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**Newbridge Quarry Extension  
Pickering  
North Yorkshire**

*Archaeological Evaluation*  
Volume 1: Trial Trenching

*February 2009*

*Report No. 1923*

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**CEMEX UK Operations Ltd.**

Rec'd 4/3/09

PARISH 3102  
ENY 4423  
SNY 12621

Archaeological Services WYAS Report No. 1923 Newbridge Quarry Extension, Pickering, North Yorkshire

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# **Newbridge Quarry Extension, Pickering, North Yorkshire**

## **Archaeological Evaluation**

### *Summary*

*An archaeological evaluation by trail trenching was carried out on the site of the proposed northern extension of Newbridge Quarry, near Pickering. The work followed extensive geophysical survey which revealed a continuation of an Iron-Age and Romano British landscape previously investigated in advance earlier stages of quarrying the south between 1999-2006. The archaeology revealed comprised a trackway and appended enclosures and field system. A total of 33 trenches were targeted upon geophysical anomalies and apparently blank areas. The site would appear to have developed in the later iron Age and early Roman period, with a definite focus of activity in the 2<sup>nd</sup> century. Also taken into consideration have been some of the finds assemblages from the previous investigations to the south, which indicate a broad landscape contemporaneity with the archaeology of the 2008 evaluation site.*



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## Report Information

Client: Cemex UK Operations Limited  
Address:  
Report Type: Archaeological Evaluation  
Location: Newbridge Quarry, Pickering  
County: North Yorkshire  
Grid Reference: NGR SE 799 876  
Period(s) of activity represented: Iron Age, Romano-British  
Report Number: 1923  
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Site Code: NQE08  
Planning Application No.:  
Museum Accession No.:  
Date of fieldwork: 4th September – 17th October 2008  
Date of report: November 2008  
Project Management: Ian Roberts BSc FSA MifA  
Fieldwork supervisor: David Williams BA  
Report: David Williams (Chapters 1, 4 & 5) and Ian Roberts  
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John Carrott (molluscs)  
Hilary Cool (small finds)  
John Cruse and Geoff Gaunt (quern)  
Malin Holst (human bone)  
Jennifer Jones (industrial residues)  
Ruth Leary (pottery)  
Martin Lightfoot (flint)  
Jane Richardson (animal bone)  
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The post-excavation finds and environmental processing was supervised by Alison Morgan who coordinated the post-excavation specialists. The report was prepared by David Williams and Ian Roberts.



## **1 Introduction**

An archaeological evaluation was commissioned by Cemex UK to carry out an archaeological evaluation by trial trenching in the area of the proposed northern extension to Newbridge Quarry at Pickering. The archaeological work is required to establish the archaeological potential and significance of the site and to inform the formulation of an appropriate mitigation strategy for dealing with the archaeology in advance of the extraction process. A total of 33 trial trenches were targeted upon potential archaeological features and potentially blank areas, selected largely on the basis of the results of an earlier geophysical survey.

### **Site location and topography**

Newbridge Quarry lies about 2km to the north of Pickering (Fig. 1). The proposed northern extension covers an area of about 20 hectares immediately to the north-west of New Hambleton Farm (central NGR SE 799 876); an area bounded by Swainsea Lane to the west, Haugh Wood to the east, and the existing quarry to the south. The land gently slopes up towards the north and lies at between 90-105m OD.

The proposed area of new mineral extraction covers an area of 17 hectares, to be carried out in five stages. The remaining area comprises is split into two roughly equal stand-off areas to the north of New Hambleton Farm, in the south-east corner of the site, and in the north-west corner of the site, which will be used for the stockpiling of soil.

### **Soils, geology and land-use**

The solid geology is Upper Calcareous Grit (Upper Oxfordian Stage) and the soils are shallow well-drained calcareous fine loams of the Elmton 2 Association. The area is presently occupied by three fields, the north and west fields being under an arable regime, whilst that to the south-east is under pasture.

## **2 Archaeological and Historical Background**

Between 1999 and 2006 limestone extraction at Newbridge Quarry was preceded by a series of extensive open-area archaeological excavations, initially by the MAP Consultancy and from 2003 by Archaeological Services WYAS. The work identified some evidence for early prehistoric activity in the form of residual finds, but most of the evidence is for Iron Age and Romano-British occupation, with some small potential for post-Roman activity. With the exception of three potential square barrows and an area of Iron Age open settlement, the settlement evidence principally took the form of a series of rectilinear enclosures that were appended to, or were focussed upon, a double ditched trackway (or driveway) that ran north-south through the entire phased extraction area. The enclosures, which were mainly on the eastern side of the trackway, were in some cases superimposed, with most containing roundhouses. Associated features have provided evidence of a generally mixed economy with

arable cultivation represented by crop driers and querns, and animal husbandry reflected in the animal bones recovered (Signorelli and Roberts 2006).

Three extended inhumations were recovered from the settlement areas, although these need not necessarily be contemporary. The commonest form of burial was cremation, with some thirty un-urned examples being recovered, often from the upper fills of the trackway ditches. Their stratigraphic position in the ditch fills suggests that they are probably of Late Roman date. A possible post-Roman phase to the site has been proposed, but the evidence for this is insubstantial (see Appendix 5 for a review of the phasing from work carried out between 2003-2006).

A full desk-based assessment was originally carried out for the New Hambleton Farm extension in 2005 (Dodds 2005) and has since been revised and updated in the light of the excavations in 2005 and 2006 (Pollington 2008). Although this study drew upon cropmarks from air photographs to establish the existence of archaeological enclosures in parts of the site, it is the enhancement by a 100% geophysical (magnetometer) survey that has produced the clearest picture of the archaeological potential of the site (Webb 2008). The geophysical survey results (Fig. 2 and 3) reveal that the western half of the site is occupied by what is almost certainly a continuation of the north-south double ditched trackway found to the south. As before, it seems to have formed a coaxial focus for other field boundaries and has several ditched rectilinear enclosures associated with it, especially on its eastern side. One very well defined square enclosure contains a rectangular geophysical anomaly that could be a building, whilst other unusual anomalies include a circular feature, which might be a prehistoric barrow, and an area of magnetic enhancement within the trackway in this area. The origin of the latter could be due to burning, which given the association of the trackway with cremation burials to the south, offers intriguing possibilities. The geophysical results reveal a complex dog-leg in the trackway, in an area that is obviously the result of several intersecting boundaries created at different times in the past and thus a key area to understanding the phasing of the landscape as a whole.

Apart from the continuation of two E-W linear ditches, and a diagonal NW-SE anomaly that may be geological, the geophysical survey has revealed few anomalies of obvious potential archaeological interest in the eastern half of the site.

### **Regional Background**

The significance of the Newbridge site needs to be considered against the presently perceived understanding of the development and exploitation of the landscape from the earlier Iron Age to the early post-roman period.

#### *Earlier Iron Age*

Research into the Iron Age has been focussed largely upon the Wolds rather than the North York Moors. In particular it has concentrated on the distinctive square barrows of the Arras culture, a phenomenon unique to Eastern Yorkshire in Britain. These barrows, which date

mainly to between the 5th and 1st centuries BC, are confined largely to the high Wolds, but examples do occur on the Moors (Dent 1999, 5; Cunliffe 2005, 214). Their predominant upland location accords with notions of a society dedicated largely to grazing, a land-use that some have seen to be further implied by the extensive dyke systems of that period. The contemporary settlements, however, remain obscure (Mackey 2003, 117). The failure to detect these settlements has generally been explained by the supposition that they were unenclosed and so difficult to detect as cropmarks. One of the best known open settlements is at Garton Slack and Wetwang Slack where, importantly, the chronological and stratigraphical succession from a square barrow cemetery to open settlement and subsequent enclosure in the later Iron Age and Roman period is well demonstrated (Mackey 2003, 119; Stoertz 1997, 46-7; Bradley 2007, 263-67).

#### *Later Iron Age and Roman Period*

From the later Iron Age single enclosures containing one or more roundhouses, nucleated groups or rectilinear sequences of linking enclosures ('ladder' or 'droveway' settlements), all become prevalent features in the Romano-British rural landscape of the region. These complexes were often associated with a wider field system as the landscape became increasingly more enclosed and spatially organised (Bevan 1999, 129; Dent 1999, 6; Fenton-Thomas 2003, 65; Mackey 2003, 119-20; Stoertz 1997; Giles 2007, 236). The trend towards enclosure was once equated with a perceived intensification of agriculture as a response to the Roman conquest (Ramm 1978, 10, 77), but as the process seems to have started in the late pre-Roman Iron Age it has since been viewed as a product of population increase (Branigan 1984, 27, 30; Dent 1983, 37-40; Hingley 1989). Archaeologically it has proved very difficult to detect any marked change in the nature of native rural settlement between the later Iron Age and the first two centuries of Roman occupation. There was apparently little Romanisation of the vast majority of the native population and the rural landscape generally seems to have been little changed as a result of Roman rule, the tangible impacts upon it being very localised, invariably in the immediate vicinity of forts, *vici* and Roman roads (Hingley 1989, 145; Taylor 2001, 53).

If a predominantly pastoral exploitation of the landscape seems likely for the earlier Iron Age, then the querns, crop drier and granaries found in considerable numbers on later Iron Age and Romano-British rural sites suggest a more agrarian economy (Dent 1983, 42). Nevertheless, agriculture remained largely on a domestic scale, even if the economic onus shifted (Powlesland 2003, 288). Arable farming seems to have been just one element of a broader mixed economy, where animal husbandry was still important. The faunal assemblages of the pre-Roman Iron Age are generally found to be dominated by sheep/goats (Haselgrove 1984, 14). However, Branigan (1984, 30) posed the possibility that certain native farmers may have switched from a mixed subsistence economy to a pastoral one to meet the demands of the Roman army, although Ramm (1978, 107) envisaged a large military demand for wheat. In fact it is likely that most early Romano-British farms operated

on a mixed economy basis. It would seem likely that apparent differences or changes to the economies of native sites, whether represented in the adoption of material culture, or the proportions of crops grown and animals consumed, will have had much to do with their proximity to major Roman urban centres and communication routes.

In the context of the Roman landscape the Newbridge site lies just 3 km to the south-east of the Roman marching camps at Cawthorn and even closer to Blansby Park, 2 km to the east (e.g. Watts *et al.* 2003), where recent work has investigated a Roman villa site.

#### *Early Post-Roman Period*

The Romano-British to Anglo-Saxon transition in the 5<sup>th</sup> and 6<sup>th</sup> centuries is little understood as most of the evidence for Anglo-Saxon invasion/migration is based largely upon distinctive cemetery sites, rather than settlement evidence. Thus the degree to which the transition was a result of cultural displacement or integration, and the rate of this change, is unclear (Loveluck 2003, 152). Few early Saxon sites are known from the North York Moors, the majority being from the Wolds or the Vale of Pickering. One of the closest and most important sites is at West Heslerton where ritual landscapes of the Early Bronze Age (round barrows) and the Early Iron Age (square barrows) were succeeded by linear 'ladder' settlements focused upon droveways from c. 500 BC to AD 500. The Saxon period at West Heslerton saw an abandonment of the 'ladder' settlements and the evolution of dispersed open settlement of timber halls and *grubenhauser* associated with an extensive inhumation cemetery (Powlesland 2003, 287-290).

#### *Significance of the Newbridge Quarry Site*

The significance of the previous archaeological findings at Newbridge Quarry up to 2006 is considered in Appendix 5 in the light of recent spot dating and assessments of key finds assemblages.

### **3 Aims and Objectives**

The archaeology of the proposed quarry extension site could not be fully realised solely by the mapping of cropmarks and geophysical anomalies alone (Fig. 2 and 3), as the manifestation of these phenomena are dependent upon factors that include lighting, ground conditions and crop regime at the time aerial photographs were taken, and the magnetic susceptibility of the soil filling the archaeological features. Moreover, whilst cropmarks and geophysical survey are good at revealing large former linear features, they do not tend to reflect the positions of smaller features, such as pits and post-holes, or indeed some ditches that have been heavily degraded by modern ploughing.

The purpose of the trial trenches reported here is to investigate the targeted 'visible' archaeological features and enclosures, as revealed by the remote sensing methods, as well as the apparently blank areas, in order to better characterise the archaeology of the site, with the