The small pottery assemblage contained little diagnostic material, but an early-middle Iron Age date is likely, perhaps the 5th-4th centuries BC. Furrows of a medieval ridge and furrow field system were also recorded.*

**1 INTRODUCTION**

Northamptonshire Archaeology, on behalf of CgMs Consulting, carried out an archaeological excavation over a period of two weeks in October 2006 at Harlestone Quarry near Northampton. (Fig 1; NGR SP 705 645)

The work was undertaken as part of an application for the extraction of Ironstone at Harlestone Quarry, Northamptonshire. It forms part of an ongoing programme of works on the site and follows a desk-based assessment (Dawson 2001), a geophysical survey and field walking project (Taylor and Fisher 2003), two phases of watching brief (Maul 2002 and Lewis 2004) and a trial trenching evaluation (Upson-Smith and Maul 2004).

The extent of the works was established at a meeting held between Myk Flitcroft, Senior Environmental Planner of Northamptonshire County Council, and Mike Dawson, of CgMs Consulting, on the 14th November 2003. The aims of the archaeological investigation were set out in a Project Design prepared by CgMs Consulting (CgMs 2006).

The site lies immediately to the south of the village of Harlestone and to the west of the A428. The intended excavation area comprised a slightly undulating field, at a height of around 100m OD, with a drop-off to the south to an infilled stream. The ground also drops away to north and north-east, where there are streams that feed into the northern, Brampton branch, of the River Nene. The underlying geology is glacial boulder clay overlying strata comprising Upper Estuarine Series, Lower Estuarine Series and Northampton Sand and Ironstone (BGS 1990, sheet 185).

## 2 BACKGROUND

A desk-based assessment identified the general area as having archaeological potential (Dawson 2001). The quarry extension lay to the north of areas identified as having the greatest archaeological significance, which comprises an extensive prehistoric landscape that includes possible surviving Bronze Age and Iron Age earthworks in nearby ancient woodland and proven below ground archaeological deposits. To the east of the woodland, on Dallington Heath, there is an important prehistoric monument complex that includes a Neolithic causewayed enclosure, a probable later Neolithic henge monument, several lengths of pit alignment and also areas of Iron Age and probable Roman settlement (RCHME 1981,

Works conducted in the area of the quarry have been of less archaeological significance, as watching briefs by Northamptonshire Archaeology in 2002 and early 2004 found no archaeological deposits (Maull 2002; Lewis 2004). Geophysical reconnaissance and fieldwalking surveys were carried out during January-March 2003 (Taylor and Fisher 2003), and the geophysical survey found a previously unknown pit alignment. Its presence was confirmed by trial trenching in October 2004 (Upton-Smith & Maull 2004).

## 3 OBJECTIVES AND METHODOLOGY

The objectives of the archaeological investigation, as set out in the project brief (CgMs 2006) were as follows:

- Determine and record the presence, date, character, integrity, state of preservation and depth of burial of any archaeological deposits
- Examine the potential of the site in its relation to its environment, economy, land use and development
- Understand the archaeology of the development area in terms of the likely impact of proposed development in order to inform NCC's senior environmental planner.

An area of roughly 1.2 hectares was stripped by mechanical excavator, fitted with a 2m-wide toothless ditching bucket, operating under direct archaeological supervision at all times (Fig 2).

All potential archaeological features were investigated by hand excavation and sampled as specified in the Project Design and standard Northamptonshire Archaeology recording procedures were employed (NA 2003). All works were conducted in accordance with *IFA Standards and Guidance for Archaeological Field Evaluation* (1994, revised 2001) and the *Code of Conduct* of the Institute of Field Archaeologists (1985, revised 2000).

## 4 THE EXCAVATED EVIDENCE

### General stratigraphic sequence

Throughout the excavated area the archaeological features were cut into a natural geology that comprised a mixture of brown sands and gravels with patches of Ironstone. Little to no subsoil was found above the natural, which was usually directly overlain by topsoil, which was on average 0.27m thick.

### **Early Bronze Age activity**

There were no diagnostic artefacts of early Bronze Age date, but two radiocarbon dates both fall within this period. This would suggest that there had been some considerable activity in the area in the later 3rd and early 2nd millennium BC that had left few tangible traces.

A radiocarbon date of 2200-1980 Cal BC (95% confidence, 3710 $\pm$ 40 BP, Beta-227089) came from a small amount of charcoal recovered from the final fill (261) of pit [263] in the pit alignment (see Fig 3). This must be assumed to be residual material that had fallen into the subsidence hollow above the largely silted pit.

The other radiocarbon date was on charcoal from the fill of a small pit (Fig 2, [222]). It lay 10m to the south-west of the Iron Age settlement but had been assumed to be contemporary with the nearby features, and was dated as it was the only feature to produce a significant quantity of charcoal, 2g. The radiocarbon date of 1920-1670 Cal BC (95% confidence, 3470 $\pm$ 50 BP, Beta-227088) indicates that the feature was actually infilled in the early Bronze Age.

Pit [222] was oval in plan, 0.83m by 0.58m in diameter, with a bowl-shaped profile, 0.18m deep (Fig 4, Section 3 & Plate 1). The fill (221) was of mid brown silty sand and contained the occasional small burnt stone and a scatter of charcoal flecking and small pieces of charcoal, described in the field notes as hearth debris.

### **The pit alignment**

A length of pit alignment lay within the northern corner of the excavated area (Fig 2). Its presence had previously been established by geophysical survey and was confirmed by trial trench evaluation in 2004 to the north-west of the present site (Upson-Smith and Maull 2004). With the present work, the pit alignment is now known to have been in excess of 200m long, but both to the west and the east it continues beyond the recorded extremities. It is aligned within 5 degrees of west-east.

Further pit alignments, on similar near west-east alignments have been recorded on Dallington Heath to the south-east of Harlestone (Fig 1, from RCHME 1981). These may all have been part of a related network of near parallel pit alignments, with a possible focus around the important prehistoric monument complex on Dallington Heath that includes a Neolithic causewayed enclosure and a probable later Neolithic henge monument.

A 56m length of the pit alignment was examined, with this including 16 individual pits, of which six were sectioned (Fig 3 & Plate 2). The excavated length shows variations in the size and spacing of the pits. These may have been mere arbitrary irregularities of little overall significance but, given the highly regular and structured form of many other excavated pit alignments, it is suggested that the pits may have formed four distinct groups that perhaps relate to progressive development of the system, rather than forming a single act of pit digging (Fig 3).

The westernmost seven pits, from pit [293] to pit [265], are considered to form a single group. From west to east the pits increased in surface diameter, from 1.80-3.40m, while the centre-to-centre spacing also increased, from 3.0-4.4m, so that the spacing between the pits remained near constant.

The three easternmost pits, pit [269] to pit [267], are considered to form another group, but of similarly-sized pits with a regular centre-to-centre spacing of 3.2-4.0m. The pits to both the



west and east are on the same general alignment, but with an offset of around 3.5m between the two alignment lines.

It is therefore suggested that these two groups may have been part of the primary setting out of the pit alignment, and that the intervening six pits comprised a later linking-up or infilling of a 22m gap. The eastern half of the gap was filled by a group of four similarly-sized pits, pit [263] to pit [285], set almost edge to edge. The end pits were both elongated along the alignment, at 2.7-3.0m long, while the central two pits were near circular, 2.2-2.4m diameter. The 10.0m wide gap to the west had been filled by a pair of pits, one of which, pit [271], was both slightly offset from the general alignment with 1.7-1.8m wide spacings to the adjacent pits, while the other, pit [279], lay immediately adjacent to the end of the western group of pits, but was slightly offset to the north.

The excavated length of pits crossed a significant change in geology. The three easternmost pits lay on Ironstone, and on the exposed surface these retained their original sub-square plan form, with angular corners, as there had been little erosion of the upper edges. The pits further west were cut into clays and sandy clays, and here the upper edges had eroded considerably to leave circular to oval surface plans. However, in excavation it was clearly seen that the base of pit [265] had a squared plan, similar to the pits to the east (Fig 4, Section 1 and Plate 3). This pit was the deepest of those excavated, at 1.0m deep, and the broad squared base was 0.70m wide, with the steep-sides indicating an original width of around 1.5m, compared to the eroded width of 2.9m. The other excavated pits on the clays, pits [273], [271] and [263], had shallower profiles and were only 0.6-0.8m deep. However, in retrospect, it is considered possible that only the secondary and upper fills of these pits had been excavated, so that the original basal shapes had not been uncovered.

The pits on the Ironstone retained their original square plan forms, at 1.8-2.2m wide by 1.8-2.2m long, and perhaps also around 1.5m square as originally excavated (Fig 4, Section 2 and Plate 4). The two excavated pits on Ironstone, pits [269] and [267] had steep upper edges, but more uneven bases, at 0.65-0.70m deep. It must again be retrospectively suggested that on the difficult Ironstone geology, the primary fills may not have been fully excavated, and that these may originally have had had a more regular basal profile.

The fills of the pits on the clays contained only sparse stone inclusions, and little differentiation in the fills was established to enable the sequence of deposition to be described. The pits cut into Ironstone contained quantities of ironstone fragments, but again there was little differentiation to enable a fill sequence to be established. In a few pits a truncated final fill was observed, indicating that they had first silted to a stable level. It was from the slow silting above this that the residual charcoal came that was used for radiocarbon dating, see above.

### **The linear boundary ditch**

A linear ditch, [184], ran across the northern part of the excavated area for 150m, and continued beyond this in both directions (Fig 2). It was aligned north-east to south-west and was typically 1.13m wide, with a bowl-shaped profile, only around 0.16m deep.

The ditch was filled with mid brown silty sand, but no datable artefacts were recovered from the several sections cut across it. However, as the posthole scatter of the settlement area to the south appeared to respect this boundary, it is suggested that the boundary was certainly still a visible and recognised land division at this time, and so must either slightly pre-date or be contemporary with the early-middle Iron Age settlement. It is unfortunate that the

intersection of the pit alignment and the linear boundary lay just beyond the excavated area, so no physical relationship between these two primary landscape features could be established.

### **The Iron Age settlement**

No smaller features lay to the north of the linear boundary ditch, but to the south there was a scatter of postholes and small pits across an area measuring 50m east to west and at least 45m north to south, and perhaps continuing beyond the limit of excavation to the south-east (Fig 2). These features lay on a plateau with the land sloping away to both the east and west. Pottery from the features in this area is tentatively dated to the early-middle Iron Age, perhaps the 5th-4th centuries BC, but the assemblage contains little diagnostic material.

Three pits lay immediately adjacent to the linear boundary ditch, and the largest of these, pit [234] was 2.3m in diameter by 0.44m deep, and appeared to cut the fills of the boundary ditch, while a smaller pit to the west, pit [196] was cut by the boundary ditch (Fig 5). This may suggest that the settlement was broadly contemporary with the linear ditch.

Within the broader scatter of postholes and pits a number of possible structural groups have been identified (Fig 5). These fall into two distinct groups. To the north there may have been a roundhouse, Structure 1, with a four-poster to the west, Structure 2, and at least one larger pit and perhaps a two-post frame. To the south this pattern may have been repeated, with a roundhouse, perhaps rebuilt, Structure 3, a four-poster to the west, Structure 4, and a scatter of slightly larger pits and perhaps two two-post frames.

In the northern group, lying less than 10m to the south of the linear boundary ditch, some eight or nine postholes may have lain on a circular arc with a diameter of 11m (Fig 5, Structure 1). It is suggested that this may have been the remnant of a roundhouse, with only the western half surviving. At least part of the eastern side may have been removed by a medieval furrow. The surviving postholes were between 0.3-0.5m in diameter and only 0.10-0.15m deep.

Four postholes to the west of Structure 1 formed a possible four-poster (Structure 2). Three sides were 2.0m long but one posthole was offset from a square plan, so that the fourth side was 2.5m long. The postholes were all of similar shape and depth; on average 0.20m wide and 0.10m deep.

To the south of the four-poster there was an oval pit, [180], 1.10m in diameter by 0.25 deep. The fill contained a small amount of burnt debris, including a small piece of fuel ash slag. The small pottery group included a finely-worked everted rim from a small bowl, one of the few diagnostic sherds. Between the roundhouse and the four-poster, there were two postholes, 2.0m apart centre-to-centre, which may have supported a timber frame. The western posthole, [178], was 0.30m in diameter by 0.23m deep, and contained some burnt stone and nearly 1kg of fragmented sherds from a single plain vessel (Plate 6).

In the southern area, circular arcs may be imposed on two groups of postholes (Figs 5 & 6, Structure 3). To the east of a medieval furrow, several postholes, including [120], [122], [124], [130] and [132], lay very roughly on a circular arc of 9.5m diameter. To the west of the medieval furrow, an arc of four closely-spaced postholes, including [136], set 1.2-1.3m apart centre-to-centre, could also have lain on an arc with a diameter of 9.0-10.0m. The postholes are circular to oval in plan and vary from 0.45-0.80m in diameter by 0.12-0.20m

deep. The evidence is very fragmentary, and other postholes may have been lost to truncation by the medieval furrow, but it is suggested that there may have been two successive roundhouses in this location, each some 9.5m in diameter. Domestic activity in the area was suggested by the presence of small pottery assemblages in some of the postholes and pits in this area [112, [116] and [130].

To the immediate west, a group of four postholes may have formed a small four-poster, Structure 4, with sides measuring only 1.0-1.2m, making it a quarter of the floor space of Structure 2 to the north. Possible pairs of postholes to the north-west of the four-poster, and also to the south and the north, may have formed two-post frames some 1.5-2.5m long.

Clusters of small pits lay to the north-west of the four-poster, Structure 4, and also to the east of the roundhouse. Two of the eastern pits contained small quantities of pottery (Figs 5 & 6, [112] & [116]).

### **The medieval field system**

The remnant furrows of the medieval ridge and furrow field system were typically 1.00-1.50m wide, and occasionally more than this, and were spaced at varying intervals of between 7m and 10m centre-to-centre. The furrows had been almost totally lost to more recent ploughing in the area of the pit alignment to the north-east. The surviving furrows were on average 0.21m deep and had similar fills of mid to dark brown silty sand and. A single pottery sherd was recovered, and is from a medieval glazed jug probably of 14th-15th century date.

The parish of Harlestone was reordered into three equal fields in 1410 (Hall 1995, 288) and it is likely that the furrows are part of the usage of those fields. No map appears to have survived of the area, but ridge and furrow earthworks are visible on the ground throughout the parish and can be seen on aerial photographs (RCHME 1981).

## **5 THE FINDS** by Andy Chapman

### **The worked flint**

Six pieces of flint were recovered, with two of these from topsoil deposits. They are all in grey or black vitreous flint, and two have surviving areas of light brown cortex.

An irregular chunk of flint from which several small flakes have been struck was from the topsoil, and is probably a product of accidental striking rather than a crude core. The other pieces are all short and squat flakes, most of which show later breakage and some edge damage. However, none show any signs of deliberate retouch and it is impossible to say whether they are struck flakes or merely the product of accidental impacts.

### **The Iron Age pottery**

A total of 1053g of pottery was recovered. Five postholes and pits [112, 116, 130, 180 and 182] produced very small groups of from one to fifteen sherds, weighing between 3g and 70g. Pit 180 also contained 1g of dark grey, but light and vesicular, fuel ash slag.

A single posthole, [178], produced 933g of pottery comprising numerous sherds from a single vessel. They certainly represent at least half of the vessel, and include rim, body and base sherds, but not the full vessel (Plate 6).

All of the material is consistent, coming from hand-built vessels in a very poorly-fired fabric that is now 'corky' due to the voids resulting from the leaching of the original inclusions. It is likely that these were crushed shell inclusions dissolved in the slightly acid soils of the local Ironstone geology. All of the sherds have a grey core and the external surfaces are typically oxidised, and brown to orange-brown in colour.

The majority of the material comprises plain body sherds, which are typically no more than 7mm thick, although the single sherd from posthole [116] was 9mm thick. There is a crudely formed rounded rim from a small bowl from posthole [130] and a neatly worked everted rim, 6mm thick, from pit [180] is from a small bowl.

The vessel from posthole [178] is too fragmented to reconstruct, but the size and quantity of sherds recovered show that it was a closed jar form. It has a flat base, 170-180mm in diameter and 9mm thick. The plain body sherds vary from 6-10mm thick, with this appearing to reflect variations in the potting. A few sherds show a marked shoulder, with the vessel wall thinner above this. This feature probably lay high on the vessel. The rim is 6mm thick, and is flat-topped to slightly rounded, with the unevenness in the rim formation also reflected in the way that the top of the vessel undulates by several millimetres (Plate 6).

Given the lack of diagnostic features it is difficult to provide a specific date for this assemblage. The general character, comprising poorly-made and poorly-fired, shell-tempered vessels suggests a broad Iron Age date. There are no characteristics of an early Iron Age assemblage and there is also an absence of characteristic middle Iron Age forms. With the occurrence of two smaller bowls in this small group, it is suggested that the assemblage is most likely to date to the early-middle Iron Age, the 5th-4th centuries BC. This early date would also be consistent with the suggested appearance of roundhouses defined by post rings.

### **Medieval pottery**

A single sherd was recovered from the fill of a furrow of the ridge and furrow field system. This is part of a handle from a jug, decorated with a groove along each margin, which flanks deep diagonal slashes. The glaze is dark green. The jug is probably of 14th-15th century date, and may be Brill/Boarstall ware (County-type series, Fabric 324).

## **6 THE CHARRED PLANT REMAINS** by Karen Deighton

Eleven soil samples were collected by hand during the course of excavation. One sample (4) was from the small pit radiocarbon dated to the early Bronze Age. Three samples (1-3) were from the fills of two of the pits in the pit alignment. The other eight samples were from various features within the open settlement area, as detailed below. Two samples (5 & 6) were from two of the postholes forming the four-poster, Structure 2. Four samples (7-10) were from postholes and pits on or around the eastern side of Structure 3, and the remaining sample (11) was from a small pit adjacent to the linear boundary ditch.

All samples were processed using a siraf tank fitted with a 500micron mesh and flot sieve. Any resulting flots were dried and examined under a microscope (10x magnification). Seeds were identified where possible with the aid of the author's reference collection and a seed atlas. Preservation was exclusively by charring. The majority of the cereal grains were heavily abraded, which adversely effected identification, unless specified otherwise.

Wild/weed taxa present were cleavers (*Galium aparine*), fat hen (*Chenopodium album*) and dock (*Rumex* sp). These are common weeds of disturbed ground and crops and add little value to an understanding of the environment. In this instance, they could be indicative of the burning of refuse.

Only 14 carbonised cereal grains were recovered; eight are identified as naked barley (*Hordeum vulgare* var.nudum) and the others are barley and bread wheat (*Triticum aestivum*). The low frequency of cereal suggests that its presence is accidental rather than as the result of crop processing activities, but it may be noted that six grains of naked barley came from one of the postholes of a possible four-poster, Structure 2, while further grains of barley and bread wheat came from a posthole [132] of Structure 3 and a posthole/small pit [106] east of Structure 3.

*Table 1: Quantification of the charred plant remains*

| Sample No. | Context /feature | Feature type and Group   | Sample volume (litres) | Charcoal weight (g) | Cereal by grain                          | Wild /weed by seed |
|------------|------------------|--|------------------------|---------------------|--|--------------------|
| 1          | 261/263          | Pit<br>Pit alignment   | 10                     | 0.2g                | 1  | 30                 |
| 2          | 262/263          | Same pit as above,<br>Pit alignment                                  | 10                     | <0.1g               |  | 8                  |
| 3          | 270/271          | Pit<br>Pit alignment   | 10                     | <0.1g               |  | 3                  |
| 4          | 221/222          | Burnt debris in<br>isolated EBA pit                                  | 10                     | 2.0g                |  | 10                 |
| 5          | 215/216          | Posthole, Structure 2<br>(possible 4-poster)<br>Open settlement area | 10                     | <0.1g               | 6 grains of<br>naked barley              | 44                 |
| 6          | 219/220          | Posthole, Structure 2<br>(possible 4-poster)<br>Open settlement area | 10                     | <0.1g               | 4  | 37                 |
| 7          | 119/120          | Posthole, Structure 3<br>Open settlement area                        | 10                     | <0.1g               | 1  | 16                 |
| 8          | 105//106         | Posthole<br>East of Structure 3<br>Open settlement area              | 10                     | <0.1g               | 6 grains of<br>barley and<br>bread wheat | 12                 |
| 9          | 123/124          | Posthole, Structure 3<br>Open settlement area                        | 10                     | 0.5g                | 1  | 32                 |
| 10         | 131/132          | Posthole, Structure 3<br>Open settlement area                        | 10                     | <0.1g               | 2 grains of<br>naked barley              | 23                 |
| 11         | 233/234          | Pit, northern edge of<br>Open settlement area                        | 10                     | 0.2g                |  | 30                 |

**7 RADIOCARBON DATING** by Andy Chapman

Very small quantities of wood charcoal were recovered from most of the soil samples, but much of this material comprises fine, comminuted charcoal (Table 1).

Pit [222], lying to the west of the main settlement area, produced by far the largest quantity of charcoal from any feature on the site (Table 1, Sample 4, 2.0g). This material was therefore chosen for radiocarbon dating on the assumption that the feature was associated with the Iron Age open settlement, but the result of the dating now suggests that this assumption was false and that the pit was an isolated feature of early Bronze Age date.

The three samples from the pit alignment all produced charcoal, but in very small quantities, and the largest of these, Sample 1 from pit 263, was chosen for submission for radiocarbon dating. However, the early Bronze Age date would suggest that the charcoal was residual in its context.

*Table 2: The radiocarbon determinations*

| Laboratory & Sample No. | Context                                 | Sample details | <sup>13</sup> C/ <sup>12</sup> C ratio | Conventional Age BP | Cal BC<br>68% confidence<br>95% confidence |
|-------------------------|---|----------------|--|---------------------|--|
| Beta-227088<br>HQ06/221 | Small pit [222] containing burnt debris | Wood charcoal  | -25.5                                  | 3470<br>+/-50       | 1880-1740<br>1920-1670                     |
| Beta-227089<br>HQ06/261 | Pit [263] of pit alignment              | Wood charcoal  | -25.0                                  | 3710<br>+/-40       | 2190-2180 &<br>2140-2030<br><br>2200-1980  |

Laboratory: Beta Analytic, Miami, Florida, USA  
 Technique: AMS standard  
 Calibration: IntCal 04: Calibration Issue of Radiocarbon (Volume 46, nr3, 2004)

**8 DISCUSSION** by Andy Chapman

The radiocarbon dates, both of which lie within the early Bronze Age, with a lengthy span from 2200-1670 Cal BC (at 95% confidence), provide evidence for a period of activity at the site for which no datable artefacts were recovered. One of the dated samples was on charcoal which must be assumed to have been residual within the upper fill of a pit within the pit alignment, while the other sample came from charcoal within the fill of a small pit that lay a little away from an area of Iron Age settlement. This pit indicates that there was at least some short-term occupation of the plateau top in the early Bronze Age.

In the fieldwalking carried out in 2003, the field containing the pit and the field immediately to the west both produced a sparse scatter of flint, a total of 29 pieces from the two fields (Taylor and Fisher 2003, 5-6 & fig 4). This group contained a high proportion of implements, about a third of the total recovered, and these included a serrated blade, attributable to the earlier Neolithic, while three discoidal scrapers, one of which was a small “thumbnail”-type, and a possible fragment from a plano-convex knife would be characteristic of an early Bronze Age date. This provides supporting evidence to the excavation results.

The nearby presence of the monuments on Dallington Heath, which include an early Neolithic causewayed enclosure and a probable later Neolithic henge monument (RCHME 1981), may provide the wider context for the early Bronze Age activity on the plateau top at Harlestone.

The excavation was also successful in relocating the pit alignment previously found in geophysical surveys and confirmed by trial trench evaluation (Upson-Smith and Maull 2004). It may be related to further pit alignments lying to the south-east, on Dallington Heath, and perhaps clustering around the Neolithic monument complex.

The pit alignment at Harlestone quarry has yielded no dateable artefacts, and can only be broadly dated to the late Bronze Age/early Iron Age by analogy with other excavated examples for which radiocarbon dates have been obtained, see McAree (2005) for a list of other excavated pit alignments in Northamptonshire.

It has been suggested that within the excavated area, differences in alignment and the spacing of the pits may denote a sequence of construction in which gaps were left between groups of pits, with the gaps subsequently filled by further pits at either closer or wider spacing. It is likely that the digging of the alignment was undertaken by organised groups digging small blocks of pits at a time on a set alignment, with the gaps occurring at the meeting points of separate groups, perhaps based on family or tribal groupings. The presence of infilling of gaps in a pit alignment has been seen at Gayhurst Quarry, in Buckinghamshire (Chapman forthcoming), while the linking of offset alignments with small groups of pits of differing sizes and spacings has been clearly seen in Northamptonshire at Warth Park, Raunds (McAree 2005) and at Gretton (Jackson 1974, fig 14).

A particular question with any pit alignment is the degree of uniformity in the plan form, profile and dimensions of the individual pits, which in many pit alignments do show strikingly consistent patterns, indicating a high degree of control over the actual process of pits digging. Given the difficult geology and the heavy erosion of the upper edges of the pits, and the unfavourable weather conditions at the time of excavation, this issue has not been fully resolved in the present excavation. Some of the pits were evidently of a square plan form, with steep-sides and flat bottoms, but other pits may not have been bottomed, leaving their original form uncertain. A priority for any further investigation of this pit alignment would be to examine this aspect of planning more carefully.

Unexpected evidence was also found of nearby open settlement, in the form of a posthole scatter that may have included two roundhouses, each with an adjacent four-poster, some pits and perhaps a number of two-post frames. Pottery from this area indicates a probable date in the early-middle Iron Age, perhaps the 5th-4th centuries BC, but there was a scarcity of diagnostic sherds. As with the earlier Bronze Age activity, the settlement appears to have utilised the higher and free-draining ground upon the Ironstone geology. To the north the settlement seems to have respected a contemporary linear boundary ditch.

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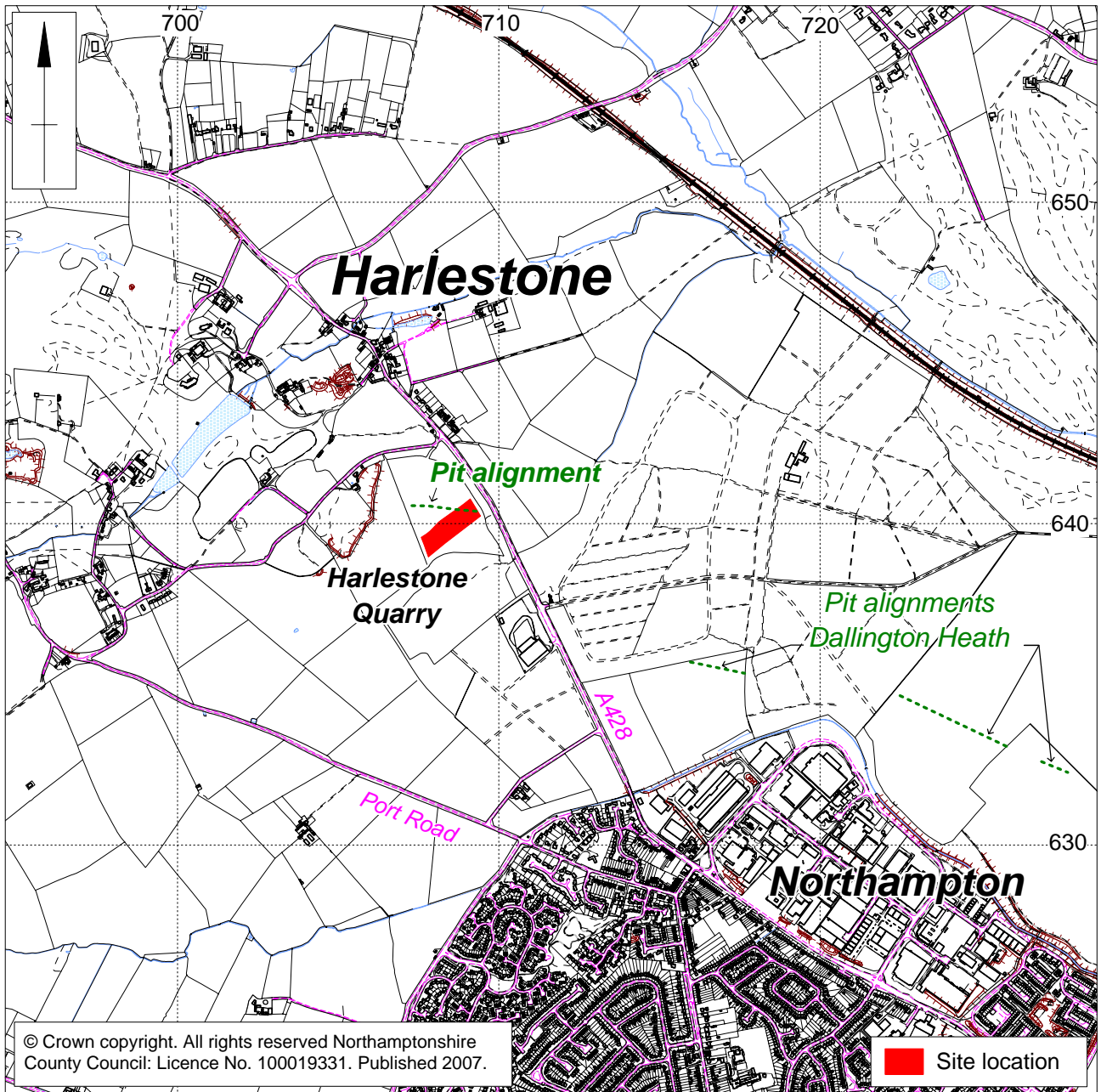
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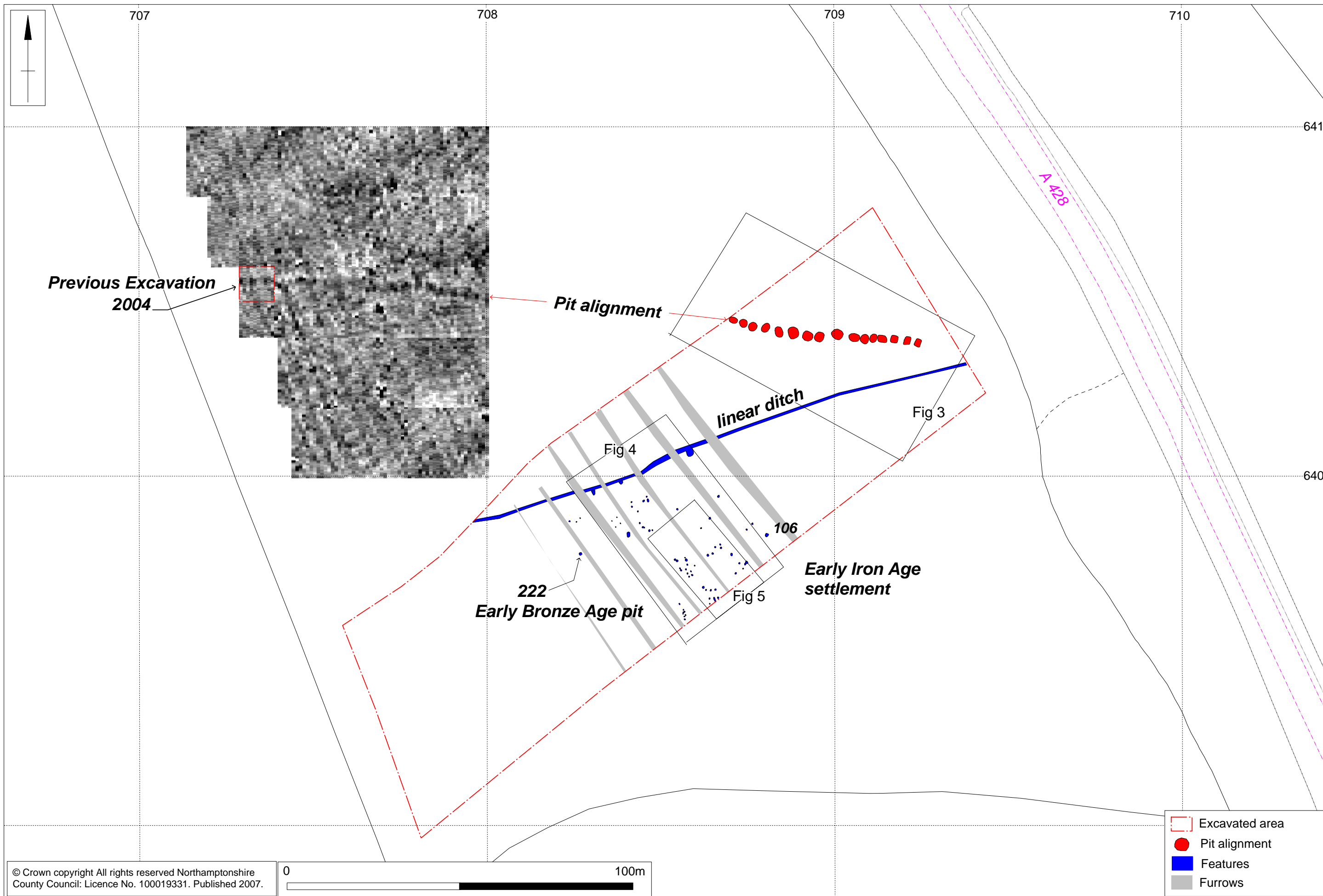
8th January 2007  
Revised April 2007





Scale 1:20,000

Site location Fig 1



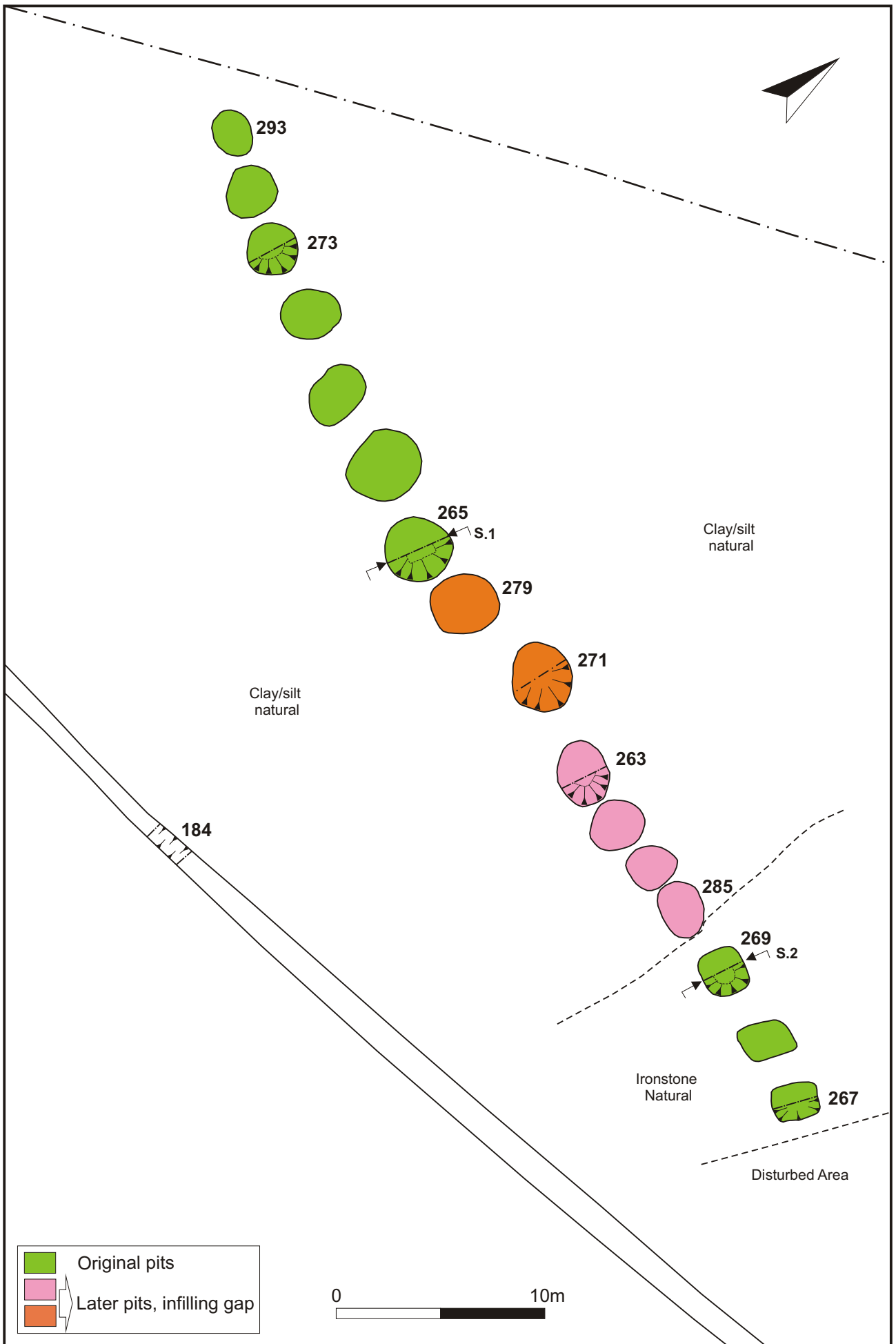
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- Excavated area
- Pit alignment
- Features
- Furrows

Scale 1:1000

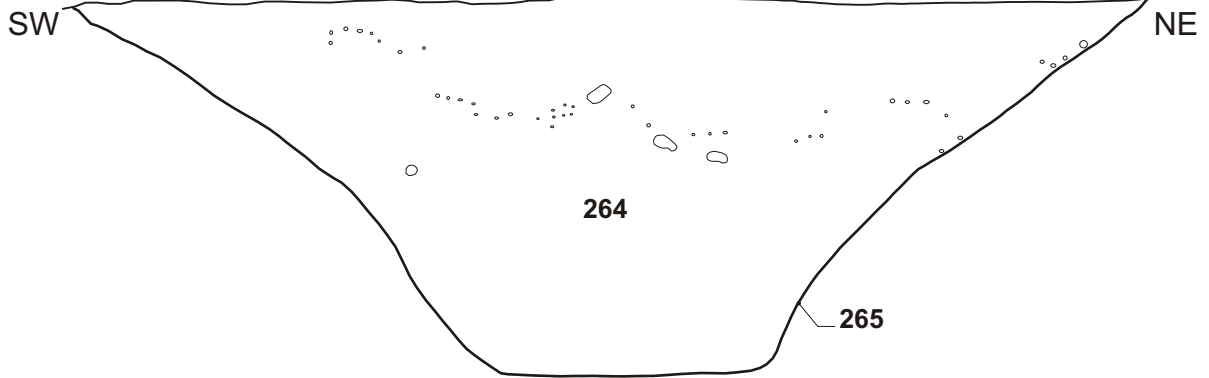
General plan of excavated area and geophysical survey Fig 2



Excavated length of pit alignment Fig 3

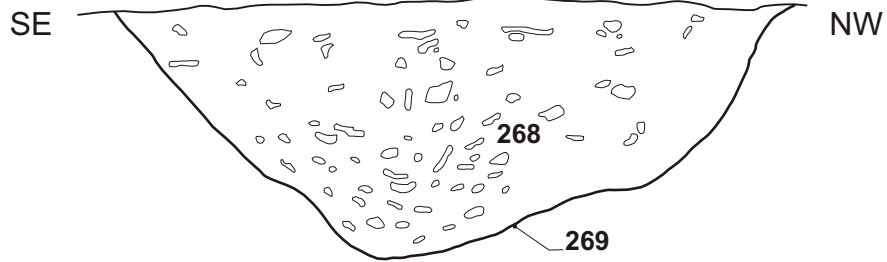
**Section 1 - Pit alignment pit**

99.82mOD



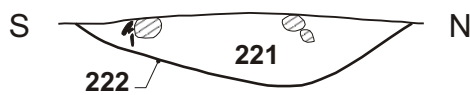
**Section 2 - Pit alignment pit**

100.00mOD



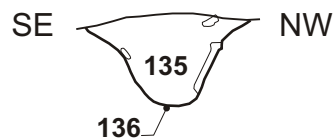
**Section 3 - Early Bronze Age pit**




100.56mOD



**Section 4 - Early Iron Age posthole, Structure 3**

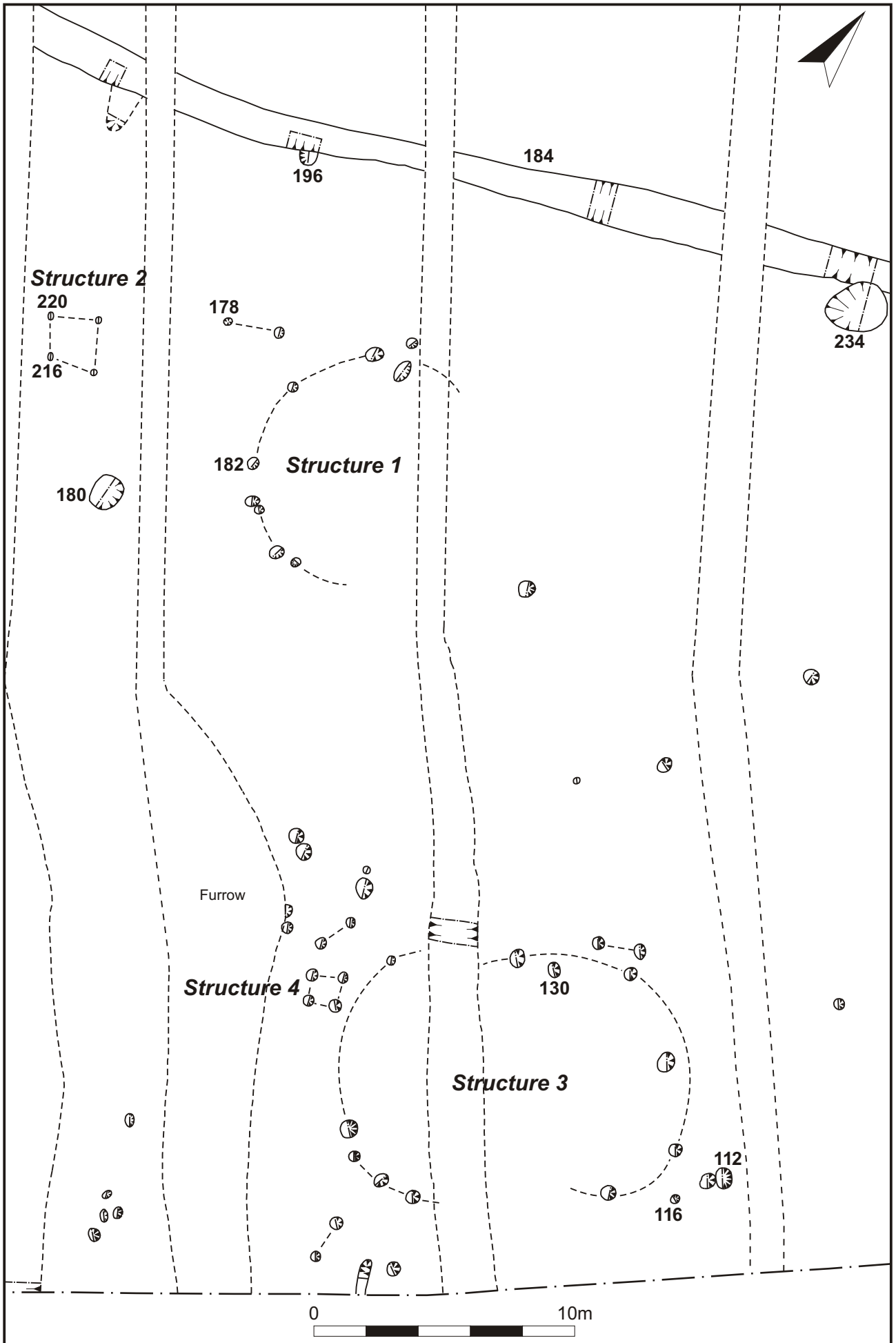
100.42mOD



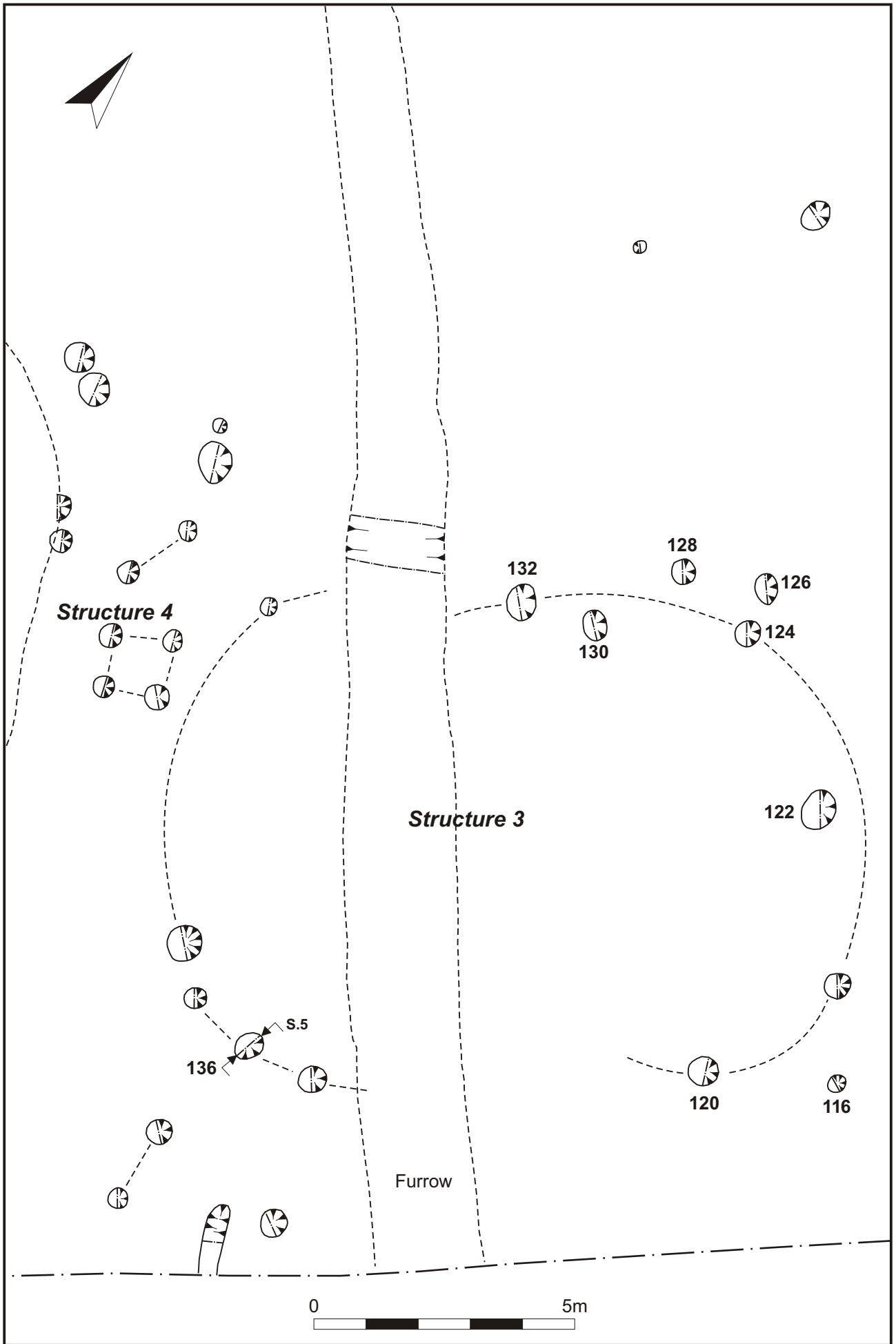
-  Burnt stone
-  Sand
-  Charcoal



Sections of pit alignment pits, early Bronze Age pit and Iron Age posthole Fig 4



General plan of the Iron Age settlement Fig 5



Iron Age settlement and Structures 3-4 Fig 6





Plate 1: Shallow early Bronze Age pit [222], containing burnt debris



Plate 2: General view of pit alignment, looking west





Plate 3: The pit alignment, pit [265], showing Section 1



Plate 4: The pit alignment, pit [269] cut into ironstone, showing Section 2





Plate 5: The Iron Age settlement area, looking west



Plate 6: The Iron Age vessel from pit 178, showing the undulating rim and leached fabric  
(Scale 10mm)