

# CEMEX-KENSWORTH TO RUGBY PIPELINE

## Close-out archive report



### Network Archaeology and the Anglo-Saxon Laboratory



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Cover image: Five of the better preserved woolcomb fragments from context 107

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## SUMMARY

An archaeological watching brief and subsequent small excavation was carried out in spring of 2006, close to the Broughton Road roundabout on the A426 Leicester Road in the Brownsover area of Rugby. A draft assessment report was produced, but the project was precipitately terminated before a full report could be produced. The brief report has been compiled to accompany deposition of the archive.

## THE CIRCUMSTANCES AND PURPOSE OF THIS REPORT

This report has been produced as an archive 'close-out' document for an archaeological watching brief that was carried out on the Cemex Kensworth to Rugby Pipeline gas pipeline project, undertaken by Network Archaeology in March 2006.

The scope of the watching brief changed in the course of the project, with much of the pipeline being installed by undercut drilling, avoiding disturbance to surface deposits. As a result, only one small area required monitoring. The results from this area, initially designated as Area B, were documented in an assessment report (Network Archaeology 2007). These were briefly summarised in the assessment report as: 'two parallel linear features, identified as two furrows, and a curvilinear ditch ... of Roman or later date. Finds were limited to two sherds of pottery, one identified as being of Early Roman date ... the other, less diagnostic, may be of either Iron Age or Anglo-Saxon date.' There was also a deposit of ferrous metal objects, tentatively identified as the teeth of an iron carding comb, and fragment of a quern from the same feature. It was recommended that these should be assessed and recorded by a specialist.

Owing to contractual difficulties, funding for further work was unavailable and the work was put on hold. The question of how to proceed was left in abeyance until April 2018, when the issue of what to do with metal finds was raised again. This prompted Network Archaeology to commission the completion of the specialist report (Appendix 1). This short report has been produced to provide a context, both archaeological and archival, for the report on the ferrous metal finds.

## DESCRIPTION OF WORKS

The route of the 279mm diameter welded steel pipeline carries chalk slurry from from Kensworth in Bedfordshire to Cemex cement works near New Bilton, Rugby in Warwickshire. Archaeological monitoring was initially considered for the whole of the 4.2km long section, referred to as the Urban Section Relay, running through the suburbs of Rugby from Brownsover in the north-east to New Bilton in the south-west.

As originally proposed, this was to be laid in an open-cut trench, and two areas were initially to be targeted for archaeological monitoring: Area A, where the pipeline route passes close to a known extensive Iron Age settlement site, excavated in 1998 (Warwickshire Sites and Monuments MWA 8221); and Area B, close to the medieval church of St Michael and All Angels (MWA 3346), a possible moated site (MWA 5403) and a shrunken village (MWA 5404). Air photography also suggests a possible barrow site, now under the A426 (MWA 3391), and a cinerary or cremation urn of the Roman period has been recovered from the graveyard of St Michael's (MWA 3348). However, as a result of a change to the method of installing the pipeline, the only elements of the works that were monitored, were topsoil stripping and levelling of the drilling compound, occupying the northern part of Area B.

## OBJECTIVES

The prime objective of the archaeological works was the mitigation of construction of the pipeline, by:

- establishing the presence or absence, extent, condition, character, quality and date of any archaeological remains

- locating, investigating and recording archaeological deposits
- recovering, recording and conserving significant archaeological finds
- producing a site archive and report for submission to the receiving museum and the HER, and upload to the Archaeology Data Service OASIS website.

## FINDINGS

The plan of the monitored area shown on the right is reproduced (not to its original scale) from the initial assessment report. Shallow features 102 and 105 were interpreted as remnants of ridge and furrows cultivation. The fill, 104, of furrow 103 contained two small pottery sherds, each weighing 2 grams, as well as three fragments of fired clay and two pieces of slag.

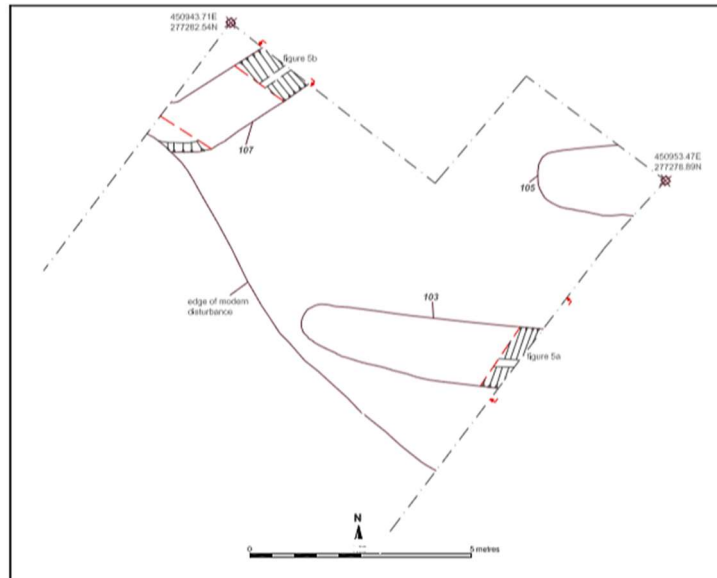
The pottery sherds were from different vessels. Both are in fairly fresh condition. One is a reduced-fired Roman grey ware with rounded quartz (0.4-1.0mm) as the main inclusion. It is wheel-made and fairly thin walled indicating a small jar or beaker form (GREY, JBK). There are no diagnostic features, but the manufacture and form indicate a 1st to 2nd century vessel rather than a late Roman product (Precious 2006).

The other is quite different, being black in colour with brown margins, hand-made and consisting of a coarse-tempered fabric with granite grains and biotite mica visible on the surface (IAGRAN). This

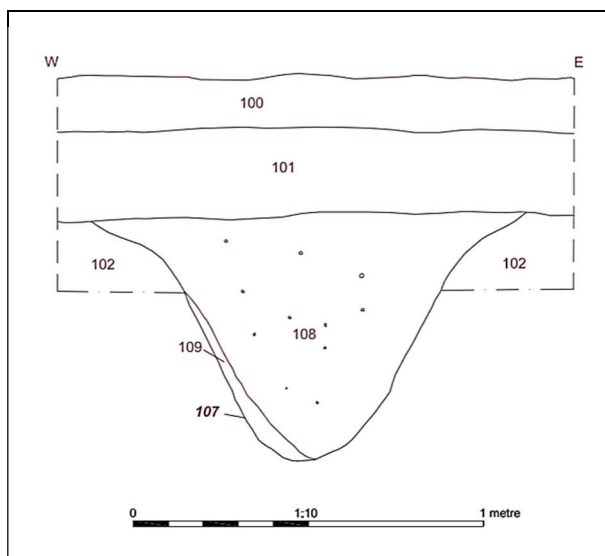
fabric is close to the source of the clays of the Charnwood Forest granites (Vince 2006). The vessel is a closed form with a dark-brown deposit on the interior, suggesting use as a cooking pot. There are no diagnostic features and this fabric is found in both Iron Age and Anglo-Saxon vessels in this area.

Feature 107 (left, not to original scale) had a deep v-shaped profile and a fill, 108, described as compact, mid-grey clayey silt, with frequent animal bone and rare ceramic building material fragments.

It yielded a fragment of a quern and two assemblages of corroded ferrous metal objects. The metal assemblages were identified as woolcomb teeth, and further work to



1: Plan of the excavated area, showing ditch and furrows



2: North-facing section through ditch 107

characterise them was recommended (see Appendix 1).

The quern-stone fragment is from a rotary quern in a grey vesicular lava containing abundant *clinopyroxene crystals, some of which appear to be zoned*. The fragment comes from the lower stone of the quern and has dressed lower and outer surfaces and a deeply scored upper surface. Such querns were used in the Roman, mid-Saxon and later periods and there is little to distinguish small fragments of Roman from mid-Saxon examples (Vince 2006).

## SOURCES CITED

Le Brecht, C. 2005. Kensworth-Rugby pipeline urban section relay: planning application supporting statement, final report no 61591, Jacobs for Cemex

Network Archaeology. 2007. *Cemex Kensworth to Rugby Pipeline: Archaeological Watching Brief*, unpublished client report 364, for Stockton Pipelines

Precious, B. 2006. *Late Iron Age and Roman Pottery from Cemex Kensworth to Rugby Pipeline*, unpublished client report for Stockton Pipelines

Vince, A. 2006. *AVAC Reports No 2006/7*, unpublished client report for Stockton Pipelines

Walton Rogers, P. 2018. *Iron Woolcombs from Rugby, Warwickshire, CKR16*

## ARCHIVE

The finds are currently stored in the Lincoln offices of Network Archaeology. The woolcombs, lava quernstone fragment and the potsherds, subject to the agreement of the landowner, should be deposited, along with this close-out report and the rest of the retained site archive, with Warwickshire County Museum. There are no recommendations for archive retention off the other finds.



1 Lava quernstone fragment, find 3, context 108



2: Pottery sherds from context 104



3: Production waste from context 104

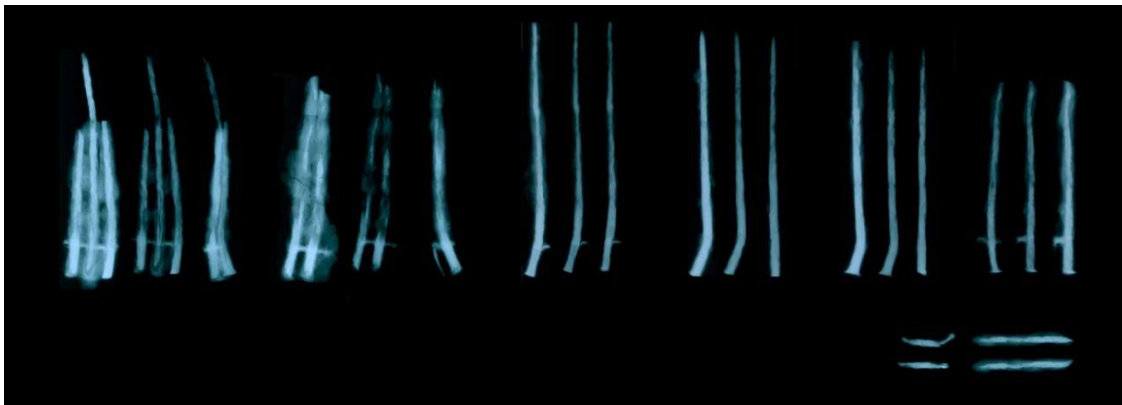
## APPENDIX 1: IRON WOOLCOMBS FROM RUGBY, WARWICKS

### Penelope Walton Rogers on behalf of Network Archaeology

The fragmentary remains of at least two woolcombs, finds /1\ and /2\, were recovered from fill 107 of feature 108. This context was poorly dated by stratigraphy, pottery and other finds (A Vince pers.comm.), but the woolcombs can be dated with some degree of confidence to the 7th to 13th or 14th century. Woolcombs were used in pairs in order to prepare the fibre for spinning. These examples represent the English and Continental type with two rows of spikes set in a flat head, which contrast with the North Scandinavian type which has a single row set in a cylindrical head.

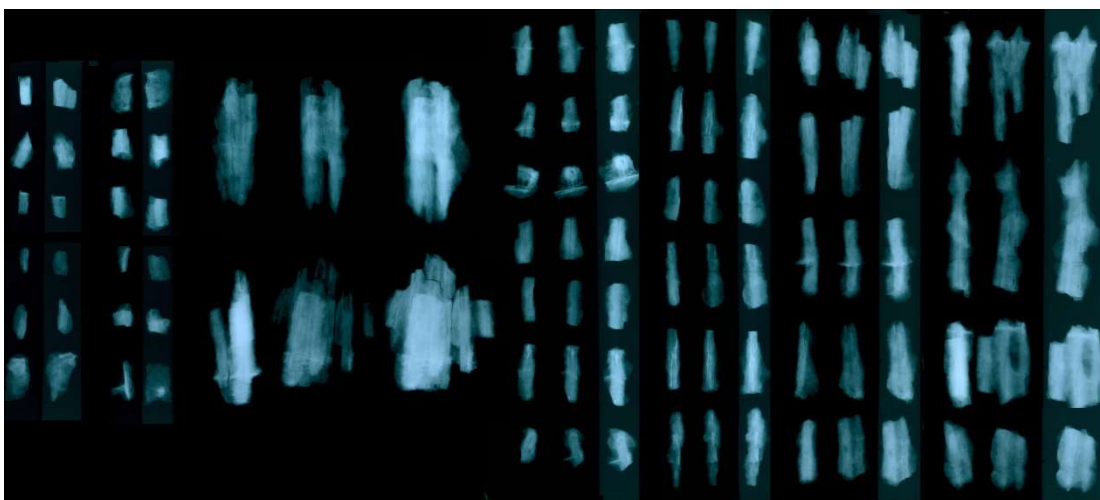
### The finds

Find /1\ includes nine iron spikes, some of which are still in their original position, with their blunt ends anchored in an iron plate (Fig.1). Traces of the plate are also visible on two of the loose spikes. The plate would have originally encased a flat wooden stock with handle, although the wooden element has not survived burial. The lengths of the three complete spikes are 97 mm, 99 mm and 106 mm; and all spikes have a shank diameter of 5.5-6.0 mm.



*Fig.1. Nine woolcomb spikes from find /1\, each spike, or group, x-rayed from three different angles, together with two corroded iron fragments*

Find /2\ is more severely corroded and fragmentary but the X-rays still show the remains of iron spikes set into a plate and also some loose pieces of the plate and remains of the nails that would have fastened the plate to the stock (Fig.2). No complete spikes were recorded in this find, the longest broken spike being 60 mm.



*Fig.2. Fragments of woolcomb(s) from find /2\, each x-rayed from two or three different angles.*

## Comments

Early woolcombs were made to a standard pattern, with spikes 90-110 mm long, and a plate set 13-14 mm from the base of the spike (Walton Rogers 1997, 1720-2, 1727-31). It is usual for spikes in a single comb to be of the same length, which may suggest that the spike of 106 mm has come from a different comb. The combs have been found, mostly in pairs, in female burials of the 7th century and in occupation sites of later centuries (Walton Rogers 2009). There is evidence from York and Beverley for a lengthening of the teeth, to 120-190 mm, in the late 12th or 13th century (Walton Rogers 1997, 1730-1) and examples of the later long-toothed combs have been recorded in early 16th-century levels at Pottergate, Norwich (Goodall 1993, 182-4). This shift from short to long teeth appears to correspond with a change in use, the early combs being held one in either hand (Fig.3), while the later ones were worked with one comb mounted on a post and the other drawn through it. It also correlates with the historical evidence that the wool industry was splitting into two wings, one producing soft woollens from carded short-staple wool and the other producing worsteds from combed long-staple wool. The Rugby woolcombs are likely to pre-date this development and most probably belong in the domestic sphere, before wool-combing had become a specialist craft.

## Bibliography

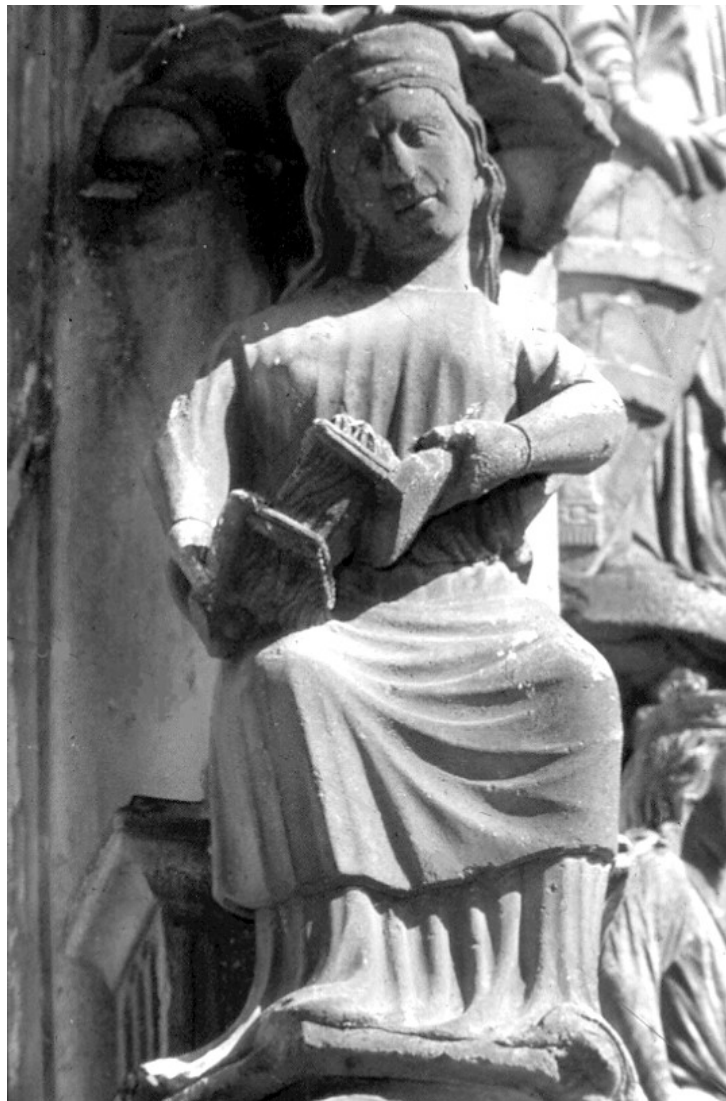
Goodall, I. H. 1993, 'Textile manufacturing tools', pp182-8 in Margeson, S. 1993, *Norwich Households: The Medieval and Post-Medieval Finds from Norwich Survey Excavations 1971-1978* (East Anglian Archaeology 58). Norwich: EAA/Norwich Survey.

Walton Rogers, P. 1997, *Textile Production at 16-22 Coppergate, The Archaeology of York 17(11)*. York: Council for British Archaeology for York Archaeological Trust

Walton Rogers, P. 2009, 'Woolcombs', pp393 & 409-10 in S. Lucy, J. Tipper and A Dickens, *The Anglo-Saxon Settlement and Cemetery at Bloodmoor Hill, Carlton Colville, Suffolk* (East Anglian Archaeology 131). Cambridge: Cambridge Archaeological Unit.

## Acknowledgements

All X-rays prepared at Lincolnshire CC Heritage Service Conservation Department, Lincoln, and processed digitally at The Anglo-Saxon Laboratory.



*Fig.3. A woman combing wool in a sculpture from AD c.1200 at the north door of Chartres Cathedral. Photo: Cathédrale de Chartres.*



## APPENDIX 2: OTHER FINDS

This section reproduces, for reference, details of the finds from the assessment report.

### Late Iron Age and Roman Pottery, B J Precious

The pottery has been recorded according to the Study Group for Roman Pottery (SGRP) guidelines, using codes currently in use at the City of Lincoln Archaeological Unit, and sherd count and weight as measures. The full archive giving full details of the pottery is presented below.

Two sherds of pottery from different vessels came from a single context (104), each weighing 2 grams. Both sherds are in fairly fresh condition, and range in date from the Iron Age to Roman or Anglo-Saxon periods.

The first sherd is a reduced-fired, Roman grey ware with rounded quartz (0.4-1.0 mm) being the main inclusion. It is wheel-made and fairly thin-walled indicating a small jar or beaker form (GREY, JBK). There are no diagnostic features, but the manufacture and form indicate a 1st to 2nd century vessel rather than a late Roman product.

The second sherd is quite different, being black in colour with brown margins, hand-made and consisting of a coarse tempered fabric with granite grains and biotite mica visible on the surface (IAGRAN). This fabric is close to the source of the clays of the Charnwood Forest granites (pers. comm Dr A G Vince). The vessel is a closed form with a dark-brown deposit on the interior, suggesting use as a cooking pot. There are no diagnostic features and this fabric is found in both Iron Age and Anglo-Saxon vessels in this area.

CONTEXT	FABRIC	FORM	DEC	NOVSS	ALTER	COMMENTS	JOIN	SHS	WT/g
104	GREY	JBK	WM			BS; 0.4-1.0MM R Q ILL SOR; 1-2C		1	2
104	ZZZ					GREY; FAINT SCORED LINES			
104	IAGRAN?	CLSD	HM			DEPOSITINT BS; GRANITE; BIOTITE; IA OR SAX		1	2
104	ZZZ					MIX?			
104	ZDATE					IA-SAX			

### Fired Clay: Alan Vince

Three small fragments of fired clay were recovered. These are probably from a daub structure although none preserved a wattle impression. The fabric of the fragments was examined at x20 magnification and was seen to consist of a sandy groundmass with some sparse limestone inclusions and impressions from burnt-out organic matter, more probably straw than roots.

### Stone catalogue: Alan Vince

CONTEXT	REFNO	CLASS	SUBFABRIC	OBJECT	NOSH	NOV	WEIGHT/g
108	SF3	STONE	MAYEN LAVA	ROTARY QUERN	1	1	739
108	SF1	IRON		HECKLE COMB	8	1	116
108	SF2	IRON		HECKLE COMB	36	1	258

### Production residues: Jane Cowgill

Context 104, a single piece weighing 45g.

Probably a hearth bottom fragment and therefore a by-product of iron smithing. It is abraded, leached but very dense and could be an iron-smelting slag, but this type of slag is not so common so its interpretation as a smithing slag is more likely.

### Heat-Affected Stone: Wendy Booth

A single piece of heat-affected stone, weighing 12g and measuring 32mm x 29mm x 15mm, was collected from context 104. The fragment appears to be a piece of limestone, and is clearly broken off from a larger fragment. It is uniform mid-pink in colour, which suggests an even exposure to a moderate heat in an oxidising environment.

### Animal Bone: Richard Moore

An assemblage of animal bone from two contexts, weighing just over 900g in total, was examined and identified to species where possible, noting condition, signs of butchery and post-depositional damage, and indications of pathological variation. The condition of the bones was variable. Much of it was fragmentary, with even some normally robust elements, teeth and phalanges, being commonly damaged and split, though some of the bones were relatively well preserved, pale buff-coloured with hard, smooth surfaces.

Context 104 contained a high proportion of abraded fragments, probably the result of ground disturbance. Identifiable elements included a cattle tooth and sheep lower limb bones. Of particular note was a thoracic vertebra, possibly from a dog or similar sized animal, that shows a marked asymmetry, the neural spine curving by around 60° to the right, and the lateral processes being better developed on this side. There is no sign of traumatic injury to the bone, suggesting that this was a chronic development caused by asymmetric muscle development, perhaps because of lameness of the left leg.

There was less variation in the condition of the bone from Context 108. The common domestic food species, cattle, pig and sheep, were all represented. A slender phalange was not identified to species but is probably from a goose-sized bird. The assemblage included an articulating group of cattle tarsals and metatarsal, possibly also including the tibia and calcaneum. This was probably butchery waste from trimming the lower leg from a carcass. The tibia and metatarsal both had unfused distal ends, indicating an age of less than 2½ years (Schmid, 1975). Although of similar appearance, the fully fused calcaneum may not belong to the same group, as this normally does not fuse until the animal is 3 years old. Overall, the assemblage seems to be fairly unremarkable, and typical of the disposal of butchery or food waste.

### References

Hillson S. 1990. *Teeth*, Cambridge University Press, Cambridge

Schmid E. 1975. *Atlas of Animal Bones*, Elsevier, Amsterdam.

## APPENDIX 3: OASIS FORM

## OASIS DATA COLLECTION FORM: England

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