Archaeology South-East

ASE

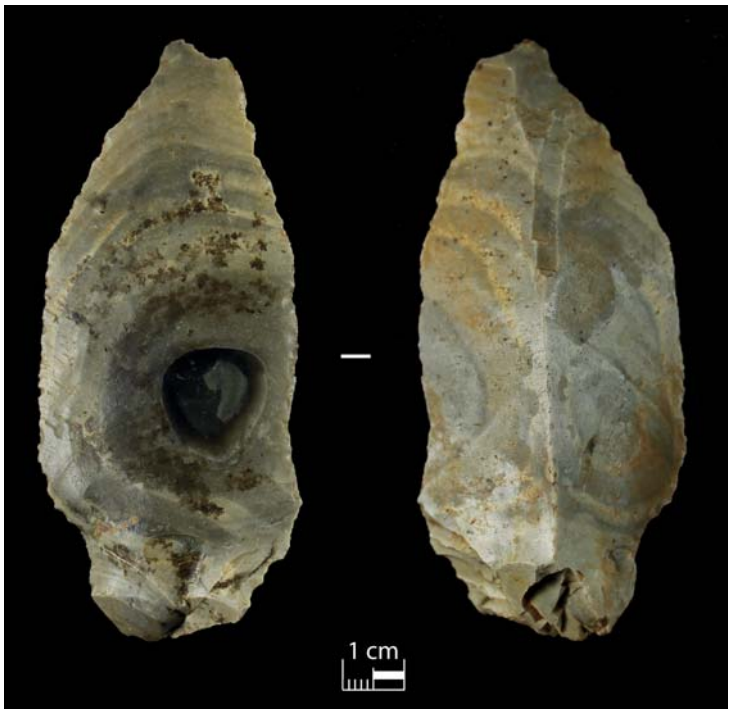
# Archaeological Evaluation Report
# Temple Hill School, St Edmunds Road
# Dartford, Kent

**NGR: 555159 174985**

**Planning Ref: KCC/DA/15/0514**

**ASE Project No: 7717**
**Site Code: THD15**

**ASE Report No: 2015299**




**By Ed Blinkhorn**

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***Abstract***

*This report presents the results of an archaeological evaluation carried out by Archaeology South-East at Temple Hill School, St Edmunds Road, Dartford, Kent between 12th and 14th August 2015. The fieldwork was commissioned by Kier on behalf of Kent County Council in advance of the construction of an extension forming three new classrooms.*

*Excavation confirmed the presence of Boyn Hill gravels at the site to a depth c.2.5m below current ground level, represented by a sequence of coarse gravel and finer sand deposits. Sieving of the test-pit arisings retrieved two Palaeolithic flakes, although one was from a contaminated sample, and the other came from later sands overlying the Boyn Hill sequence.*

*Three shallow features comprising two ditches and a pit were also identified. A small quantity of Roman pottery and industrial debris and burnt flint was recovered from the pit. Prehistoric, Roman and/or medieval/post-medieval activity is likely to exist on the site.*

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## FIGURES

# 1.0 INTRODUCTION

## 1.1 Site Background

1.1.1 Archaeology South-East (ASE) was commissioned by Kier on behalf of Kent County Council (KCC) to undertake an archaeological and geoarchaeological evaluation as part of the development at Temple Hill School, St Edmunds Road, Dartford Rd, Kent. (NGR: 555159 174985; Figure 1).

## 1.2 Geology and Topography

1.2.1 According to current data from BGS (2015), the site is situated on the Seaford Chalk Formation and Newhaven Chalk Formation (undifferentiated), overlain by the Thanet Formation.

1.2.2 Superficial geological deposits at the site comprise the Boyn Hill Gravel Member of the Thames Valley Formation.

1.2.3 The site is situated at the apex of a small hill after which the site is named, at about 30m OD, and is on roughly level ground. It is bounded to the north by St Edmunds Road, to the east by Temple Hill Baptist Church, to the south by school buildings and to the west by a playground.

## 1.3 Planning Background

1.3.1 There are proposals for an extension to the north of the eastern block of Temple Hill School comprising 3 classrooms. Further details are set out in planning application KCC/DA/15/0514.

1.3.2 The Archaeological Officer for Education LPA on the basis of present archaeological information recommended that the site should be subject to a programme of archaeological work in order to clarify the historical and archaeological elements within the site.

1.3.3 A specification for the evaluation was produced by KCC (2015a) supported by guidance documents on trial trenching (KCCb) and geoarchaeological evaluation (KCCc).

## 1.4 Scope of Report

1.4.1 This report details observations made during the archaeological and geoarchaeological evaluation at the site.

## 2.0 ARCHAEOLOGICAL BACKGROUND

### 2.1 Introduction

2.1.1 The potential of the area was gauged by Kent County Council (KCC 2015a) in relation to the proximity of known archaeological remains.

### 2.2 Palaeolithic

2.2.1 Boyn Hill Gravels, dating to Marine Isotope Stages 12-10 (ca 425-375 thousand years ago) have demonstrable potential to contain Palaeolithic remains, including stone artefacts and faunal remains. Additionally, certain deposits within the Boyn Hill Gravel Member have the potential to preserve palaeoenvironmental evidence

### 2.3 Romano-British

2.3.1 High potential for Roman remains is suggested by the number of recorded Roman finds from the site itself and from the surrounding area. There is a Romano-British settlement recorded to the east (HER NO: TQ 57 SE 134); Roman artefacts were found during works on the school buildings themselves in 1955 (HER No: TQ 57 SE 18); and some Roman burials have been found to the south (HER No: TQ 57 SE 19).

### 2.4 Project Aims and Objectives

2.4.1 The project's primary aim was to evaluate the site for its potential to preserve significant archaeological deposits, and to assess their nature, extent, scale and date. The primary targets of the works detailed in this report were Romano-British and Palaeolithic archaeology, although potential for archaeology dating to other periods should be considered a secondary aim. A further aim was to identify whether the development would impact on archaeological remains and what mitigation measures are appropriate.

2.4.2 To assess the project aims a phased programme of archaeological work was undertaken, comprising trial trenching followed by the excavation of geoarchaeological test pits.

## 3.0 ARCHAEOLOGICAL METHODOLOGY

### 3.1 Fieldwork Methodology

3.1.1 Two trial trenches each measuring 12m x 1.8m (Figure 2) were excavated and recorded according to the specification documents (KCC 2015a and 2015b), in the same configuration and in the locations advised by KCC. Each trench was situated to avoid services and remain in the footprint of the proposed development. Both trenches were excavated to evaluate the Holocene archaeology of the site.

3.1.2 Two geoarchaeological test pits (GTPs) were excavated to enable investigation of Pleistocene deposits at depth; GTP1 at the west end of Trench 1, and GTP2 at the north end of Trench 2 (Figure 2).

3.1.3 All material was mechanically excavated under archaeological supervision in spits not exceeding 250mm; most spits equated to about 100mm of sediment. GTP1 was excavated down to chalk. Due to problems with ground stability, excavation of GTP2 ceased at 2.20m BGL and was immediately backfilled after recording. Samples from GTP2 were stockpiled and sieved after backfilling.

3.1.4 A series of 100 litre samples from the Boyn Hill gravels from GTP1 and 2 was retrieved and sieved through 10mm mesh to facilitate artefact and ecofact identification. During excavation of the test-pits, while it was safe to do so, the surface of the gravels was inspected, as was each bucket of arisings.

### 3.2 Archive

3.2.1 The site archive is currently held at the offices of ASE and will be deposited at Dartford Museum in due course. The contents of the archive are tabulated below (Table 1).

| | |
|---|---|
| Number of Contexts | 14 |
| No. of files/paper record | 1 |
| Plan and sections sheets | 1 |
| Colour photographs | 0 |
| B&W photos | 0 |
| Digital photos | 28 |
| Permatrace sheets | 1 |
| Trench Record Forms | 4 |

Table 1: Quantification of site archive

## 4.0 RESULTS

### 4.1 Trench 1 (Figure 3)

4.1.1 Overlying the Quaternary deposits [1/004] in Trench 1 was a brown clayey silty sand subsoil [1/003] with a significant coarse gravel component, shallowing from 0.30m deep at the west end to 0.19m at the east end of the trench. [1/003] was in turn overlain by brick rubble [1/002] and tarmac [1/001] made ground.

4.1.2 From [1/003] a small assemblage of undiagnostic Holocene worked flints and unworked fire-cracked flint was recovered. Additionally, at the west end of the trench, a concentration of (unretained) 11 unworked flint nodules (100-350mm) was observed in [1/003], close to the interface with the underlying Boyn Hill Gravels [1/004].

4.1.3 Subsoil [1/003] sealed two shallow features: pit [1/005] and linear [1/007] (Figure 3).

4.1.4 Environmental samples from these two features yielded small quantities of finds.

4.1.5 Sample <1> from [1/006], the fill of pit [1/005] contained three Roman pottery sherds of probable 2nd century AD date and a small quantity of industrial material, probably iron slag.

4.1.6 Sample <2> from [1/008], the fill of linear feature [1/007] also contained a small quantity of industrial material, probably iron slag.

### 4.2 Trench 2 (Figure 3)

4.2.1 The stratigraphic sequence in Trench 2 echoed that in Trench 1, although the gravelly sand subsoil [2/003] was notably thinner than its counterpart in Trench 1; only 0.05m was observable at the southern end of the trench. This is likely due to levelling works associated with the construction of the school.

4.2.2 A single feature, sealed by [2/003] was observed (Figure 3) comprising a shallow linear cut oriented east-west. No finds were recovered from its fill [2/006] and the feature was not sampled.

| Context | Type | Interpretation | Length m | Width m | Depth m | Height m AOD |
|---|---|---|---|---|---|---|
| 1/001 | Layer | Tarmac | 12.0+ | 1.8+ | 0.12 | 29.81 |
| 1/002 | Layer | Brick Rubble | 12.0+ | 1.8+ | 0.12 | 29.69 |
| 1/003 | Layer | Gravelly sand | 12.0+ | 1.8+ | 0.30 | 29.57 |
| 1/004 | Layer | Boyn Hill Gravel | 12.0+ | 1.8+ | 0.12+ | 29.27+ |
| 1/005 | Cut | Pit | 1.0 | 1.0 | 0.3 | 29.27 |
| 1/006 | Fill | Fill of [1/005] | 1.0 | 1.0 | 0.3 | 28.97 |
| 1/007 | Cut | Linear | 1.8+ | 0.8 | 0.36 | 29.27 |
| 1/008 | Fill | Fill of [1/007 | 1.8+ | 0.8 | 0.36 | 28.91 |

Table 2: Trench 1 list of recorded contexts

| Context | Type | Interpretation | Length m | Width m | Depth m | Height m AOD |
|---|---|---|---|---|---|---|
| 2/001 | Layer | Tarmac | 12.0+ | 1.8+ | 0.14 | 30.14 |
| 2/002 | Layer | Brick Rubble | 12.0+ | 1.8+ | 0.16 | 30.00 |
| 2/003 | Layer | Gravelly sand | 12.0+ | 1.8+ | 0.16 | 29.86 |
| 2/004 | Layer | Boyn Hill Gravel | 12.0+ | 1.8+ | 0.10+ | 29.70 |
| 2/005 | Cut | Linear | 1.8+ | 0.58 | 0.21 | 29.70 |
| 2/006 | Fill | Fill of [2/005] | 1.8+ | 0.58 | 0.21 | 29.49 |

Table 3: Trench 2 list of recorded contexts

### 4.3 Geoarchaeological Test Pit 1 (GTP1)

4.3.1 GTP1 was located at the western end of Trench 1 (Figure 2).

4.3.2 Sieving of Unit 3, a Holocene sand unit, produced four flints, two unworked and burnt, and two humanly struck pieces. One is considered to be possibly Palaeolithic in date (see Section 5 below and Figure 4b).

4.3.3 Underlying Holocene age units 1-3 (described above in Section 4.1), a 2.0m deep sequence of Boyn Hill Gravel Member deposits was recorded (Table 4). Despite sieving seven samples and inspecting spoil during excavation of the Pleistocene sediments, no artefacts, ecofacts, or deposits suitable for further analysis were identified.

4.3.4 Units 4-7 are typical of Boyn Hill gravels. Correlation with deposits at Barnfield Pit in Swanscombe, based on altitude, suggest equivalence to the sequence spanning the Lower Middle and Upper Middle Gravels. However, as the site lies over 4.5km to the west of the Barnfield Pit type section, the comparison is only broadly indicative of the sequence.

4.3.5 Comparison with the Borehole WS3 (Ashdown Site Investigations Limited 2014) indicates minimal variation in the height of the chalk bedrock at around 27.40m OD. It is suggested here, however, that Unit 8 might represent vestigial or reworked Thanet Sands, and that the Boyn Hill sequence is present to a depth of 27.50m OD, and even perhaps directly overlays the chalk.

### 4.4 Geoarchaeological Test Pit 2 (GTP2) (Figure 2)

4.4.1 GTP2 was located at the northern end of Trench 2.

4.4.2 The Pleistocene sequence (Units 4-7) broadly echoes that in GTP1. Notable, however, are Units 5 and 6 which include shingle lenses in a sand matrix, dipping to the north.

4.4.3 Unfortunately, due to the loose composition of the sediments, exacerbated by torrential rain the day prior to excavation, GTP2 suffered from frequent collapses. This meant that samples from units 6 and 7 are highly likely to have components of other units included within them.

4.4.4 As an artefact was recovered from the Unit 7 sample, it must be treated with caution as the sample is probably contaminated with collapsed sediment. Unfortunately it was impossible to determine from which unit the collapsed sediment was introduced.

| Unit | Sediment description | Depth (m) | Height AOD (m) | Samples (100L) |
|---|---|---|---|---|
| 1 | Tarmac | 0-0.10 | 29.81-29.71 | |
| 2 | Brick Rubble | 0.10-0.25 | 29.71-29.66 | |
| 3 | Mid-dark brown slightly silty slightly clayey sand. 20% <50mm angular to rounded flints; 2% <10mm rounded to subrounded flint. Concentration of large nodular flint clasts. Depth of deposit shallows to the east. | 0.25-0.55 | 29.66-29.36 | I @0.40<br><br>Flint artefacts |
| 4 | Orangey-brown / light yellowish grey coarse sandy gravel – slightly loose. Coarse component comprises 50% <50mm tertiary flint pebbles and 50% subangular to subrounded flints. | 0.55-0.95 | 29.36-28.96 | I@0.60<br>II@0.90 |
| 5 | Horizontally bedded brownish-orange/light brownish-grey/brownish-red coarse sand. | 0.95-1.45 | 28.96-28.46 | I@1.00<br>II@1.30 |
| 6 | Light yellowish-grey coarse sand. Structureless. | 1.45-2.05 | 28.46-27.86 | I@1.60 |
| 7 | Slightly gravelly (10%) sand. Coarse component comprises <50mm tertiary pebbles and subangular to subrounded flints. | 2.05-2.35 | 27.86-27.56 | I@2.20 |
| 8 | Sandy (40%) gravel. Large proportion of tertiary pebbles in coarse component. Remnant/reworked Thanet sand? | 2.35-2.55 | 27.56-27.36 | I@2.45 |
| 9 | Greyish-white Chalk. | 2.55+ | 27.36+ | |

Table 4: GTP1 list of recorded units

| Unit | Sediment description | Depth (m) | Height AOD (m) | Samples (100L) |
|---|---|---|---|---|
| 1 | Tarmac | 0.00-0.12 | 30.14-30.02 | |
| 2 | Brick Rubble | 0.12-0.24 | 30.02-29.90 | |
| 3 | Mid-dark brown slightly silty slightly clayey sand. 20% <50mm angular to rounded flints; 2% <10mm rounded to subrounded flint. Fire cracked flint; glass; CBM. | 0.24-0.35 | 29.90-29.79 | |
| 4 | Loose yellowish-grey sandy (25%) gravel. Majority <50mm rounded tertiary pebbles; few <10mm subangular flints. 1% larger flint clasts. | 0.35-1.10 | 29.79-29.04 | I@0.45<br>II@0.80 |
| 5 | Fine gravel. Subangular-subrounded shingle <10mm. Dip to north. | 1.10-1.15 | 29.04-28.99 | |
| 6 | Loose gravelly coarse sand. Bedded? With 50% rounded tertiary pebbles (majority ~20mm); 5% subangular flint; 1% <100m rounded cobbles. Shingle lenses, dipping to north. | 1.15-1.45 | 28.99-28.69 | I@1.35 |
| 7 | Greyish or orangey yellow coarse sand. Orangey or reddish-yellow at top 0.2m. @1.85+ 10% <20mmrounded tertiary pebbles and 2% subangular flints. | 1.45-2.20+ | 28.69-27.94+ | I@1.90<br><br>Flint artefact. |

Table 5: GTP2 list of recorded units

## 5.0 THE FINDS

### 5.1 Summary

5.1.1 A small assemblage of flint was recovered by hand, washed and dried or air dried as appropriate. These were subsequently quantified by count and weight and were bagged by material and context (Table 6). All finds have been packed and stored following CIfA guidelines (2014a). No further conservation is required.

| Context | Flint | Wt (g) | Burnt flint | Wt (g) |
|---|---|---|---|---|
| GTP1 Unit 3 | 2 | 19 | 2 | 49 |
| GTP2 Unit 7? | 1 | 71 | | |
| [1/006] | | | 45 | |
| [1/008] | | | 117 | |

Table 6: Finds Quantification

### 5.2 **Worked Flint** by Ed Blinkhorn

**GTP2 Unit 7**

5.2.1 A single Palaeolithic flake (Figure 4a) was recovered from GTP2 Unit 7 Sample I. However, due to ground conditions leading to frequent collapsing sections it is possible that the artefact derives from later units.

5.2.2 The piece measures 110mm x 44mm, with a maximum thickness of 20.5mm, and is made on banded cherty flint, exhibiting a small translucent unpatinated dark grey flint inclusion. It is in relatively fresh condition with slight iron staining on the ventral side and other mineral staining on the dorsal side. The flake is unrolled but does possibly display slight damage along all edges (though see below).

5.2.3 No striking platform is preserved on the flake but based on its size and thickness it is likely to be marginally struck by a hard-hammer. A series of at least seven step and hinge terminations at the proximal end are suggestive of difficulty removing a workable flake from the raw material.

5.2.4 Previous removals from the dorsal surface suggest a single platform core was utilised and there is no evidence for core preparation. A single arris is present at both the proximal and distal ends of the flake. At the proximal end it has been truncated by previous attempts at flake removal. Towards the distal end it has been truncated by a small spall removed obliquely close to the tip of the flake.

5.2.5 A series of very small flakes removed from around the edge of the artefact might be the product of naturally occurring edge damage. However, the concentration at the distal end could conceivably have been produced as a tool edge, or as the result of robust use of the piece.

5.2.6 The flake is unlikely to be a product of working a biface. Core reduction is a more likely explanation and it may derive from either a Clactonian or Acheulean type industry.

**GTP1 Unit 3**

5.2.7 A small assemblage of flints was recovered during the excavation of GTP1, all deriving from Unit 3 (Context [1/003]) a silty clayey sand overlying the Boyn Hill gravels.

5.2.8 Two pieces of struck flint were recovered during excavation of the geoarchaeological test-pit. One piece is an undiagnostic small cortical secondary flake on honey coloured flint.

5.2.9 The larger artefact (Figure 4b) is a tertiary hard hammer flake on mottled brown and blue-grey cherty flint, with a large striking platform and pronounced bulb of percussion. Post-depositional damage is apparent on all surfaces of the flake

5.2.10 Three areas of further flaking are observable: on the central distal end, and along the two sides at the distal end. None of these exceed 13mm in length. These are possible evidence for use-wear, the edge-damage occurring during use rather than deliberate retouching of the piece. On the basis of the above, and the significantly dulled lustre of the artefact, this piece is likely to be a reworked Palaeolithic flake deriving from the underlying Boyn Hill Gravels, or imported material.

5.2.11 Two pieces of unworked burnt flint were also retrieved. Both are calcined grey and exhibit crazed surfaces, apart from cortical faces. Burnt flint is often associated with prehistoric activity and here represents residual presence in a disturbed deposit.

## 5.3 Burnt Flint

5.3.1 Unworked burnt flint was recovered from bulk samples taken from two contexts in Trench 1, fill [1/006] of pit [1/005] and fill [1/008] of linear [1/007].

5.3.2 The fragments are principally small-sized, comprising heat-shattered pieces, pot-lids, and thermally modified pebbles. The great majority from both contexts display a reddish hue, with a small proportion calcined white or mid to dark grey. The difference in colour suggests that the degree to which the flint had been heated varied. Burnt unworked flints are frequently associated with prehistoric activities.

## 5.4 **Roman Pottery** By Louise Rayner

5.4.1 In addition to hand collected finds, three small pottery sherds were also recovered from sample <1> from context [1/06]; all are undiagnostic body sherds.

5.4.2 The largest, a reduced sandy ware sherd is of Roman date, and most likely a sherd of black-burnished ware 2 (BB2) dating to the early 2nd century.

5.4.3 The other two small pieces comprise an abraded sherd in a vesicular fabric (originally shell-tempered) and a tiny chip of an oxidised sandy ware; although neither is particularly diagnostic both could also be of Roman date.

## 6.0 THE ENVIRONMENTAL SAMPLES by Angela Vitolo

6.1 During evaluation work at the site, 2 bulk soil samples were taken to recover environmental material such as charred plant macrofossils, wood charcoal, fauna and mollusca as well as to assist finds recovery. The samples were taken from the fills of a pit and an undated linear feature recorded in Trench 1.

6.2 Both samples were processed by flotation in their entirety. The flots and residues were captured on 250µm and 500µm meshes respectively and were air dried. The dried residues were passed through graded sieves of 8, 4 and 2mm and each fraction sorted for environmental and artefactual remains (Table 7). Artefacts recovered from the samples were distributed to specialists, and are incorporated in the relevant sections of this volume where they add further information to the existing finds assemblage. The dry flots were scanned under a stereozoom microscope at 7-45x magnifications and their contents recorded (Tables 7 and 8). Identifications of macrobotanical remains have been made through comparison with published reference atlases (Cappers *et al*. 2006, Jacomet 2006, NIAB 2004), and nomenclature used follows Stace (1997).

6.3 Both samples produced small flots dominated by rootlets and other uncharred plant matter that is likely to have infiltrated the soil through root action. Charred plant remains were scarce and limited to an unidentifiable cereal (Cerealia) caryopsis, goosefoots (*Chenopodium* sp.), ivy-leaved speedwell (*Veronica hederifolia*) and an indeterminate seed, which could be part of a grass (Poaceae) caryopsis, but being so fragmentary identification was not possible. Small amounts of charcoal were recorded both from the residues and the flots, but given their paucity no identification work was carried out. Other finds recovered from the residues included flint, pottery, industrial debris, magnetic material and fire cracked flint.

### Discussion

6.4 The environmental samples have not provided much information in regards to the agricultural economy and environment at the site. Charred plant remains were present in small quantity and displayed a fragmentary state of preservation. Although the charred wild seeds recorded could be indicative of cultivated ground, they can also grow in a variety of other environments, including waste ground, hedgerows, open woods and possibly grassland. However, the presence of both plant macros and charcoal in the samples suggests the potential for preservation of charred plant remains in the deposits and any future work at the site and surrounding area should continue to include sampling, targeting primary deposits.

Table 7: Residue quantification (* = 1-10, ** = 11-50, *** = 51-250, **** = >250) and weights in grams

| Sample Number | Context | Context / deposit type | Sample Volume litres | Sub-Sample Volume litres | Charcoal <4mm | Weight (g) | Other (eg ind, pot, cbm) |
|---|---|---|---|---|---|---|---|
| 1 | 1/006 | Pit | 20 | 20 | * | <1 | FCF **/ 238g - Mag. Mat **/ 1g - Unworked Flint */ 13g - Industrial Debris **/ 2g - Pottery */ 8g |
| 2 | 1/008 | Linear | 20 | 20 | * | <1 | FCF **/ 367g - Mag. Mat. ***/ 2g - Industrial debris **/ 2g |

Table 8: Flot quantification (* = 1-10, ** = 11-50, *** = 51-250, **** = >250) and weights in grams

| Sample Number | Context | Weight g | Flot volume ml | Volume scanned | Uncharred % | Sediment % | Charcoal <2mm | Crop seeds charred | Identifications | Preservation | Weed seeds charred | Identifications | Preservation |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1/006 | 0.6 | <10 | <10 | 30 | 60 | * | * | Cerealia (1) | + | * | *Chenopodium* sp. (1), Indeterminate (1) | + |
| 2 | 1/008 | 0.3 | <10 | <10 | 80 | 10 | * | | | | * | *Veronica hederifolia* | ++ |

# 7.0 DISCUSSION AND CONCLUSIONS

## 7.1 Overview of stratigraphic sequence

7.1.1 The stratigraphic sequence in both trenches and test-pits followed a similar pattern. Chalk was identified in GTP1 at 27.36m OD and was overlain by sands and gravels of the Boyn Hill Gravel Member to a height of c. 29.36m OD. The river gravels were overlain by a silty clayey sand subsoil, which was capped by brick rubble and tarmac made ground.

7.1.2 Three features were identified in the two trenches comprising two linear features, probably ditches, and a pit. The pit and ditch in Trench 1 are probably 2nd century AD in date. The ditch in Trench 2 is undated and may or may not also prove to be Roman should further work be undertaken.

7.1.3 A concentration of flint nodules was observed at the west end of Trench 1. These nodules were unworked, but it is possible that their presence at the site might be related to flint-working. It is equally possible; however, that this group represents modern activity, as part of made ground.

7.1.3 The gearchaeological test-pitting was partially successful in describing the nature of the Boyn Hill gravels to their interface with pre-Quaternary deposits. Additionally, sieving of sediments from GTP2 successfully identified a Palaeolithic flint artefact (Figure 4a), although ground conditions caused frequent collapsing of the test-pit leading to questionable provenance of the artefact.

## 7.2 Deposit survival and existing impacts

7.2.1 Previous groundworks are likely to have truncated the subsoil underlying the made ground, although the preservation of features under this deposit suggests that the archaeology is undisturbed.

7.2.2 Approximately 2 metres thickness of Boyn Hill gravels survive at the site. Correlation with deposits at Barnfield Pit, Swanscombe (Bridgland 1994) suggest that the sequence is analogous to the sequence spanning the Upper Middle and Lower Middle Gravels, although the large distance between the site and the type section means that this comparison must be considered only broadly indicative.

## 7.3 Discussion of archaeological remains by period

### Palaeolithic

7.3.1 The single Palaeolithic artefact recovered from GTP2 represents hominin activity in the vicinity during Marine Isotope Stage 11, between approximately 425-375 kya. Due to the probable contamination of the sample from which it was recovered, it is impossible to determine from which unit the flint flake derives.

7.3.2 Due to the nature of the Boyn Hill Gravels at the site, the flint flake is not considered *in situ*, although its relatively fresh condition suggests that it has

not been transported far. Potential exists for further finds of similar nature

**Later Prehistoric**

7.3.3 Two, probably 2nd century AD Roman, ditches and a pit contained residual burnt flint and fragmentary palaeoenvironmental evidence.

7.3.4 A small assemblage of unworked burnt and worked flint was also recovered. The pieces are not diagnostic and as such could represent general Mesolithic to Bronze Age activity.

**Roman**

7.3.5 Given the fact that previous Roman findings have been made, both on the site and in the general area (section 2.3 of this report), a pit containing a small quantity of 2nd century Roman pottery and (probably) iron slag is highly indicative evidence that Roman activity exists on the site. Two undated ditches may represent further evidence of Roman activity or could represent activity earlier or later than this.

## 7.4 Potential impact on archaeological remains

7.4.1 The proposed foundations, whilst verbally confirmed to be a series of concrete pads c. 500m in depth (C. Hayman pers comm.), have some potential to impact on Palaeolithic, later prehistoric, Roman and hitherto undated archaeology.

## 7.5 Consideration of research aims

7.5.1 This evaluation succeeded in demonstrating the potential for Boyn Hill gravels to contain Palaeolithic archaeology on Temple Hill and at the site.

7.5.2 Roman occupation is highly likely to exist at the site.

7.5.3 Earlier or later archaeology may also exist at the site.

## 7.6 Conclusions

7.6.1 The evaluation has demonstrated the potential of the Boyn Hill Gravels at Temple Hill to preserve Palaeolithic archaeology. Roman and undated evidence was also found.

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NIAB 2004. *Seed Identification Handbook*: Agriculture, Horticulture and Weeds. 2nd ed. NIAB, Cambridge.

Stace, C. 1997. *New Flora of the British Isles.* Cambridge: University Press.
English Heritage 2002. *Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation and Geoarchaeology: Using earth sciences to understand the archaeological record*

## ACKNOWLEDGEMENTS

ASE would like to thank Kier for commissioning the work and for their assistance throughout the project, and Wendy Rogers County Archaeologist Kent County Council for her guidance and monitoring. The excavation was directed by Ed Blinkhorn assisted by Lucy May. Dylan Hopkinson and Antonio Reis produced the figures for this report; Paul Mason and Neil Griffin project managed the excavations and Jim Stevenson and Dan Swift project managed the post-excavation process.

## HER Summary

| | | | | | | |
|---|---|---|---|---|---|---|
| **HER enquiry no.** | N/A | | | | | |
| **Site code** | THD15 | | | | | |
| **Project code** | 7717 | | | | | |
| **Planning reference** | KCC/DA/15/0514 | | | | | |
| **Site address** | Temple Hill School, St Edmunds Road, Dartford, Kent | | | | | |
| **District/Borough** | Dartford | | | | | |
| **NGR (12 figures)** | 555159 174985 | | | | | |
| **Geology** | Seaford Chalk Formation And Newhaven Chalk Formation (undifferentiated), overlain by the Thanet Formation, overlain by Boyn Hill Gravel Member. | | | | | |
| **Fieldwork type** | Eval | | | | | |
| **Date of fieldwork** | 12/08/15 – 14/08/15 | | | | | |
| **Sponsor/client** | Kier | | | | | |
| **Project manager** | Neil Griffin | | | | | |
| **Project supervisor** | Ed Blinkhorn | | | | | |
| **Period summary** | Palaeolithic | Mesolithic ? | Neolithic ? | Bronze Age ? | | |
| | | | | | Undated | |
| **Project summary** | An archaeological and geoarchaeological evaluation was conducted at Temple Hill School, St Edmunds Road, Dartford, Kent between the 12th August and 14th August 2015. Two trenches measuring 12m in length were excavated. Three shallow features of probable Roman (or other) date were identified and a small assemblage of prehistoric lithics was recovered from the subsoil. Two geoarchaeological test-pits were also excavated, one in the end of each trench to evaluate potential for Palaeoltihic archaeology. A single Lower Palaeolithic flake was identified in the Boyn Hill Gravels, although the sample from which it was recovered was not considered secure. | | | | | |
| **Museum/Accession No.** | | | | | | |

## Finds summary

| Find type | Material | Period | Quantity |
|---|---|---|---|
| Lithics | Flint | Palaeolithic | 2 |
| Lithics | Burnt flint | Prehistoric | 164 |
| Lithics | Flint | Prehistoric | 1 |
| Pottery | Ceramic | Roman | 3 |
| Industrial debris | Slag? | Roman? | 15g |

## OASIS Form

### OASIS ID: archaeol6-222959

**Project details**

| | |
|---|---|
| Project name | Archaeological evaluation at Temple HIll School, Dartford, Kent |
| Short description of the project | Excavation confirmed the presence of Boyn Hill gravels at the site to a depth c.2.5m below current ground level, represented by a sequence of coarse gravel and finer sand deposits. Sieving of the test-pit arisings retrieved two Palaeolithic flakes, although one was from a contaminated sample, and the other came from later sands overlying the Boyn Hill sequence. Three shallow features comprising two ditches and a pit were also identified. A small quantity of Roman pottery and industrial debris and burnt flint was recovered from the pit. Prehistoric, Roman and/or medieval/post-medieval activity is likely to exist on the site. |
| Project dates | Start: 12-08-2015 End: 14-08-2015 |
| Previous/future work | Not known / Not known |
| Any associated project reference codes | THD15 - Sitecode |
| Type of project | Field evaluation |
| Site status | Area of Archaeological Importance (AAI) |
| Current Land use | Community Service 1 - Community Buildings |
| Monument type | PIT Roman |
| Monument type | DITCHES Roman |
| Significant Finds | FLINTWORK Early Prehistoric |
| Significant Finds | POTTERY Roman |
| Significant Finds | IDUSTRIAL DEBRIS Uncertain |
| Methods & techniques | "Test Pits" |
| Development type | Public building (e.g. school, church, hospital, medical centre, law courts etc.) |
| Prompt | Planning condition |
| Position in the planning process | After full determination (eg. As a condition) |

**Project location**

| | |
|---|---|
| Country | England |

| | |
|---|---|
| Site location | KENT DARTFORD DARTFORD Temple Hill School |
| Postcode | DA1 5NE |
| Study area | 21.6 Square metres |
| Site coordinates | TQ 55159 74985 51.452039807371 0.23330973517 51 27 07 N 000 13 59 E Point |
| Height OD / Depth | Min: 29.57m Max: 29.86m |

**Project creators**

| | |
|---|---|
| Name of Organisation | Archaeology South-East |
| Project brief originator | Kent County Council |
| Project design originator | Kent County Council Heritage Conservation Group |
| Project director/manager | Neil Griffin |
| Project supervisor | Ed Blinkhorn |
| Type of sponsor/funding body | Client |
| Name of sponsor/funding body | KCC |

**Project archives**

| | |
|---|---|
| Physical Archive recipient | Local Museum |
| Physical Archive ID | THD15 |
| Physical Contents | "Ceramics","Industrial","Worked stone/lithics" |
| Digital Archive recipient | Local Museum |
| Digital Archive ID | THD15 |
| Digital Contents | "Ceramics","Industrial","Stratigraphic","Survey","Worked stone/lithics" |
| Digital Media available | "GIS","Images raster / digital photography","Survey","Text" |
| Paper Archive recipient | Local Museum |

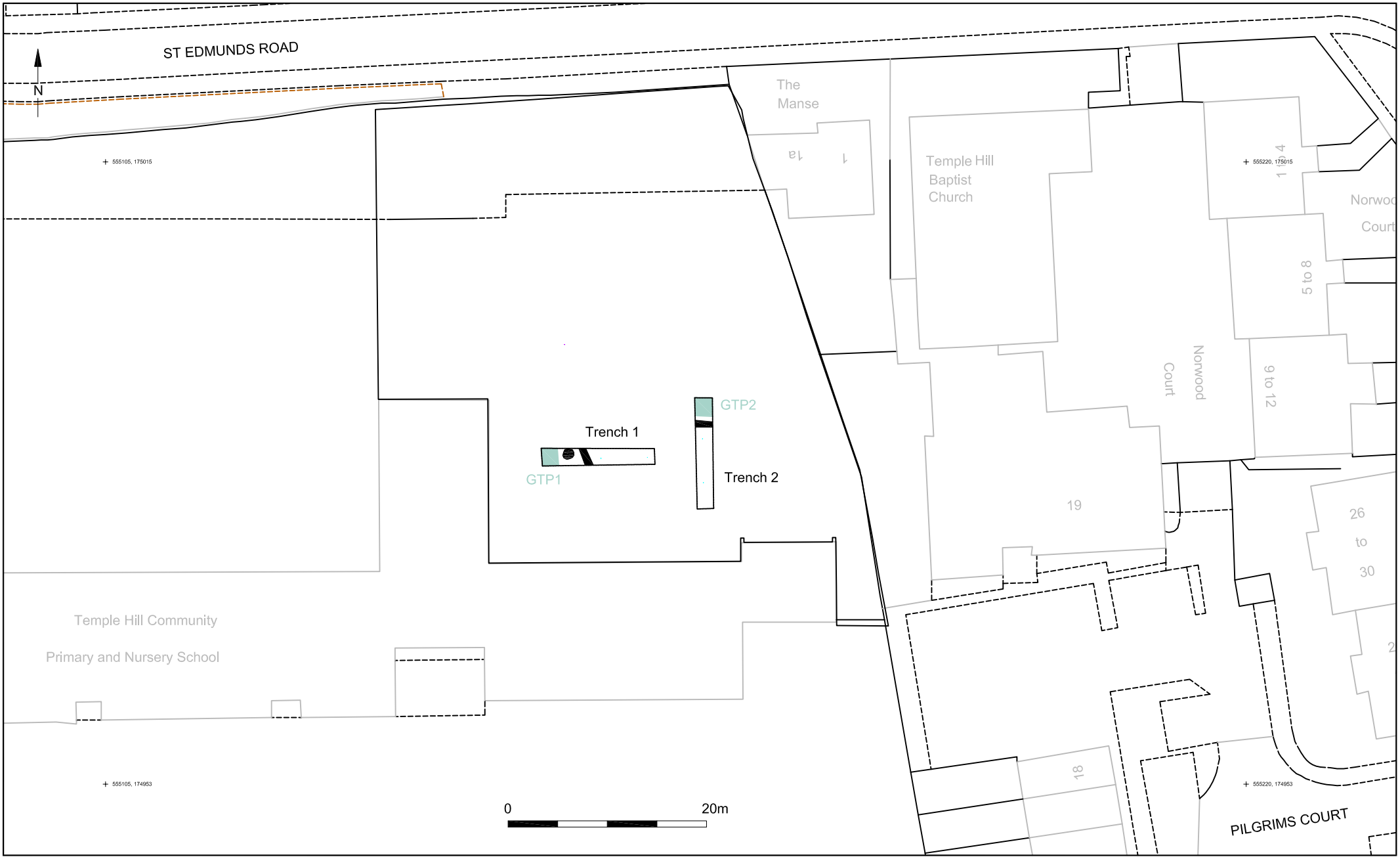
| | |
|---|---|
| Paper Archive ID | THD15 |
| Paper Contents | "Ceramics","Industrial","Stratigraphic","Survey","Worked stone/lithics" |
| Paper Media available | "Context sheet","Miscellaneous Material","Plan","Report","Survey " |

**Project bibliography 1**

| | |
|---|---|
| Publication type | Grey literature (unpublished document/manuscript) |
| Title | Archaeological evaluation at Temple HIll School, Dartford, Kent |
| Author(s)/Editor(s) | Blinkhorn, E. |
| Other bibliographic details | ASE Report No: 2015299 |
| Date | 2015 |
| Issuer or publisher | ASE |
| Place of issue or publication | Portslade |
| Description | grey lit bound rep |

| | |
|---|---|
| Entered by | Dan Swift (d.swift@ucl.ac.uk) |
| Entered on | 8 September 2015 |


| © Archaeology South-East | | Temple Hill School, Dartford, Kent | Fig. 1 |
|---|---|---|---|
| Project Ref: 7717 | September 2015 | Site location | |
| Report Ref: 2015299 | Drawn by: FEG | | |




| © Archaeology South-East | | Temple Hill School, Dartford, Kent | Fig. 2 |
|---|---|---|---|
| Project Ref: 7717 | Sept 2015 | Site plan | |
| Report Ref: 2015299 | Drawn by: FEG | | |

N

555148, 174991

GTP1

Trench 1

1/005

1/007

GTP2

2/005

Trench 2

GTP2 looking west

GPT1 looking north

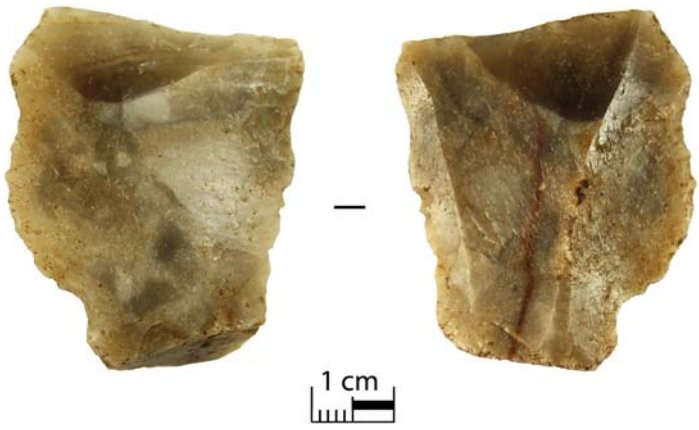
Trench 1 looking east

555165, 174978

0 2m

Trench 2 looking south

| | | | |
|---|---|---|---|
| © **Archaeology South-East** | | Temple Hill School, Dartford, Kent | Fig. 3 |
| Project Ref: 7717 | Sept 2015 | Trench plans and photographs | |
| Report Ref: 2015299 | Drawn by: FEG | | |


| © **Archaeology South-East** | | Temple Hill School, Dartford, Kent | Fig. 4 |
|---|---|---|---|
| Project Ref: 7717 | September 2015 | Flint from GTP2 Unit 7 and GTP1 Unit 3 | |
| Report Ref: 2015299 | Drawn by: AR | | |

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