

EXCAVATIONS AT NOBEL DRIVE, HARLINGTON, AND SIX SITES TO THE NORTH OF HEATHROW AIRPORT, HILLINGDON

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With contributions from Jonathan Cotton and Randolph Donahue

SUMMARY

This report deals with an excavation at Nobel Drive, Harlington, and draws in the results of six other small scale excavations, evaluations, and watching briefs to the north of the eastern end of Heathrow Airport. The purpose of this article is to make the limited information from these sites readily available for future studies of this area.

The earliest evidence for human activity was a pit whose fill contained a leaf-shaped arrowhead of Earlier (Early or Middle) Neolithic date, which might have been deliberately deposited, soon after manufacture. This forms part of a small body of Earlier Neolithic material which has come to light in excavations over the last two decades, but which was previously unknown in this area of the Third Terrace Gravels.

Later prehistoric activity is represented by a number of boundary ditches of probable Later (Middle or Late) Bronze Age date. The entrance way through one Later Bronze Age ditch had a complex series of modifications to its layout, possibly as part of a system for stock management. Its alignment has parallels from sites in the surrounding area, which extend over a distance of more than 1.5km, and appears to be derived from the local alignment of the slope of the gravel terrace in the valley of the River Crane. One ditch appears to be of Iron Age or later date. This, and a large boundary ditch which may also be of Iron Age date, show a change in orientation from the enclosures of the Later Bronze Age. This change may follow a shift in settlement location in the Early or Middle Iron Age, and

appears to continue into the Roman period. A single coin of the late 3rd or early 4th century AD forms the sole indication of Roman activity, but is of similar date to a nearby Roman enclosure system at Cranford Lane.

INTRODUCTION

Following an archaeological evaluation at land adjacent to the Ibis Hotel, Nobel Drive, Harlington (Elsden 1996b), an excavation was conducted by staff from the Museum of London Archaeology Service. The site is located to the north of the Bath Road and Heathrow Airport, between the M4 Spur Road and the River Crane, in an area which has been subject to a number of small scale archaeological evaluations, excavations, and watching briefs in the 1990s.

The results of six small sites, which were also situated to the north of the eastern end of Heathrow Airport, are included in this report. They are: Northrop Road 1992, Neptune Road 1995, Newall Road 1996 and 1997, and Bath Road 1997. The latter was situated on the northern side of the Bath Road; the other four between the Bath Road and the Northern Perimeter Road of Heathrow Airport. In addition, some of the results of a watching brief inside the airport boundaries (Heathrow Airport 1997) have been included. This project extended along the

Table 1. *Fieldwork information*

Location	Site Code	Date	Type of fieldwork	National Grid Reference	Supervisor
Nobel Drive	NDH96	December 1996 & July 1997	Evaluation & Excavation	TQ 0911 7701	N.J. Elsdon
Northrop Road	HCR91	February 1992	Evaluation	TQ 0901 7680	S. Hoad
Neptune Road	NEP95	January–March 1995	Watching Brief	TQ 0859 7681	S. Hoad
Bath Road	BTD96	December 1996	Evaluation	TQ 0850 7695	S. Hoad
Newall Road 1996	NAL96	March 1996 & May–June 1996	Evaluation & Excavation	TQ 0828 7685	P. Durnford & J. Partridge
Newall Road 1997	NLL97	July 1997	Evaluation	TQQ 0834 7689	J. Partridge
Heathrow Airport	HCI97	May–September 1997	Watching Brief	TQ 0527 7666 to TQ 0894 7678	N.J. Elsdon

entire length of the main northern runway, but only those results from the eastern end are presented here.

These sites, in common with other prehistoric sites in West London, are notable for the small size of their finds assemblages. The finds will therefore be discussed with their parent features, rather than in a separate section. More importantly, the paucity of datable pottery, or other artefacts, has resulted in varying degrees of certainty in dating features where ‘assemblages’ are frequently in the order of one or two sherds.

GEOLOGY AND TOPOGRAPHY

The area containing the sites under discussion lies on the Third Terrace Gravels (formerly the Taplow Terrace), close to the southern edge of the brickearths (or Langley Silt Complex) which caps the gravels. It has been found during excavations in the vicinity of Heathrow Airport that the brickearth extends considerably further to the south than the extent shown on the maps of the British Geological Survey. In this southern area the brickearth is often present only in patches, or as a weathered brickearth subsoil.

The gravel terrace in this area slopes down gradually to the south and east, to the Rivers Thames and Crane respectively. Further to the west the influence of the Crane recedes and the slope is directed solely southwards, towards the Thames. This slope is typified by the 25m OD contour, which in this area runs from north-east to south-west, displays a re-entrant to the north in the area around the Bath Road site (Fig 1), and turns to the west in the vicinity of Newall

Road. Despite the levelling which has taken place within the airport perimeter, these modern contours closely reflect those immediately preceding the construction of the airport. It is suggested below that the northeast-southwest orientation has influenced the layout of the Later Bronze Age field systems in the area.

ARCHAEOLOGICAL LANDSCAPES OF THE HEATHROW AREA

The history of the area around Heathrow Airport can be characterised as a series of ‘archaeological landscapes’, commencing with the hunter-gatherer communities of the Palaeolithic and Mesolithic, which are represented by occasional finds of flint tools.

The Later Neolithic and Early Bronze Age is characterised by a landscape dominated by ceremonial monuments, in particular the Stanwell Cursus and a line of round barrows on the southern edge of the gravel terrace between Stanwell and West Bedfont, with limited evidence for contemporary settlement.

From the Middle Bronze Age onwards we see an intensification of agriculture, and gradual abandonment of the earlier monuments. This is marked by the emergence of settlements with extensive field systems, such as the Middle Bronze Age field system at Perry Oaks Sludge Works, that from the Later Bronze Age at Cranford Lane, and also the Middle Iron Age settlements at Stockley Park and Caesar’s Camp, Heathrow (Grimes & Close-Brooks 1993).

With the establishment of Roman towns at *Pontes* (Staines) and *Londinium*, the rural character

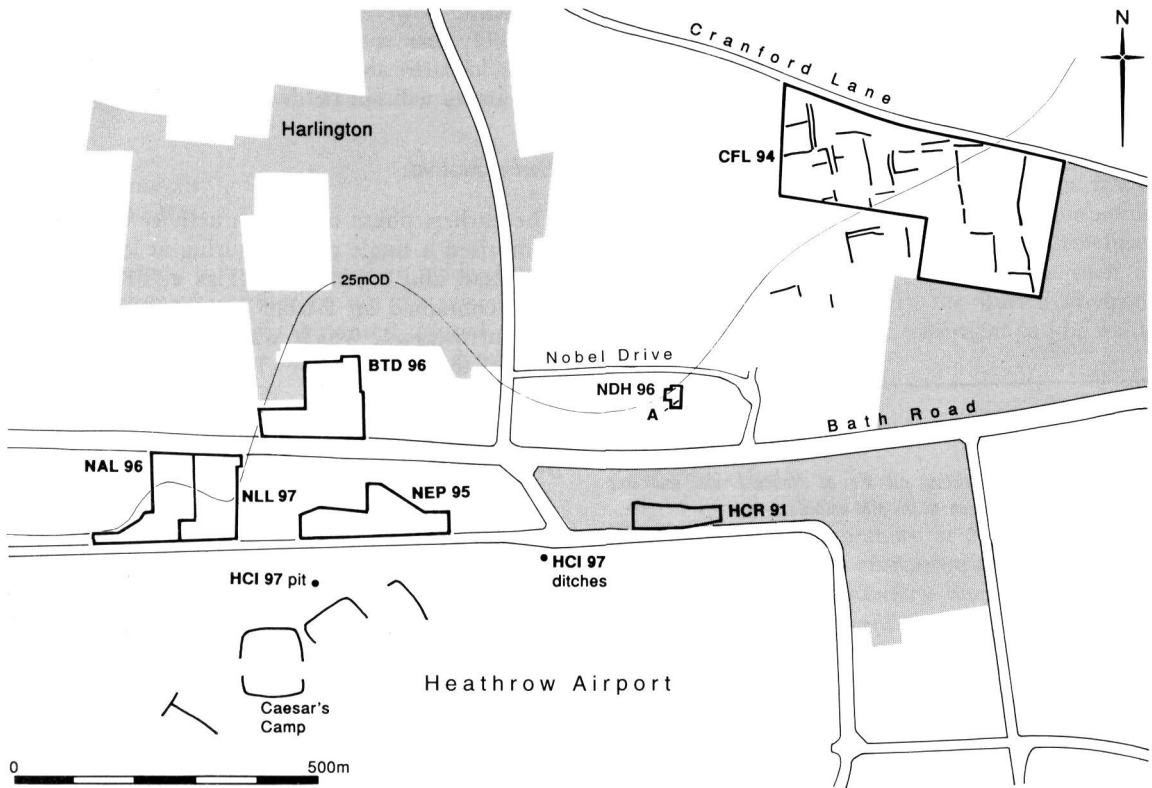


Fig 1. Site locations: Nobel Drive (NDH96), Northrop Road (HCR91), Neptune Road (NEP95), Bath Road (BTD96), Newall Road (NAL96 & NLL97), and Heathrow Airport (HCL 97)

of the area will have been influenced by its proximity to the urban centres. Apart from a hiatus during the Early Saxon period, this situation continued until radical changes took place in the 20th century, caused by the construction of Heathrow Airport in the 1940s and subsequent development.

EXCAVATION RESULTS

Nobel Drive

The site lies on the southern side of Nobel Drive (Fig 1), and covers an area of approximately 940m². It is situated on the western side of the shallow valley of the River Crane, at a point where the valley widens out, overlooking the lower land on either side of the river. This situation, which is clear on a contour map, but obscured by building and trees on the ground, may have been more obvious in earlier times. The slopes are, however, of a gradual nature,

although more pronounced than the area to the south on which the airport is now situated.

The site lies immediately to the south of the 25m OD surface contour, at a point where the brickearth exists only as patches, and as a weathered brickearth subsoil.

The site is currently flat, lying between 24.29 and 24.33m OD. This must be the result of ground reduction and levelling during post-war development, as a 1943 level survey (Air Ministry 1943) shows the site to slope gently down to the north, from approximately 24.51 to 24.23m OD. This survey also shows the site to lie in an anomalous position, on the northern slopes of a very slight rise, an undulation in an area which otherwise slopes down gently to the south-east.

The natural gravels in the southern half of the site were roughly level, lying between 23.57 and 23.62m OD. At the northern end of the site the gravels rose noticeably, to a maximum of 23.78m OD. Immediately to the south of this rise lay a slight depression between 23.40 and 23.54m OD, along the line of a palaeochannel.

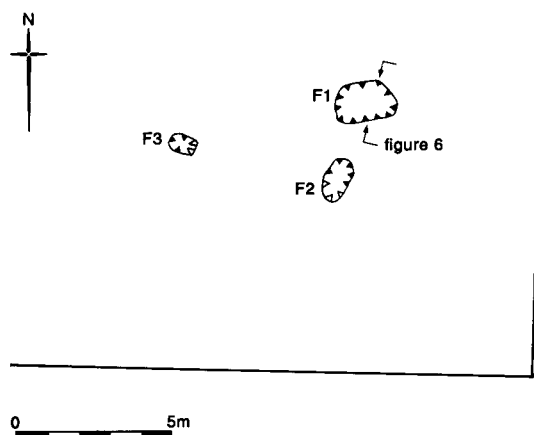


Fig 2. Possible Neolithic pit F1 at Nobel Drive, and two undated pits, in relation to the site boundary

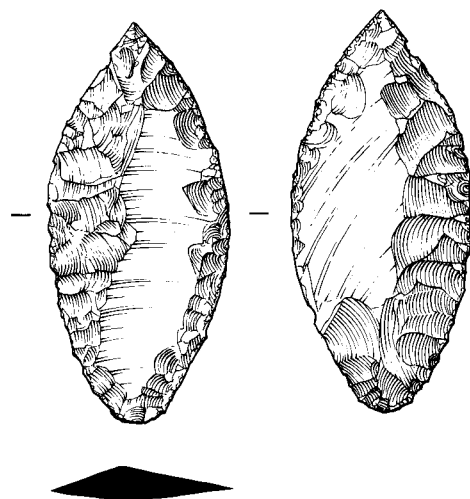


Fig 3. Earlier Neolithic arrowhead from Nobel Drive (1:1)

The contradiction between the slope of the 1943 ground surface and that of the underlying gravels is unexpected; the reason for it is, at present, unexplained.

The assemblages of both pottery and flintwork from the excavations were small, despite complete excavation of all the significant features on the site. This lack of large assemblages of datable material means that the proposed phasing is open to challenge; it is justified in the section 'dating structure', below. The decalcifying nature of the soil (Gibbard 1985, 57) was such that no bone survived, and virtually no other organic material, including that which would provide environmental information. Similarly, as most of

the features were filled with a similar material, mid grey brown clay silt derived from erosion of the brickearth and silting during disuse, the fills of features will not be described.

Earlier Neolithic

The earliest phase of human activity on the site comprised a single pit, measuring at least 2.22m in length and 0.31m deep (Figs 2, F1 & Fig 6). This contained an Earlier Neolithic leaf-shaped flint arrowhead, which was found close to the base of the pit (Fig 3).

The Arrowhead *Jonathan Cotton*

The arrowhead has been worked on a thin, broad, leaf-shaped flake of fine, translucent, mottled yellow-orange/brown flint. Invasive ripple-flaking has been carried out from one edge and covers some 35–50% of both faces. Shallow, marginal retouch on the opposite edge is seemingly restricted to the formation of a symmetrical shape. The proximal end of the original flake has been further modified by shallow invasive flaking to create a neatly rounded butt. The tip has been carefully worked to form a symmetrical point, though one edge appears to have suffered some minor, possibly post-depositional, damage 5mm from the tip. Length 53mm; width 23.5mm; thickness 3.5mm; weight 5.23g.

The arrowhead belongs to Green's Type 2Bm (Green 1980, 29 & 70), and is notable for its size and careful manufacture. Moreover, the choice of a highly coloured, fine quality, and aesthetically pleasing raw material – presumably derived from the Thames terrace gravels hereabouts – is likely to have been deliberate. It is a feature of the local scene that coloured flint seems to have been utilised for narrow blades or fine, bifacially worked pieces: an incomplete ripple-flaked leaf arrowhead of amber flint recovered from the fill of a Roman well at Imperial College Sports Ground, Harlington (Jonathan Nowell pers comm) and a broken laurel leaf of yellow-brown flint from Bedfont Road, Stanwell (Knight 1997) are cases in point.

Whether the finely-worked Nobel Drive arrowhead is to be interpreted as some sort of special event-marking 'placed deposit', is an open question, though it remains a possibility. Equally, the arrowhead could have been collected as a

curio or 'elf-bolt' (Merrifield 1987, 16) and deposited at an altogether later date like the piece from the Roman well above, though its nearly pristine state tends to militate against this.

Residue Analysis

Randolph Donahue

In an attempt to provide further evidence for consideration of whether or not the arrowhead had been a deliberately deposited unused piece, it was submitted for microwear and residue analysis. There is no evidence of surviving organic residues adhering to the arrowhead, and the fracture scars observed were either the

product of retouch, or in one case a notch probably resulting from excavation damage, with patches of metallic residue from a steel trowel or mattock. Extensive mild surface wear on protruding surfaces was very likely to have been produced during shifting and settlement of the fill of the pit after deposition, but abrasion tracks near the proximal end of the dorsal face could have been either from grit between the arrowhead and a binding, or from other actions such as rubbing against a stone in the buried environment. Thus no conclusive statement can be made with regard to hafting.

Later Bronze Age

The main phase of activity at Nobel Drive was based around the entranceway through an enclosure or field boundary ditch (Fig 4, F4 & F5), which had been modified by the insertion of four short lengths of ditch, and a ditch or slot with a post hole at each end. The enclosure ditches (Fig 4, F4 & F5) measured 0.50 to 0.70m in width and were 0.19 to 0.35m deep. The later modifications (F6 to F9) varied between 2 and 4.05m in length, and were 0.65 to 0.95m wide and 0.23 to 0.36m in depth (see also Fig 6).

The detailed sequence of these alterations is shown in Figure 5. The original entrance was approximately 5m wide (Fig 5, I), and was subsequently reduced in width to 3m by the addition of a short length of ditch in the western side of the entrance (Fig 5, II, F6). Either at this time, or later, during the life of ditch F6, a setting of at least two posts was inserted into the entranceway (F7). This measured 2.30m in length, 0.40m in width, and was 0.17m deep, the post holes being 0.21 and 0.33m deep. These posts, set approximately 1.5m apart, could have been linked by a wicker hurdle or other form of lightweight fencing, possibly set into the slot which linked the post holes. Alternatively, two slight depressions in the base of the slot suggested that it may have held further posts, forming a more robust structure. Whatever form it took, the insertion of this structure into the already narrowed entrance further divided it into two routes, each 1.4m wide. Ditch length F6 was later recut, the recut extending less far to the north than the original. The function of these modifications is unclear, but it is possible that they might have formed a 'funnel' for channelling

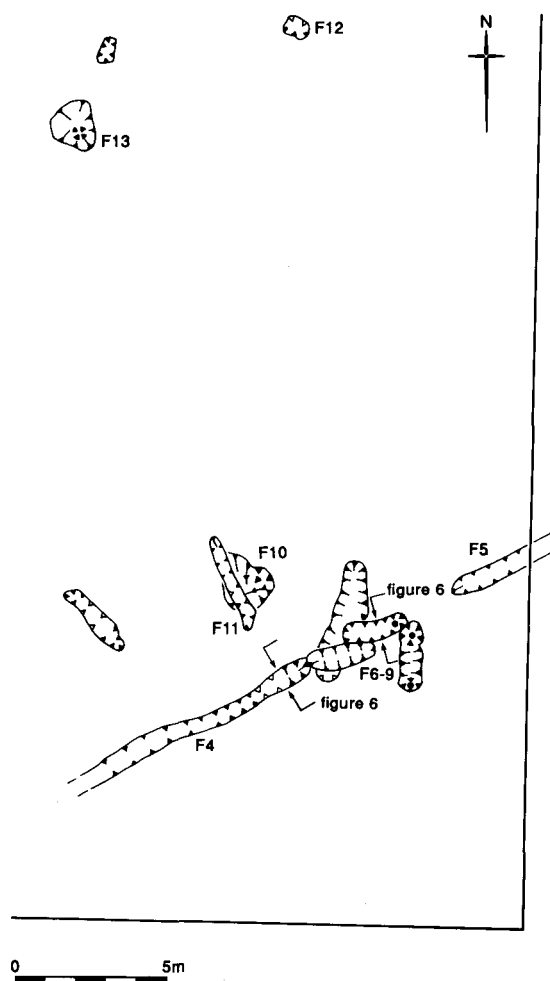


Fig 4. Later Bronze Age enclosure entrance, pits, and gullies at Nobel Drive

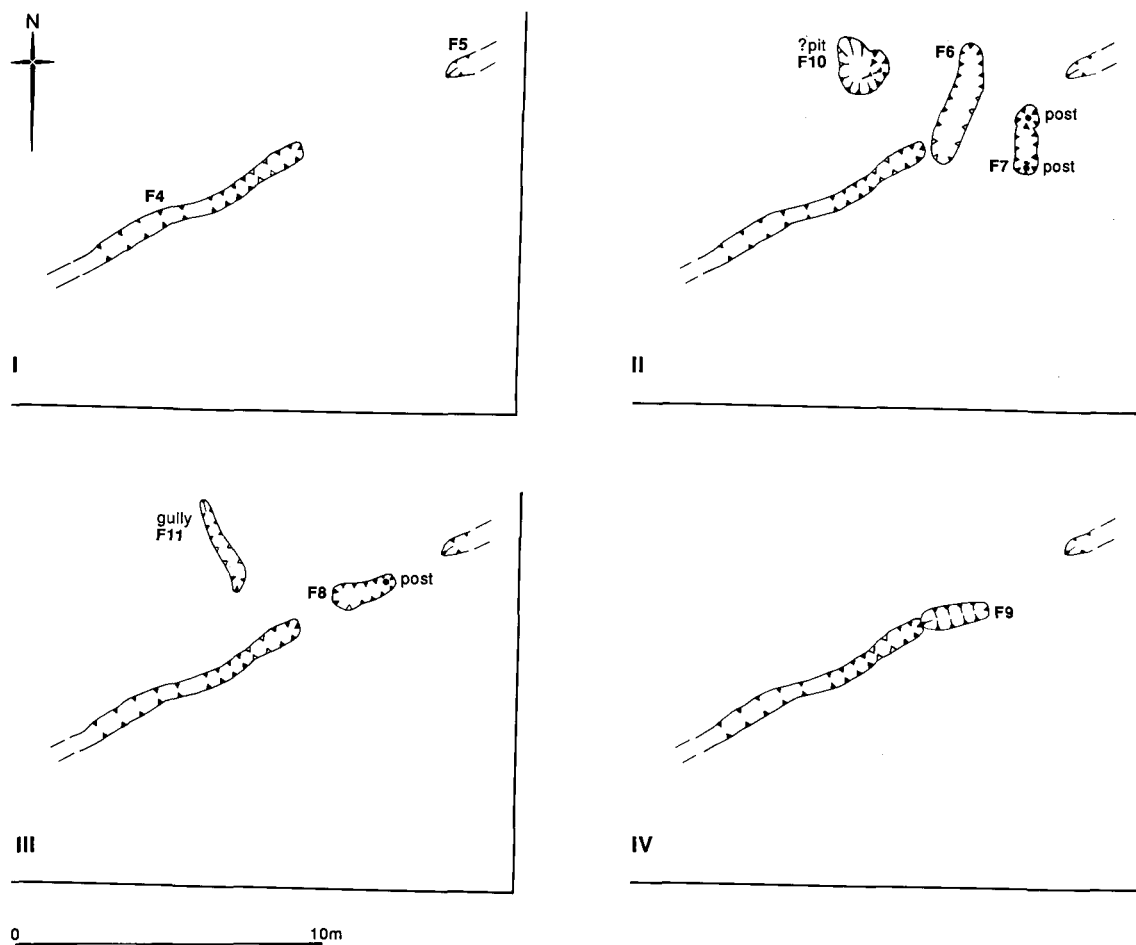


Fig 5. Sequence of alterations I-IV to the Later Bronze Age enclosure entrance at Nobel Drive

sheep, similar to those suggested for Bronze Age enclosures at Fengate (Pryor 1996).

A pit situated close to the entranceway was significantly deeper and larger than the others in the vicinity (F10), measuring 1.59 to 2.10m across and 0.50m deep. Its profile suggested that it might possibly have been a post hole for an isolated large post. It is notable that the original ditch and the first modification to the entranceway were equidistant from the pit or post hole, in effect curving around it at a distance of approximately 2.2m. As a consequence, the pit has been tentatively assigned to this phase.

A third phase of alterations redesigns the double entranceway (Fig 5, III, F8), without the 'funnel' of the previous phase. This produces entrances 1.4m and 1.7m wide, with a 0.37m deep post hole beside the eastern entrance.

The earlier pit or large post hole (F10) may have gone out of use by this time; its fills were cut by a shallow gully (F11), 0.55m wide and 0.14m deep. This lay at approximately 90° to the main enclosure ditch (F4), suggesting that it belongs with this or the next phase of the entranceway.

In the fourth and final phase (Fig 5, IV), the original western ditch (F4) is extended by the addition of another short length of ditch (F9), by means of which the entranceway reverts to a single opening, 3m wide.

The purpose behind this sequence of modifications remains obscure. We are looking at only a small part of what was undoubtedly a much more extensive system of enclosures, but it is possible that this configuration was related to stock control, and that the modifications are

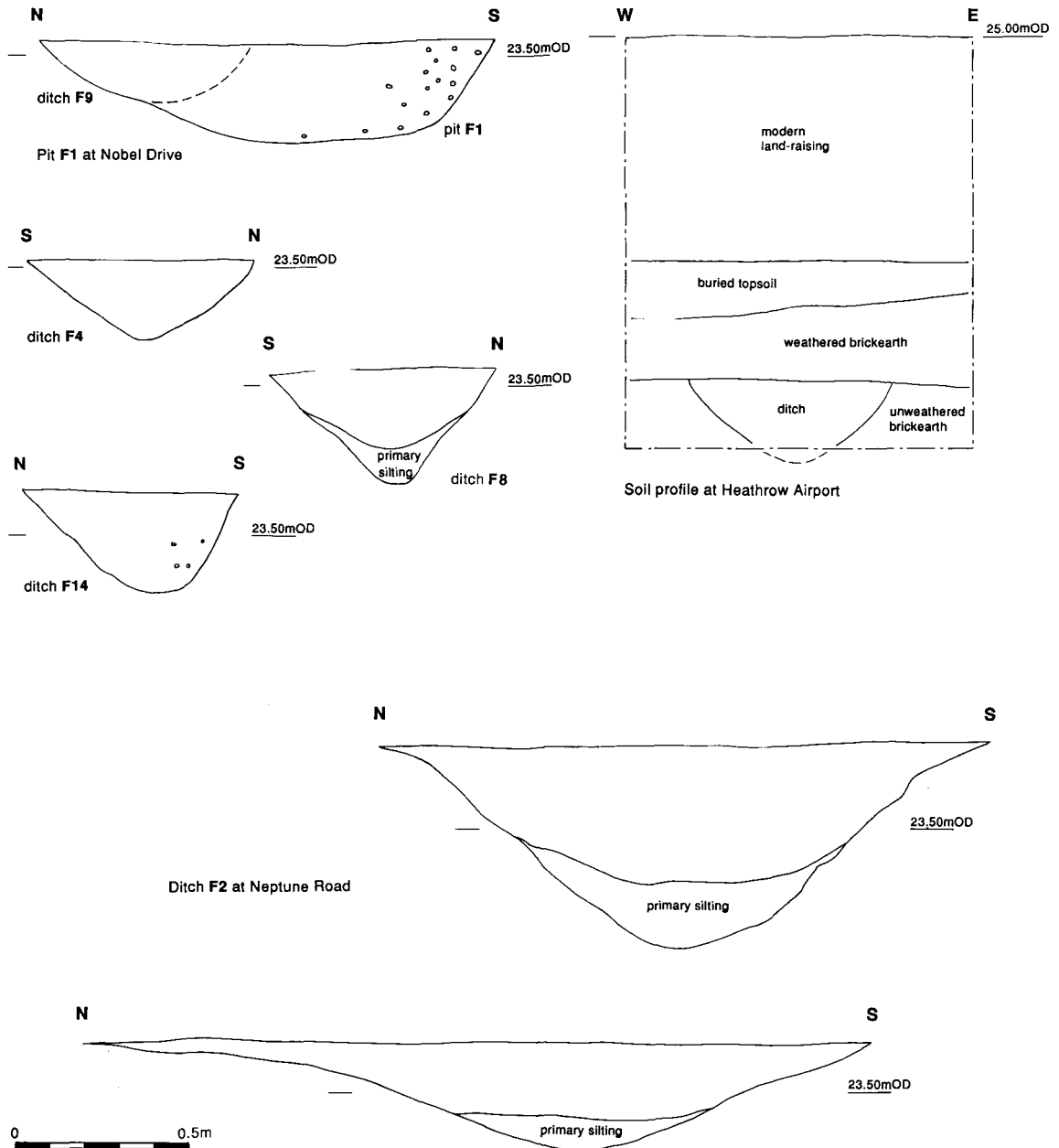


Fig 6. Feature sections from Nobel Drive and Neptune Road, and soil profile at Heathrow Airport

related to changes either in the use of individual enclosures, or possibly in farming practice. The reduced widths of the entrances here are somewhat more narrow than those described by Pryor (1996), but, like those, might indicate a change from cattle, or mixed flocks of sheep and cattle, to a system for sheep alone.

Such a system should have been situated at the end of a droveway, leading to the intersection of a number of enclosures. There is no evidence for a droveway, although if it had been separated from the entrance ditches by 3m or more, it would have lain outside the area of excavation. The shallow gully F11 might conceivably have

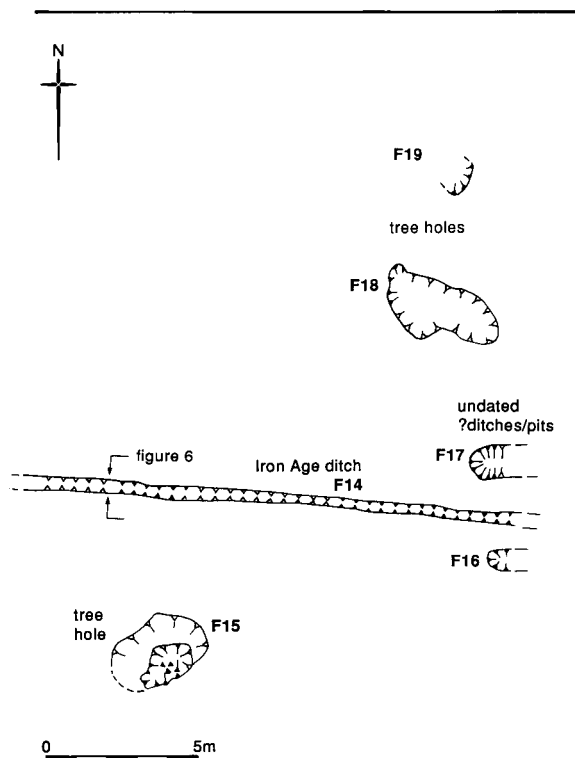


Fig 7. Possible Iron Age and later features at Nobel Drive

been part of a system of enclosures lying to the north of the entranceway, but lost to truncation.

These features contained little in the way of dating material: the one small fragment of prehistoric pottery does not appear to be of an Iron Age type, and might date from the Late Neolithic or the Bronze Age. One of the two pieces of struck flint is probably a tertiary flake of Neolithic or Bronze Age date. The other is a primary flake with a wide striking platform but otherwise undiagnostic. The environmental assemblage consisted of a single cereal grain.

A number of smaller pits have also been tentatively assigned to this phase on spatial grounds, but do not shed any light on the activities taking place at this time. One pit (Fig 4, F12) contained two small tertiary flakes, one flake with marginal damage adjacent to the striking platform.

Possible Iron Age and later

A single ditch extended across the northern part of the site (Figs 6 and 7, F14), and measured up to 0.57m in width and 0.25m in depth.

This ditch was notable for the relative size of its finds assemblage, on a site where artefacts were rare. These included a single abraded sherd of Middle or Late Iron Age pottery, two waste flakes, 17 crudely smashed flints, 33 fragments of burnt flint, and five small fragments of fired clay, probably burnt daub. This feature also contained a glume base of either emmer or spelt wheat. None of the burnt flint appear to have been burnt with the intensity usually associated with the 'cooking pits' seen on Middle and Late Bronze Age sites in the Heathrow area. In particular, it is not heavily calcined, and the vast majority lacks the characteristic polygonal surface cracking. This suggests that these flints were not derived from a 'cooking pit', but from smaller domestic fires or bonfires.

There appears to be little evidence for activity associated with this ditch. The remaining features at the northern end of the site appear to be incompatible with it on stratigraphic or spatial grounds, but it is possible that some of the undated pits to the south could be contemporary (Fig 2, F2 & F3).

Two possible ditch terminals, or large pits, extending beyond the limit of excavation were located either side of the ditch described above (Fig 7, F16 & F17). These share neither the orientation of the entranceway described above, nor that of ditch F14, and are, therefore, likely to have belonged to a different phase of activity.

A copper alloy coin was recovered from a feature that was probably a tree extraction hole, but might possibly have been a post hole or pit which had been heavily disturbed by a tree hole (Fig 7, F15). Despite heavy surface corrosion, X-ray photography revealed the coin to be a minim dating from the late 3rd or early 4th century AD. Although such a small corroded coin in a tree hole is likely to be residual, it provides evidence for Roman presence in the locality at, or after, this date.

Two tree extraction holes contained small waste flakes, small flecks or fragments of burnt flint, and a fleck of pottery (Fig 7, F18 & F19). Given the small sizes and condition of the artefacts, these were probably residual, suggesting that the tree holes post-dated the other activity on site.

Dating structure

The phasing of the features at Nobel Drive is based on an extremely small number of artefacts,

supported by stratigraphic and spatial relationships, and by the character of the cut features.

The sequence of ditch lengths forming the enclosure entranceway and its modifications (F4 to F9) are consistent in profile, but again contained few artefacts. A single sherd and one flint flake suggest that these may have belonged to the Neolithic or the Bronze Age. The one sherd of pottery falls far short of the size of assemblage which might provide reliable dating, and these artefacts could both be residual. The alignment of ditches F4 and F5, however, shares a distinctive orientation with those of the extensive Later Bronze Age field system excavated at Cranford Lane (CFL 94), the nearest part of which lay some 300m to the north-east of the present site (Fig 1, 'A' marks the orientation of the enclosure ditches). The enclosure and entranceway system at Nobel Drive are, therefore, very probably elements of the Cranford Lane field system, and thus should date from the Later Bronze Age. Consequently, they have been assigned to that period.

While it is possible that the Earlier Neolithic arrowhead was residual in pit F1 from which it was recovered, the pit was stratigraphically earlier than the ditches forming the enclosure entranceway (F4 to F9), and of different plan and profile, suggesting that it belonged to a different, earlier, phase of activity. This implies that the pit did not belong to the overlying sequence of ditches from the entranceway, with whose layout it also appears to be incompatible spatially. Combined with the relatively pristine condition of the arrowhead itself, this strongly suggests that this artefact was probably *in situ*, in a pit of Earlier Neolithic date. No other features contained Earlier Neolithic material, but there were a number of undated features on the site, and it is possible that one or more of these might also be derived from this period. In particular, two smaller shallow pits at the southern end of the site, which had similar profiles, might possibly have been contemporary with this feature (Fig 2, F2 & F3).

The ditch which ran across the northern part of the site (F14) contained only one datable artefact, an abraded sherd of Middle or Late Iron Age date. It is quite possible that this is residual, and that this feature may be of Iron Age or Roman date, or possibly even later. Some form of Romano-British presence, however fleeting, is indicated by the late 3rd or early 4th century AD coin from a tree hole.

Northrop Road

This evaluation revealed three ditches, oriented approximately north-south and east-west, one of which produced a fragment of medieval pottery (Fig 8, F20), and measured 1.20m wide and 0.33m deep. The remaining two contained no datable material.

Neptune Road

A watching brief over a large site revealed three ditches, oriented approximately east-west. The natural gravels sloped down from approximately 23.76m OD in the west to 23.20m OD in the east. These were overlain by a layer of heavily truncated brickearth between 0.1m and 0.45m deep. A thin patchy spread of mid grey, clayey silt, thought to be a waterlain deposit was noted overlying the brickearth in some areas.

A heavily truncated ditch contained several sherds of possible Late Bronze Age or Early Iron Age pottery (Fig 8, F21). It measured more than 3m in length by 0.4m wide, and survived to a depth of 70mm.

A much larger ditch was revealed over a distance of 33m, extending beyond the limits of excavation in both directions (Fig 8, F22). In its truncated form the ditch was up to 2m wide and 0.65m deep, significantly wider than the other ditches recorded from this area, with the exception of those from Caesar's Camp. A fragment of ceramic building material and one of burnt flint were recovered from the upper reaches of the latest fill. It is possible that both these artefacts were intrusive, and the date of the feature remains unknown. The substantial size of this ditch suggests that it formed part of a major boundary or enclosure, although it falls far short of the ditch at Caesar's Camp, which was 7m wide and 2.44m deep (Grimes & Close-Brooks 1993, 332).

A smaller ditch (Fig 8, F23) was recorded over a length of 7m; it measured 0.5m in width and was 0.3m deep. This was roughly parallel with the larger ditch (Fig 8, F22), and it is possible that they were contemporary.

Bath Road

The undulating natural gravels varied between 23.84 and 24.31m OD, and were overlain by

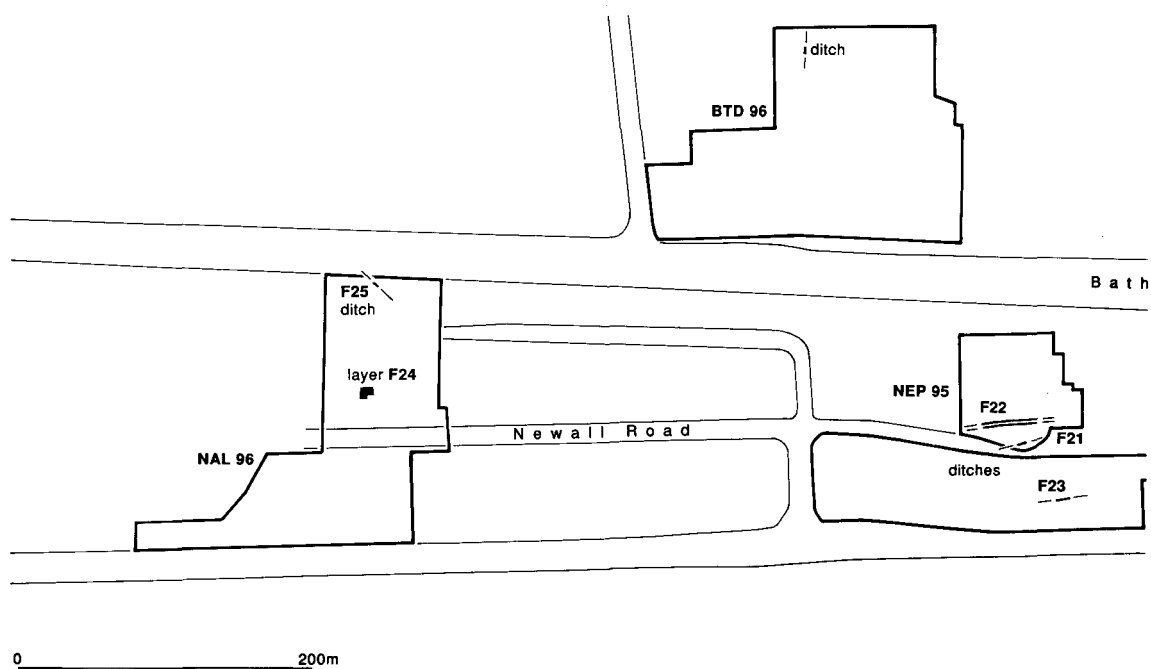


Fig 8. Flooding deposit F24 at Newall Road, and comparison of the alignments of the ditches at Bath Road (BTD96), Newall Road (NAL96), Neptune Road (NEP95), and Northrop Road (HCR91)

brickearth 0.14 to 0.35m deep. The only archaeological feature was an undated ditch, oriented north-south, which measured 0.70m wide and 0.20m deep.

A snapped flint blade-knife, possibly of Late Neolithic date, and a fragment of Late Bronze Age pottery were recovered from the surface of the natural brickearth. The blade-knife has marginal shallow invasive retouch along one edge, and traces of utilisation along the other, with accompanying ventral spalling. Careful cleaning of the brickearth, however, failed to reveal any archaeological features.

Newall Road

An evaluation and subsequent excavation in 1996 were followed by evaluation of an adjacent area in 1997.

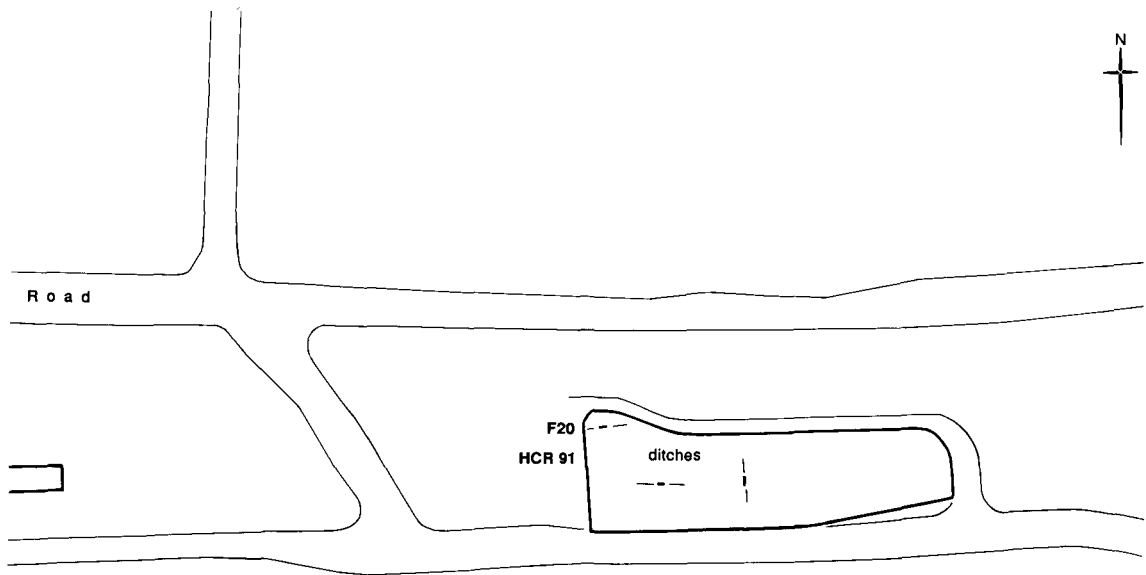
The underlying geology was comprised of natural gravels, which were recorded at a height of 24.55m OD, sloping gradually down to the south to 23.85m OD. In the southern half of the site the gravels were covered by a layer of alluvial deposits 0.20m thick. To the north the gravels were capped by a layer of brickearth up to 0.4m deep.

The gravels were cut by two features interpreted as either palaeochannels or periglacial features, one of which was sealed by a layer of fine clay silt and lay at 23.85 to 24.06m OD (Fig 8, F24). This produced a very small sherd of flint tempered prehistoric pottery. This layer was probably alluvium or some other flood deposit; it appears to have been similar to an extensive alluvial layer which covered the south-eastern corner of the site at Cranford Lane.

An undated gully measured 0.4m wide and 0.15m deep (Fig 8, F25), and was aligned roughly north-west to south-east.

Heathrow Airport

Three archaeological features were recorded towards the eastern end of this watching brief (Fig 1). Two ditches were located a short distance to the south of the airport perimeter fence, approximately 15m to the west of the line of North Hatton Road, and 6.5m apart. These were seen only in section, cut into natural unweathered brickearth. They were oriented roughly north-south, but as the trench was only 0.8m wide, the orientation could not be determined with confidence. The western ditch contained a small



friable fragment of orange-brown pottery or burnt daub, which disintegrated on lifting, and cannot, therefore, be identified. This ditch was 0.50m wide and greater than 0.25m deep; the eastern ditch was 0.62m wide and greater than 0.17m deep (Fig 6, 'soil profile at Heathrow Airport').

The ditches were clearly truncated from above, and overlain by weathered brickearth, 0.18 to 0.28m deep. This was in turn overlain by a buried former topsoil, sealed by modern levelling dumps. The weathered brickearth was the former subsoil, composed of the upper levels of the natural brickearth, modified by leaching, ploughing, or other cultivation, mixing the natural brickearth with topsoil. This phenomenon has been observed on numerous other sites in the Heathrow area, occurring immediately above the level at which archaeological features survive. The latter have been truncated, or possibly masked, by the processes which formed this subsoil. The relationship of this weathered or reworked brickearth to the truncated archaeological horizon is, however, particularly clearly defined in these observations.

The third feature was probably a pit, which extended beyond the limits of the trench, and measured 0.80m in diameter and more than 0.45m deep. Although the fill was similar to

natural deposits in the vicinity, the very regular shape of the cut suggested that this was a pit, although there was no indication of its date. It was located approximately 80m to the north of a crop mark representing a large enclosure, which lies immediately to the north-east of Caesar's Camp (Fig 1). It is possible that the pit was associated with the activity implied by the crop mark enclosure.

DISCUSSION

Earlier Neolithic

Hitherto, Neolithic assemblages from the Third Terrace gravels in west London have been dominated by decorated Peterborough ceramics and by flint arrowheads of transverse type, artefacts traditionally ascribed to the Later Neolithic. However, recent work at Cranford Lane, just to the north-east of Nobel Drive (Elsden 1996a, 6 & i-ii), for example, has located features containing sherds of Earlier Neolithic round-based undecorated open pottery bowls, alongside several broken and burnt leaf arrowheads. The group of pits at Cranford Lane were situated 500m to the north-east of Nobel Drive. Both lay in similar topographic positions, just

above 24m OD, on the gentle slopes of the valley of the River Crane. The association between the activities represented by the two groups is obscure, but their proximity and topographical situation suggest a possible connection. It has been suggested that both might have been deliberately 'placed' deposits, but the evidence from Nobel Drive is equivocal: microwear analysis produced no evidence that the piece had been used as an arrowhead, but could not determine whether or not it had been hafted, and the material from Cranford Lane has yet to be analysed in detail. Thus while the deliberate burial of the arrowhead for a non-practical reason is a credible possibility, there is no irrefutable evidence to support it.

In addition, the odd leaf arrowhead and laurel leaf have turned up in surface collections from Holloway Lane and Wall Garden Farm to the north-west (Mason & Lewis 1993), and, as noted above, from Bedford Road to the south. The activities that these artefacts attest, and the nature of their relationship with the notionally long-lived (though as yet undated) communal monuments sited on the Third Terrace, such as the Stanwell Cursus (*eg* O'Connell 1990) and the rectilinear enclosure at Imperial College Sports Ground, Harlington (Jonathan Nowell *pers comm*), are matters awaiting resolution.

Later Bronze Age

The distinctive orientation of the enclosure at Nobel Drive and the field system at Cranford Lane is also exhibited by crop marks representing large enclosures adjacent to Caesar's Camp, which lie at an angle to the Middle to Late Iron Age enclosure. Whilst these could be of Iron Age date, the differing alignments suggest that they might more plausibly be seen as part of the Late Bronze Age activity excavated in 1944 (Grimes & Close-Brooks 1993, 330–1). It is thus quite possible that all these features were parts of a series of Later Bronze Age field and enclosure systems, sharing a common alignment. This alignment appears to be derived from the overall slope of the valley of the River Crane in this area, which is illustrated by the modern 25m OD contour. This runs from north-east to south-west, turning to the west in the area covered by the Newall road sites (Fig 1).

Possible Iron Age and later

The post-Bronze Age evidence from these sites is dated uncertainly, being based around one enclosure or field boundary ditch from Nobel Drive, which contained a single pot sherd tentatively dated to the Middle or Late Iron Age. The sherd, even if of Iron Age date, could still be residual in a Roman or later ditch. The ditch does, however, differ significantly in orientation from the enclosure entrance, which has been interpreted as deriving from the Later Bronze Age. The orientation of this feature is also shared by certain elements of the late Roman enclosure system at Cranford Lane, the large boundary ditch at Neptune Road, and more tenuously, is similar to the north and south faces of Caesar's Camp, which is of Middle or Late Iron Age date. Thus the ditch at Nobel Drive may have been of Iron Age or Roman date, but could be later.

Dated Roman material is limited to a single coin from a tree hole at Nobel Drive. Although this is likely to be residual, it suggests some human presence in the locality, however ephemeral, at a similar date to, or perhaps slightly earlier than, the enclosures and probable settlement at Cranford Lane.

CONCLUSIONS

The information from these small sites, including Nobel Drive, needs to be compared with that from larger excavations in the Heathrow area, in order to understand the activities which generated the deposits and their place within the wider landscape. Consequently, the purpose of this article is to make this information available for such studies in the future. In particular, the sequence from Nobel Drive mirrors that at Cranford Lane, albeit on a much reduced scale. The main result of the other smaller sites will be to contribute data to future studies of the archaeology of the Heathrow Area.

The leaf-shaped arrowhead provides further evidence for Earlier Neolithic activity in this area, and while there is a plausible case for it having been deposited soon after manufacture, the evidence for it having been a deliberately 'placed deposit' remains ambiguous, as does this feature's relationship to contemporary activity nearby at Cranford Lane.

The conclusions derived from the orientations of the enclosures and field systems discussed here

must remain provisional until further data are available, from better dated features on sites over larger areas, in particular further east towards the River Crane.

The orientations of Later Bronze Age enclosure and field systems do, however, display some consistency, lying approximately orthogonally to the overall slope of the western side of this part of the Crane valley. The end of use of this alignment may coincide with the extensive flood deposits seen at Cranford Lane, which sealed the Late Bronze Age features, and probably dated from the Late Bronze Age or Early Iron Age. Similar flood deposits were also seen at Newall Road, where they lay at a similar elevation, between 23.5 and 24.0m OD. At Cranford Lane this alluvium appears to mark a break in the prehistoric occupation; although there are hints of human activity after the Early Iron Age, it was not apparently until the late 3rd or 4th century AD that the site was reoccupied.

It would appear that in the Iron Age or Roman period the orientations of enclosure or boundary ditches in this area altered by approximately 20–30° clockwise. The reasons for this change are difficult to comprehend, and might have been the result of conditions beyond the immediate area of the sites.

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