

# ARCHAEOLOGICAL EXCAVATIONS AT INGHAM QUARRY, FORNHAM ST GENEVIEVE

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## INTRODUCTION

### *The Site*

INGHAM QUARRY IS located in northern Suffolk, approximately 1.75km north-east of Fornham All Saints and 2km south-east of Fornham St Martin. Bury St Edmunds lies some 3km to the south (Fig. 135). The site sits on the southern edge of the Breckland Environmentally Sensitive Area.

The site lies at 26–36m AOD with its central and eastern sectors occupying a slight north-facing slope which levels out along its northern edge. The western sector comprises level ground at the base of this slope, which forms the south side of a shallow valley. A watercourse lies 350m to the north. Timworth Carr – a semicircle of wooded wetland (Figs 135 and 136) – is the only immediate surface water feature. Timworth Carr sits above impermeable soils and is fed by rainwater run-off. An earlier evaluation encountered evidence of previously waterlogged conditions.<sup>1</sup> The local geology is Upper Cretaceous chalk below sand and gravel. The local soils are of the Melford Association: deep, well-drained fine loam over clayey soils with some calcareous clayey subsoils.<sup>2</sup>

The excavation area was a single, c. 14.5ha field, bounded to the south and east by the working quarry. The western and northern sides were bordered by roads and by Timworth Carr.

### *Previous archaeological work*

Between August and December 2008, and September and November 2011, Archaeological Solutions Ltd undertook a programme of archaeological monitoring and recording, and excavation at Ingham Quarry. Previous archaeological evaluation and excavation to the south had revealed early Neolithic, late Neolithic/early Bronze Age and Iron Age activity including occupation and funerary evidence.<sup>3</sup>

An evaluation of the current site in 2004 revealed dispersed Iron Age (4th–1st-century BC) features, including four concentrations in the north, along the natural slope. Curving gullies filled with dark charcoal-rich sand and associated with small pits/post-holes suggested the presence of structures or funerary remains. Occasional post-holes also indicated possible structures.

### *Archaeological Background*

The landscape surrounding Ingham Quarry contains a significant density of prehistoric sites, including the nationally important Neolithic Fornham causewayed enclosure and cursus.<sup>4</sup> Sites within the immediate vicinity include a prehistoric ring-ditch and linear features (FSG 007 and 008) (Fig. 135). Material of Neolithic and Bronze Age date has also been reported to the southwest. Prehistoric evidence from within the current site is paralleled by similar, largely early Iron Age, evidence from neighbouring sites (FSG 012, 013, 014 and 015) (Fig. 135).

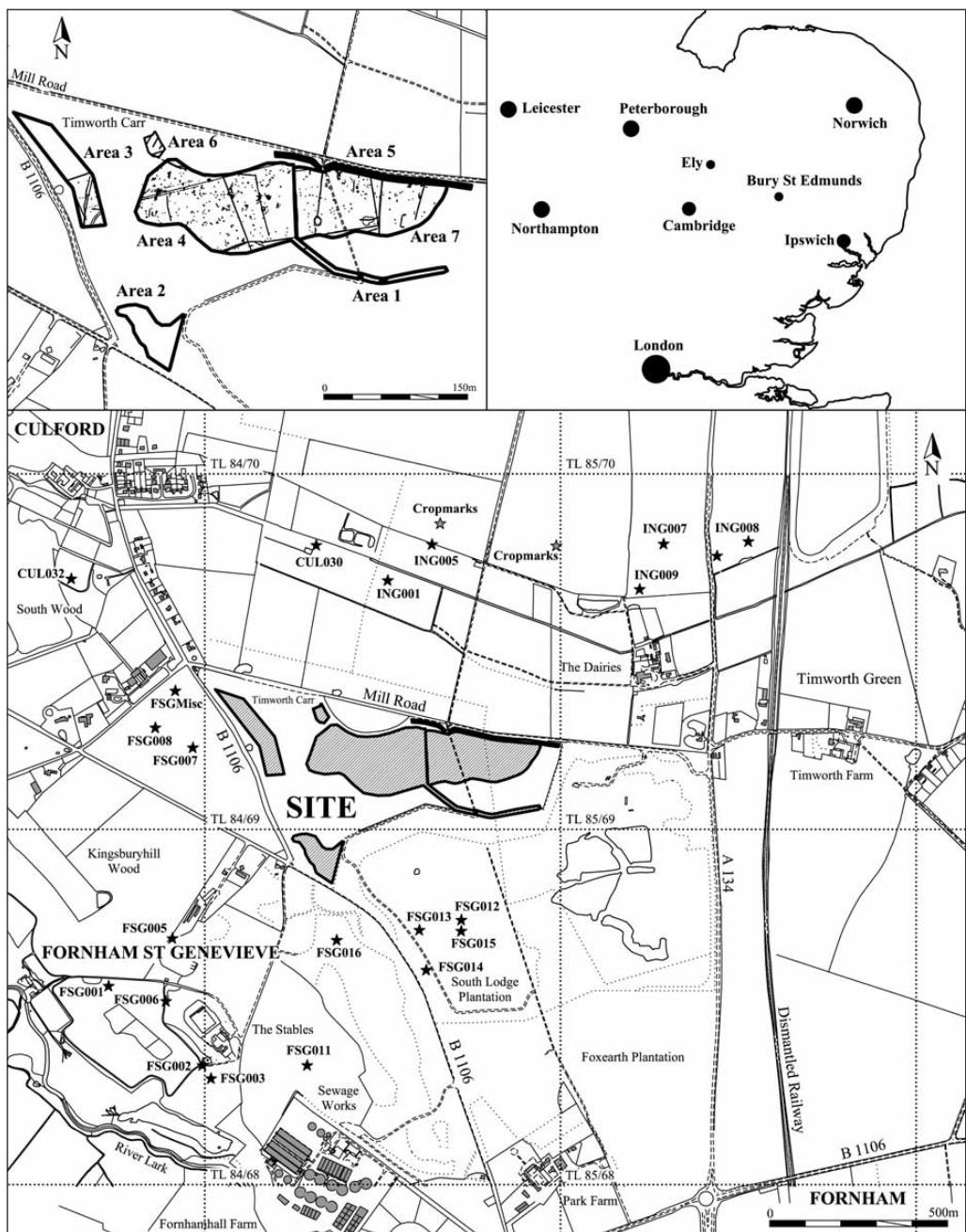


FIG. 135 – Site location.

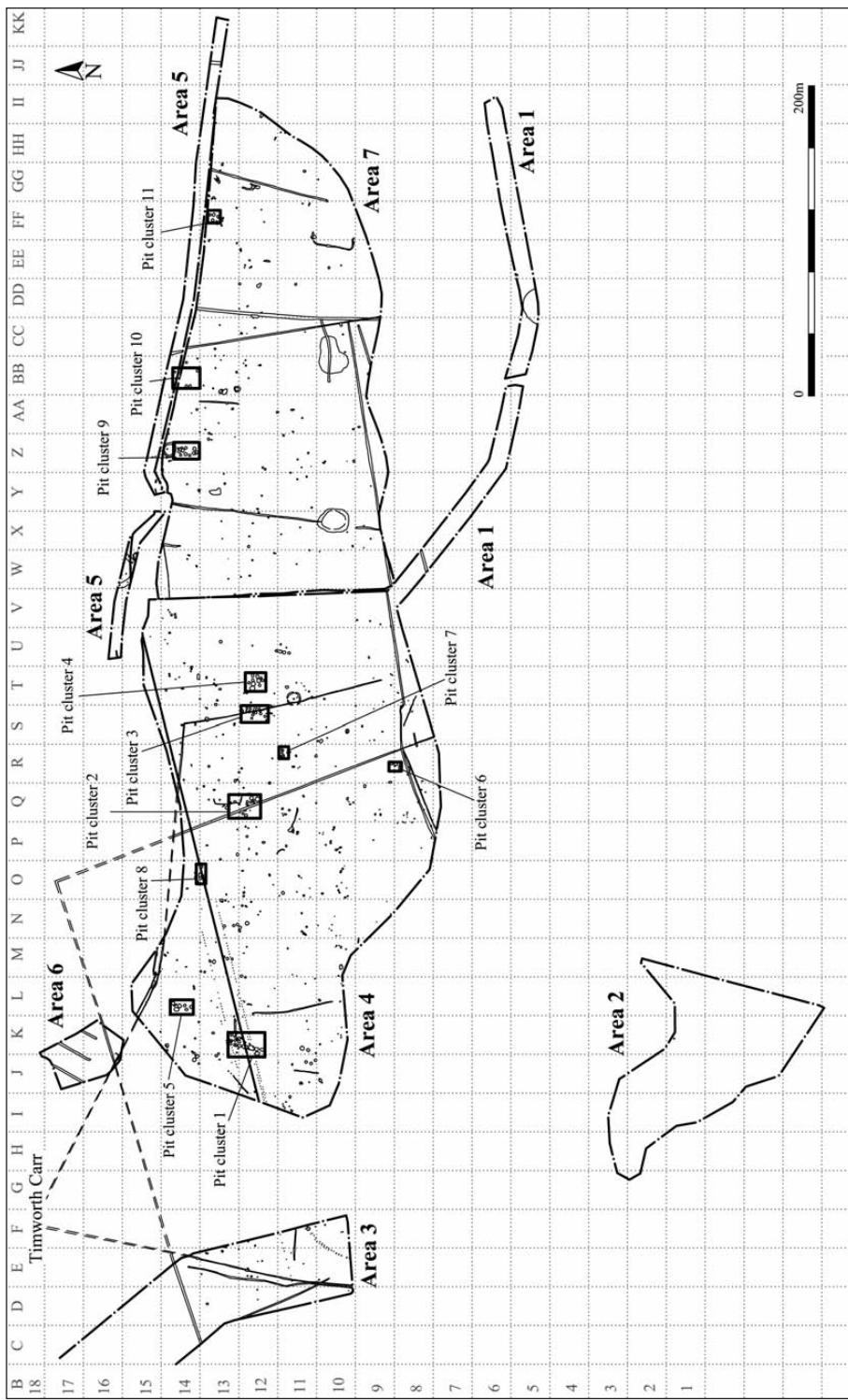


FIG. 136 – All features plan.

## RESULTS OF THE EXCAVATION

*Introduction*

Features were recorded across the site, but were most numerous in Areas 3, 4, 5, 6, and 7 (Fig. 136). Post-excavation analysis identified eight chronological phases of activity (Table 1), mostly prehistoric in date. Roman and later evidence was also recorded.

CHRONOLOGICAL PHASE	PERIOD	DATE RANGE
1	Early Neolithic	c. 4300–3300 BC
2	Later Neolithic	c. 3300–2100 BC
3	Neolithic/early Bronze Age	c. 3300–1700 BC
4	Early Bronze Age	2100–1700 BC
5	Early Iron Age	750–400 BC
6	Mid to later Iron Age	1st–3rd centuries BC
7	Roman	AD 43–410
8	Post-medieval/Modern	AD 1500–

TABLE 1 – Chronological phasing.

Phases 1–3, 5 and 7–8 were only sparsely represented, indicating limited, possibly transient or seasonal human occupation of the site. A full account of these phases is presented in the Research Archive Report.<sup>5</sup> This paper focuses on the more intensive early Bronze Age and mid to later Iron Age phases (4 and 6).

*Phase 4: Early Bronze Age (c. 2100–1700 BC)*

*Introduction.* Whereas earlier phases were represented by few features, implying only limited and small-scale human impact, Phase 4 revealed a greater density of features and a greater diversity in the nature of activity. The Phase 4 pits and post-holes also displayed greater size variation, a greater tendency toward ‘clustering’, and more stratigraphic relationships. Phase 4 also revealed clear funerary evidence (Fig. 137).

The Phase 4 ceramic assemblage includes Beaker and Food Vessels, Biconical and Collared Urns. The range of early Bronze Age vessel types and their fragmentary occurrence suggests that they are the by-product of domestic activities. This is supported by relatively rich deposits of cereals from Pit F1264, indicating settlement/domestic activity in the vicinity; including cereal cultivation, processing and consumption.

*Funerary monuments*

*Ring-Ditch F2483* (Fig. 138). F2483 lay within Area 5 (GS W15-16) and extended beyond the confines of the excavation. The maximum dimensions<sup>2</sup> of the exposed ditch were 27.00+ x 3.10 x 1.10m. Cremated human bone and burnt material in associated features/contexts suggest that F2483 represented a round barrow.

Cut into the base of F2483, towards its eastern extent, was Pit F2502, the lower fill of which was charcoal-rich ashy silt (Fig. 138). To the north-east of F2502 were two further pits cut in to L2484, the primary fill of Ring-Ditch F2483, both of which contained charcoal-rich fills. Despite the absence of human bone, it is tentatively suggested that these represented cremations, or perhaps token deposits of pyre material; the lack of bone may indicate poor recovery from the pyre.

At the north-western extent of F2483, Cremation F2510 was identified within uppermost Fill L2500 (Fig. 138). F2510 contained charcoal-rich, sandy ash (L2511). Cremated human

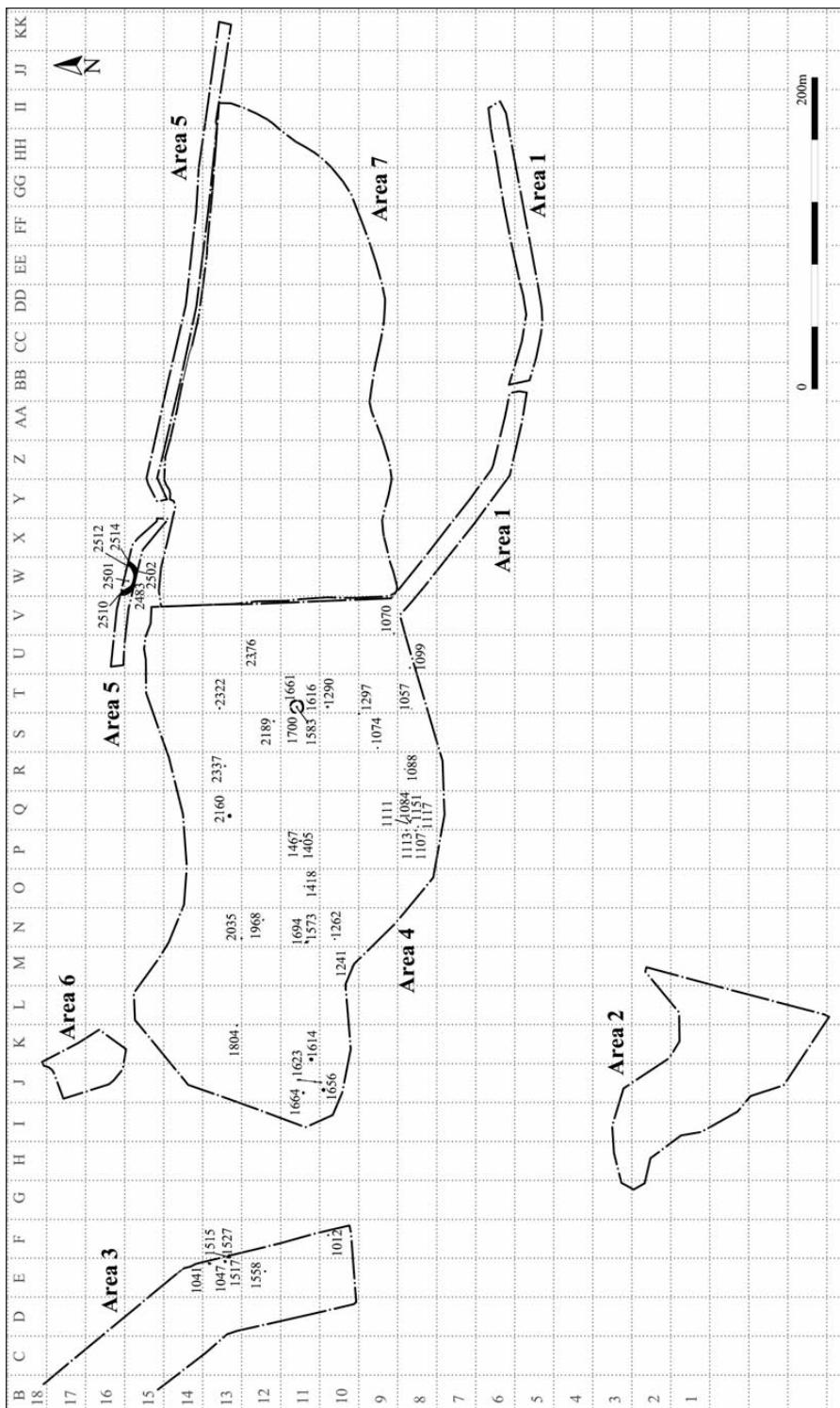


FIG. 137 – Early Bronze Age plan.

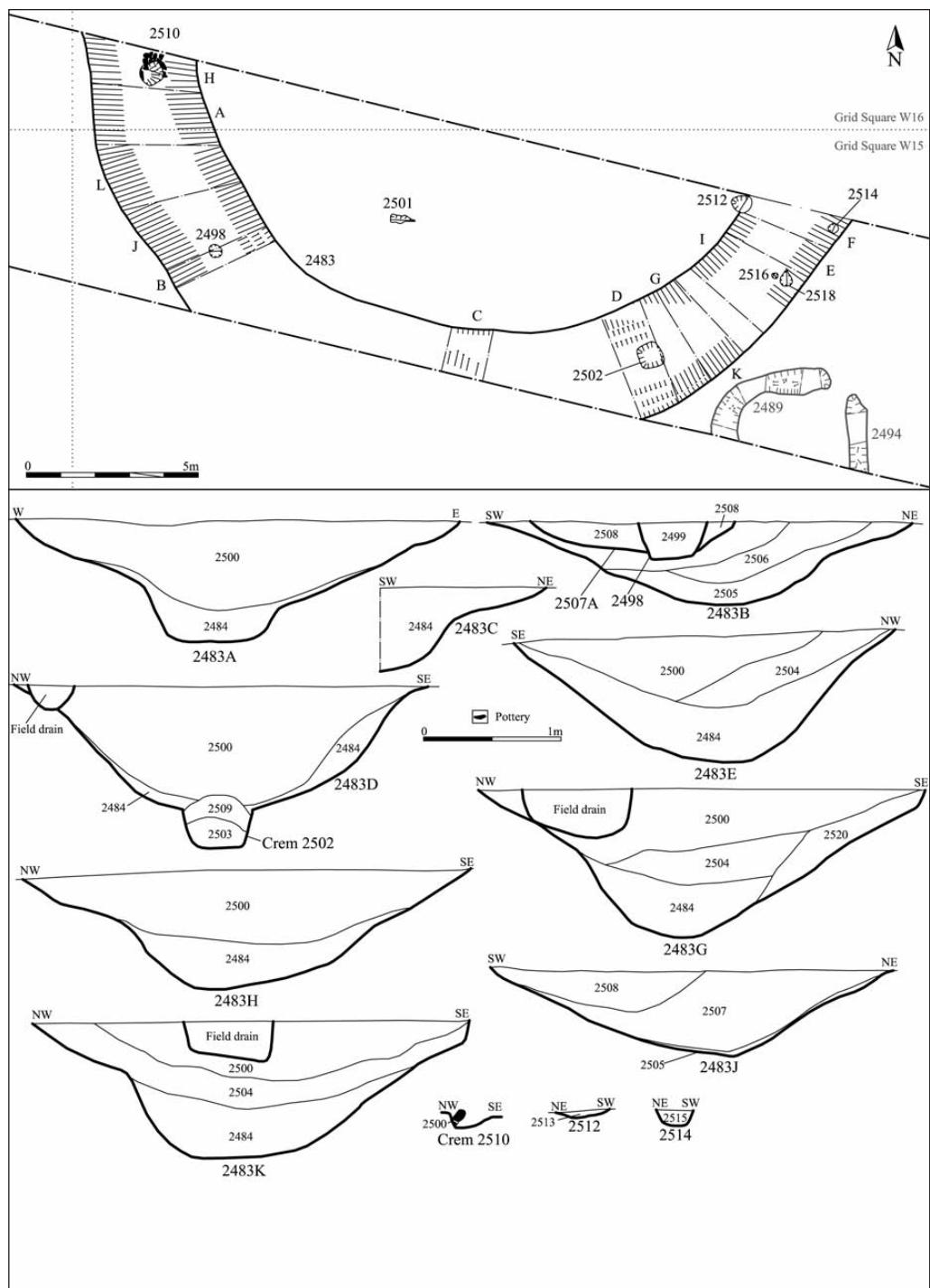


FIG. 138 – Plan and sections, F2483.

bone was again absent, although fragments were present within L2500 (Table 2). Despite having been assigned a cut number, it seems likely that the above cremation deposit and the bone from L2500 represented material originally deposited within the barrow mound and subsequently redeposited as the result of degradation or destruction of the mound, possibly through ploughing. Cremation C2499 was observed as discrete charcoal-rich material close to the interface of L2508 and L2507, the upper fills of the ring-ditch at this location (Table 2). Only trace human bone was present in C2499 and it seems that this too must have represented a disturbed/redeposited cremation.

Pit F2501 was enclosed by Ring-Ditch F2483, c. 2.5m from its southern circuit (Fig. 138). The fill of F2501 contained 4.1g of cremated human bone (Table 2). Although this pit did not appear to be the primary deposition within the barrow, its contents may have been interred before the mound was raised. It is postulated that any primary deposit would have lain beyond the northern limit of Area 5. As is often observed, this funerary monument attracted satellite and secondary funerary deposits, which, based on their stratigraphic relationships with Ring-Ditch F2483, can be seen to be broadly contemporary with the barrow or, at least, to have been deposited while it remained identifiable.

Context	Description
L2485	4.1g of cremated bone fragments; mainly one fragment of ulna shaft (length 43.5mm) and several unidentifiable fragments. The ulna was calcined, but some less burnt (dark brown to black) fragments were present. Metrical data suggest an adolescent or adult individual. No indicators of sex were present.
C2499	14.2g of highly fragmented, cremated bone; MNI = 1. No elements were recognisable, although the bone characteristics were more indicative of human than animal remains. Fragments of long bone were recorded. All fragments were calcined, suggestive of high temperature exposure. No age and sex indicators were present.
L2500	14.3g of calcined cranial and postcranial fragments. Although few, comparatively large fragments present; maximum cranial fragment size was 32.5mm; maximum postcranial fragment size was 33.3mm. A high degree of warping and fissuring indicated the presence of flesh at the time of burning.

TABLE 2 – Human bone from contexts associated with Ring-Ditch F2483.

The Phase 4 cremation burials yielded no evidence of offerings or specialised deposits of plant material. A single barley grain from F2498 probably represents background levels of cereals or processing waste used as kindling. Wild plant taxa are characteristic of waste/disturbed ground. These could represent small amounts of cereal processing debris or redeposited vegetation from the pyre.

The only dating evidence from F2483 was a single 3rd to 1st century BC pot sherd from L2500. Although the placing of cremations under barrows continued into the Iron Age, the practice is understood to have ceased around the 5th century.<sup>6</sup> Consequently, it is unlikely that F2483 was of mid to late Iron Age date as suggested by the pottery, which was most likely intrusive. Although possibly of early Iron Age date, the relative dearth of contemporary features makes an early Bronze Age date more likely. Morphologically and in its topographic setting,<sup>7</sup> F2483 appeared to conform to what would be expected of the remains of a Bronze Age barrow. The presence of similar funerary monuments, one more easily dated to the early Bronze Age, elsewhere within the site, aids this interpretation.

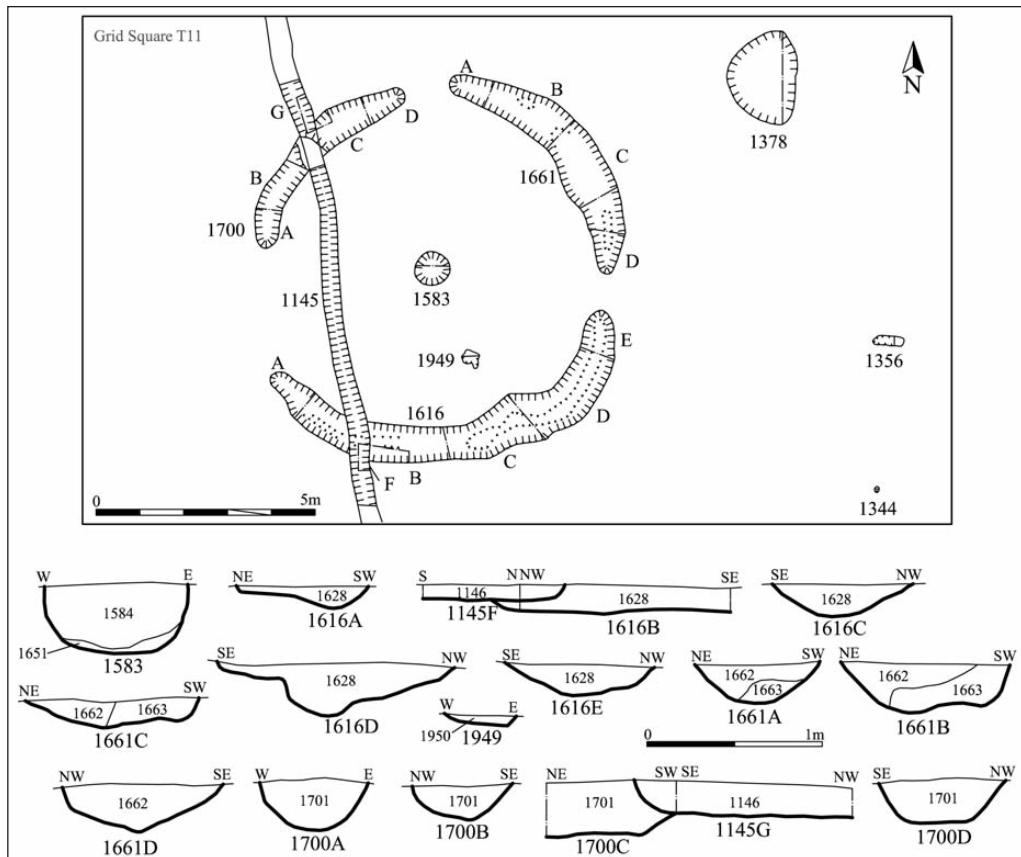


FIG. 139 – Fragmented ring-ditch.

*The Fragmented Ring-Ditch* (Fig. 139). Approximately 145m to the south-west of Ring-Ditch F2483 lay three curvilinear ditches forming a broken ring (internal diameter c. 9m), encircling a central pit and associated cremation deposit (F1583). The ditches (F1616, F1661 and F1700) clearly functioned as part of the same construct despite yielding an incongruent pottery assemblage. However, the overall character of the assemblage, combined with the obvious function of the features, strongly suggests an early Bronze Age date. Based on aerial survey, Gates and Deegan have asserted that where pits can be identified at the centre of ring-ditches, identification as a ritual or burial monuments may reasonably be assumed.<sup>8</sup>

At Stockbridge Down, Hampshire, a barrow with a central inhumation displayed a similar segmented ditch, apparently overlain by the associated mound.<sup>9</sup> While no evidence for a mound was identifiable at Ingham, it seems possible that the two may have belonged to similar traditions. Similarities to henges in the Millfield basin, Northumberland, some of which displayed evidence of funerary activity, suggest the slight possibility that the Ingham ditches represented a small hengiform monument.<sup>10</sup>

The cremation from F1583 (L1651) is that of an adolescent aged 16 to 20 years. The presence of most of the cranium and long bones indicates careful collection. The remains had not been deposited in a container, but were sealed by a charcoal-rich deposit of possible pyre debris.

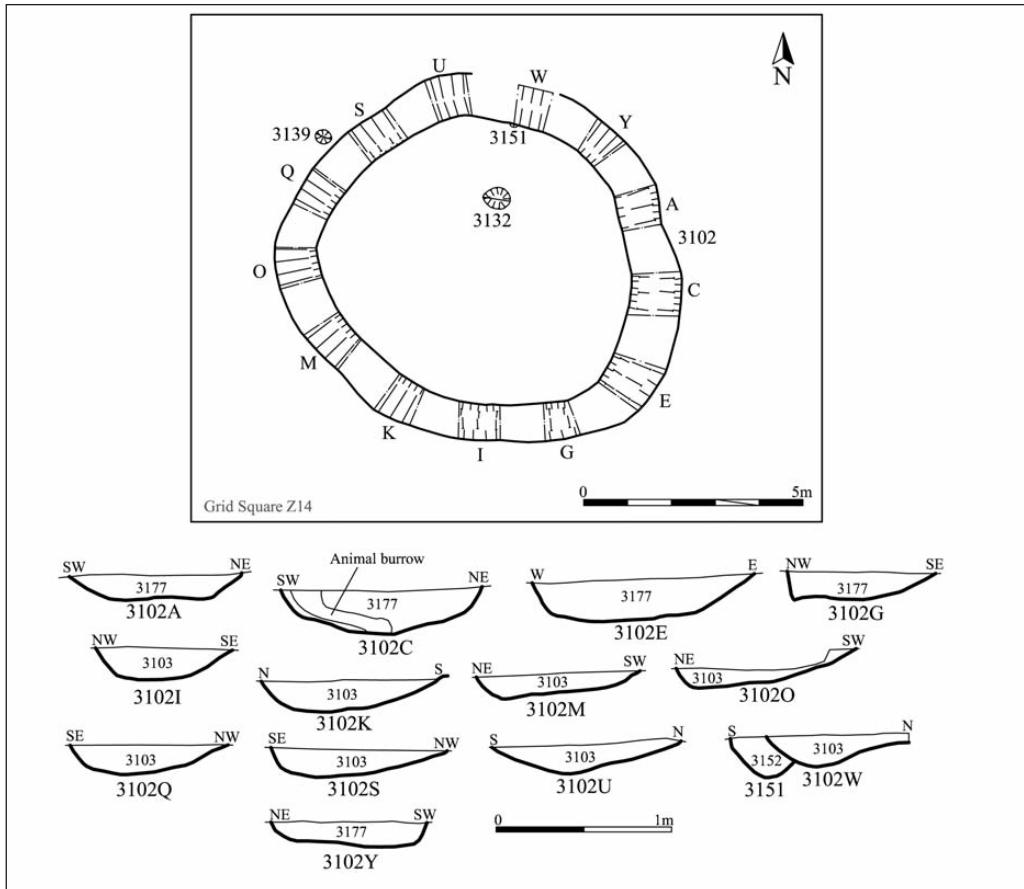


FIG. 140 – Ring-Ditch F3102.

*Ring-Ditch F3102* (Fig. 140). F3102 lay some 43m south-west of Ring-Ditch F2483 (GS Z14). This probable barrow was comparable in size to the fragmented ring-ditch, but morphologically more similar to F2483. Again, despite contradictory ceramic evidence, the overall character and obvious function of the feature suggests an early Bronze Age date. Given the close proximity of Phase 6 Pit Cluster 9, it is suggested that the Iron Age pottery from F3102 represents intrusive material from these features or redeposited material. It remains possible that F3102 represented a structural feature associated with adjacent Phase 6 activity, although the lack of supportive evidence and the similarity of F3102 to other Phase 4 features contradict this.

*Possible Cremation Pit F3009.* F3009 (GS W10) was isolated. Its fill (L3010) contained considerable quantities of burnt bone and flint. Red mottling throughout L3010 also suggested heating. The feature was similar to Phase 4 cremations excavated elsewhere within the site but a lack of finds meant that it could not be confidently dated.

*The Phase 4 Pits and Post-holes.* Phase 4 pits and post-holes were present across Areas 4 and 7, and in the eastern part of Area 3. These varied more in shape and size than those of preceding phases. The pits also showed a greater tendency towards clustering, though few of

these clusters appeared to be intentional.

The most formal feature cluster was located in the south of Area 4 (GS P8-Q8; Fig. 137). Six small pits/post-holes (F1084, F1107, F1111, F1113, F1117 and F1151) lay within an area of c. 10m<sup>2</sup>, and yielded 69 sherds (457g) of early Bronze Age pottery, including fragments from at least 14 Beakers and a single Food Vessel. A concentration of worked flint was present within F1113 and a smaller concentration, comprising scrapers and debitage, was recovered from F1111. A blade was also found within F1151. Four similar but undated features were recorded nearby, three of which may have been contemporary.

Another possible cluster of features – one of which (Pit F3128) contained Beaker pottery (13 sherds; 172g) – was present in the south-west of Area 7 (GS Y11-Z11; Fig. 137). Undated features F3110, F3112, F3114, F3126, F3145 and F3147 formed a roughly ovoid arrangement (c. 10 x 6m) encircling F3128, but were morphologically dissimilar to the latter; all contained comparable fills.

A similar cluster of Phase 4 pits (F1405 and F1467) and undated features was located centrally within Area 4 (GS P11; Fig. 137). The pits were both circular in plan though different in profile. Both contained identical fills and both were cut by slightly larger undated features. To the immediate west lay three further undated features, at least two of which, F1579 and F1585, could have been contemporary with F1405 and F1467.

A dispersed grouping of early Bronze Age pits (F1041, F1047, F1515 and F1517) was present on the eastern side of Area 3 (GS E13-F13; Fig. 137). The spatial relationships of these features did not suggest a formally laid out group. Their presence did, however, indicate a concentration of early Bronze Age activity. It is possible that they represented refuse pits, as the artefacts they contained showed no signs of structured deposition. This may suggest that domestic occupation occurred somewhere nearby.

Pits F1614, F1656 and F1664 (GS J10, J11 and K11) formed a dispersed triangular arrangement of features bisected by Phase 4 Gully F1623. The regularity of this layout suggests that it may have been deliberate. All three features contained dateable pottery and notable deposits of struck flint; F1664 yielded a horseshoe scraper, F1614 contained blades and debitage, Pit F1656 contained three hammer stones and a variety of debitage. Although other such concentrations were encountered, the occurrence of this material in regularly laid out features may indicate a particular significance. Perhaps this area was a focal point for flint-working or perhaps struck flints and production tools were stored here. The role of Gully F1623 remains uncertain.

Pits F1694 and F1573 (GS N11) were notable for being one of only three examples of intercutting Phase 4 features, the others being F1515 and F1517 in Area 3 and F3451, F3453 and F3455 in Area 7 (GS GG13). The majority of Phase 4 pits were isolated from contemporary features. A few were identified as cutting or being cut by features assigned to other phases. Some also lay close to undated features though there is little evidence of any spatial/functional associations. Many were small and contained trace early Bronze Age pottery and struck flint and, occasionally, animal bone. Some features were, however, more notable: Pits F2035 (GS N12-N13) and F1290 (GS T10) both contained burnt flint; Pit/Post-hole F1262 (GS N10) contained a concentration of struck flint (blades and debitage); while Pit F1088 (GS R8) also contained a large group of struck flint. A notable quantity of struck flint was also recovered from Pit F1012 (GS F10) in Area 3, including a double side scraper. F2337 also contained a large struck flint assemblage which included side scrapers and a Levallois-type core. Pit F1264 (GS M10) yielded core trimming flakes, possibly removed to create a new striking platform or as core rejuvenation flakes. Pit F3191 contained a unique struck flint assemblage comprising 69 debitage flakes apparently from a single core. A notable assemblage of flint was also found in Pit F3128, comprising a later Neolithic/early Bronze Age arrowhead,

three blades and an additional 49 blade-like flakes. Environmental samples from F3128 contained a high concentration of cereal and glume wheat remains. Pottery from this pit includes rim sherds from a biconical urn. Pits F1407 (GS P10), F1558 (GS E12), F2337 (GS R13) and F2376 (GS U12) also yielded significant pottery assemblages; all contained fragments from multiple vessels/vessel types. The fill of Pit F2337 was particularly notable for two Beaker vessels, both open bowls with extensive finger-tip impressions. Finger-nail rustication is present on pottery from F3139 and F3390. In addition, sherds of collard urn were found in the fills of F3189 and F3418, located c. 84m apart on the northern edge of Area 7. The latter yielded a plain collar sherd, while F3189 contained a collar sherd displaying a herring bone pattern of impressed cord decoration.

#### *Phase 6: Middle to later Iron Age (3rd to 1st centuries BC)*

*Introduction.* Phase 6 was the best-represented phase of activity, containing 185 pits and 19 ditches/gullies (Fig. 141). Datable ceramics belong to a narrow typological range representing an East Anglian tradition of 'local developments' in the 3rd to 1st centuries BC.<sup>11</sup> The lack of grog-tempered or 'Belgic' pottery suggests that occupation had ceased by the 1st century.

Unlike earlier periods, the Phase 6 pits formed several clear groups. The four largest in Area 4 (Pit Clusters 1 [GS K12-K13] (Figs 142–43), 2 [GS Q12-Q13], 3 [GS S12] and 4 [GS T12] (Fig. 144)) were distributed along an east to west central axis. Four further pit clusters (Pit Clusters 5 [GS L14], 6 [GS R9-R8], 7 [GS R11] and 8 [GS O14-O13]) were randomly distributed across Area 4. Pit Clusters 5–8 comprised fewer features of generally smaller size. Three further clusters (Pit Clusters 9 [GS Z14], 10 [GS BB14] and 11 [GS FF13]) were identified along the northern edge of Area 7; a continuation of Pit Cluster 10 projected northwards into Area 5. Like those in Area 4, the Area 5/7 clusters displayed considerable variation in the number of features they included. Each displayed individually distinguishing characteristics in terms of pit morphology/organisation. Further pits occurred in isolation or in loose groups of two to three features which may or may not have been deliberate.

Ditches/gullies of varying size were recorded in Areas 3–5 and 7. Generally, their function remains ambiguous and few formed recognisable boundaries. They did, however, display a tendency towards a broadly north to south alignment, possibly indicating deliberate landscape division. Their relationship to the contemporary pit clusters remains uncertain.

#### *The Phase 6 Pit Clusters*

*Pit Cluster 1.* Pit Cluster 1 (Figs 142–43) occupied the western side of Area 4 (GS K12-K13). Principally, it comprised a line of seven pits (F1760, F1742, F1776, F1752, F1704, F1682 and F1643), all of which were oval to sub-rectangular in plan, aligned north-north-east to south-south-west; the long axes of these features were similarly aligned. Immediately west lay rectangular Pit F1692, while to the east was a parallel line of four smaller, less uniform pits (F1800, F2045, F1749 and F1992). To the immediate east of these lay a second, similar line of pits (F1747, F2077, F2083 and F2089).

Pit Cluster 1 was notable for the regularity of its layout, which extended to the shape of the pits in section (Fig. 142). Overall, the pits were between 0.11m and 0.99m deep, with the deepest features lying within longest of the three lines. While the regularity of its layout and form sets Pit Cluster 1 apart, the associated artefactual evidence is unremarkable, mostly comprising moderate quantities of pottery and struck flint. Pit F1760, however, contained a marked concentration of struck flint, while F2045 and F1992 yielded only struck flint. It is possible that struck flint in Iron Age features is residual. Saville's view that 'regular production of and use of flint artefacts for everyday domestic activities declined and ceased altogether within the later Bronze Age' is still widely cited despite abundant contradictory evidence.<sup>12</sup>

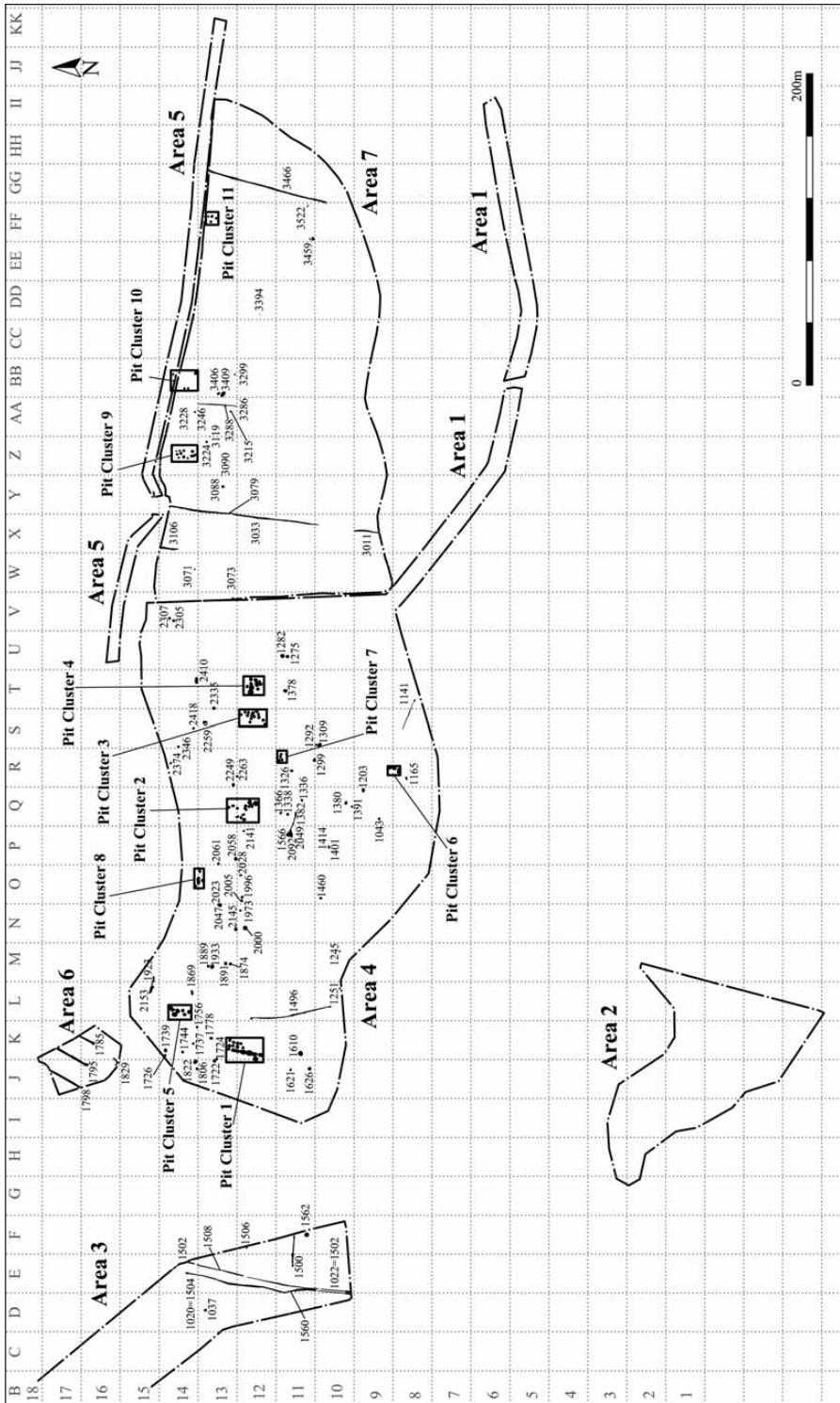


FIG. 141 - Middle to late Iron Age.

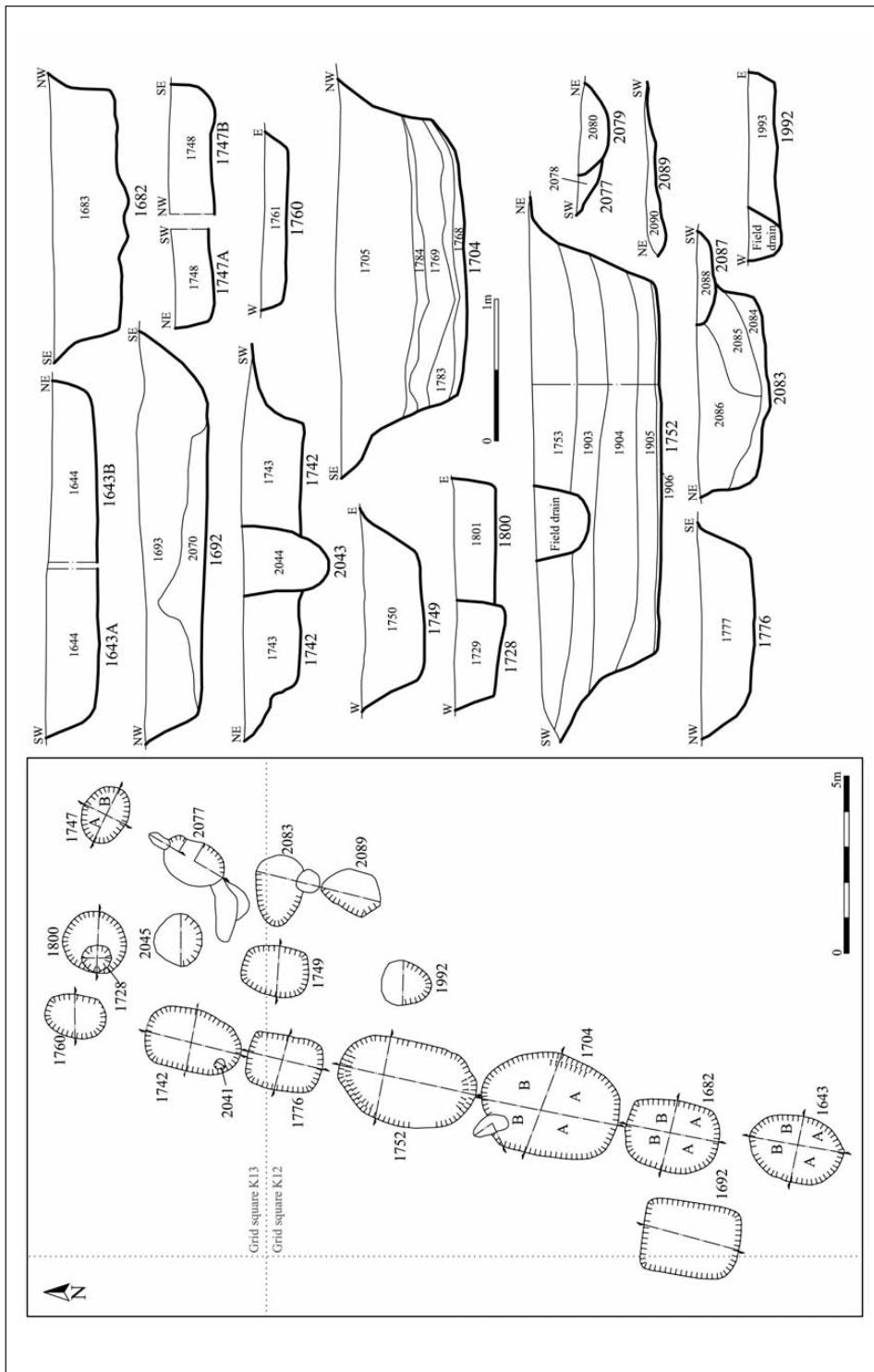


FIG. 142 – Pit Cluster 1.

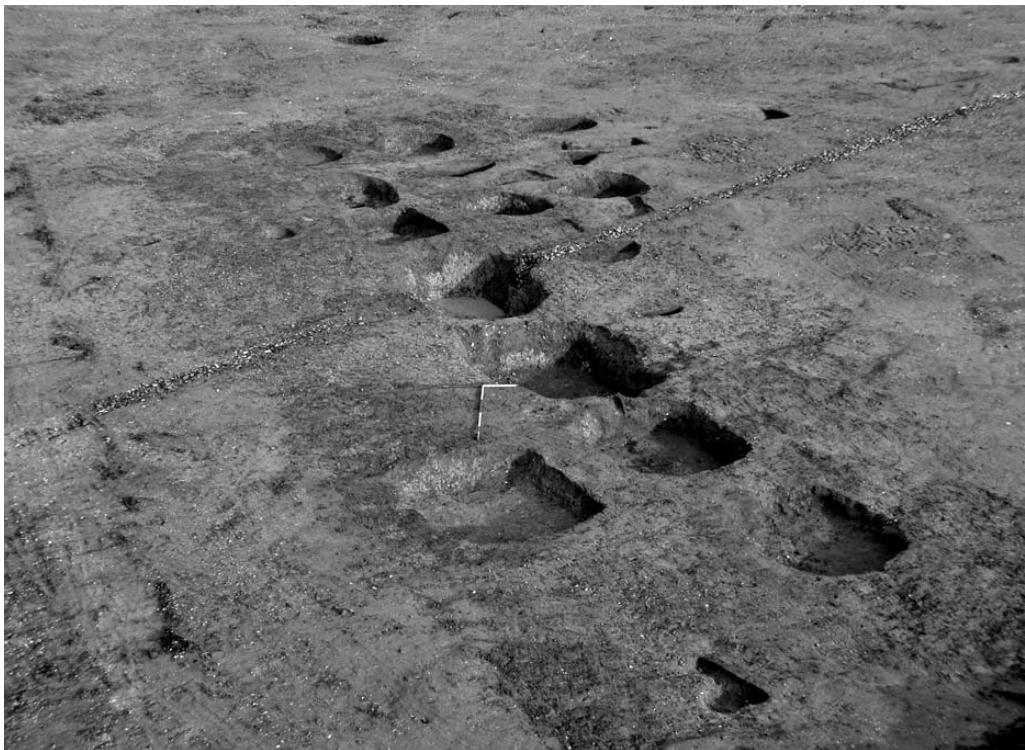


FIG. 143 – Pit Cluster 1, looking north-east.

Only a very small proportion of the Iron Age pottery from Ingham was residual, suggesting a similar date for most of the associated flint. Furthermore, the origin of any ‘residual’ material must be considered: very few earlier features – a possible source of residual flintwork – were cut by Iron Age features. While the residuality of some Phase 6 material is likely, it cannot all be dismissed as such, especially in East Anglia where Iron Age flint working has been long attested,<sup>13</sup> and where notable examples of such have been recorded; unpatinated worked flint in conjunction with Iron Age pottery was recovered from Micklemoor Hill, Norfolk,<sup>14</sup> and Pollard recorded worked flint from Iron Age pit alignments at St Ives, Cambridgeshire.<sup>15</sup>

Certain features forming this cluster (Pits F2077 and F2089) were devoid of dateable artefacts, while others (Pit F1752) contained contradictory assemblages. These have, however, been assigned to Phase 6 based on their clear association. Modest quantities of animal bone were recovered from four features; the partial skeleton of a hare (*Lepus europaeus*) was recovered from F1643.

*Pit Cluster 2.* Pit Cluster 2 lay centrally within Area 4 (GS Q12-Q13). It comprised 14 pits (F2170, F2195, F2179, F2123, F2148, F2117, F2166, F2211, F2221, F2143, F2326, F2127, F2227 and F2381), mostly at irregular intervals, forming a broad north-west to south-east alignment. The layout of this cluster was irregular in comparison to Pit Cluster 1 and its features were less uniform. However, twelve of the pits were steep- or vertical-sided with flat bases. Although these pits were generally smaller than those forming Pit Cluster 1, the variance in size was similar with lengths ranging from 1.05 to 3.00m, width between 0.87 and 2.88m and depth between 0.12 and 0.94m.

Pits F2227 and F2381 were the only Pit Cluster 2 features lacking finds. Third- to 1st-

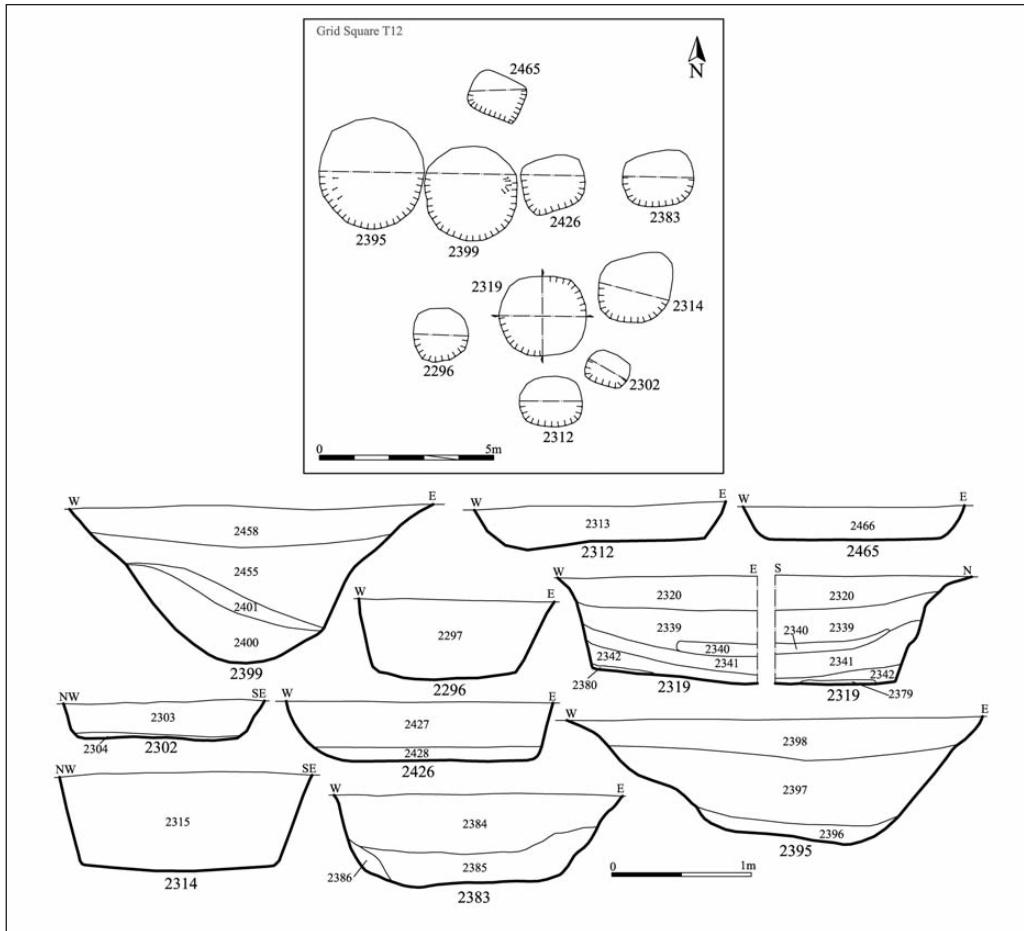


FIG. 144 – Pit Cluster 4.

century BC pottery was present in all other pits with a significant quantity (861g) in Pit F2123. Trace struck flint was present in several features. The corner of a triangular fired-clay loomweight was recovered from Pit F2166 and quantities of fired-clay/daub were also present in F2117 and F2326. Quantities of animal bone ranged from 3 to 120g, though animal bone was present in all five fills of F2221 and a partial dog (*Canis familiaris*) skeleton was recovered from F2143; these represent the deposition of dismembered, lower forelimbs. A bovine left hind limb and forelimb, possibly from the same animal, were recovered from Pit F2326. Environmental sampling recovered a high concentration of cereal remains from F2195.

It is notable of this pit cluster, as it is of most of the Phase 6 clusters, that there was no intercutting of features, although they were cut by later and undated features. This may suggest that all of the clustered pits were created simultaneously or that their locations remained visible, possibly through the use of markers.

*Pit Cluster 3.* Pit Cluster 3 (GS S12) comprised 14 pits (F2265, F2287, F2255, F2235, F2193, F2276, F2267, F2252, F2294, F2291, F2273, F2261, F2362 and F2243), of noticeably smaller size than those forming Clusters 1, 2 and 4. Although the distribution of the Pit

Cluster 3 features appeared random, in plan these pits tended towards circular with regular, steep or vertical sides and flat bases (with the exception of F2193 and F2267).

Finds were scarce, comprising only pottery and struck flint. No feature in this group contained more than five sherds of pottery and only two features contained over 100g. Five pits (F2243, F2261, F2273, F2291 and F2362) contained no pottery but were obviously associated with the pit cluster. Environmental analysis has, however, shown that Pits F2252 and F2267 contained high concentrations of cereal remains, suggesting that these pits functioned as subterranean 'granaries'.

*Pit Cluster 4.* Pit Cluster 4 (GS T12) was the smallest of the major Area 4 clusters, containing only 10 features (F2395, F2426, F2383, F2296, F2319, F2314, F2302, F2465, F2399 and F2312) (Fig. 144). However, the pits forming this cluster were large (comparable to those in Pit Cluster 1), though they did not display the uniformity in distribution characteristic of the latter. Bar F2395, all of the constituent pits were steep/vertical-sided and flat-based.

Again, finds were scarce. Struck flint was present in seven features and trace animal bone was present in three. Pits F2465, F2399 and F2312 yielded no dateable artefacts but were clearly associated with the cluster. Unlike the other large clusters, Pit Cluster 4 yielded an intrinsically significant ceramic assemblage. F2319, towards the centre of the group, contained a complete, intact Iron Age vessel with exterior soot traces (Fig. 145). The vessel was inverted and was located between the upper two fills of F2319 (L2320 and L2339). This indicates that it was initially deposited partly protruding from L2339 before being sealed by L2320. The vessel contained light yellowish brown, firm sandy clay, substantially different to these fills. In further contrast to the other main clusters, 50 per cent of the Pit Cluster 4 features contained multiple fills. This suggests that a greater proportion of these features may have been filled in stages or were permitted, at least partially, to fill naturally.

*Pit Cluster 5.* This cluster (GS L14) was the largest within Area 4 not forming part of the central 'band' of clusters. It comprised 8 pits (F1814, F1887, F1837, F1831, F1788, F1883,

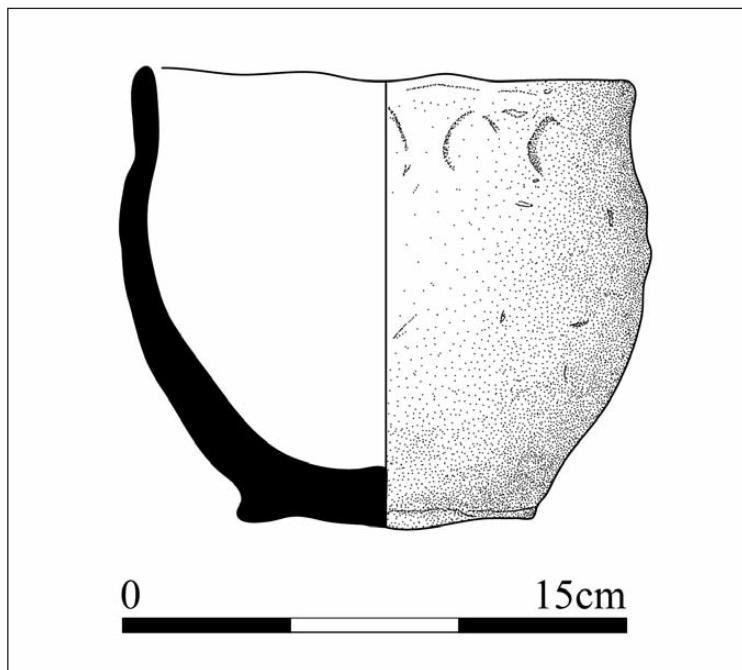


FIG. 145  
– Complete, intact pottery vessel from Pit F2319.

F1791 and F1917) apparently randomly arranged but with no intercutting. The pits were comparable in size to those in Pit Clusters 1–4 and 9–11. Most displayed the steep sides and flattish bases characteristic of the other main clusters.

With the exception of F1831 and F1887 all of these features contained multiple fills, suggesting that they were filled in stages, probably partly through natural processes. Besides trace pottery and struck flint, Pit F1887 (L1888) yielded a smooth flat, oval, perforated stone, measuring 69 x 42mm (maximum) (Fig. 146). The wider end has been drilled from both sides, producing a hole with an hour-glass profile. The junction of the drill holes is worn through suspension, probably on a hide or leather thong; it may have been worn as a pendant. Light scratches on the surface are probably natural. The pendant was undoubtedly amuletic, and its deposition may have been deliberate, equivalent to deposits of dress accessories, weapons and tools in pits that was a feature of Iron Age ritual practice in some areas, marking specific events or the seasonal cycle.<sup>16</sup> The single backfilling of F1887 may support this argument. The stone itself is crystalline and igneous. Two minerals can be identified within it: augite (possibly hornblende) and plagioclase feldspar. Its composition and the size of the crystals that form it are characteristic of andesite. In Britain, andesites outcrop in the Breidden Hills on the English/Welsh border, the Lake District, the Cheviots on the English/Scottish border, and in the Scottish Highlands.

All Cluster 5 pits contained pottery, sometimes in large quantities. Moderate animal bone (between 23g and 261g) was present in four features, while single pieces of burnt stone and flint were recovered from F1837 and F1917. Most of the assemblage resembled either deliberately or coincidentally deposited refuse. It seems unlikely that domestic waste would be dumped into pits belonging to the same group in which the deliberate, possibly symbolic, deposition of the stone pendant occurred; Cunliffe argues that such material may actually

represent an element of structured/symbolic behaviour, possibly deriving from middens of ‘curated rubbish’.<sup>17</sup> The apparent lack of dwellings in the area belies the possibility that this was domestic waste.

*Pit Cluster 6.* Pit Cluster 6, comprising F1082, F1080, F1062 and F1184, lay in the south of Area 4 (GS R8-R9). The two larger pits (F1082 and F1080) were amorphous in plan, while F1062 and F1184 were sub-oval. All displayed steep sides and all except F1184 had flat bases. There is a faint possibility that Phase 2 Pit F1139, close to Pit F1080, became a focus of subsequent Iron Age activity.

Significant concentrations of 3rd- to 1st-century BC pottery were recovered from F1082 and F1080. The latter contained a minimum of four vessels including c. 60 per cent of a single vessel with a slightly everted rim and vertical exterior scoring. An unusual vessel from F1062 parallels an

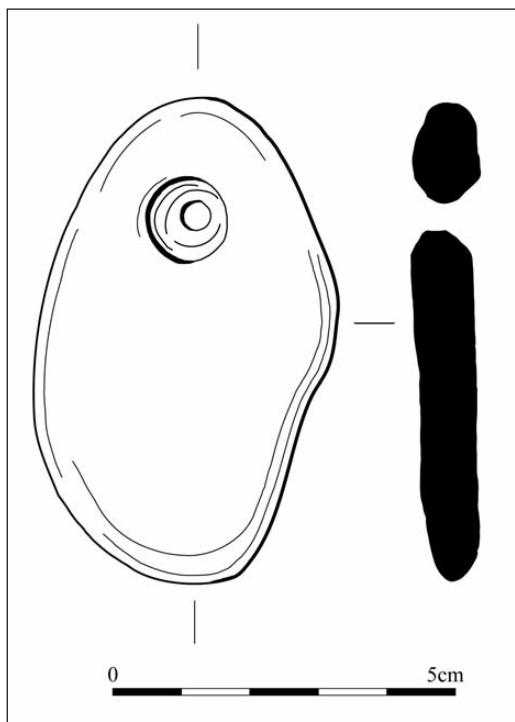


FIG. 146  
– Illustration of stone pendant.

example from West Stow.<sup>18</sup> A sandstone hammer stone, probably used for primary flint flaking, was found in F1080.

*Pit Cluster 7.* This cluster (GS R11) comprised 4 pits (F1322, F1330, F1342 and F1315) and putatively associated Post-hole F1354. In plan, Pits F1322, F1330 and F1342 were sub-rectangular with their long axes aligned east to west. F1315 was sub-oval and was aligned north to south. The pits of this cluster were comparatively shallow and all contained single fills. They approached the steep/vertical side and flat base profile predominant in the other clusters, but F1322 and F1315 had irregular sides.

Pottery from F1330 includes parts of a large jar or bowl with an upright rim and ovoid body and a smaller jar with an upright rim and burnished exterior; both parallel examples from West Stow.<sup>19</sup> Notable vessels were also present within Pit F1342, which also contained a fragment of baked clay, probably from a triangular loomweight, and was within 10m of Layer L2178 which yielded a comparable fragment. Animal bone and struck flint were also present.

Post-hole F1354 may or may not have formed part of Pit Cluster 7. It is included for consideration as it was the only other Phase 6 feature within a 5m radius. However, it may have been functionally related to undated Post-hole F1307, c. 2.5m to the south.

*Pit Cluster 8.* Pit Cluster 8 lay in the north of Area 4 (GS O13-O14) and was one of only two Phase 6 clusters to include intercutting features; smaller features cut some of the pits in Pit Cluster 1 but these were considered not to be part of the group. The largest pits in this cluster (F2134 and F2137) were intercutting and were the only examples to contain multiple fills. Both were oval in plan and had steep sides and flat bases. Of the remaining features only F2096 displayed a similar profile. Three undated features (F1985, F1966 and F2098) lay to the immediate north and may have been contemporary.

Finds from Pit Cluster 8 were limited. Trace animal bone (2g) was recovered from F2137, and struck flint was present in F2137, F2071 and F2134. F2134 also contained fragments of baked clay possibly from a triangular loomweight.

*Pit Cluster 9.* Pit Cluster 9 lay immediately south of Phase 4 Ring-Ditch F3102 (GS Z14). It comprised 13 pits of variable size (F3116, F3161, F3164, F3172=0003, F3175=0012, F3183=0005, F3185, F3193=0014, F3209, F3259, F3265, F3268 and F3270), three of which were intercutting. All of the pits were ovate or circular/sub-circular in plan and the majority displayed steep sides and flat/flattish bases. The consistency and number of fills varied considerably.

Twelve of the 13 pits contained mid to later Iron Age pottery (between 1 and 52 sherds each) including 22 (79g) middle Iron Age sherds from F3175(=0005; L3176). Similarly, 12 of the pits contained quantities of struck flint. The struck flint assemblage from F3164 included a thumbnail scraper from Fill L3165. L3165 also yielded numerous burnt acorn fragments. Acorns are a good fodder for pigs and can also be eaten by humans.<sup>20</sup> However, the charcoal-rich sample from which these derived may simply suggest their inclusion with fuel wood.

Those Pits closest to Ring-Ditch F3102 (F3116, F3259 and F3172=0003) appeared to respect its location. It is possible that the early Bronze Age monument was still prominent during the Iron Age and may have been significant in the placement of Pit Cluster 9. Gosden and Lock postulate that when the tangible history of a landscape feature is lost, it can retain significance in the minds of the general populace derived from its perceived age, and from the potential for replicating the past based on its ambiguous origins.<sup>21</sup> It is possible that the monument represented by Ring-Ditch F3102 held this kind of significance in the minds of the Iron Age population.

*Pit Cluster 10.* Pit Cluster 10, comprising F2471, F2481, F3241, F3249, F3251 and F3257 (=0035) straddled the central northern part of Area 7 and adjacent Area 5 (GS BB14). All but one pit (F3249) contained 3rd–1st-century BC pottery. Although separate from the rest of this

cluster, F3257 (=0035) was considered part of the group based on its date and similarities to F3251.

The pits varied considerably in plan and, as well as being the only constituent features located within Area 5, F2471 and F2481, also differed in profile. However, both contained identical fills to pits F3241, F3249 and F3251 (upper fill).

In addition to pottery, these features yielded a small quantity of struck flint, totalling 53g. The upper fill of F3257 (=0035; L3258) also contained burnt flint, pot boilers and trace animal bone.

*Pit Cluster 11.* Cluster 11 lay in the north-east of Area 7 (GS FF13). This cluster was small, comprising only four features of similar size, shape and profile. All were ovoid in plan and displayed steep to near-vertical sides and flat bases. Their long axes ran approximately east to west.

The fills of the pits displayed some commonality, despite varying in number. The uppermost of three fills in F3431 (L3434) was identical to the uppermost fill of F3435 (L3437) and the fill of F3438 (L3439); the single fill of F3442 (L3443) was similar. Likewise, the secondary fill of F3431 (L3433) was identical to the basal fill of F3435 (L3436). It appears, therefore, that certain of the backfilling events were associated.

All four pits contained middle Iron Age pottery in modest quantities; some sherds from F3435 (L3437) may be earlier. Other finds include animal bone, struck flint and burnt stone/pot boilers. Animal remains from F3431 include articulated dog bones and fragments of cattle and sheep/goat. The former included loose teeth, a near-complete right mandible and fragments of left mandible, maxilla, temporal bone, atlas and axis (vertebrae). Additionally there were several ‘medium mammal’ skull fragments that may also have derived from this animal (apparently deposited as an articulated head and neck). The possible interment of articulated dog elements is echoed in the fragments of forelimb from Pit Cluster 2 (F2143).

*Other Phase 6 pits.* Numerous other Phase 6 pits were distributed across Areas 3, 4 and 7. Many were isolated; others formed possible, loose clusters, perhaps the beginnings of unrealised clusters. Examples of these deliberate pairings or ‘proto clusters’ included F1722 and F1724 (GS J13 and K13), F1275 and F1282 (GS U11) and F1874 and F1891 (GS M13).

Several dispersed pits lay to the south-west of Pit Cluster 8 (GS N12, N13 and O12). Some were notable and lay in alignment with the four major Area 4 pit clusters. Pit F1996 (GS O12) contained a concentration of middle to late Iron Age pottery but few diagnostic sherds. F2005, c. 2m to the west, yielded a similar assemblage (11 sherds; 142g), although small in comparison to 151 sherds (2074g) from Pit F2023 (GS N13), most of which derive from a largely complete vessel similar to that from Pit Cluster 4 (F2319). A thick flake blank, struck from a Levallois-like flint core, and burnt flint were also recovered from F2023.

F2000, a circular, vertical-sided, flat-based pit containing four fills, lay approximately midway between Pit Clusters 1 and 2 (GS N12). Its secondary fill (L2003) contained a well preserved and mostly complete, articulated dog skeleton, comprising elements of the head, vertebrae, and limbs. Comparable remains were recovered from Pit Clusters 2 (F2143) and 11 (F3431). Cunliffe indicates that animal burials, including dogs, often intact or largely complete, are common special deposits found in Iron Age pits. However, a recent survey by Albarella and Pirnie found no published examples of articulated Iron Age dogs from Suffolk, Norfolk or Cambridgeshire.<sup>22</sup> Whether ‘special’ or not, the Phase 6 Ingham dogs represent rare regional examples.

Another loose cluster of pits (F3199, F3215, F3224, F3228, F3246, F3288, F3291, F3406 and F3409) was observed in Area 7 (GS AA14 and Z13-BB13). These were bisected, north to south, by contemporary Gully F3286; this was cut by Pit F3288. The similarity in profile of

these features to those comprising the pit clusters might indicate functional continuity across all similar Phase 6 pits. Finds from these features are largely unremarkable with the exception of middle to late Iron Age pottery from F3199 (17 sherds; 231g) and F3246 (22 sherds; 339g) and abundant struck flint (146 pieces; 1390g) from F3406 (L3407/L3408), including a flaked axe, four blade cores, two scrapers, five blades and debitage. Peachey suggests that this assemblage is Neolithic;<sup>23</sup> it is tentatively possible, therefore, that the pottery from which the date of F3406 is derived is intrusive.

Various dispersed pits of comparable size and shape (F1726, F1739, F1744, F1737, F1756, F1778, F1722, F1724, F1806 and F1822), perhaps also representing a loose cluster, were recorded to the north of Pit Cluster 1 and to the west/south-west of Pit Cluster 5 (GS J13-J14 and K13-K14).

Isolated Pits F1338 (GS Q11), F1380 (GS Q10), F1391 (GS Q10), F2335 (GS S13-T13) and F2418 (GS S14) all contained substantial concentrations of middle to late Iron Age pottery. F1391 and F2335, however, yielded few diagnostic sherds. Pit F1380 was exceptional as it contained fragments from at least five vessels, all with parallels from West Stow.<sup>24</sup> F1380 also yielded abundant animal bone (1922g). The similarity of F1380 to some of the clustered Phase 6 pits may suggest a comparable function.

Pit F2374 (GS R14) was also notable for its pottery assemblage which included a complete Iron Age small cup, again similar to a West Stow example.<sup>25</sup> Burnt flint (38 fragments; 413g) was also recorded. Although larger concentrations of burnt flint were present elsewhere on the site, it is sufficient, in combination with the cup, to suggest deliberate, possibly structured, deposition. However, F2374 was morphologically different to other Phase 6 features with possible structured deposits.

*Phase 6 boundaries, ditches and enclosures.* Ditches F1022 (=F1502) and F1020 (=F1504) were aligned south-south-west to north-north-east across Area 3 (GS E10-E14). To the south these ditches followed a parallel course, c. 1m apart. If extrapolated, Ditch F1022 (=F1502) and F1895 (=F2125), which spanned the south-west corner of Area 6 (GS J16-K16) and the north-west of Area 4 (GS K15, L15 and M14), would have intersected at a slightly acute angle somewhere in Grid Square F18. Ditch F1145, in the north-east of Area 4 (GS Q14-S14-T9), partly followed a similar alignment to F1895 (=F2125), suggesting that they formed two parts of the same feature.

Superficially at least, Ditches F1022 (=F1502), F1020 (=F1504), F1895 (=F2125) and F1145 appeared to form an enclosure boundary postdating the pit clusters and marking the northernmost progression of permanent occupation; all had similar fills containing Iron Age pottery. However, the typological dating evidence is insufficient to unequivocally prove that these ditches postdated the pit clusters. Indeed, the pottery may be residual; material in F1145 could have originated from numerous Phase 6 pits that it cut. If Iron Age in origin, however, the intercutting of these ditches with other, ‘contemporary’ features is in contrast to the site’s general character. Furthermore, F1145 was similar to a mapped 19th-century boundary ditch.

In Area 7, Phase 6 Ditches F3106 (GS X14), F3011 (GS X9), F3033 (GS X10-Y14) and F3446 (GS FF10-GG13) and Gully F3286 (GS AA13) followed the same broadly north to south alignment as those in Area 3. Viewed together, therefore, the longest Phase 6 linear features tended towards a common alignment. The often large distances between these features makes it unlikely that they formed any refined enclosure system. Furthermore, the similarly aligned, shorter features (F1496, F3106 and F3286) interspersed with their longer counterparts did not appear to delineate any meaningful plots. Additional short linear features (F1141, F1382 and F1500) were identified running east to west but, with the exception of F1500, were not closely associated with contemporary ‘boundaries’.

In the north-east of Area 6 (GS J16-K17) three parallel linear ditches (F1785, F1795, and F1798) were recorded. All were oriented north-east to south-west, positioned 8m apart, shared a common steep-sided, flat-based profile, and terminated in a line 9–11m north-east of Ditch F1895 (=2125). Clearly, they formed part of the same construct and were functionally related. Both F1795 and F1798 contained gleyic fills suggestive of waterlogging, and perhaps demonstrating the extent of the Timworth Carr wetland (probably not extensive at the time these ditches were created, but becoming wetter during their lifespan).

In summary, it appears that the Phase 6 landscape of Ingham was unenclosed, or at least informally subdivided. The spread of Iron Age pits extended across the whole of Areas 4 and 7, and probably beyond. No convincing evidence for boundaries marking the outer limits of the Iron Age site was identified. It may be that the ditches in Area 3 represented the western boundary of activity, although isolated Pit F1037 lay beyond these.

## DISCUSSION

### *Timworth Carr*

Cartographic sources suggest that Timworth Carr influenced the historical development of the surrounding landscape. It is possible that this influence reaches further back: the distribution of recorded archaeological features at Ingham appeared, in many cases, to respect the Carr's boundaries. Bar associated drainage ditches, a combination of geological and topographical factors makes Timworth Carr the only immediate surface water feature, one that may have been influenced over time by both seasonal and more long-term fluctuations in the weather and climate. Only limited evidence regarding fluctuations in the extent of this wetland was identified during recent work. Evidence of iron panning, suggesting earlier waterlogging has previously been noted.<sup>26</sup> In Area 6, two parallel Iron Age ditches contained gleyic basal fills, possibly indicating the extent of the Carr during their lifetime. Furthermore, poor animal bone preservation was linked, partially, to water action. However, environmental samples yielded little evidence of wetland plant species.

The evidence for Timworth Carr affecting the layout of encountered archaeology is, therefore, hugely compelling but too limited to make firm conclusions regarding its extent, or even its presence, during any given phase. In the light of what is known about Timworth Carr, it is notable that clear lines exist in the distributions of features of different phases, beyond which activity appears not to have extended any further in the direction of the Carr. The most likely explanation for this distribution pattern is that it results from fluctuations in the extent of the wetland area. This cannot be proved however. Although largely speculative, the influence of Timworth Carr on the distribution of archaeological features is considered below.

### *The Bronze Age*

*The nature of Bronze Age activity.* With the exception of funerary monuments, the majority of the Bronze Age evidence comprised smallish, isolated or loosely clustered pits. Early Bronze Age settlements are rare in Suffolk but a group of sites displaying evidence of small roundhouses has been recorded at West Row, Mildenhall.<sup>27</sup> Structural evidence was lacking at Ingham. However, the pottery and archaeobotanical assemblages strongly suggest settlement/domestic activity. This is supported by evidence recorded during earlier work; Caruth and Anderson recorded grouped features, including two post-holes, interpreted as structural remains.<sup>28</sup>

Norfolk contains numerous known, and probable early, Bronze Age round barrows but comparatively few domestic sites. However, from the quantity of pottery and lithics recovered from surface collection alone, it appears that Norfolk had a substantial early Bronze Age

population. The situation in Suffolk appears similar. It seems likely that the state of the evidence reflects the priorities of Bronze Age society and that burial mounds and ceremonial centres were more elaborate and enduring than settlements, and greater time and resources were invested in them.<sup>29</sup>

Ashbee indicates that Bronze Age populations lived close to their ceremonial centres and funerary monuments.<sup>30</sup> It appears likely, therefore, that Phase 4 activity at Ingham represents the archaeologically visible remnants of a small settlement and its funerary landscape.

*The funerary landscape.* Bradley characterises the early to middle Bronze Age as being the first period in which the wealth of East Anglia is evident, and states that regional barrows contain some of the richest UK graves.<sup>31</sup> While this is undoubtedly true, it is not reflected at Ingham. This may, in part, be due to extensive ploughing over the last 200 years. Grave robbing in antiquity is also possible, though evidence for this was not forthcoming.

It should be noted, of course, that only part of the largest Phase 4 funerary monument (Ring-Ditch F2483) lay within the excavated area. As such, no primary burial associated with this barrow was recorded: if such a deposit existed, it clearly lay beyond the excavation, north of Area 5. Despite this, six deposits associated with F2483 were identified as cremations. Four of these (F2502, F2512, F2514 and F2510), however, comprised only charcoal-rich deposits devoid of bone, though cremated bone was scattered within the fills of F2483. F2510 (L2511) was present only as discrete burnt material between ring-ditch fills and may have been redeposited here from the mound of the barrow. This is also the case with cremation C2499, which included trace cremated human bone. The fill of F2501 (L2498) also contained human bone. F2501 cut the natural substrate and, therefore, appears to have been a secondary cremation contemporary with the primary cremation/burial lying beneath the now ploughed-out mound of the barrow.

While the lack of bone from F2510 (L2511) may result from the removal of this deposit from its primary depositional context, this does not hold true for F2502, F2512 and F2514 which were found *in situ*. Some explanation is offered by the fact that F2512 and F2514 were both cut into the primary fill of Ring-Ditch F2483, indicating that the monument had been extant for some time before they were cremated, and may, therefore, be ritually distinct from cremation burials. All three may represent token deposits of pyre material, rather than the burial of human remains, which may have been dealt with differently or placed elsewhere. One hundred per cent of cremated remains were rarely, if ever, collected for burial, and burial comprised only an element of the funerary rites associated with cremation.<sup>32</sup> It is, therefore, conceivable that these ‘cremation related contexts’ represent only those chosen parts of the cremation selected to represent it in the barrow and that these, either intentionally or accidentally, included no biological element. It may be that they symbolised the non-biological elements of the individual to whose funerary rites they pertained; the material artefacts that were inextricably linked to them or their social standing. Taylor suggests that although grave goods are rare with Bronze Age cremations, other offerings were probably burnt with the body.<sup>33</sup>

A group of early Bronze Age barrows is known at Risby, c. 5km to the south-west of Ingham. Indeed, most Suffolk barrows are considered Bronze Age in date. The mound of one, at Barrow Bottom, survives to a height of 0.8m; its excavated ditch measured c. 27m in diameter, 2.10–3.30m in width and 0.97–1.35m deep.<sup>34</sup> These dimensions are similar to those of Ring-Ditch F2483, suggesting that the Ingham feature represents a similar monument type.

Ditches F1616, F1661 and F1700 may also have represented a barrow. A number of barrows have been identified where the surrounding ditch is broken by causeways. These are generally to the south/south-east, reflecting the alignment of Bronze Age roundhouses. F1616, F1661 and F1700 were broken by causeways to the north, west and east. Alternatively, based

on comparisons with monuments at Millfield Basin, Northumberland, these features may represent a hengiform monument.<sup>35</sup>

The cremation burial from Pit F1583 (L1651), encompassed by these ditches, contrasts sharply with those associated with Ring-Ditch F2483, though like these it was unurned. Cremated bone (416g) was recovered from L1651, representing all body parts. One individual was represented (no duplication of body parts was recorded) and the presence of most of the cranium and long bones indicates the careful collection of material from the pyre. The upper fill of F1583 comprises pyre material, at least partially.

Ring-Ditch F3102 may also have represented a barrow. Although lacking ‘causeways’, the area encircled by this ditch precisely matched that enclosed by Ditches F1616, F1661 and F1700. The morphology of F3102 was also similar to these features. Contradictory dating evidence (pottery) makes it possible that F3102 was not in fact of early Bronze Age origin. However, the ceramic assemblage is likely intrusive, having been incorporated into Fill L3103 (=3177) through some indefinable process. As such the characterisation and phasing of F3102 is based solely on its resemblance to neighbouring, dated features.

Post-hole F3132 was located just north of centre within the area enclosed by Ring-Ditch F3102. As such it may have represented a primary deposit. However, unlike other, similar features, no evidence for a cremation was present.

At least 825 Suffolk barrows are known, most of which have Bronze Age origins.<sup>36</sup> Vatcher and Vatcher indicate a band of barrows/ring-ditches aligned south-west to north-east, to the north of Bury St Edmunds, and incorporating the concentration of such features to the north of Risby.<sup>37</sup> The Ingham monuments fall well within this band and may, therefore, have comprised part of this wider monumental landscape.

Jones suggests that monumental landscapes were intended to facilitate centralised or ‘elite’ control over the general populace by linking the latter with the land’s ancestral inhabitants.<sup>38</sup> Indeed, since the Victorian period, barrows have been identified as elite graves.<sup>39</sup> This is especially true of the Wessex culture where examples such as Bush Barrow yielded bronze daggers, an axe decorated with gold and a wooden rod decorated with bone, analogous to the gold-decorated sceptre of Mycenae.<sup>40</sup> Although more modest, food and beaker vessels, jet beads and a spacer were recovered from the barrow at Poor’s Heath, Risby, and a bronze awl, a tubular bronze bead and 151 jet beads were included in finds from neighbouring Barrow Bottom.<sup>41</sup> These indicate a certain degree of wealth and, therefore, presumably high status. Such finds were absent at Ingham. In the case of Ring-Ditch F2483, this may be because the primary burial, perhaps the most likely to have been deposited with status-linked items, was not identified. However, as Taylor indicates, grave goods are rare with Bronze Age cremations,<sup>42</sup> though none of the Ingham cremations were urned. While they may have been deposited within perishable organic containers, it seems likely that their unurned character indicates the lower status/lesser means of individuals at Ingham compared to those reported from the Risby environs. This may also be reflected by monument size, which with the exception of Ring-Ditch F2483 was also much smaller. However, slight differences in date between these monuments and potential variation in the funerary rite over time may account for these variances.

*Timworth Carr in the Bronze Age landscape.* Area 4 is most likely to have been affected by the possible wetland surrounding Timworth Carr and its potential fluctuations. Pit F2322 (GS T13) was the northernmost Phase 4 feature in this area. It lay at the eastern end of a west-south-west to east-north-east alignment of contemporary pits, also including F1804, F2035, F2160 and F2337, and clearly marking the northerly limit of Phase 4 activity in Area 4. Although not provable, this may also mark the southern extent of the Carr’s wetland environment at this time. It is impossible to know whether these pits were intended to mark

the interface between occupation and wetland or if their formation is coincidental. Pit F2337 contained a noteworthy pottery assemblage including two Beakers and numerous struck flints. This deposition may link F2337 to some symbolically motivated act, perhaps related to its possible position at the occupation/wetland interface. However, none of the other pits contained assemblages suggestive of deliberate or structured deposition, with the possible exception of F2035 which yielded moderate burnt flint.

### *The Iron Age.*

*The nature of Iron Age activity.* The recovered pottery assemblage indicates a hiatus between early Bronze Age (Phase 4) and early Iron Age (Phase 5) activity at Ingham. Phase 5 was only represented by four features, suggesting only infrequent/small-scale use of the site at this time. It is possible that the immediate area was unsuitable for occupation, most likely due to the encroachment of Timworth Carr making the land too waterlogged to inhabit. The resurgence of on-site activity in the middle to later Iron Age may be linked to the subsequent regression of the wetland area.

Iron Age features previously recorded to the south comprised a scatter of small pits/post-holes with larger pits and gullies at their southern edge.<sup>43</sup> This pattern was regarded as being typical of Iron Age occupation recorded elsewhere in Suffolk, where intensive activity has been noted independent of structural foci. The Phase 6 features at the current site generally conformed to this pattern, although many of the pits were large and post-holes were scarce. There was, however, no clear structural focus, bar two possible roundhouse drip-gullies. While the Phase 6 features may have represented settlement, the greatest quantity of information regarding the nature of the site must, naturally, come from the most numerous features present; the pits.

*The Pits: their groupings, function and relationship to Timworth Carr.* Large pits are characteristic of the British Iron Age.<sup>44</sup> Since Gerhard Bersu's work at Little Woodbury in the late 1930s, large Iron Age pits have often been interpreted as subterranean granaries.<sup>45</sup> Ethnographic evidence and experimental data from Butser attest to the viability of this interpretation.<sup>46</sup> Like many of the Ingham examples, granary pits are generally flat-based and bell-shaped or have straight vertical sides.<sup>47</sup> High concentrations of cultivated cereal grains were present in several pits belonging to the four main pit clusters in Area 4, possibly suggesting their use as granaries. However, the overall character of the Phase 6 archaeobotanical assemblage favours domestic preparation of cereals, rather than their large-scale storage. A lack of evidence for grain storage should, however, not be seen to indicate that the pits were not created for this purpose: stored grain is likely to have been removed before they fell into disuse or were deliberately 'closed'. Indeed, recent studies suggest that carbonised plant remains in Iron Age pits are not representative of their use or stored commodities. Rather, they represent post-abandonment deposits.<sup>48</sup>

Environmental prerequisites for successful subterranean grain storage are a low temperature, an impermeable seal, good carbon dioxide production and inhibited lateral water flow.<sup>49</sup> The wisdom of placing granary pits, cut into a sandy, gravelly substrate, adjacent to a possible wetland is questionable. Other excavated pits including examples from Duxford, Woodditton, and Harston Mill were dug into chalk, a more stable substrate that is less prone to slumping or collapse.<sup>50</sup> The experimental pits at Butser were also dug into chalk.<sup>51</sup> It is possible, however, that the Ingham pits had supportive, watertight linings. Evidence for wickerwork linings is sometimes identified and ethnographic parallels exist; the lids of the pits were probably sealed with layers of clay and similar substances could have been employed to prevent water affecting their contents.<sup>52</sup>

The four largest pits clusters in Area 4, Pit Clusters 1–4, formed an east to west alignment.

This is reminiscent of the Bronze Age pits marking the northernmost advance of Phase 4 activity in this area, perhaps mirroring the extent of Timworth Carr. It may be that the major pit clusters also mark the wetland edge, with Phase 6 activity to the north representing earlier or later fluctuations of the Carr within the mid to later Iron Age. If the pits were used for storage, it may be that the distribution of pit clusters, or individual pits, marks those areas dry enough for such activity. Dry or not, it is unlikely that grain storage pits would have occupied an area bordering wetland. As such, the Area 4 pit clusters are unlikely to have marked the edge of Timworth Carr at any particular juncture, but perhaps mirrored it.

The most striking characteristic of Pit Cluster 1 is its organisation into three distinct lines. Long pit alignments, occurring in notable concentrations in East Anglia, south-east Scotland and the Yorkshire Wolds, are interpreted as forming linear boundaries on a landscape scale.<sup>53</sup> Pollard suggests that, as such boundaries were functionally illogical, it must have been the act of their construction which was of significance, as a form of symbolic boundary definition.<sup>54</sup> The alignments forming Pit Cluster 1 are ineffectual even as symbolic boundaries, although they did mirror major Phase 6 Ditches in Areas 3 and 7. It is possible that Pit Cluster 1 was originally intended as a pit alignment, rather than a cluster, especially if it was developed over time instead of representing an individual event.

Pit Clusters 2–4 and 9–11 did not display the same regularity of layout, their constituent features being more randomly distributed. This may again be because the clusters were dug or added to over a prolonged period. There were only two instances of intercutting within these clusters. As grain could potentially be stored in pits with only minimal wastage for up to seven years,<sup>55</sup> it is possible that these pit clusters grew as each year's harvest was deposited for storage, and that each pit was identifiable to avoid intercutting.

Cunliffe suggests that the rationale behind storing seed grain in underground silos, rather than above-ground, must be associated with placing grain under the protection of the chthonic deities who controlled fertility, the latter being propitiated by offerings placed in the emptied pits.<sup>56</sup> This explains 'special' or 'structured' pit deposits recorded at many Iron Age sites. Such deposits were scarce in association with the Ingham pit clusters. Only the intact vessel from F2319 (Pit Cluster 4) can be positively identified as a symbolic deposition. Its location between Fills L2320 and L2339 suggests that its deposition may have been associated with the intervals of erosion of the pit,<sup>57</sup> and that, this high up in the feature, it was a secondary or even tertiary deposit. This suggests that a primary propitiatory deposit, possibly organic and archaeologically 'invisible', may have originally been present. The propitiatory offering of organic items may explain why more items suggestive of such acts were rare in the larger pit clusters. Butchered cattle limbs, possibly representing prepared haunches of meat intended as propitiatory offerings, were recovered from the primary fill of Pit F2326 (Pit Cluster 2) and hare bones were found in Pit F1643.

More evidence of such activity was gained from the 'lesser' pit clusters; F1330 (Pit Cluster 7) and F1082 and F1080 (Pit Cluster 6) all contained abundant pottery, including near complete vessels, possibly representing symbolic deposition. Pit F1887 (Pit Cluster 5) contained the quartzite pendant, which Crummy states was undoubtedly amuletic in character and deliberately deposited as part of a ritual/symbolic act.<sup>58</sup> The stone of the pendant occurs naturally on the Welsh border, in the Lake District, the Cheviots and in the Highlands. This suggests a rare and possibly valuable item, resulting from long distance trade.

Strong evidence for structured or special deposition was also present in Pit F2000 which contained an articulated dog skeleton. Articulated dog elements were also present in F2221 (Pit Cluster 2) and F3431 (Pit Cluster 11) and may also represent structured deposition. F2000 was not, however, part of a pit cluster. It lay between Pit Clusters 1 and 2, aligned with the four largest Area 4 clusters. If this was deliberate it perhaps further attests to the overall

significance of this alignment. The presence of a possible ‘special’ deposit in a comparatively isolated pit indicates that any of the Phase 6 pits could potentially have been of symbolic significance to the contemporary population.

Although ‘special’ deposits are considered to be closely linked to pits and pit clusters in the Iron Age, of which the Danebury examples are amongst the best known,<sup>59</sup> there are several sites where there are pits or pit clusters, often positively identified as storage pits, which contain little or no evidence for ‘ritual’ depositions. Examples include Mallard Close, Earls Barton, Northamptonshire, and Farmoor, Oxfordshire.<sup>60</sup> Like much of the Ingham evidence, finds from many pits at Farmoor were thought to represent domestic waste.

The patterns of pit form and infill are clearly similar to those recorded at Edix Hill, Cambridgeshire. The differences in size and shape of the Edix Hill pits and in the associated patterns of infill were considered to indicate functional differences. The cylindrical pits were interpreted as storage pits, while the more irregular features were interpreted as weathered or poorly executed examples of the latter.<sup>61</sup> Similar interpretations may hold true for Ingham, but this does not explain why so many pits were created in such concentration at Edix Hill or why large numbers of the Ingham pits were clustered. Nor does it explain why cylindrical pits were present at Ingham both as isolated and clustered features. Grain could be stored for several seasons and it is possible that pits were re-trimmed for reuse.<sup>62</sup> If this were the case at Ingham, it would have been possible to store vast quantities of grain at this location. Clearly not all of the pits coexisted; new pits would have been dug and old ones filled in at intervals during the course of Phase 6.

Based on experimental work at Butser, Reynolds suggested that besides ritual, unidentifiable archaeologically, the only cause for the abandonment of a storage pit is the farmer’s reaction to its failure.<sup>63</sup> Other than poor sealing, or rodent or fungal infestation, the only reason for pit failure is if sufficient water is present to cause lateral flow through the ground. The effect of water on stored grain can be startling, causing decolouration and an unpleasant odour; abandoning the pit would be understandable. There is no evidence to suitably indicate the extent of Timworth Carr during Phase 6, but much of the Iron Age faunal assemblage was poorly preserved, partly as a result of water action. If the area was waterlogged, or prone to seasonal fluctuations in the water table, it is possible that storage pits failed regularly, thus helping to explain the proliferation of these features. However, it seems unlikely that such environmental factors would have escaped notice. Furthermore, pit failure may be argued to result in greater quantities of grain being present in environmental samples than was the case; a failed pit may have been backfilled, possibly following a ritual designed to appease the chthonic deities, without removing the spoiled grain.

The proximity of the possible wetland environment may, at least in part, have attracted the accumulation of pits in Areas 4 and 7. Bogs, rivers and other striking natural features may have attracted Iron Age ritual practices. Metalwork and other objects recovered from bogs and rivers are likely to have been offerings deliberately dedicated to the spirits of these places.<sup>64</sup> Deliberate deposition in man-made watery contexts has also been noted at sites such as Crick Covert Farm (Northamptonshire).<sup>65</sup> It is, therefore, reasonable to suggest that the wetland of Timworth Carr (if in existence as the basal fills of F1798 and F1795 suggest) may have been religiously significant. Davies suggests that pits and shafts that penetrated into the ground served as interfaces with the underworld.<sup>66</sup> The combination of the Carr wetlands as a prominent natural feature, with its associated spirits, and the excavation of pits and intrusion into the underworld may have been a particularly potent symbolic/ideological mixture. Cunliffe suggests that economic activity, social activity and belief systems would have been closely bound together, as the concept of placing seed grain in the protection of chthonic deities suggests.<sup>67</sup> This may indicate that the pits were excavated for various purposes: to make offerings to the spirits of

the wetland and/or the gods of the underworld, e.g. the dog ‘burial’ in Pit F2000; to commune in some way with those gods and spirits; and to place seed grain under the protection of deities. It is possible that the risk of stored grain spoiling owing to the proximity of the wetland was considered acceptable due to the strength of the supernatural beings that, according to what is understood of the Iron Age paradigm, would have inhabited this area.

The alignment of the four larger pit clusters, and possibly Pit F2000, across Area 4, and the similar but more northerly alignment of Pit Clusters 9–11 (Area 7), is so striking that it must have been deliberate, and therefore significant. It is possible that it reflects the edge of Timworth Carr at some point during Phase 6. Alternatively, the alignments may mark a seasonal high point in the wetland’s extent, with features to the north (in Area 4) representing activity restricted to drier periods. It is possible that configuration of the large pit clusters represents a boundary or line of delimitation that can only be understood as part of the belief system of the site’s occupants.

The greatest carbonised plant assemblages from Phase 6 features were from those comprising Pit Clusters 2, 3, 7 and 9. These represent the daily processing of cereals, storage as spikelets and accidentally charred material from food preparation. This concentration of processed material may indicate a focus of Phase 6 activity, and potentially alludes to the location of settlement structures, the remnants of which have been lost. Indeed this is supported by the possibility that the final contents of many pits represents refuse; it is unlikely that waste would be transported large distances for disposal, although this cannot be ruled out, notably where there is the possibility of deliberate/structured deposition.<sup>68</sup>

*Boundaries and enclosures.* Many Iron Age settlements in East Anglia appear to have been undefended. Some were defined by ditches (akin to field boundaries) while others were apparently open.<sup>69</sup> Literary sources emphasise the ritual and symbolic importance of boundaries to various Iron Age societies in northern Europe.<sup>70</sup> In the light of the possible significance of the Timworth Carr wetland to the Iron Age population, it may be possible that Ditches F1895 (=F2125), F3033 and possibly F3446, which contained small quantities of Iron Age pottery, may have had some symbolic function associated with the adjacent Carr. However, these sit uncomfortably with the overall character of the Phase 6 site. Neither do they appear to obey the picture of settlement enclosures in Iron Age Suffolk suggested by Martin.<sup>71</sup> Iron Age activity represented at Ingham would appear, therefore, to have been either loosely enclosed or unenclosed like many regional sites and, perhaps more significantly, like the earlier Iron Age activity recorded to the south.<sup>72</sup>

Several Phase 6 ditches were identified. These clearly had a specific purpose. The largest, F1020 (=1504), F1022 (=1502), F3033 and F3446 shared a common alignment, bisecting large areas of the landscape. Cunliffe suggests that the Iron Age enclosure boundary at Gussage All Saints, though imposing, was little more than a symbolic boundary.<sup>73</sup> This concept of symbolism and the suggestion that space was structured and governed by rules that meant certain undertakings were confined to specific, but not necessarily physically marked zones,<sup>74</sup> may indicate that the linear features at Ingham, rather than forming an enclosure system, related to the structuring and division of space. They would not necessarily have to be interlinked to perform this task.

*Phase 6: summary.* Evidence for Phase 6 structures was lacking, and so to describe the site as a settlement may be misleading. However, this pattern appears typical of Iron Age sites in Suffolk. Very few Iron Age structural features were previously recorded to the south of the site.<sup>75</sup> The Phase 6 archaeobotanical evidence strongly contrasts with the structural evidence as much of it is considered to be ‘domestic’. The potential focus of such activity may have been around Pit Clusters, 2, 3 and 7 while Clusters 1 and 5 were peripheral.

It appears that, whatever the nature of the Phase 6 activity, it was strongly focussed on the

function of the pit clusters. Many of the pits displayed profiles typical of Iron Age grain storage pits. Despite this, the archaeobotanical evidence points more towards domestic food preparation or waste disposal. However, as final pit fills need not be representative of their earlier uses, some credence is lent to the interpretation of these features as subterranean granaries, even if solely based on their form. Cunliffe suggests that the act of storing seed grain in pits was carried out in order to place the grain under the protection of chthonic deities.<sup>76</sup> Often such pits contain ‘special’ deposits: offerings to the beings in whose trust the grain was placed. Certainly, there is clear evidence for the deliberate deposition of objects into Phase 6 pits at Ingham but this is not of any great scale, and the items deposited: pottery vessels, an amuletic pendant and articulated animal elements, are not particularly spectacular when compared to votive objects elsewhere; it is, of course, possible that their perceived value does not translate well from the Iron Age. It may be that organic or perishable items were deposited in some of the pits, such as leather, woven items, bales of wool or other fabrics and foodstuffs, or even that liquids such as beer, wine or milk were poured directly into the pits prior to ‘closure’. These would not have survived in the burial environment, and so the information that these acts would reveal about the nature of the site and of Iron Age society in general is lost. In addition to the ‘special’ deposits, it may be seen that the combination of the clearly defined pit clusters and the possible wetland area surrounding Timworth Carr further hint at some kind of unusual ‘extra-domestic’ activity taking place.

Although there is evidence that symbolic or ‘ritual’ activity was taking place and that the site may have been chosen for the symbolic or spiritual significance of the possible wetland, it was not necessarily solely a ‘ritual’ site. The large number of possible storage pits suggests that the Phase 6 features represent a site at which economic/agricultural activity was occurring. The belief system of the population, the economy and the way in which society functioned during the Iron Age were closely bound together.<sup>77</sup> Clearly, in the minds of the Iron Age population there was little distinction between economic activity and ritual or symbolic activity. The site may have been chosen, and the apparently deliberate deposits of pottery vessels, animal burials and the amuletic pendant made, because this was good economic practice according to the beliefs of the people carrying out these acts.

## CONCLUSION

The encountered archaeology follows a pattern that might have been largely predicted from the results of the previous investigations.<sup>78</sup> The evidence spanned the Neolithic to the early modern period with the focus being mostly on the early Bronze Age and middle to later Iron Age. The Bronze Age activity appears to form part of a wider Bronze Age landscape in this part of Suffolk, with funerary monuments present in a band running south-west to north-east, to the north of Bury St Edmunds, and incorporating the concentration of such features to the north of Risby.<sup>79</sup> This activity would appear to form a coherent extension of the prehistoric activity previously recorded in the more southerly parts of Ingham Quarry. The middle to later Iron Age activity appears to be slightly later in date than previously recorded. This activity represents well the way in which Iron Age belief systems appear to have been inextricably linked with all other aspects of daily life.

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#### NOTES

- 1 Craven 2004, 4.
- 2 SSEW 1983a, 1983b.
- 3 Gill 1996; Anderson and Caruth 1998; Caruth and Anderson 1999.
- 4 Castleden 2015, 173–74.
- 5 Newton and Mustchin 2012.
- 6 Adkins and Adkins 1998, 97; Cunliffe 2005, 544.
- 7 Taylor 2001, 41.
- 8 Gates and Deegan 2009, 140.
- 9 Ashbee 1960, 70–71.
- 10 Harding 1981, Figs 12 and 28.
- 11 Cunliffe 1968, 182; 1978, 51.
- 12 Saville 1981, 6; Young and Humphrey 1999.
- 13 Clarke 1939, 36.
- 14 Clark and Fell 1953, 34; Young and Humphrey 1999, 231.
- 15 Pollard 1996, 100–2.
- 16 Hamilton 1998, 32, 38; Hill 1995, 15, 64–67; Wait 1985, 240–44.
- 17 Cunliffe 1992, 76.
- 18 West with Martin 1990, 66: vessel 120.
- 19 West with Martin 1990, 62 and 64: vessels 78, 91, 98, 101 and 102.
- 20 Gale and Cutler 2000, 205; Campbell and Straker 2003, 17.
- 21 Gosden and Lock 1998, 6.
- 22 Cunliffe 1992, 75; Albarella and Pirnie 2008.
- 23 Peachey (in Newton and Mustchin 2012).
- 24 West with Martin 1990, 64.
- 25 West with Martin 1990, 64: vessel 64.
- 26 Craven 2004, 4.
- 27 Martin 1999a, 38.
- 28 Caruth and Anderson 1999, 28.
- 29 Ashwin 1996, 52; Bradley 1984, 70.
- 30 Ashbee 1960, 15.
- 31 Bradley 1993, 9.
- 32 McKinley 1997, 130.
- 33 Taylor 2001, 39.
- 34 Martin 1976, 46, 60; Martin 1981, 75.
- 35 Bradley 1998, 149–50; Harding 1981, Figs 12 and 28.
- 36 Martin 1999a, 38.
- 37 Vatcher and Vatcher 1976, Fig. 1.
- 38 Jones 1986, 68.
- 39 Ashbee 1960, 170.
- 40 Briard 1979, 87.
- 41 Vatcher and Vatcher 1976, 267, 270; Martin 1976, Fig. 26.
- 42 Taylor 2001, 39.
- 43 Caruth and Anderson 1999.

- 44 Cunliffe 1992, 69.  
 45 Bersu 1940, 60–64; Cunliffe 1992, 70.  
 46 Reynolds 1979, 74–76.  
 47 Cunliffe 2005, Fig. 16.2.  
 48 Campbell 2000, 53.  
 49 Reynolds 1979, 76.  
 50 Lyons 2011, 10–11; Mustchin forthcoming; O'Brien forthcoming.  
 51 Reynolds 1979, Fig. 2.  
 52 Harding 1974, 78.  
 53 Wigley 2007, 119.  
 54 Pollard 1996, 110.  
 55 Harding 1974, 78.  
 56 Cunliffe 1992, 78–79.  
 57 Cunliffe 2005, 570.  
 58 Crummy (in Newton and Mustchin 2012).  
 59 Grant 1984, 542–43; Walker 1984, 461.  
 60 Chapman and Atkins 2004, 5–6, 24–25; Lambrick and Robinson 1979, 65.  
 61 Malim 1998, 22, 48.  
 62 Cunliffe 1992, 79; Harding 1974, 78.  
 63 Reynolds 1979, 76.  
 64 Cunliffe 2005, 566.  
 65 Woodward and Hughes 2007, 191.  
 66 Davies 2008, 112.  
 67 Cunliffe 1992, 81.  
 68 Cunliffe 1992, 71.  
 69 Martin 1999b.  
 70 Hingley 1990, 100.  
 71 Martin 1999c.  
 72 Caruth and Anderson 1999.  
 73 Cunliffe 2005, 576.  
 74 Cunliffe 2005, 577.  
 75 Caruth and Anderson 1999.  
 76 Cunliffe 1992, 69.  
 77 Cunliffe 1992, 81.  
 78 Caruth and Anderson 1999; Craven 2004.  
 79 Vatcher and Vatcher 1976, Fig. 1.

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