



Archaeological Desk-Based Assessment for Isles Quarry, Borough Green, Kent

July 2009

SWAT. Archaeology
Swale and Thames Archaeological Survey Company
School Farm Oast, Graveney Road
Faversham, Kent
ME13 8UP
Tel: 01795 532548 or 07885 700 112
www.swatarchaeology.com

Isles Quarry, Borough Green, Kent
Archaeological Desk-Based Assessment

NGR: TQ 6050 5680

Report for
Simon Wright Homes

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Archaeological Desk-Based Assessment in Advance of Development at Isles Quarry, Borough Green, Kent

NGR: TQ 6050 5680

1 SUMMARY

Swale & Thames Survey Company (SWAT) have been commissioned to carry out an archaeological desk-based assessment of a proposed development at Isles Quarry, Borough Green, Kent, in advance of a planning application for a new housing development (Figure 1).

The site is located within an area of moderate-high archaeological potential associated with the prehistoric and Romano-British periods, in particular Palaeolithic material, an early Iron Age settlement and two Roman cremation cemeteries. This evidence is reviewed and it is recommended in this case that further archaeological assessment will be required and that an archaeological Watching Brief should be carried out. This will provide an additional assessment of the nature, depth and level of survival of any archaeological deposits present within the extents and immediate vicinity of the site to be developed and used to inform further mitigation if necessary.

2 INTRODUCTION

2.1 Planning Background

Planning Policy Guidance 16: Archaeology and Planning (2001) states:

'Positive planning and management can help to bring about sensible solutions to the treatment of sites with archaeological remains and reduce the areas of potential conflict between development and preservation. Both central government and English Heritage have important roles to play (see Annex 1). But the key to the future of the great majority of archaeological sites and historic landscapes lies with local authorities, acting within the framework set by central government, in their various capacities as planning, education and recreational authorities, as well as with the owners of sites themselves. Appropriate planning policies in development plans and their implementation through development control will be especially important'

(2001:14)

'The needs of archaeology and development can be reconciled, and potential conflict very much reduced, if developers discuss their preliminary plans for development with the planning authority at an early stage. Once detailed designs have been prepared and finance lined up, flexibility becomes much more difficult and expensive to achieve. In their own interests, therefore, prospective developers should in all cases include as part of their research into the development potential of a site, which they undertake before making a planning application, an initial assessment of whether the site is known or likely to contain archaeological remains.

The first step will be to contact the County Archaeological Officer or equivalent who holds the SMR, or English Heritage in London. The SMR provides information about the locations where archaeological remains are known or thought likely to exist. Where important remains are known to exist or where the indications are that the remains are likely to prove important, English Heritage are also ready to join in early discussions and provide expert advice.

(2001:19)

'These consultations will help to provide prospective developers with advance warning of the archaeological sensitivity of a site. As a result they may wish to commission their own archaeological assessment by a professionally qualified archaeological organisation or consultant. This need not involve fieldwork. Assessment normally involves desk-based evaluation of existing information: it can make effective use of records of previous discoveries, including any historic maps held by the County archive and local museums and record offices, or of geophysical survey techniques'

(2001:20)

The Desk-Based Assessment therefore forms the initial stage of the archaeological investigation and is intended to inform and assist decisions regarding archaeological mitigation for proposed development and associated planning applications.

2.2 The Proposed Development

The proposed development will comprise of the construction of approximately 250 domestic units including access, services and parking facilities. At the time of preparing this report the site layout had been proposed (Figure 2).

2.3 Projects Constraints

There were no known constraints associated with this project.

2.4 Geology and Topography

The British Geological Society (BGS 1995) shows that the local geology consists of Lower Greensand and Cretaceous sand. The area around Borough Green has been quarried for 'Ragstone' and silica sand. Isles Quarry is 300m above sea level.

The proposed development area within Isles Quarry measures 10.6 acres. The topography has been altered dramatically by quarrying and subsequent back filling, however woodland still dominates the slopes of the escarpment (formed by the River Bourne) that is the south and west perimeter of the site.

3 AIMS AND OBJECTIVES

3.1 Introduction

The Desk-Based Assessment was commissioned by Simon Wright Homes in order to supplement a planning application for the construction of domestic housing.

3.2 Desktop Study – Institute of Field Archaeologists (1999)

This desktop study has been produced in line with archaeological standards, as defined by the Institute of Field Archaeologist (1999). A desktop, or desk-based assessment, is defined as being:

- *‘...a programme of assessment of the known or potential archaeological resource within a specified area or site on land, inter-tidal zone or underwater. It consists of a collation of existing written, graphic, photographic and electronic information in order to identify the likely character, extent, quality and worth of the known or potential archaeological resource in a local, regional, national or international context as appropriate’ (1999:2)*

The purpose of the desk-based assessment is, therefore, an assessment that provides a contextual archaeological record, in order to determine:

- *the formulation of a strategy to ensure the recording, preservation or management of the resource*
- *the formulation of a strategy for further investigation, whether or not intrusive, where the character and value of the resource is not sufficiently defined to permit a mitigation strategy or other response to be devised*
- *the formulation of a proposal for further archaeological work within a programme of research.*

IFA (1999:2)

4 METHODOLOGY

4.1 Desk-Based Assessment

4.1.1 Archaeological databases

The local Historic Environment Record (HER) held at Kent County Council provides an accurate insight into catalogued sites and finds within both the proposed development area and the surrounding landscape. The Archaeology Data Service Online Catalogue (ADS) was also used. The search was carried out within a 1km radius of the proposed development site (25 June 2009). A full listing of the relevant HER data is included in Appendix 1. The Portable Antiquities Scheme Database (PAS) was to be used as an additional source as the information contained within is not always transferred to the local HER. However, the PAS database was offline during the writing of this report.

4.1.2 Historical documents

Historical documents, such as charters, registers, wills and deeds etc were not relevant to this specific study.

4.1.3 Cartographic and pictorial documents

A full map regression exercise was undertaken during this assessment. Research was carried out using resources offered by the Centre for Kentish Studies, Maidstone Kent and the Internet.

4.1.4 Aerial photographs

Access to the collection of aerial photographs held by Heritage & Conservation, Kent County Council was unavailable during the writing of this report. However, research using Google Earth highlighted several crop marks (Plate 2), which are discussed in Section 5.5.

4.1.5 Geo-technical information

To date, no known geo-technical investigations have been carried out at the site.

4.1.6 Secondary and statutory resources

Secondary and statutory sources, such as regional and periodic archaeological studies, landscape studies, dissertations, research frameworks and Web sites are considered appropriate to this type of study and have been included within this assessment where necessary.

5 ARCHAEOLOGICAL AND HISTORICAL DEVELOPMENT

5.1 Introduction

Prehistoric	Palaeolithic	c. 500,000 BC – c.10,000 BC
	Mesolithic	c.10,000 BC – c. 4,300 BC
	Neolithic	c. 4,300 BC – c. 2,300 BC
	Bronze Age	c. 2,300 BC – c. 600 BC
	Iron Age	c. 600 BC – c. AD 43
Romano-British	AD 43 – c. AD 410	
Anglo-Saxon	AD 410 – AD 1066	
Medieval	AD 1066 – AD 1485	
Post-medieval	AD 1485 – AD 1900	
Modern	AD 1901 – present day	

Table 1 Classification of Archaeological Periods

The Archaeological record, both in and around Borough Green is diverse and comprises of stone hand tools dating from the earliest human activities in Britain (the Palaeolithic) through to the post-medieval and industrial periods. Situated on the south edge of the North Downs the site at Isles Quarry, is located on a meander of the River Bourne. Its geographic and topographic location would have made it a defensible position within a landscape that has been the focus of trade, travel and communication since the Neolithic. The presence of such a diverse archaeological record (Figure 3) within such a small area is the direct result of the expansion of the parish of Borough Green, since the arrival of the railway in 1874. It would not be surprising therefore to discover additional archaeology outside the confines of Isles Quarry during the development of the site.

The proposed development site at Isles Quarry is located immediately to the south west of Borough Green. The diversity of the archaeological record around Borough Green extends beyond the periphery of the modern village and is equally as 'busy' within the area immediately around the proposed development site. This section of the assessment will focus on the archaeological and historical development of this area, placing it within a local and

regional context. Each period classification will provide a brief introduction to the wider landscape, followed by a full record of archaeological sites, monuments and records within the site's immediate vicinity. Timescales for archaeological periods represented in the report are listed in Table 1 and locations of monuments and spot finds are presented in Figure 3.

5.2 Scheduled Monuments, Listed Buildings Historic Parks & Gardens and Conservation Areas

No scheduled monuments or listed buildings are recorded within the confines of the proposed development site at Isles Quarry.

5.3 Palaeolithic, Mesolithic, Neolithic and Bronze Age

The prehistoric period around Borough Green is comparable with traditional patterns observed elsewhere in The Weald of Kent along the southern edge of the Downs. The network of dry valley systems that form the edge of the Downs is well known for its' prehistoric diversity¹. Re-opening of Isles Quarry in 1891 led to the discovery of over 100 species of vertebrates, including mammoths, woolly rhinoceros and wolves. Most of these remains have dated to the last million years, yet they are exactly the species of animal that would have been hunted by our earliest ancestors during the Palaeolithic period.

The Palaeolithic represents the earliest phases of human activity in the British Isles, up to the end of the last Ice Age. This period is represented within the assessment area by several artefact find spots all located a distance between 700m and 1km to the north east of Isles Quarry (HER Refs: TQ 65 NW2, TQ 65 NW 34, TQ 65 NW 40, TQ 65 NW 42 and TQ 65 NW 64).

The Mesolithic period (a society of hunter-gatherers active after the last ice age) is represented by the presence of a single, concentration of flint tools. Situated within a dry valley 800m to the east of Isles Quarry are the find spots for two axe heads and one core (HER Refs: TQ 65 NW 54, TQ 65 NW 75 and TQ 65 NW 49).

The Neolithic period, the beginning of a sedentary lifestyle based on agriculture and animal husbandry is represented within the assessment area by a single arrowhead 700m north east of Isles Quarry (HER Ref: TQ 65 NW 46).

The Bronze Age, a period of large migrations from the continent and more complex social developments on a domestic, industrial and ceremonial level, is represented by the presence of a single burial mound (site of) located 300m to the north of Isles Quarry (HER Ref: TQ 65 NW 39).

5.4 Iron Age

By the Iron Age settlement patterns become more visible, both within the archaeological record and the physical landscape. The Historical Environment Record records the site of a possible early Iron Age dwelling (HER Ref: TQ 65 NW 1) inside the limits of Isles Quarry (presumably now destroyed). This was situated in the development area on the eastern boundary that is area H2. This 'dwelling' may be indicative of a farmstead of limited extent,

¹ Wymer J. 1999: The Lower Palaeolithic of Britain, Vol 2. Maps 48-50. Wessex Arch & English Heritage.

though no mention in the record is made of an enclosure ditch or field boundary. Also recorded within the assessment area is a single gold coin (Stater) 800m north east of Isles Quarry (HER Ref: TQ 65 NW 42). Immediately to the south of the development area at Stangate Quarry a late Iron Age burial was unearthed in 1953 (now on display in Maidstone museum). Excavations on the site of a Roman cremation cemetery near Borough Green railway station in 1899 also revealed late Iron Age material.

5.5 Romano-British

The Romano-British period is the term given to the Romanised culture of Britain under the rule of the Roman Empire, following the Claudian invasion in AD43, Britain then formed part of the Roman Empire for nearly 400 years.

The predominant feature of the Roman infrastructure within Kent is arguably the extensive network of Roman roads connecting administrative centres, towns and military posts, increasing the flow of trade, goods, communications and troops. Borough Green is situated around the junction of the modern A25 and A227. The forerunner of the A25 was the Roman Military Way Westward.

Approximately 250m to the north of Isles Quarry and 250m directly south of the A25, in Barrow Field, off Staley's Road was the location of a cremation cemetery discovered in 1839. Study (30th June 2009) of satellite imagery from Google Earth shows a surviving ring-ditch and other features in this field (Plate 2), immediately opposite the site of Roman cremations and a possible Romano-British (R-B) burial mound (HER Ref: TQ 65 NW13) located on the north west boundary of Isles Quarry. The ring-ditch observed in the satellite photograph, is probably a second R-B burial mound. A second cremation cemetery was discovered in 1899 on the site of what is now the Borough Green and Wrotham railway station (HER Ref: TQ 65 NW 17). The date of finds associated with both of these cemeteries, ranges from the early 1st century AD to the mid-late 3rd century AD. Further archaeological evidence for the Romano-British period comprises of the discovery in 1900, of an isolated scatter of pottery and the foundations of a building, within the garden of a private residence 500m north of Isles Quarry and 400m west of the railway station (SMR Ref: TQ 65 NW 38).

5.6 Anglo-Saxon

There is no known Anglo-Saxon remains within the assessment area, however the name of Borough Green (which has had various spellings, especially during the sixteenth century) may have an Anglo-Saxon origin. It has been suggested that the name 'Boroe' Green, meaning a defensive position, is the source of the modern name.

5.7 Medieval

Despite the presence of several listed buildings within Borough Green such as the Red Lion Public House (MKE36426) and the Old Manor House (MKE36186) there are no known Medieval remains within or immediately outside the development area.

5.8 Post-Medieval

The Post Medieval period within the assessment area is somewhat better represented. There is evidence of tile production 900m to the north east of Isles Quarry (HER Ref: TQ 65 NW 66) and there are several listed buildings within and around Borough Green. These buildings represent the growth of industry and farming within the area and include two barns and outbuildings at Borough Green House (MKE36784), the former Apple Store (MKE36785), Fourways House (MKE36183) and (MKE36184) and Hunts Farmhouse (MKE36182). A Grade II listed building is located 600m to the north east of Isles Quarry (MKE36185) but there are no listed buildings within Isles Quarry itself.

5.9 Modern

Modern development on the site has been limited to the extraction of stone during its life as a quarry and, after it's disuse, as a landfill site. Isles Quarry is presently the site of two operational industrial units, derelict industrial buildings (Plate 3) and a recycling station of bottle banks etc (Plate 4). The remainder of the site is overgrown 'wasteland' and scrub (Plate 5).

5.10 Undated

There are no undated features of archaeological interest within the assessment area.

5.11 Cartographic Sources and Map Regression

A map regression exercise (Figures 4 & 5) carried out on the proposed development area has shown that the site was undeveloped up until the 1890's. The slopes overlooking the River Bourne were wooded and the plateau that would become the centre of Isles Quarry was farmland. A small open cast quarry (known as Basted Quarry by 1908) was well established on part of the escarpment overlooking the River Bourne by 1897 (Grid Ref: TQ60405657). Subsequent quarrying between 1908 and 1937 in a north west direction resulted in what is today Isles Quarry. The site of the early Iron Age 'dwelling' (SMR Ref: TQ 65 NW 1) is highlighted on the 1937 map.

5.12 Aerial Photographs

As already stated above, research of aerial photographs held by Kent County Council and the National Monuments Record was not available during the writing of this report.

6 ARCHAEOLOGICAL POTENTIAL

6.1 Palaeolithic, Mesolithic, Neolithic and Bronze Age

The potential for finding remains that date prior to the Iron Age within the confines of Isles Quarry is considered **low** as quarrying is likely to have removed the archaeology that may have previously existed. However, the installation of new and / or improved services such as water and gas outside of the boundary of Isles Quarry could potentially reveal archaeology from these periods. It is also possible that material from the Palaeolithic may still survive beyond the quarry face along the inner boundary of the quarry. The potential therefore is considered **moderate** as the archaeological recorded within the area immediately surrounding the proposed development site shows a good degree of early human activity.

6.2 Iron Age

The potential for finding remains dating to the Iron Age within the confines of Isles Quarry is also considered **low**. As with the predating evidence however, the surrounding landscape offers the potential for surviving archaeological deposits dating to this period as is evident from the 'dwellings' found just within boundary of the quarry. The potential outside the confines of the quarry is considered **moderate** as activity surrounding the proposed development site has also been recorded.

6.3 Romano-British

Extensive cremation cemeteries directly to the north and north east of Isles Quarry suggest that further archaeological remains associated with this period would be extant within undeveloped parcels of the landscape. The presence of the cemeteries along the location of the old Roman road (A25) and within the immediate vicinity of Isles Quarry suggests that the potential for finding remains dating to the Romano-British period is to be considered as **moderate-high**.

6.4 Anglo-Saxon

Anglo-Saxon archaeology within the assessment area has not been recorded. The potential for finding remains dating to the Anglo-Saxon period is considered as **low-moderate**.

6.5 Medieval

Medieval settlement within the assessment area is limited to Borough Green and a few isolated buildings. However, the presence of manorial estates and associated agricultural activity and woodland management, including track ways, field boundaries etc should not be ruled out. The potential for finding remains dating to the medieval period is therefore considered as **low-moderate**.

6.6 Post-Medieval

Evidence for post-medieval occupation in the area is likely to be similar to the medieval evidence noted above, with the possible increase in activity. The potential for finding remains dating to the post-medieval period is therefore considered as **low-moderate**

7 IMPACT ASSESSMENT

7.1 Existing Impacts

The search area had been a mix of arable fields and woodlands up until the late 1800's at which time localised quarrying began. Up until this point the impact on buried archaeological deposits would have been due to agricultural activities such as ploughing. That said, very early archaeological deposits within Isles Quarry are known to have survived within fissures at depths greater than 0.5m, and thus beyond the impact of ploughing. Once quarrying ceased Isles Quarry became a land fill site. Where quarrying and subsequent land filling has taken place the impact is considered as **low**.

Extensive impact is to be expected around the periphery of the development area if and when new services are installed. The archaeology east of Quarry Hill Road is more than likely to have been removed during quarrying between 1897 and 1908 however, there is a potential for surviving archaeology along the north edge of the site (west of Quarry Hill Road roundabout). Any development-related works that also affect the surviving quarry face and encroach on the wooded escarpment surrounding Isles Quarry to the south and west could also disturb surviving archaeology. The impact caused during the construction of the new housing development along the outer periphery is therefore considered as **moderate-high**.

7.2 Proposed Impacts

At the time of preparing this archaeological assessment, the extent of the proposed development was for the construction of two hundred and fifty domestic units along with associated access, parking and utilities within that area allocated 'H2'. Areas of open green space are also considered.

8 MITIGATION

The purpose of this archaeological desk-based assessment was to provide an assessment of the contextual archaeological record, in order to determine the potential survival of archaeological deposits that maybe impacted upon during any proposed construction works.

The assessment has generally shown that the area to be developed is within an area of **moderate** archaeological potential. Past quarrying activity within the development area of Isles Quarry has resulted in **high** truncation (previous impact), whereas the periphery around the development area has been subject to **low-moderate** truncation.

It is therefore recommended in this case that further archaeological assessment will be required and that an archaeological watching brief should be carried out. This will provide an additional assessment of the nature, depth and level of survival of any archaeological deposits present within the extents of the site and used further inform further mitigation if necessary.

9 OTHER CONSIDERATIONS

9.1 Archive

Subject to any contractual requirements on confidentiality, two copies of this desk-based assessment will be submitted to Kent County Council within 6 months of completion.

9.2 Reliability/limitations of sources

The sources that were used in this assessment were, in general, of high quality. The majority of the information provided herewith has been gained from either published texts or archaeological 'grey' literature held at Kent County Council, and therefore considered as being reliable.

9.3 Copyright

Swale & Thames Survey Company shall retain full copyright on the commissioned report under the Copyright, Designs and Patents Act 1988. All rights are reserved, excepting that it hereby provides exclusive licence to Simon Wright Homes (and representatives) for the use of this document in all matters directly relating to the project.

10 ACKNOWLEDGEMENTS

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Simon P Holmes BA (Hons) MA
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