

Report 2516



nau archaeology

**An Archaeological Evaluation of the Proposed B1108
Drainage Scheme, Station Road, Kimberley, Norfolk**

ENF125161



Prepared for
Environment, Transport and Development
Norfolk County Council
County Hall
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September 2010



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Location:	Station Road, Kimberley
District:	South Norfolk
Grid Ref.:	TG 0715 0429
HER No.:	ENF 125161, HERs 8918, 30466
OASIS Ref.:	82759
Client:	Norfolk County Council
Dates of Fieldwork:	16 to 20 August 2010

Summary

An archaeological evaluation was conducted for the Environment, Transport and Development department of Norfolk County Council ahead of a proposed new drainage scheme, designed to relieve frequent flooding of part of the B1108. The project was undertaken prior to a final decision on the route of the drainage scheme. The drainage would impact upon part of a large earthwork complex on the edge of Kimberley Park.

Three trenches were excavated during the evaluation and located within the line of the proposed drainage scheme. The central trench revealed that one of the earthworks located in the park represented an east-west orientated ditch of medieval date. A further medieval ditch, a pit of Early Neolithic date, and a gully of possible Neolithic date were also found in the eastern trench. Natural features were observed in the western trench.

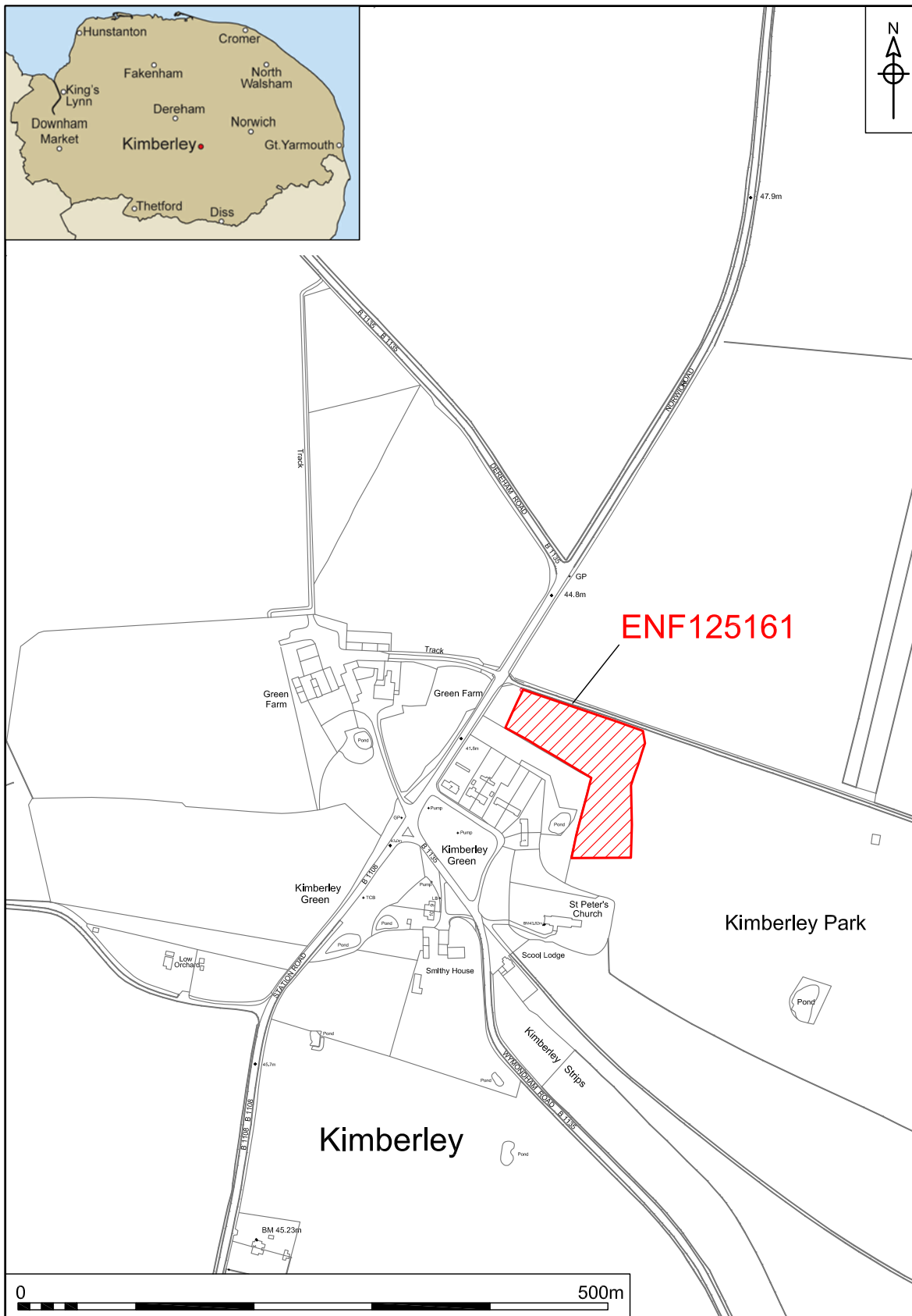
1.0 INTRODUCTION

(Fig.1)

The site was located in the north-west corner of Kimberley Park, adjacent to the B1108 (Station Road) which runs through the small village of Kimberley. The work was undertaken to examine the nature of the subsurface archaeology that might be affected by proposed new drainage. Three archaeological trenches were excavated on the line of the proposed drain route to achieve this. The project was also designed to record and understand the nature of the existing earthworks. A contour survey was also undertaken during the project to record the heights and form of the earthworks and to accurately locate them within the National Grid. The total area surveyed amounted to 0.5 hectares.

This work was commissioned and funded by the Environment, Transport and Development department of Norfolk County Council, who consulted with Norfolk Landscape Archaeology about the likely impact of the proposed drainage scheme. The project was undertaken prior to any final decision being taken on the route of the proposed drainage. The work was undertaken in accordance with a Norfolk Landscape Archaeology brief (Ref: James Albone, 4 August 2010 – CNF42923) and a Project Design prepared by NAU Archaeology (Ref.NAU/BAU2516/DW).

This programme of work was designed to assist in defining the character and extent of any archaeological remains within the proposed redevelopment area, following the guidelines set out in *Planning Policy Statement 5: Planning for the Historic Environment* (Department for Communities and Local Government 2010).



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Figure 1. Site location. Scale 1:5000

The results will enable decisions to be made by the Local Planning Authority about the treatment of any archaeological remains found.

The site archive is currently held by NAU Archaeology and on completion of the project will be deposited with the Norfolk Museums and Archaeology Service (NMAS), following the relevant policies on archiving standards.

2.0 GEOLOGY AND TOPOGRAPHY

The underlying bedrock consists of Upper Chalk (Specifically of the Lewes Nodular Chalk Formation, Sleaford Chalk Formation, Newhaven Chalk Formation and Culver Chalk Formation type). The upper geological deposits consist of Stagnogleyic argillic brown earths (British Geological Survey)

The site is situated in an area of parkland which has caused it to be free of the disturbance associated with arable farming practices. It is feasible that soil formation processes that might normally be anticipated in established grassed areas were less prevalent here due to reduced earthworm action because of the clayey nature of the ground. Aside from the earthworks, the overall area is reasonably flat and on average is located around 41m OD. The small village of Kimberley is situated to the north of a tributary of the River Yare.

The deposits encountered on the site were specifically a light greyish brown humic silt topsoil which supported a thick turf layer, a light brown sandy silt subsoil and a slightly silty very firm orangey clay natural substratum. Across the site, the topsoil had a depth range from 0.30m to 0.60m and the subsoil from 0.10 to 0.50m.

3.0 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

A search of the Norfolk Historic Environment Records (NHER) was undertaken and the most relevant entries reproduced below. Supplementary historical information has been found within the Victoria County History (accessed as <http://www.british-history.ac.uk/report>), and the Historical Atlas of Norfolk (Ashwin and Davison 2005).

3.1 Prehistoric to Roman

The area around the River Yare in Norfolk has been considerably exploited throughout prehistory. To the south of Kimberley there is the well known Romano-British settlement of Crownthorpe (Gurney 20005) however little of Roman date has been found nearer to the evaluation site. Several find spots in the vicinity hint at the activity of these earlier periods. Over 1km to the south of the site, a prehistoric flint scraper was found during fieldwalking (NHER 28145) and 1km to the east some sherds of Roman pottery were found during gravel extraction (NHER 32325).

3.2 Saxon to medieval

The early history of Kimberley is tied strongly to Kimberley manor. A survey was taken of the estate during the reign of Edward the Confessor (1042-1066) and at this time the Estate was said to be 5 furlongs long and 3 broad and paid 13d to the geld; the land belonged to Hakene. By 1086 the land had passed to Godric and by the era of King John (1199-1216) the Kimberley Hall Manor was said to belong to

a Norman, Hugh de Gurnaco, who passed it via his daughter to Nicholas de Stutvile who lost it after a period of rebellion in 1205. In 1206 the king directed a writ to the sheriff to restore Nicholas de Stutvile to all his lands; the manor and stock was subsequently assigned to Walter de Cantelupe (History of the County of Norfolk). Later in the medieval period the property passed to the Falstolfs, and then to the Wodehouses, one of whom fought in the battle of Agincourt (1415). (Marius Wilson 1870).

The church of St. Peter (NHER 8917) located just to the south of the site would have been the focus for the early settlement of Kimberley. The church structure dates to the 12th century and has a 15th-century tower. It houses several memorials which refer to the Wodehouse family. In the medieval period there was also a chapel dedicated to St Mary in the grounds of the church. The fabric of the church was restored in the 19th century and traces of the ruined chapel were removed at this time from the churchyard (History of the County of Norfolk).

To the south of the church are earthworks of two or three medieval tofts along with a possible field boundary (NHER 12723), at one time thought to be the site of Kimberly Hall. Subsequent metal detecting and fieldwalking in this area has recovered part of an Early Saxon brooch, medieval and post medieval pottery and medieval and post medieval metal finds. The pottery includes stoneware imported from Raeren (modern-day Belgium) and possibly Langerwehe (Germany). Three hundred metres to the south-west were some Late Saxon to post medieval pottery sherds and part of a medieval copper alloy vessel, found during fieldwalking and metal detecting (NHER 28146). About 1km to the east further sherds of medieval and post medieval pottery were found (NHER13744). There may be associated earthworks, and these and the sherds may relate to manor house (HER 8918). A metal detecting survey located a range of finds along the B1108 to the south including a medieval buckle, part of a medieval horse harness, a post medieval signet ring and two post medieval tokens (NHER 28405). Medieval pottery sherds have also been found over 1km to the south of the site (NHERs 17033 and 21007).

3.3 Post medieval

The most dramatic and relevant post medieval record is that of the deer park (NHER 30466). The park was in existence in Kimberley since around 1400 and was expanded in the early 18th century when the present Hall was built. Changes were made by Capability Brown in the 18th century, with a general naturalisation and softening of the design with the planting of perimeter belts of trees. In 1778 two islands were added to the lake as pleasure grounds. Formal terraced gardens were created to the west of the hall in the 19th century which included the pre-existing earthworks which remain on the site today.

The site of the old hall (NHER 8918) is situated just to the east of the site. It was a moated site and had a tower (Wodehouse Tower) built in the late 16th century on the site of the medieval manor house of the Wodehouse family. The moated hall was built around a courtyard and had polygonal towers and decorative terracotta panels, and the foundations of part of the hall are still upstanding. Elizabeth I was entertained at the hall in 1578, and the hall was demolished in the mid 17th century. The moated site is surrounded by complex earthworks of a late medieval to early post medieval garden. These earthworks include a series of small

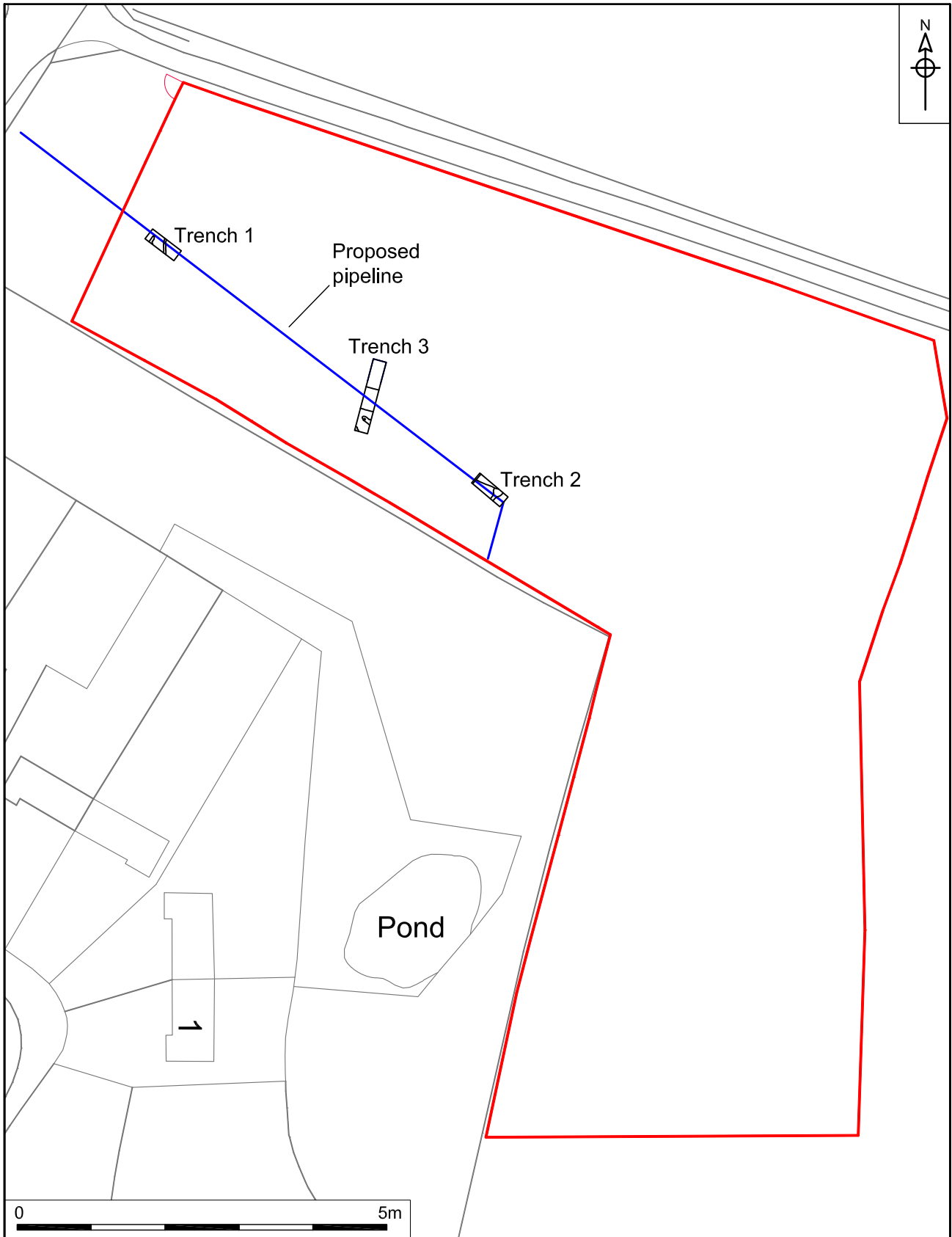
rectangular compartments that were probably part of a formal garden, with walks and garden buildings. There are also the remains of a large formal water garden, with several ponds surrounded by terraced walks. This is a rare and important survival of a late medieval high-status garden, which has survived because of the lack of any development or significant change in these areas of the site.

Around 1 km to the south was the site of post medieval brickworks (NHER 14298). The brickworks are marked on the 1883 Ordnance Survey map and some of their remains were found when a new house was constructed here in 1978.

There are several post medieval structures nearby which have listed status. To the west is Green Farm (NHER 44292); the house is a mid 19th-century red brick farmhouse built in the Gothic Revival style with a central porch, arched windows and octagonal and circular chimney pots. The Wodehouse family held a pair of estate cottages (NHERs 44290 and 44291) displaying the date 1866 at the base of the chimneys and the Wodehouse family crest and motto. To the north-east of the site there is a 17th-century farmhouse which contains re-used 16th-century brick (NHER 14296) and which was altered in the 19th century; some of the decorative elements were taken from Wodehouse Tower itself. A timber framed barn located here dates to the early 18th century. Attleborough Lodge (NHER 44294), situated to the south-east of the site, was built in the early 19th century and was formed of two dwellings originally. Close by, NHER 19404 refers to the 'The Old Smithy', a (now demolished) 17th-century timber-framed blacksmith's house with a forge. A square cast-iron telephone box with a domed roof originally designed by Sir Giles Gilbert Scott in 1935 (NHER 44293) can be found in Kimberley.

3.4 Undated

To the south-west of the site a cropmark complex has been recorded (NHER 36127) and though the date remains unknown they could relate to the construction and use of the nearby railway. A similar cropmark complex (NHER18906) lay further to the south and has been tentatively identified as drainage ditches or possible medieval house platforms. Fragments of medieval and post medieval pottery have been found on the site. NHER 8894 records several banks and ditches visible as cropmarks on aerial photographs, which probably also relate to drainage systems.



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Figure 2. Plan showing location of pipeline and trenches. Scale 1:750

4.0 METHODOLOGY

(Figs 2 and 3, Plate 1)

The objective of this evaluation was to determine as far as reasonably possible the presence or absence, location, nature, extent, date, quality, condition and significance of any surviving archaeological deposits within the development area.

The Brief required that three trial trenches be excavated along the line of the proposed new drain. The central trench was excavated at a right angle across the large east west orientated earthwork to achieve a full profile.



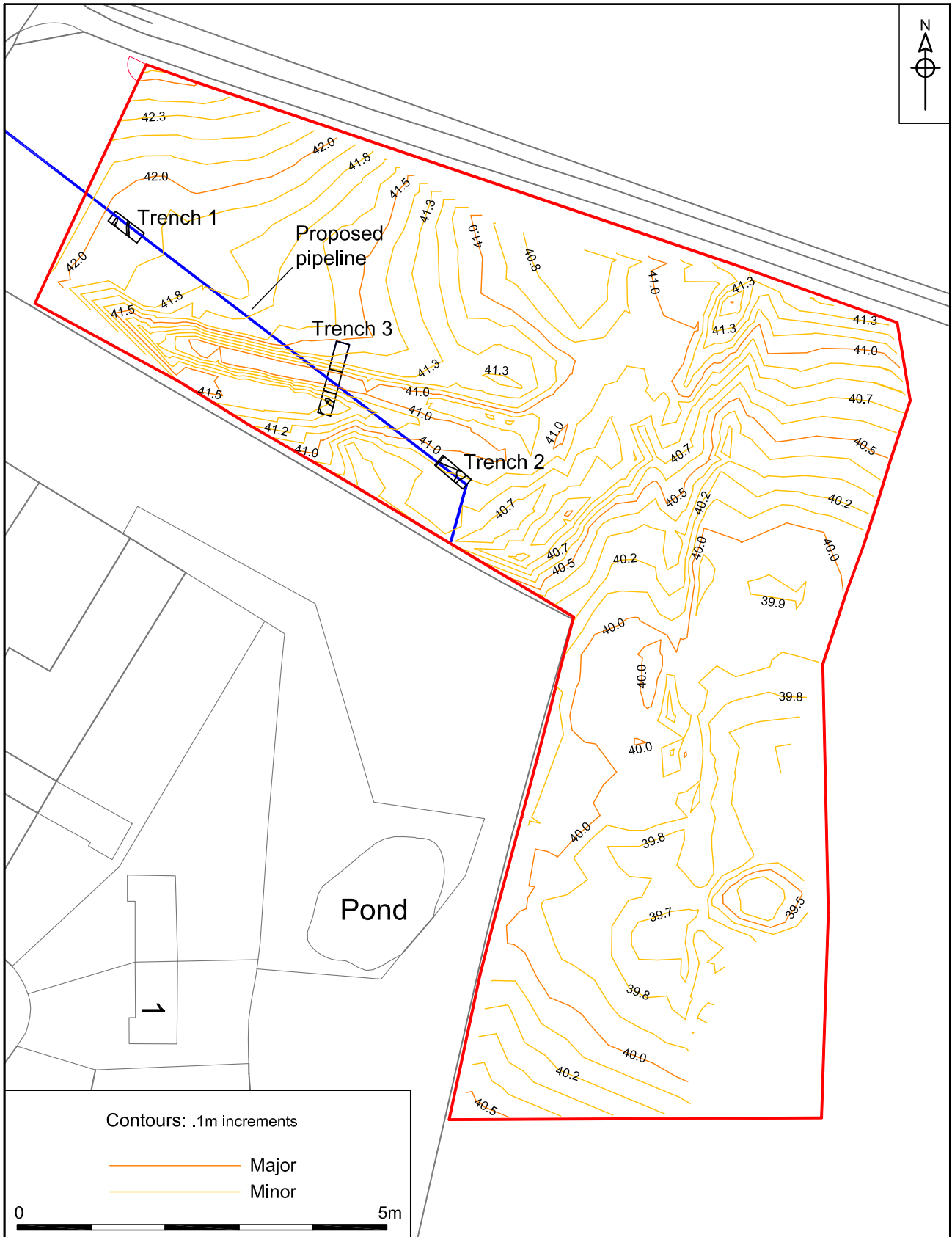
Plate 1. Machining, looking east

Machine excavation was carried out with a wheeled JCB-type excavator equipped with a toothless ditching bucket and operated under constant archaeological supervision. Prior to, and post machining the turf had to be cut, moved to the side of the trenches and then replaced by hand.

Spoil, exposed surfaces and features were scanned with a metal-detector. All metal-detected and hand-collected finds other than those which were obviously modern, were retained for inspection.

Four environmental samples were taken and processed from features [19], [30], [17] and [14].

All archaeological features and deposits were recorded using NAU Archaeology pro forma. Trench locations, plans and sections were recorded at appropriate scales. Colour, monochrome and digital photographs were taken of all relevant features and deposits where appropriate.



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Figure 3. Contour survey. Scale 1:750

The trenches were located along the line of the proposed drainage trench using a Leica GPS900 RTK. This device was also used to prepare a contour survey of the earthworks in the north-west corner of the park.

The temporary benchmark used during the course of this work was transferred from a known height of 41.8 m OD, located near the entrance to the site on the B1108. Many of the other supplementary known heights for this project were supplied by the Leica GPS900 RTK.

Site conditions were good, with the work taking place in fine weather.

5.0 RESULTS

5.1 Trench 1

(Fig. 4 and Plate 2)

Trench 1 measured 5.0m by 1.80m and was located on the western side of the site. It was orientated roughly north-east to south-west to on the same alignment as the proposed pipe trench. There were two features within the trench which, after excavation, were deemed to be of natural origin, having been created by root action. These features were excavated and were allocated context numbers to provide a full record.



Plate 2. Trench 1, looking north

At the western end was irregular probable root hole [10]. It extended 1.25m in length and was 0.35m wide with a depth of 0.20m. The feature had gradually sloping sides which were also irregular in places. The fill ([11]) was a light brown fine silt of natural origin.

At the eastern end there was another irregular natural root hole ([12]). The feature was 2.0m in length and 0.20m wide with a depth of 0.25m. The sides and base

were irregular and on the eastern side there was a large amount of undercutting. The fill ([13]) also consisted of a natural light brown fine silt.

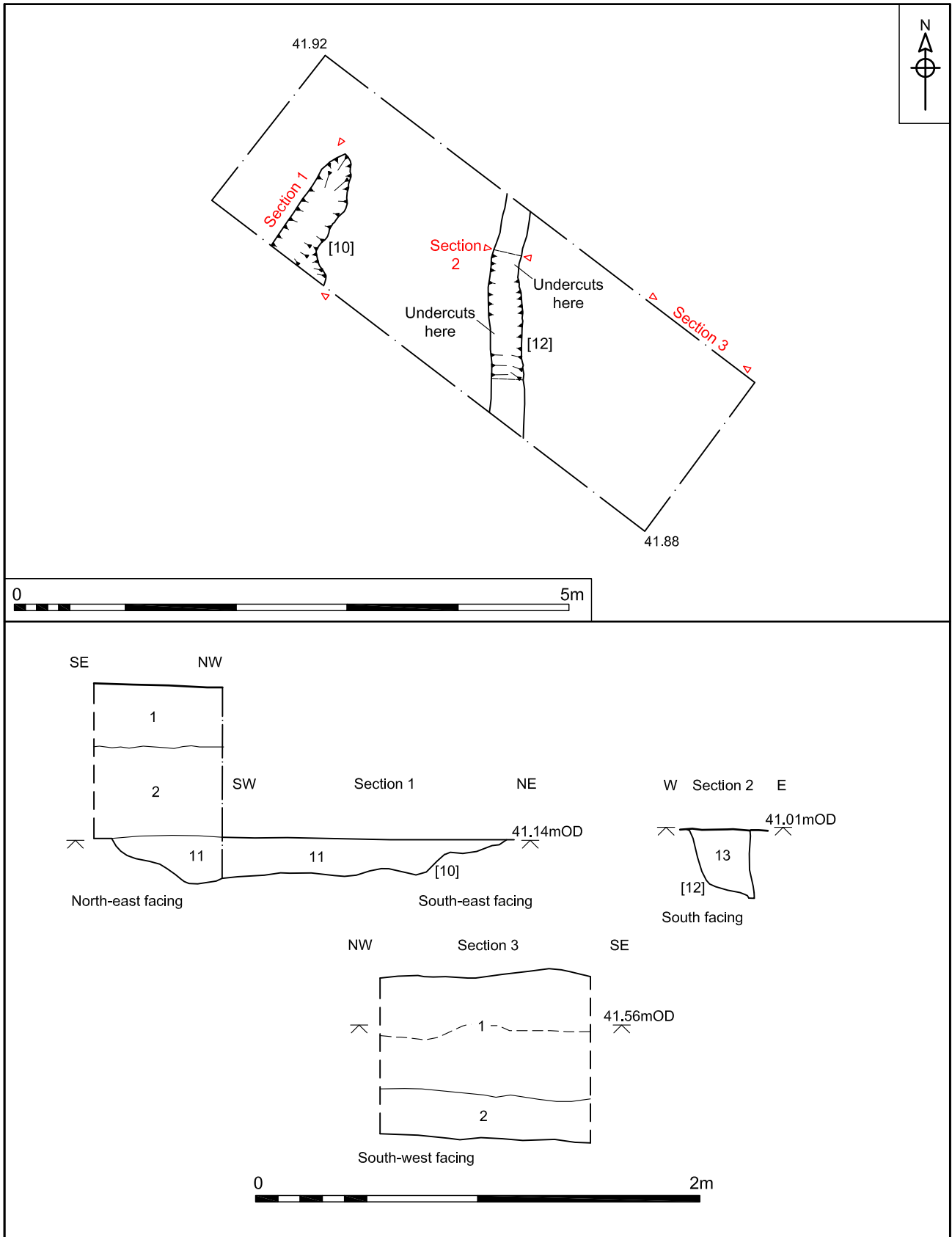


Figure 4. Trench 1, plan and sections. Scale 1:50 and 1:25

5.2 Trench 2

(Fig. 5, Plates 3, 4 and 5)

Trench 2 measured 5.0m by 1.80m and was located in the eastern side of the site. It was on a similar alignment to Trench 1 (orientated roughly north-west to south-east) and along the line of the proposed pipe trench. Four archaeological features were identified within the trench.



Plate 3. Trench 2, looking east

A small pit ([30]) was located towards the eastern end of the trench. It extended 1.30m east to west by 0.90m north to south and had a depth of 0.45m. The feature was truncated by ditch [14] on its northern side and gully [17] on its southern side. The pit contained three fills. The primary silting of the pit was a 0.05m thick firm orange brown silt of natural origin ([35]). Next in the sequence was a friable dark brown silty sand ([36]), which may have been the result of deliberate dumping and which had a depth of 0.17m. Lastly was a firm, deliberately dumped, pale brown sand ([31]) which was 0.23m thick. Layers [36] and [31] contained a large amount Early Neolithic pottery and contemporary worked flint.

At the base of pit [30] was a large, regular probable stake-hole ([37]) which was round in plan with near vertical regular sides. The fill ([38]) was a soft black silt.

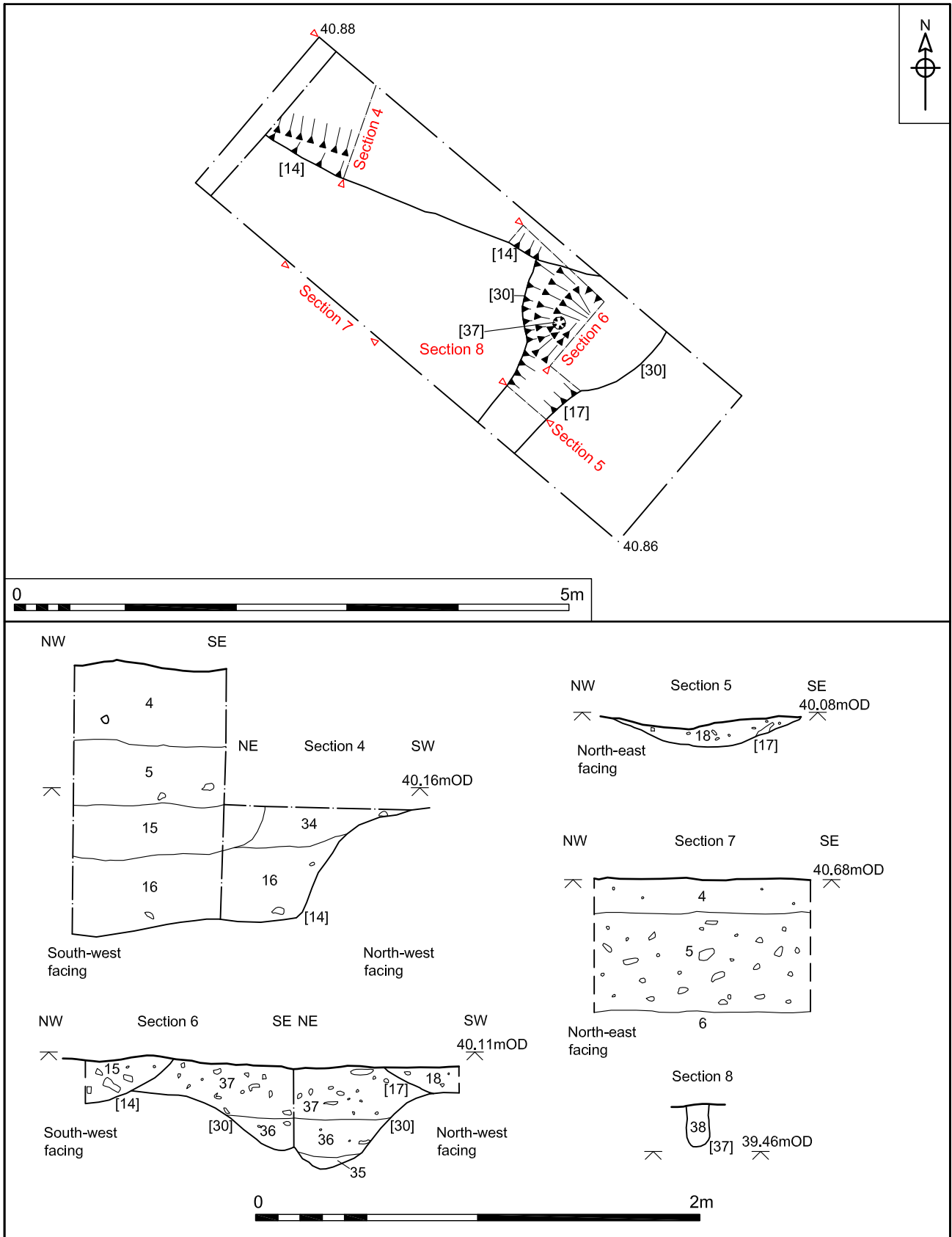


Figure 5. Trench 2, plan and sections. Scale 1:50 and 1:25

The stake-hole appeared to have been sealed by the layer of primary silting [35] in pit [30], which suggested that the stake had been broken prior to the early silting up (disuse?) of the pit.



Plate 4. Pit [30], looking east

Shallow gully [17] appeared to truncate and terminate at its junction with pit [30]. It was 0.90m in length and 0.45m across and had a depth of 0.10m. The base was roughly flat and the sides slightly concave. The fill ([18]) was a compact medium brown silty sand which contained occasional charcoal flecks. The fill contained four sherds of Early Neolithic pottery and some struck flints which may have derived from the truncation of pit [30]. The position of the gully, and the fact that it seemed to terminate at the position of the pit suggested that the pottery within the gully was in fact contemporary with its backfilling rather than being residual.

On the north side of the trench a probable ditch ([14]) was noted. The ditch ran obliquely across the trench in an approximate east to west direction and truncated prehistoric pit [30]. A full profile could not be recorded through the ditch due to its position at the side of the trench and its base was not exposed. The southern side of the ditch was slightly stepped, with a shallower angle of slope at the top. The ditch was observed to extend 3.10m by 0.94m and had a depth of 0.58m. It had three fills. The lowest ([16]) was a firm mid to dark brown silty sand which had a largely homogenous appearance except towards the top where there were frequent flecks of chalk. The fill had a depth of 0.33m and contained three sherds of medieval pottery. The fill may have been the result of deliberate dumping. Layer [34] was located on the upper part of the edge of the ditch and consisted of a firm light brown silty sand. It was 0.17m thick. The upper fill ([15]) of the ditch was a firm pale yellowish brown clayey silt which contained frequent lumps of natural clay and chalk flecks. It also contained some sherds of medieval pottery, which suggested that the layer had been the result of deliberate dumping.



Plate 5. Ditch 14, looking north

5.3 Trench 3

(Figs 6 and 7, Plates 6 and 7)

Trench 3 measured 10m by 1.80m and was aligned roughly north to south and was located at the centre of the site. It was orientated to be perpendicular to a prominent east to west earthwork and thereby to allow the earthwork to be examined and its profile recorded. Four archaeological features were present within the trench.



Plate 6. Trench 3, looking north

The trench revealed that the linear earthwork represented an underlying ditch ([19]). The ditch had an observed width of 3.0m. The ditch when fully excavated had a depth of 1.92m (when the earthwork is included in the depth) and contained five fills. The uppermost part of the ditch's fill also contained a large amount of topsoil. The base of the ditch was reasonably flat and the sides had an overall even slope, although on closer examination there was some pitting and irregularity.

The earliest fill was composed of a very firm light brown sandy silty clay ([20]) which included moderate chalk flecks and was 0.30m thick. This layer contained one sherd of medieval pot though was probably the result of natural infilling processes.

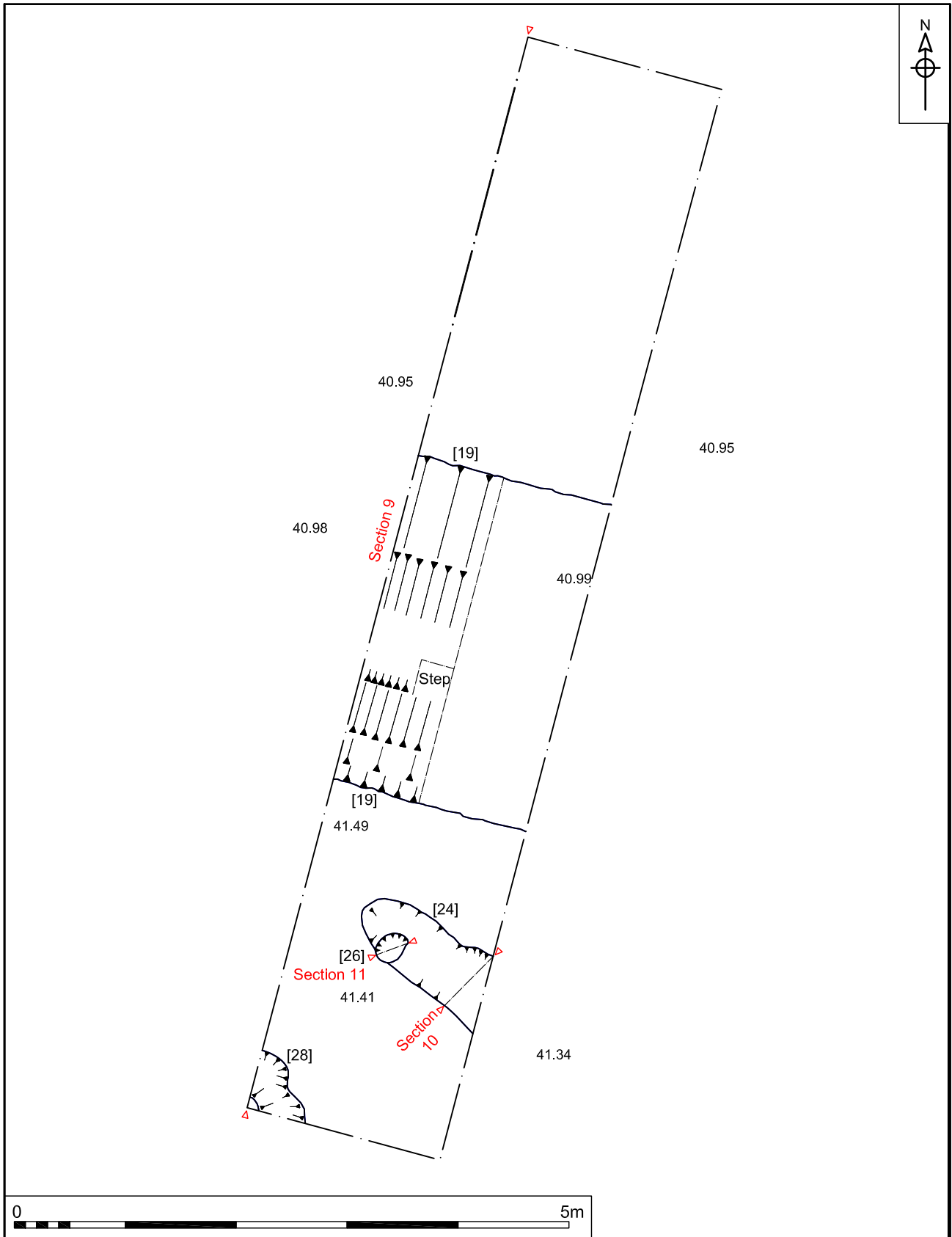


Figure 6. Trench 3, plan. Scale 1:50

Above this was layer [22], a mid brown silty clay, which also contained frequent small chalk flecks and fragments. It had a maximum depth of 0.60m, though it was only observed to tip down the southern side of the ditch. The ditch had at least one observable episode of re-cutting ([33]) which had probably truncated layer [22] and which showed a bias towards the south side of the ditch. However this concentration of material could equally have been the result of the re-deposition of bank material; the chalk flecks could indicate that the layer had originally been excavated from the base of the ditch and that this was the material which has later been pushed back into the ditch.

The primary fill of the re-cut ([33]) was a firm dark brown silty clay ([21]) which was 0.50m thick. Its boundary with layers [20] and [22] below was very diffuse which suggested that there was some mixing as the layer formed. The darker colour of the layer and lack of inclusions also suggested that the fill formed through natural processes. Above layer [21] the re-cut was filled with a firm mid brown silty clay [23] which contained 11 medieval pot sherds and measured 2m in width and had a depth of 0.50m. Though this is considered to be a sizeable number of sherds, the homogenous nature of the deposit suggested that it probably developed via natural silting, with small amounts of waste material finding their way into the layer due to activity nearby. A small layer of mottled light grey and orange clayey silt was located at the top of the cut on the north side of the ditch. It was 0.15m thick and was truncated by ditch re-cut [33].



Plate 7. Ditch [19], looking west

The section through the earthwork and associated ditch demonstrated that it was cut through subsoil ([8]) on both sides and that the subsoil has substantially different depths either side of the ditch i.e. is 0.47m thick on the south side and 0.14m thick on the north side. This disparity of the depths of the subsoil may indicate that the use of the land on either side of the ditch was different in the medieval period. The thicker subsoil may reflect that the land was used for pasture, whereas on the south side the land may have been more actively worked.

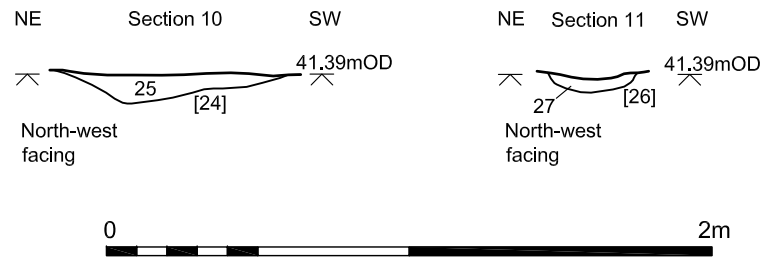
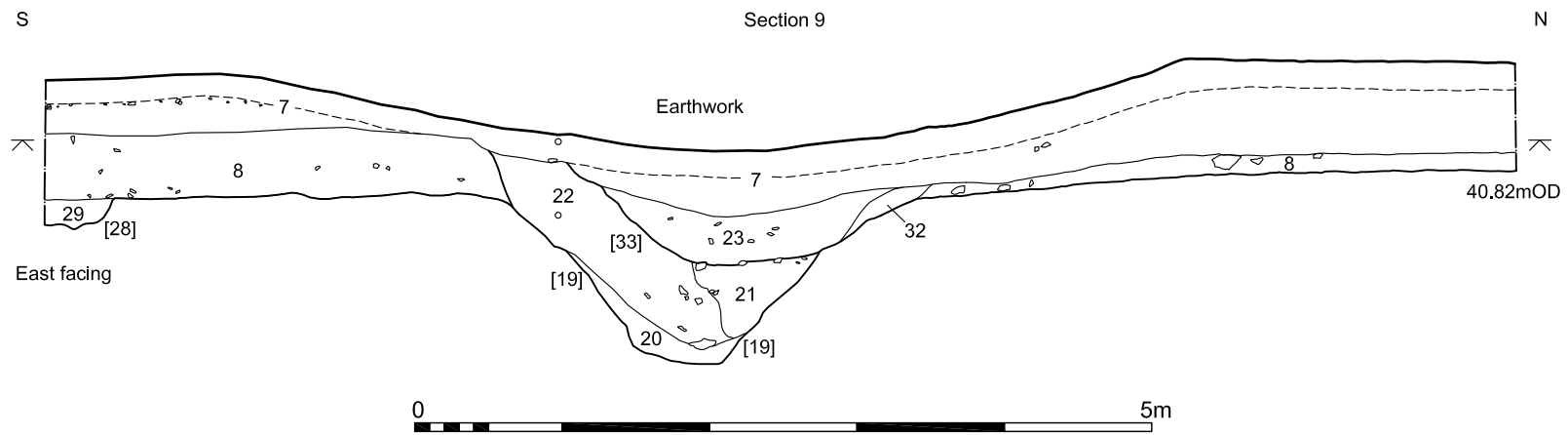


Figure 7. Trench 3, sections. Scale 1:50 and 1:25

At the south end of the trench there were three small features; two gullies and a post-hole, features [28], [24] and [26] respectively.

At the southern limit of the trench was small linear feature [28], possibly a curving gully, which extended 0.50m by 0.40m and which had a depth of 0.15m. The fill ([29]) was a friable light brown slightly sandy silt which contained occasional charcoal flecks and a few sherds of medieval pottery.

Immediately to the north there was the terminus of another probable gully ([24]). This gully had concave sides and a slightly irregular sloping base which became deeper to the east. The feature extended 1.30m by 0.70m and had a depth of 0.10m. Its fill ([25]) was a light greyish brown slightly sandy clayey silt which contained occasional chalk and charcoal flecks. It also contained a sherd of medieval pottery. These features appeared to be sealed by a layer of subsoil ([7]) that was in turn cut by ditch [19].



Plate 8. Gully [24] and post-hole [26], looking east

Possible post-hole [26] was roughly circular in plan with a concave base and shallow but regular sides. It was probably associated with possible gully [24] with which it was probably contemporary as it appeared to be sealed by the infill of that feature and was positioned at its terminus. The fill ([27]) contained no dating evidence and was a firm light greyish brown slightly sandy clayey silt. The fill was probably the result of natural silting after the removal of a post.

6.0 THE FINDS

6.1 Pottery

6.1.1 *Earlier Neolithic Pottery*

by Sarah Percival

6.1.1.1 *Introduction*

A total of 114 sherds weighing 1,201g was recovered from three contexts (Appendix 3). All of the prehistoric pottery is earlier Neolithic, dating to approximately 3600 to 2400BC and represents the remains of a minimum of thirteen vessels including rims from twelve plain bowls and a single highly decorated body sherd from a Mildenhall Ware vessel. The majority of the pottery was recovered from a single feature, pit [30]. Small numbers of sherds were residual in the subsoil and in the fill of ditch [17]. The pottery is fragmentary and moderately to poorly preserved.



Plate 9. Sample of Early Neolithic pottery from pit [30]

6.1.1.2 *Methodology*

The assemblage was analysed in accordance with the Guidelines for analysis and publication laid down by the Prehistoric Ceramic Research Group (PCRG 1992, 1997). The total assemblage was studied and a full catalogue was prepared. The sherds were examined using a binocular microscope (x10 magnification) and were divided into fabric groups defined on the basis of inclusion types. Fabric codes were prefixed by a letter code representing the main inclusion present (F representing flint, G grog and Q quartz). Vessel form was recorded; R representing rim sherds, B base sherds, D decorated sherds and U undecorated body sherds. The sherds were counted and weighed to the nearest whole gram. Decoration and abrasion were also noted.

6.1.1.3 Fabric

The assemblage is dominated by flint-tempered fabrics which make up just under 84% of the total assemblage (1006g). Flint for use in pot making was heated, crushed and then sieved before being added to the clay as an opening agent. The presence of the flint helped air bubbles escape so preventing the pots from exploding during firing. Two flint-tempered fabrics were identified; F1 is smooth and well finished and contains sparse to moderate small angular flint inclusions whilst F2 is coarse with larger more numerous flint pieces.

A small number of sherds in sandy fabric were also present and make up around 16% of the total assemblage (195g). The mix of sandy and flint-tempered fabrics is typical of earlier Neolithic assemblages from central and northern Norfolk (Percival 2004).

6.1.1.4 Form

Rims from twelve undecorated bowls were found. The form of the bowls is uncertain as the assemblage is highly fragmentary however the larger sherds indicate globular or baggy bowls with no distinct shoulder or change in body angle. Rims were catalogued following the form series used by Healy for the earlier Neolithic pottery from Spong Hill (1988, fig.57). A variety of rim forms are present suggesting that several bowl forms are represented. The rims are mostly rolled or folded (five examples), three are eternally thickened, three simple and one out-turned. Gibson has argued that there was an expansion in the range of bowl forms and rim forms produced at or just after 3600BC (Gibson 2002, 35). It is therefore likely that the assemblage dates to sometime immediately after 3600BC.

One decorated sherd from a Mildenhall Ware bowl was found alongside the undecorated bowl. The sherd is of fine flint-tempered fabric and has a distinct angular shoulder decorated with bands of shallow impressed dots above and incised channels below the shoulder. The distinctive form and decoration are typical of Mildenhall Ware vessels and is similar to examples from Spong Hill (Healy 1988, fig.72, P144) and Kilverstone (Garrow *et al* 2006, fig.2.29, P4). The presence of this decorated vessel also dates the assemblage to sometime after 3600BC (Gibson 2002).

6.1.1.5 Deposition

With the exception of seven sherds recovered from residual contexts, all the earlier Neolithic pottery came from pit [30] which also contained a substantial quantity of worked flint. The deposition of pottery and flint in pits, sometimes isolated, sometimes clustered in groups, is also found on most earlier Neolithic sites. The pottery assemblages from the pits often comprise a mix of fragmentary sherds from numerous vessels, each vessel represented by single or small numbers of sherds (Garrow 2006). The pottery found in the features almost certainly represents domestic debris placed in the pit some time after it was initially used and deposited. Evidence for storage of this debris in pre-pit contexts is seen in the differential preservation of the sherds, some of which are abraded or burnt whilst others are fresh. Three examples of burnt sherds are present within this assemblage.

6.1.1.6 Discussion

The assemblage comprises a mix of decorated and undecorated earlier Neolithic bowls mostly recovered from the fills of a single pit. The bowls are domestic in origin suggesting some occupation of the site in the earlier Neolithic, almost certainly on an episodic perhaps seasonal basis, in keeping with the nomadic lifestyle postulated for this period (Thomas 1999; Garrow 2006). The rubbish from this intermittent occupation was collected and stored before eventual deposition in the pit. Radiocarbon determinations on material from similar pits excavated at Kilverstone near Thetford which contained an identical mix of plain and Mildenhall Ware bowls show that these features were infilled between 3650 and 3400 cal. BC (Garrow *et al*, fig. 2.49) and it is likely that the Kimberley pottery is of similar date.

6.1.2 Medieval Pottery

by Sue Anderson

6.1.2.1 Introduction

Forty-seven sherds of pottery weighing 196g were collected from thirteen contexts (Appendix 4). The sherds represented a minimum of 38 vessels (MNV) and five measurable rims produced an estimated vessel equivalent (eve) of 0.37. Table 1 shows the quantification by fabric; a summary catalogue by context is included as Appendix 4.

Description	Fabric	Code	No	Wt (g)	Eve	MNV
Thetford-type ware	THET	2.50	12	70	0.28	12
Early medieval ware	EMW	3.10	18	47		18
Medieval coarseware	MCW	3.20	8	18	0.02	2
Grimston-type coarseware	GRCW	3.22	1	5		1
Local medieval unglazed	LMU	3.23	4	23	0.07	3
Grimston-type glazed ware	GRIM	4.10	4	33		2
Totals			47	196	0.37	38

Table 1. Medieval pottery quantification by fabric.

6.1.2.2 Methodology

Quantification was carried out using sherd count, weight and estimated vessel equivalent (eve). A full quantification by fabric, context and feature is available in the archive. All fabric codes were assigned from the author's post-Roman fabric series, which includes East Anglian and Midlands fabrics, as well as imported wares. Thetford Ware fabrics are based on Dallas (1984), and forms on Anderson (2004). Imports were identified from Jennings (1981). Form terminology follows MPRG (1998). Recording uses a system of letters for fabric codes together with number codes for ease of sorting in database format. Standard pottery quantification forms were used and the results were input onto an Access database.

6.1.2.3 Late Saxon

Twelve sherds of Thetford-type ware were found. Three rims were present, all from ditch fill [23], comprising a lamp and two medium ('AB') jars. The jars had type 3 and type 4 rims. Two jar base fragments, both flat with wire-cutting marks,

were also collected. The sherds were in a variety of fabrics including the typical mid-grey fine to medium sandy fabric typical of Thetford itself, although most were brownish-grey with more frequent sand than is normal for the town. It is likely that some at least were rural products of the industry.

6.1.2.4 Early medieval

The majority of EMW sherds were small body fragments, generally thin-walled and in medium sandy fabrics. One rim was recovered from ditch fill [18], and was a typical simple everted type from a small jar.

6.1.2.5 Medieval

Pottery of high medieval date was recovered from topsoil, subsoil and the fills of ditches [14] and [21]. Sherds of medieval coarseware from upper fill [15] included a bowl or dish with a short everted rim, and a fragment of LMU upright thickened jug rim came from lower fill [16]. Three body sherds of Grimston-type glazed ware from subsoil were from a jug decorated with an applied white slip leaf with incised lines similar to examples from Kings Lynn (e.g. Clarke and Carter 1977, fig. 92.2). These have been dated to the latest medieval period at the production site (Little 1994, fig. 63).

6.1.2.6 Pottery by context

A summary of the pottery by feature is provided in Table 2.

Context	Fill of	Description	LSax	EMed	Med	Spotdate
4		Topsoil		1	1	13th-14th c.+
5		Subsoil			4	15th c.
7		Topsoil		1		11th-12th c.+
8		Subsoil			2	11th-14th c.
15	14	Upper fill ditch		1	8	12th-13th c.
16	14	Lower fill ditch	1	1	1	13th c.
18	17	Ditch fill	1	4		11th-12th c.
20	19	Ditch fill		1		11th-12th c.
21	19	Ditch fill			1	11th-14th c.
23	19	Ditch fill	6	5		11th c.
25	24	Gully fill	2	1		11th-12th c.
29	28	Gully fill	1	2		11th-12th c.
36	30	Pit fill	1	1		11th-12th c.

Table 2. Pottery types present by feature (sherd count)

Evidence from the pottery suggests that the fills of two ditches can be dated to the medieval period, and medieval pottery was also incorporated into subsoil and topsoil. No features contained Late Saxon pottery alone, with Thetford ware always being found in association with early medieval handmade wares. This

tends to suggest that occupation on the site can be dated to the 11th century, rather than earlier, as both pottery types were in use during that period.

6.1.2.7 Discussion

This small assemblage is largely of early medieval date and suggests activity on the site from the 11th century onwards. Fabrics and forms which are familiar in the major regional towns in the Late Saxon to medieval periods are present in this group, as well as some variations on them which are likely to be more local products. The presence of a late Grimston-type jug, albeit in subsoil, suggests that activity continued into the late medieval period.

6.2 Fired Clay

by Sarah Percival

A total of seven pieces of fired clay weighing 71g was recovered from four contexts. All the pieces are poorly fired and contain mixed chalk pieces in a coarse, poorly mixed clay matrix. Six pieces weighing 54g came from the fills of ditch [17] and gullies [24] and [28]. A single piece, also in chalky fabric, came from earlier Neolithic pit [30]. The piece has one smoothed surface and may be from hearth lining or similar.

6.3 Flint

by Sarah Bates

6.3.1 Introduction

A total of one hundred and six struck or shattered flints were recovered, mostly from fills of a single pit (Appendix 5). A single piece of burnt flint, weighing 3g, was also found; it has been recorded and discarded. Two non-struck fragments of flint were also discarded. The flint is summarised in Table 3 and listed by context in Appendix 5.

Type	Number
multi platform flake core	1
single platform flake core	1
single platform blade core	1
core fragment	1
tested piece	3
shatter	6
core trimming flake	4
flake	28
blade-like flake	13
blade	18
bladelet	1
spall	1
double end	1
piercer	1
serrated blade	3
serrated flake	1
notched flake	1

Type	Number
retouched blade	1
retouched flake	5
struck fragment	3
utilised blade	4
utilised flake	8
Total	106
burnt fragment	1

Table 3: Summary of the flint

6.3.2 *Flint from pit [30]*

Most of the flint was recovered from two fills [31] and [36] of pit [30]. The flint from the pit includes three cores; a single platform blade core, struck neatly from one side of a cortical fragment, an irregular single platform flake core struck from a probable thermal surface and a quite large and irregular multi platform flake core some protruding overhangs to one or two platform edges and incipient percussion cones on some surfaces. There is also a fragment from a possible blade core and three irregular tested pieces. Six irregular shattered fragments and one spall are also present.

Twenty-three unmodified flakes were found in the pit. They vary in type but are predominantly quite small and generally quite irregular in nature. There are twelve blade-like flakes, some of them quite irregular and/or cortical. Sixteen blades and a small bladelet were found in the pit. Many of these are quite neat and several have abraded platforms showing that they were struck from deliberately prepared blade cores. The debitage from the pit is all sharp or quite sharp and only a small number of pieces are patinated.

Retouched tools, all found in pit [30], include a double end scraper on an ovate thick primary flake, a piercer on a neat blade with slight retouch of its right edge near the distal point and utilisation of that point, and four serrated pieces. Three of these are blades with abraded platforms and the fourth is a small quite thick flake with another slightly retouched edge. All the 'serrated' pieces have quite slight but discernible tiny chips or notches in one edge. A very small flake has retouch forming a slight notch in one broken edge.

Three miscellaneous retouched flakes, six utilised flakes and four utilised blades also came from the pit fills. One each of the retouched and utilised flakes seem to have been used as knives; they have quite straight slightly worn modified edges.

6.3.3 *Flint from other contexts*

Three flakes, a blade-like flake, two blades, two retouched flakes, one of them blade-like, part of a retouched blade and a utilised blade-like flake were found residually in fills of ditches or gullies which contained medieval pottery.

Two flakes, one (possibly utilised) was found in subsoil [5] and one flake came from the topsoil.

6.3.4 Discussion

The flint from the pit is consistent with the earlier Neolithic date provided by the pottery from the feature. The relatively large number of blade-type pieces, including several with abraded platforms is characteristic of flint-working of this period when cores were worked with care and their platforms deliberately prepared. The piercer on a blade and the serrated pieces are also characteristic earlier Neolithic tool types and the deposition of lithic material alongside pottery in pits during this period has been discussed (Healy 1988, 108-109, Beadsmoore 2006, 53-70).

6.4 Lava

by Sarah Percival

Two pieces of grey, vesicular lava were recovered from subsoil. Lava was imported into Britain from sources in the Rhineland throughout the Roman period and then again in the Late Saxon and medieval periods. The pieces are not closely datable but are perhaps Late Saxon or medieval, contemporary with other activity noted at the site.

6.5 Stone

by Sarah Percival

An utilised quartzitic sandstone pebble was found in the fill of pit [30] which also contained earlier Neolithic pottery and flint. The pebble which had almost certainly derived from river gravels had been broken in half along its length and had distinct areas of smoothing on the upper surfaces. The stone is likely to be of earlier Neolithic date and is similar to examples found in contemporary contexts at Kilverstone interpreted as being pestle/rubbers (Garrow *et al* 2006, 70). A large flint fossilised sponge was also found in the fill of pit [30].

6.6 Small Finds

by Rebecca Sillwood

6.6.1 Introduction

A total of nine metal objects were allocated small find numbers (SF1-9); four of these were fragments of medieval knives, three were medieval horseshoe nails, and the remaining two finds were a medieval pot repair and an undated iron object. All of the small finds are described below and listed in Appendix 6. The majority of the finds came from subsoil, with only two coming from the topsoil.

6.6.2 Methodology

All objects were catalogued by count and weight, and the dimensions of each object were noted. X-radiation could not be carried out prior to the production of this report, due to time constraints, therefore analysis was limited to what could be noted by visual examination; X-radiation of the objects will be undertaken and major discoveries will be added to an updated version. The objects are discussed below by period, in order of object type.

6.6.3 Medieval

A total of four iron knives were recorded, all came from subsoil, and all are likely to be medieval in date. Two of the knives are best described together, as they are of a singular form, and are likely to be of the same date; they both come from context [5] which is a subsoil.

Small finds (SFs) 1 and 3 both demonstrate fragmentary survival, as do all the knives, with small find 1 retaining around 75% of its original length, and SF3, less than 25% of the original length. Both knives are whittle-tang, that is, with a tapering tang, which would have originally been encased in a bone or wooden handle. These knives have 'angled' backs, leading to a straight blade, although SF3 comprises only the tang part of the knife, and it is from this that the similar forms have been recognised. The 'angled' backed knife type reflects the end of the Saxon tradition in knives, where angled backs are a common type. Dating for this type of knife is fairly contained, and is likely to be late 12th-century (Cowgill et al. 2003, p.79, fig. 54, nos. 2 and 5).

Small find 2 is also a whittle-tang knife, probably missing the very tip of the blade, with an extant length of 83mm, and a width of 10.5mm. This knife also came from subsoil deposit [5]. It is likely that this knife fits into the early to mid 13th-century period, with a slight indentation to the cutting edge near the handle, and the outer edge sloping gently into the blade.

The fourth knife (SF8) is so covered in corrosive products that it is difficult to assign a type to the object, it is even uncertain as to whether it is, in fact, an knife blade. Small find eight is from subsoil deposit (8), and comprises only 54mm of length, with a width of 13.6mm. Due to its being found near to the other knives, it is likely that this object is also of medieval date.

Three iron horseshoe nails of 'fiddle key' type, and therefore of medieval date were recovered from the site (SFs 4, 5 and 9). All of the nails were found within either subsoil [5] or [8] and are all complete and have the distinctive large semi-circular head, with a tapering shank leading to a chisel-like point. They measure between 28.6mm and 32.4mm in length, being between 12.9mm and 16.5mm wide at the head. These nails belong to the Type 2 Horseshoe, and as such are dated to around the 12th-century. For an illustration of the nail type, see Clark (ed.), 2004, p.86, fig.64a.

The final find of medieval date from this site is a lead pot mend (SF7) which was recovered from topsoil [7]. Lead pot mends are a common occurrence in archaeological assemblages from the Roman period through to the post-medieval period, and are always of a similar form. The only defining feature of this object is that there is a tiny piece of pottery that looks to be medieval retained between its two disc-like sides.

6.6.4 Undated

A single iron object (SF6) from topsoil [7] remains undated. It is shaped rather like an arrowhead, although it seems unlikely that this is what the object is. X-radiation should help to identify this fragmentary object.

6.6.5 Conclusions

The metalwork from this site comes from subsoil and topsoil deposits, and as such it is difficult to draw any meaningful conclusions from its provenance. The location of the site within an area of earthworks and possible medieval boundaries, gives some background to the location of these finds. The finds themselves are indicative of settlement and passing activity. The knives and the pot mend are domestic accoutrements that would have been part of everyday life. The horseshoe nails are evidence for the presence of horses, either for farming, transport or leisure purposes.

Although a small assemblage, the metal finds from this site in Kimberley support the theory that the earthworks in the area are of medieval date.

6.7 Animal Bone

by Julie Curl

6.7.1 Methodology

The assessment was carried out following a modified version of guidelines by English Heritage (Davis, 1992). All of the bone was examined to determine range of species and elements present. A note was also made of butchering and any indications of skinning, hornworking and other modifications. When possible a record was made of ages and any other relevant information, such as pathologies. Counts and weights were noted for each context. The information was entered into an Excel database. A summary of the data recorded is included in a table in this report and the full database is available in the digital archive.

6.7.2 The assemblage

Thirteen pieces of bone weighing a total of 186g were recovered from the evaluation excavations at Kimberly (Appendix 7). Remains were produced from six different contexts which came from ditch and gully fills, topsoil and subsoil. Some of the faunal remains were found in association with prehistoric and medieval pottery.

The assemblage is in good, sound condition, although fragmentary from butchering and wear. No gnawing was seen on any of the bone, although with such a small assemblage, this does not rule out scavengers at the site.

Most of the bone in this assemblage was too fragmented and lacked diagnostic zones that would allow identification of the bone to species, with only cattle being identified from two contexts. A distal femur from a juvenile cattle was seen in the fill [18] from ditch [17], which was recovered with prehistoric and medieval ceramics. Cattle mandible fragments from a juvenile or sub-adult animal came from fill [29] of gully [28]. All of the cattle remains had been butchered, fine cuts were noted on the mandible fragments that would also suggest the tongue had been removed.

6.7.3 Conclusions

This is a very small assemblage, but it has produced some species, ageing and butchering evidence. The remains would suggest butchering and food waste from domestic stock.

7.0 THE ENVIRONMENTAL EVIDENCE

by Val Fryer

7.1 Plant Macrofossils

7.1.1 Introduction and method statement

The evaluation at Kimberley recorded a small number of features of prehistoric (Early Neolithic) and medieval date. Samples for the evaluation of the content and preservation of the plant macrofossil assemblages were taken from three medieval ditches (Samples <1>, <4> and <5>) and from a fill within Early Neolithic pit [30] (Sample <3>). Four samples were submitted for assessment (Appendix 8).

The samples were processed by manual water flotation/washover and the flots were collected in a 300 micron mesh sieve. The dried flots were scanned under a binocular microscope at magnifications up to x 16 and the plant macrofossils and other remains noted are listed in Table 1. Nomenclature within the table follows Stace (1997). All plant remains were charred. Modern fibrous roots were present throughout. The non-floating residues were collected in a 1mm mesh sieve and will be sorted when dry. All artefacts/ecofacts will be retained for further specialist analysis.

7.1.2 Results

Oat (*Avena* sp.), barley (*Hordeum* sp.) and wheat (*Triticum* sp.) grains were recorded, although most were quite poorly preserved, being both puffed and distorted, probably as a result of combustion at very high temperatures. A fragment of a possible pea/bean type cotyledon was also noted and the sole weed seed was a single cotyledon from an indeterminate small legume (Fabaceae). Hazel (*Corylus avellana*) nutshell fragments were abundant within the assemblage from Early Neolithic pit [30]. Charcoal/charred wood fragments were present throughout along with occasional pieces of charred root or stem. The fragments of black porous and tarry material were probable residues of the combustion of organic remains at very high temperatures. Other remains included fragments of bone, pellets of burnt or fired clay small mammal/amphibian bones, although some of the latter may have been modern contaminants within the contexts from which the samples were taken.

7.1.3 Conclusions and recommendations for further work

In summary, the material within Sample <3> is typical of many assemblages of Neolithic date, containing a high density of hazel nutshell fragments, occasional cereal grains and pieces of charcoal/charred wood. It is assumed that many of these assemblages are derived from scattered midden waste, generated by a population which was still following a hunter-gatherer subsistence lifestyle whilst also adopting agricultural production. The medieval assemblages from the current site are somewhat sparse, but would appear to be principally derived from scattered refuse, much of which was probably accidentally incorporated within the ditch fills.

Although these assemblages are a little limited, they clearly illustrate that plant macrofossils, some of which are of some considerable antiquity and, therefore, of some importance, are preserved within the archaeological horizon within this area of Kimberley. Therefore, if further interventions are planned, it is strongly

recommended that additional plant macrofossil samples of approximately 40 litres in volume are taken from all well-sealed and dated contexts recorded during excavation.

8.0 CONCLUSIONS

The findings of the evaluation can be divided neatly into the Early Neolithic and medieval periods. The conclusions shall be presented below under those headings.

8.1 Early Neolithic

Well-dated Early Neolithic features are relatively rare in the archaeological record in Norfolk despite some areas of high activity in the period especially around the River Yare. The site at Kimberley produced two features of this date (pit [30] and gully [17]) both of which were recorded in Trench 2. As there are only two features, and the evidence is present in one trench, there is little that can be said about their spatial distribution, though it is reasonable to suppose that any further evidence is likely to be located close to Trench 2, on the eastern side of the site.

Of particular interest was the presence of a stake-hole in the base of pit [30]. The diameter of the stake suggests it was not structural, and there were no other stake-holes associated with it visible within the evaluation trench. The stake appeared to have been broken off prior to the silting of the pit, leaving a part of the stake *in situ* where it rotted. The imbalance of the relatively large size of the pit compared with the thin stake suggests that the stake may have originally acted as a marker post or that the pit had a ritual origin, only later becoming used for the deposition of waste. After a short period of abandonment (fill [35]), the pit was filled with refuse, which appeared to have been sorted prior to deposition. Environmental evidence suggests that these dumped deposits also contained hearth waste and this is supported by the presence of possible fragments of fired clay hearth lining. The storage of debris in pre-pit contexts is seen in the differential preservation of the sherds, some of which are abraded or burnt whilst others are fresh - a practice that appears to be common in the Early Neolithic period (6.1.1.5 above). The large amount of pottery of domestic origin, and contemporary and characteristic Early Neolithic worked flint found within the pit provides compelling evidence for habitation in the very near proximity to the excavated area. The two distinct dumped fills of the pit ([36] and [31]) could reflect the episodic or seasonal, settlement characteristic of a nomadic lifestyle (Thomas 1999; Garrow 2006). It may be tentatively suggested that if the pit lay on the edge of an Early Neolithic nomadic settlement then the occupants of that settlement may have been seasonally exploiting hunting resources on the central clay plateau of Norfolk, with a good view southwards towards a tributary of the Yare.

Neolithic communities tended to prefer Norfolk's light soils and well-drained river valley tracts rather than the heavily wooded central claylands (Ashwin 2005). The area of the Yare valley has been very well exploited in this period with sporadic and scattered but fairly persistent occupation. Evidence of Neolithic settlement tends to be restricted to pits containing cultural material of Neolithic date rather than there being evidence of structures (Thomas 1999). There have been several large sites excavated in the region of the Yare valley including two which have been published in the journal *Norfolk Archaeology*, at Great Melton and at Colney.

The excavation at Great Melton produced a large amount of mined and worked flints of Mesolithic and Neolithic date. (Wymer and Robins 1995) whilst the site at Colney revealed Neolithic soils sealed by Neolithic occupation, including a Neolithic structure, with contemporary flint knapping (Whitmore 2004). Other more recent investigations include a site at Laurel Farm which presented sporadic and scattered (but fairly persistent) occupation which was in decline by the Late Neolithic (Bishop and Proctor forthcoming); especially notable were two tree hollows that were filled with large quantities of flint and pottery. Larger settlement sites have been recorded at Postwick (NHER 22030) and Trowse Newton (NHER 13927). The site of Kilverstone (Garrow 2006) has around 200 similar pits containing cultural debris such as pottery, worked and burnt flint, charred hazelnuts and seeds.

8.2 Medieval

Part of the emphasis of the evaluation was to examine the large east to west orientated earthwork which runs across the site. The evaluation had determined that the earthwork was created by a sizeable sub surface ditch ([19]). Prior to the evaluation it was thought that the earthwork represented a toft boundary and the results of the evaluation support this interpretation. Tofts are often distinguished by 'substantial boundaries that regularly incorporate banks, walls, hedges, and ditches in various combinations, with access via one or more gates. The unusual degree of investment in the boundary is a common feature that implies an intent both to exclude and to contain' (Crabtree 2000).

The small finds recovered from the evaluation subsoil such as knives and horseshoe nails of 12th-century date are also indicative of the type of agricultural activity which might be found associated with a medieval toft. The profile of the ditch indicated that it cut the subsoil on both sides, and interestingly the subsoil was 0.47m thick on the south side and 0.14m thick on the north side. This marked difference in the thickness of the subsoil may indicate that the use of the land on either side of the ditch was different. The thicker subsoil may reflect land used for pasture, whereas on the south side the land may have been more actively worked; again possibly supporting the idea that the ditch marks out the position of an early medieval toft. The dating evidence, though a little mixed with later medieval pottery, appears to show that the main ditch ([19]), re-cut ([33]) and their infilling represent activity of the earlier medieval period, probably of the 12th to 13th centuries. There may also have been some episodes of re-cutting which are not visible in the archaeological record. The presence of a late Grimston-type jug in the subsoil, suggests that activity in the area continued into the late medieval period. Small features [24], [26] and [28], though also early medieval in date, lay beneath the subsoil which is truncated by ditch [19] and as such must be earlier, though the evidence suggests that the medieval sequence was formed relatively quickly.

Ditch [14] in Trench 2 appears to line up with the possible gully [24] in Trench 3, and the gully may mark the point where the ditch terminates. This feature seems to respect ditch [19] although it is difficult to be certain. Ditch [19] does seem to contain more early medieval pot and Late Saxon pot compared to ditch [14] which appears to contain pottery in a range from the 11th to 14th century. This would be expected if ditch [14] did indeed respect the presence of ditch [19]. The ditch was

probably part of a system that surrounded a property in the medieval village of Kimberley, and its depth may indicate that it had an important drainage function. The present drainage scheme is designed to deal with similar types of flooding problems with which the original ditch had to contend.

The earthwork ends around 30m to the east of Trench 3, and this suggests that it could have been part of a property situated on the west side of a road. This road is believed to have been originally located further east than its current route (now known as the B1108). The potential activity and occupation represented by the ditch was located on the opposite side of this route to the hall and may have represented a separate estate or individual dwelling. The earthworks appear to have 'fossilized' quite early due to a slowing of the soil formation processes, probably due to firm nature of the ground (less earthworm activity?) and the lack of the usual churning and truncation through farming practices. This was emphasised when the land became a formal park in the later medieval period. The form and amount of topsoil at the top of the profile of the ditch suggests that there may have been some later movement and landscaping of soil.

Recommendations for future work based upon this report will be made by Norfolk Landscape Archaeology.

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Bibliography

- Anderson, S. 2004 'The pottery', in Wallis, H., *Excavations at Mill Lane, Thetford*, East Anglian Archaeology 108, 67–86. Norfolk Archaeological Unit, NMS, Dereham
- Ashwin, T. 2005 Norfolk's First Farmers: Early Neolithic Norfolk (c.4000-3000 B.C) in Ashwin, T and Davison, A. (eds) *An Historical Atlas of Norfolk*, Phillimore, Chichester
- Ashwin, T. and Davison, A. (eds) 2005 *An Historical Atlas of Norfolk*, Phillimore, Chichester
- Beadsmoor, E. 2006 'Earlier Neolithic flint' in Garrow, D., Lucy, S. and Gibson, D. *Excavations at Kilverstone, Norfolk: an Episodic Landscape History Neolithic pits, later prehistoric, Roman and Anglo-Saxon occupation and later activity* East Anglian Archaeology 113 Cambridge Archaeological Unit, Dereham
- Bishop, B. and Proctor, J. (forthcoming) *Laurel Farm Settlement and Industry: living and working on Mousehold Heath, Norfolk, from the Neolithic to the Saxon period*. Pre-Construct Archaeology Ltd Monograph
- British Geological Survey <http://www.bgs.ac.uk/opengeoscience> date accessed 13.09.10
- Clark, J. (ed.). 2004 *The Medieval Horse and its Equipment c.1150-c.1450*. The Boydell Press, Woodbridge
- Clarke, H. and Carter, A. 1977 *Excavations in King's Lynn 1963-1970*. Soc. Medieval Archaeol. Monograph Series No. 7, London.
- Cowgill, J., de Neergaard, M. and Griffiths, N. 2003 *Knives and Scabbards*. The Boydell Press, Woodbridge
- Crabtree, P.J. (ed) 2000 *Medieval Archaeology: An Encyclopaedia*, Routledge.
- Dallas, C. 1984 'The pottery', in Rogerson, A. and Dallas, C., *Excavations in Thetford 1948-59 and 1973-80*, East Anglian Archaeology 22, 117–66. Norfolk Archaeological Unit, NMS, Dereham.
- Davis, S. 1992 *A Rapid Method For Recording Information About Mammal Bones From Archaeological Sites*. English Heritage AML Report 71/92.
- Department for Communities and Local Government 2010 *Planning Policy Statement 5: Planning for the Historic Environment*
- Garrow, D. 2006 *Pits, Settlement and Deposition during the Neolithic and Early Bronze Age in East Anglia*. BAR British Series 414.
- Garrow, D., Lucy, S. and Gibson, D. 2006 *Excavations at Kilverstone, Norfolk: Neolithic pits, later prehistoric, Romano British and Anglo Saxon occupation and later activity*. East Anglian Archaeology 113, NMS, Dereham
- Gibson, A. 2002 *Prehistoric Pottery in Britain and Ireland*, Tempus, Stroud
- Gurney, D. 2005 *Roman Norfolk* in Ashwin, T and Davison, A. (eds) *An Historical Atlas of Norfolk*, Phillimore, Chichester

- Healy, F. 1988 *The Anglo-Saxon Cemetery at Spong Hill, North Elmham, part VI: Occupation During the Seventh to Second Millennium BC*, East Anglian Archaeology 39, NMS, Dereham
- Jennings, S. 1981 *Eighteen Centuries of Pottery from Norwich*. East Anglian Archaeology. 13, Norwich Survey/NMS, Dereham
- Little, A. 1994 'The pottery from sites 22954 and 24054', in Leah, M., *The Late Saxon and Medieval Pottery Industry of Grimston, Norfolk. Excavations 1962–92*, East Anglian Archaeology 64, 84–91, NMS, Dereham
- Marius-Wilson, J. 1870 John Marius Wilson's Imperial Gazetteer of England and Wales 1870-72, viewed online as part of 'A Vision of Britain Through Time'. <http://www.visionofbritain.org.uk/index.jsp> accessed 13.09.10
- MPRG 1998 *A Guide to the Classification of Medieval Ceramic Forms*. Medieval Pottery Research Group Occasional Paper 1.
- PCRG 1992 Guidelines for analysis and publication; Prehistoric Ceramic Research Group
- PCRG 1997 Guidelines for analysis and publication; Prehistoric Ceramic Research Group
- Percival, S. 2004 'The Prehistoric pottery' in Whitmore, D., 'Excavations at a Neolithic Site at the John Innes Centre, Colney 2000' *Norfolk Archaeology*. Vol XLIV Pt III, 422-426.
- Stace, C. 1997 *New Flora of the British Isles*. Second edition. Cambridge University Press, Cambridge
- Thomas, J. 1999 *Understanding the Neolithic*. Routledge, London.
- Whitmore, M. 2004 Excavations at a Neolithic site at the John Innes Centre, Colney, 2000. *Norfolk Archaeology* volume XLIV Part III. p. 406-431
- Wymer, J.J. and Robins, P.A. 1995 *A Mesolithic Site At Great Melton*. *Norfolk Archaeology* Vol. XLII, pp 125–147.
- 'Hundred of Forehoe: Kimberley', An Essay towards a Topographical History of the County of Norfolk: volume 2 (1805), pp. 535-539, <http://www.british-history.ac.uk/report> accessed 01.09.10

Appendix 1a: Contexts

Context	Category	Cut Type	Fill Of	Description	Period
1	Deposit			Topsoil	Unknown
2	Deposit			Subsoil	Unknown
3	Deposit			Natural	Unknown
4	Deposit			Topsoil	Unknown
5	Deposit			Subsoil	Unknown
6	Deposit			Natural	Unknown
7	Deposit			Topsoil	Unknown
8	Deposit			Subsoil	Unknown
9	Deposit			Natural	Unknown
10	Cut	Root		Root Disturbance	Unknown
11	Deposit		10	Fill of [10]	Unknown
12	Cut	Gully?		Gully/Root Disturbance	Unknown
13	Deposit		12	Fill of [12]	Unknown
14	Cut	Ditch		Ditch	Medieval
15	Deposit		14	Upper fill [14]	Medieval
16	Deposit		14	Lower fill of [14]	Medieval
17	Cut	Ditch		Ditch/Gully	Early medieval
18	Deposit		17	Fill of [17]	Early medieval
19	Cut	Ditch		Ditch	Early medieval
20	Deposit		19	Fill of [19]	Early medieval
21	Deposit		19	Fill of [19]	Early medieval
22	Deposit		19	Fill of [19]	Early medieval
23	Deposit		19	Fill of [19]	Early medieval
24	Cut	Gully		Gully	Early medieval
25	Deposit		24	Fill of [24]	Early medieval
26	Cut			Post-hole	Early medieval
27	Deposit		26	Fill of [26]	Early medieval
28	Cut	Gully		Curving Gully	Early medieval
29	Deposit		28	Fill of [28]	Early medieval
30	Cut	Pit		Pit	Early Neolithic
31	Deposit		30	Fill of [30]	Early Neolithic
32	Deposit		30	Fill of [33]	Early Neolithic
33	Cut	Re-cut Ditch		Re-cut of large Ditch	Early medieval
34	Deposit		14	Fill of [14]	Early medieval
35	Deposit		30	Fill of [30]	Early Neolithic
36	Deposit		30	Fill of [30]	Early Neolithic
37	Cut	Stake-hole		Stake hole	Unknown
38	Deposit		37	Fill of [37]	Unknown

Appendix 1b: OASIS Feature Summary

Count of Cut Type		
Period	Cut Type	Total
Early Neolithic	Pit	1
Medieval	Ditch	1
Unknown	Gully?	1
	Root	1
	Stake-hole	1
Early medieval	Ditch	2
	Gully	2
	Re-cut Ditch	1

Appendix 2a: Finds by Context

Context	Material	Qty	Wt	Period	Notes
4	Pottery	2	5g	Medieval	
4	Animal Bone	1	4g	Unknown	
5	Iron	1	2g	Unknown	nail
5	Iron	1	13g	Modern	plate fragment
5	Iron	1	20g	Unknown	SF1 Knife
5	Iron	1	9g	Unknown	SF2 Knife
5	Iron	1	4g	Unknown	SF3 Knife
5	Iron	1	4g	?Medieval	SF4 Horseshoe nail
5	Iron	1	2g	?Medieval	SF5 Horseshoe nail
5	Pottery	3	11g	Early Neolithic	
5	Pottery	4	37g	Medieval	
5	Lava	2	20g	Unknown	
5	Animal Bone	1	5g	Unknown	
5	Flint – Struck	2	9g	Prehistoric	
7	Iron	1	8g	Modern	plate fragment
7	Iron	1	2g	Unknown	SF6 Object
7	Lead	1	23g	Medieval	SF7 Pot mend
7	Animal Bone	2	8g	Unknown	
7	Pottery	1	1g	Medieval	
7	Flint – Struck	1	1g	Prehistoric	
8	Iron	1	11g	Unknown	SF8 Knife
8	Iron	1	4g	?Medieval	SF9 Horseshoe nail
8	Pottery	1	4g	Medieval	
15	Pottery	9	11g	Medieval	
15	Flint – Struck	1	27g	Prehistoric	
15	Animal Bone	1	4g	Unknown	
16	Pottery	3	29g	Medieval	

Context	Material	Qty	Wt	Period	Notes
18	Pottery	4	22g	Early Neolithic	
18	Pottery	5	27g	Medieval	
18	Fired Clay	3	21g	Unknown	
18	Flint – Struck	8	127g	Prehistoric	
18	Animal Bone	6	100g	Unknown	
20	Pottery	1	1g	Medieval	
21	Pottery	1	5g	Medieval	
23	Pottery	11	49g	Medieval	
23	Flint – Struck	1	1g	Prehistoric	
25	Pottery	3	6g	Medieval	
25	Fired Clay	2	24g	Unknown	
25	Flint – Burnt	1	11g	Unknown	Discarded
25	Flint – Struck	1	3g	Prehistoric	
29	Pottery	3	7g	Medieval	
29	Fired Clay	1	9g	Unknown	
29	Animal Bone	2	65g	Unknown	
31	Pottery	67	635g	Early Neolithic	
31	Flint – Struck	55	1,248g	Prehistoric	
31	Stone	1	315g	Unknown	Half quartzitic pebble
31	Stone	1	717g	Unknown	Large fossil rich flint (discarded)
36	Pottery	48	541g	Early Neolithic	
36	Fired Clay	1	17g	Unknown	
36	Flint – Struck	38	822g	Prehistoric	

Appendix 2b: OASIS Finds Summary

Period	Material	Total
Prehistoric	Flint – Struck	108
Early Neolithic	Pottery	122
Medieval	Lead	1
	Pottery	44
Modern	Iron	2
Unknown	Animal Bone	13
	Fired Clay	7
	Flint – Burnt	1
	Iron	6
	Lava	2
	Stone	2
?Medieval	Iron	3

Appendix 3: Prehistoric Pottery

Context	Fabric	Type	Qty	Wt	Spotdate	Form	Dec	Rim type	Comment
5	F1	U	3	11	Earlier Neolithic	Plain Bowl			fine
18	F2	U	4	22	Earlier Neolithic	Plain Bowl			coarse
31	F1	U	11	114	Earlier Neolithic	Plain Bowl			fine
31	F2	U	40	279	Earlier Neolithic	Plain Bowl			coarse
31	Q1	U	3	17	Earlier Neolithic	Plain Bowl			
31	Q1	R	1	10	Earlier Neolithic	Plain Bowl		out turned	
31	F1	R	1	8	Earlier Neolithic	Plain Bowl		simple rounded	drilled
31	F2	R	1	12	Earlier Neolithic	Plain Bowl		ext thick	
31	F2	R	1	17	Earlier Neolithic	Plain Bowl		ext thick	
31	F1	U	1	9	Earlier Neolithic				drilled
31	F1	R	1	11	Earlier Neolithic	Plain Bowl		simple flat	three joining
31	F1	R	1	27	Earlier Neolithic	Plain Bowl		folded	
31	Q1	R	1	131	Earlier Neolithic	Plain Bowl		rolled	
36	F2	U	30	368	Earlier Neolithic	Plain Bowl			
36	F1	U	8	47	Earlier Neolithic	Plain Bowl			
36	Q2	U	1	23	Earlier Neolithic	Plain Bowl			
36	F1	R	1	19	Earlier Neolithic	Plain Bowl		folded	
36	F2	R	1	24	Earlier Neolithic	Plain Bowl		folded	drilled
36	F1	R	1	12	Earlier Neolithic	Plain Bowl		folded	
36	Q1	R	1	14	Earlier Neolithic	Plain Bowl		simple rounded	burnt
36	F2	R	1	13	Earlier Neolithic	Plain Bowl		ext thick	burnt
36	F1	D	1	13	Earlier Neolithic	Mildenhall Ware	channels and dots		

Appendix 4: Saxon and Medieval Pottery catalogue

Context	Fabric	Form	Rim	No	Wt(g)	Spotdate
4	EMW			1	2	11th-12th c.
4	GRIM			1	3	L.12th-14th c.
5	GRIM			3	30	15th c.
5	GRC W			1	5	11th-M.13th c.
7	EMW			1	2	11th-12th c.
8	LMU			2	4	11th-14th c.
15	EMW			1	1	11th-12th c.
15	MCW			1	2	L.12th-14th c.
15	MCW	bowl/dis h	FTE V	7	16	11th-13th c.
16	THET			1	10	10th-11th c.
16	EMW			1	6	11th-12th c.
16	LMU	jug	UPT H	1	14	11th-14th c.
18	THET			1	15	10th-11th c.
18	EMW			3	6	11th-12th c.
18	EMW	jar	SEV	1	5	11th-12th c.
20	EMW			1	2	11th-12th c.
21	LMU			1	5	11th-14th c.
23	THET			3	8	10th-11th c.
23	THET	AB jar	3	1	8	10th-11th c.
23	THET	AB jar	4	1	15	10th-11th c.
23	THET	lamp?	FLA R	1	3	10th-11th c.
23	EMW			5	15	11th-12th c.
29	THET			1	2	10th-11th c.
29	EMW			1	1	11th-12th c.
29	EMW			1	2	11th-12th c.
25	THET			1	2	10th-11th c.
25	THET			1	3	10th-11th c.
25	EMW			1	1	11th-12th c.
36	THET			1	4	10th-11th c.
36	EMW			1	4	11th-12th c.

Notes:

Rim: UP – upright; TH – thickened; SEV – simple everted; FTEV – flat-topped everted; FLAR – flaring; 1-7 – Thetford ware types.

Appendix 5: Flint

Context	Cat.	Type	Quantity	Non-str.
5	flak	flake	1	0
5	utfl	utilised flake	1	0
7	flak	flake	1	0
15	flak	flake	1	0
25	utfl	utilised flake	1	0
18	blad	blade	2	0
18	retb	retouched blade	1	0
18	refl	retouched flake	1	0
18	flak	blade-like flake	1	0
18	flak	flake	2	0
18	stfr	struck fragment	1	0
23	refl	retouched flake	1	0
36	flak	flake	4	0
36	flak	shatter	3	0
36	blad	blade	4	0
36	flak	blade-like flake	7	0
36	corf	core trimming flake	1	0
36	core	single platform blade core	1	0
36	core	single platform flake core	1	0
36	core	tested piece	1	0
36	stfr	struck fragment	2	0
36	core	tested piece	1	0
36	utbl	utilised blade	2	0
36	pecr	piercer	1	0
36	dent	serrated blade	2	0
36	utfl	utilised flake	4	0
36	refl	serrated flake	1	0
36	notf	notched flake	1	0
36	refl	retouched flake	2	0
31	unsk	non-struck fragment	0	2
31	burn	burnt fragment	1	0
31	flak	spall	1	0
31	flak	flake	19	0
31	flak	blade-like flake	5	0
31	blad	blade	12	0
31	blad	bladelet	1	0
31	flak	shatter	2	0
31	corf	core trimming flake	3	0
31	core	multi platform flake core	1	0
31	core	core fragment	1	0
31	core	tested piece	1	0
31	scpf	double end	1	0
31	utbl	utilised blade	2	0
31	refl	retouched flake	1	0

Context	Cat.	Type	Quantity	Non-str.
31	dent	serrated blade	1	0
31	flak	shatter	1	0
31	utfl	utilised flake	2	0

Appendix 6: Small Finds

Small Find No.	Context	Material	Qty	Wt. (g)	Dimensions	Object Type	Notes	Period
1	5	Iron	1	20	L>98.4 W15.5	Knife	late 12th century, angled-back, whittle-tang	Medieval
2	5	Iron	1	9	L83.2 W10.5	Knife	requires x-ray	Medieval
3	5	Iron	1	4	L>41.3 W15.2	Knife	late 12th century, angled-back, whittle-tang	Medieval
4	5	Iron	1	4	L32.4 W16.5	Horseshoe nail	requires x-ray	Medieval
5	5	Iron	1	2	L30.5 W14.3	Horseshoe nail	requires x-ray	Medieval
6	7	Iron	1	2	L28.7 W13.7	Object	requires x-ray	Unknown
7	7	Lead	1	23	L24.2 W22.1 T11	Pot mend	tiny piece of poss Medieval pot in situ	Medieval
8	8	Iron	1	11	L54.1 W13.6	Knife	requires x-ray	Medieval
9	8	Iron	1	4	28.6 W12.9	Horseshoe nail	requires x-ray	Medieval

Appendix 7: Animal Bone

Context	Context Qty	Context Wt(g)	Species	NISP	Butchering	Comments
4	1	4	Mammal	1	ch	
5	1	5	Mammal	1		
7	2	8	Mammal	2		
15	1	4	Mammal	1		
18	6	100	Cattle	1	c, ch	J, distal femur
18			Mammal	5		
29	2	65	Cattle	2	c/ch	J/sa mandible, tongue removed?

Key:

NISP: Number of Individual Species elements Present.

Age: Estimate based on fusion of bones & toothwear; a = adult, j = juvenile, sa = sub-adult

Butchering: c = cut, ch = chopped

Appendix 8: The Environmental Evidence

Sample No.	1	3	4	5
Context No.	22	36	18	16
Feature No.	19	30	17	14
Feature type	Ditch	Pit	Ditch	Ditch
Date	E.Med	E.Neo.	E.Med	Med.
Cereals and other food plants				
<i>Avena</i> sp. (grain)			xcf	
<i>Hordeum</i> sp. (grains)	x		x	
<i>Triticum</i> sp. (grains)			x	
Cereal indet. (grains)	x	x	x	x
Large Fabaceae indet.			xcfcotyfg	
Herbs				
Fabaceae indet.			xcoty	
Tree/shrub macrofossils				
<i>Corylus avellana</i> L.		xxx		
Other plant macrofossils				
Charcoal <2mm	x	xx	xx	xx
Charcoal >2mm	x	x	x	x
Charred root/stem	x		x	
Indet.seed	x			
Other remains				
Black porous 'cokey' material	x	x	x	x
Black tarry material				x
Bone	x		x	x
Burnt/fired clay			x	
Fish bone			x	
Small mammal/amphibian bone	x	xpmc		x
Sample volume (litres)	20	14	10	14
Volume of flot (litres)	<0.1	<0.1	<0.1	<0.1
% flot sorted	100%	100%	100%	100%

Key to Table

x = 1–10 specimens xx = 11–50 specimens xxx = 51–100 specimens xxxx = 100+ specimens
 cf = compare coty = cotyledon fg = fragment pmc = possible modern contaminant
 E.Med = early medieval E.Neo = early Neolithic Med = medieval