

CSG Aylesford, Forstal Road, Aylesford, Kent: Pleistocene & Palaeolithic Evaluation Report

RAS Site Code: 33271 NGR Site Centre: 574174 158602 Planning Application Number: MA/22/502575

> Prepared on behalf of: Cleansing Service Group

> > November 2022

Prepared by:

David Britchfield BA MCIfA

Ravelin Archaeological Services

admin@ravelinarchservices.co.uk

07702 587630

Report Reference: 33271.02 v01

© Ravelin Archaeological Services 2022 all rights reserved

Quality Assurance

Report Reference:	33271.02
Version:	01
Status:	Final
OASIS ID	ravelina1-510626
RAS project code and type	RAS 33271 Archaeological Evaluation
HER Event number	NA
National Grid Reference	574174 158602
County	Kent
Report title:	CSG Aylesford, Forstal Road, Aylesford, Kent: Pleistocene & Palaeolithic Evaluation Report
Author(s):	David Britchfield & Peter Knowles
Origination date:	04 /11/2022
Edited:	P Walker (RAS)
Circulation:	Client (for circulation)

Contents

1	INTRODUCTION
1.1	Project Background7
1.2	Non-Technical Summary
1.3	Scope
2	GEOARCHAEOLOGICAL BACKGROUND8
2.1	Site Context
2.2	Topographic & geological context9
2.3	Bedrock Geology9
2.4	Superficial Geology9
2.5	Palaeolithic Archaeology10
3	AIMS AND OBJECTIVES
3.1	Specific Aims11
3.2	General Aims11
3.3	General Objectives
4	METHODS12
4.1	Fieldwork
5	RESULTS
5.2	Test Pit 1
5.3	Test Pit 2
5.4	Site Stratigraphy
5.5	Archaeology16
6	DISCUSSION AND INTERPRETATION
6.1	Evolutions of the River Medway17
7	CONCLUSION AND RECOMMENDATIONS
7.1	Overview
7.2	Recommendations

8	REFERENCES	. 19
9	APPENDIX 1 MAPS AND DEPOSIT MODELS	. 21
10	APPENDIX 2 PHOTOGRAPHIC LOG	. 26
11	APPENDIX 3 – HER FORM	. 40
12	APPENDIX 4 – OASIS RECORD	. 41

Tables

Table 1 Lithostratigraphic description of Test Pit 1	14
Table 2 Lithostratigraphic description of Test Pit 2	16
Table 3 Stratigraphic units	16

Plates

Plate 1 The evaluation site at Forstal Road, View looking south, Test Pit 1 in centre	9
Plate 2 View of the existing site showing extent of development carried out to date	19
Plate 3: Test Pit 1, Made ground. Unit 1	26
Plate 4: Test Pit 1, section facing north, Beds 1-2, silty sand, Unit 2	27
Plate 5: Test Pit 1, Beds 1-3, cobbly sandy gravel, Unit 3	28
Plate 6: Test Pit 1, Beds 3, chert cobbles	29
Plate 7: Test Pit 1, Beds 1-4, coarse sand and gravel, Unit 3	30
Plate 8: Test Pit 1, Beds 1-5, coarse sand and gravel, Unit 3	31
Plate 9: Test Pit 1, Beds 1-6, clayey coarse sand and gravel, Unit 4	32
Plate 10: Test Pit 1, Complete stratigraphic sequence Beds 1-6, Units 1-4	33
Plate 11: Test Pit 1, chert cobble from bed 3.	34
Plate 12: Test Pit 2, Made ground. Unit 1	35
Plate 13: Test Pit 2, section facing east, beds 1-6, Units 1, 2, and 3	36
Plate 14: Test Pit 2, section facing east, showing detail of beds 2-5.	37
Plate 15: Test Pit 2, section facing east, beds 1-7, Units 1, 2, and 3	38
Plate 16: Test Pit 2, section facing east, beds 1-8, Units 1, 2, and 4	39

Figures

Figure 1: Revised geoarchaeological test pit locations	21
Figure 2: Site plan with Geoarchaeological test pit locations and BGS mapped bedrock geology	22
Figure 3: Site plan with Geoarchaeological test pit locations and BGS mapped superficial deposits	23

Figure 4: The Site location in relation to the terraces of the River Medway24
Figure 5: Long profiles of the Medway terraces, with post-diversion Thames and Thames-Medway
terraces also shown for comparison25

Summary

Ravelin Archaeological Services (RAS) has been commissioned by Cleansing Service Group (the Client), to undertake a programme of archaeological works during the proposed development at CSG Aylesford, Forstal Road, Aylesford, Kent. The works have been carried out as part of a planning application condition requiring an evaluation in order to further characterise the potential archaeological impact from any proposed development.

The archaeological evaluation has been successful in evaluating the proposed development site for the possibility of archaeological remains. The evaluation established that Pleistocene gravels and sands of a low terrace of the River Medway (probably Terrace 1) underlie the site, it is likely that they were deposited during the cooling phase leading into MIS 6, this was the beginning of a period that saw a long absence of hominins in Britain (c. 100 000 years BCE).

The archaeological evaluation has assessed the archaeological potential of land intended for development. The results from this work will be used to aid and inform the Senior Archaeological Officer of any further archaeological mitigation measures that may be necessary in connection with any future development proposals.

CSG Aylesford, Forstal Road, Aylesford, Kent: Pleistocene & Palaeolithic Evaluation Report

NGR Site Centre: 574174 158602 Site Code: AYL-EV-22 (33271)

1 INTRODUCTION

1.1 Project Background

- 1.1.1 Ravelin Archaeological Services (RAS) was commissioned by the client (Cleansing Service Group) to undertake a Geoarchaeological Field Evaluation and Palaeolithic Period investigation on land at CSG Aylesford, Forstal Road, Aylesford, Kent, ME20 7AG, hereafter 'the site' (National Grid Reference (NGR): 574174 158602. The site under development, which measures approximately 480sq.m in area, forms a small corner of a larger former industrial site that measures approximately 8,050sq.m (Plate 1 and Figure 1).
- 1.1.2 Development proposals include the construction of a wastewater treatment facility comprising two large tanks set within a bunded area to the south with a separate lime tank and sump. The northern portion of the Site includes a process building, RORO skip, tanker loading area, and odour control system. In acknowledgement of the archaeological potential of the site, archaeological issues have been addressed as a condition attached to planning consent (Planning Application Number: MA/22/502575, a variation of MA/17/501165 which was attached to the larger site) granted by Maidstone Borough Council, advised by the Kent County Council (KCC) Senior Archaeologist, which states that;

Prior to the commencement of development the applicant, or their agents or successors in title, will secure and implement:

- Archaeological field evaluation works in accordance with a specification and written timetable which has been submitted to and approved by the County Planning Authority; and
- Further archaeological investigation, recording and reporting, determined by the results of the evaluation, in accordance with a specification and timetable which has been submitted to and approved by the County Planning Authority.

Reason: To ensure that features of archaeological interest are properly examined and recorded.

(MA/17/501165, Condition 8, dated 21/05/2021)

- 1.1.3 The archaeological evaluation, which comprised the excavation of two Test Pits measuring approximately 5m in length and 2.5m in width, was carried out over the course of a single day in October 2022. The evaluation was carried out in accordance with an archaeological Written Scheme of Investigation (WSI), prepared by Peter Knowles (2022), prior to commencement of works.
- 1.1.4 This report has been prepared by Peter Knowles and Edited by David Britchfield BA MCIfA of Ravelin Archaeological Services.

1.2 Non-Technical Summary

- 1.2.1 The aims of the evaluation on land at the site (National Grid Reference (NGR): TQ 74174 58602; Figure 1) was to inform KCC about the Palaeolithic archaeological and geoarchaeological potential of the site. To establish sub-surface stratigraphy across the site and locate any evidence for Palaeolithic artefacts and Paleoenvironmental remains.
- 1.2.2 Two Test Pits (Figure 1) were sunk to a maximum depth of 3.4 m BGL. Pleistocene sands and gravels were identified during the evaluation but no Palaeolithic archaeology or Pleistocene paleoenvironmental remains were found.

1.3 Scope

- 1.3.1 This report summarises the findings from the geoarchaeological test pit investigations conducted by Peter Knowles and Ravelin Archaeological Services on the 30th of September 2022. It provides an interpretation of those results.
- 1.3.2 A Written Scheme of Investigation for Pleistocene and Palaeolithic Investigation (Knowles, 2022) had previously been prepared for the site; the findings of which are largely reproduced in sections 2.1 to 2.3, together with aims and objectives for the site (Section 3).

2 GEOARCHAEOLOGICAL BACKGROUND

2.1 Site Context

2.1.1 The site is located 1.4km southeast of the centre of Aylesford and 3.1km northwest of the town of Maidstone and is situated adjacent and directly northeast of the River Medway.



Plate 1 The evaluation site at Forstal Road, View looking south, Test Pit 1 in centre

2.2 Topographic & geological context

2.2.1 The site lies in the Maidstone region of the River Medway, south of the gap through the chalk of the North Downs which separates the lower and estuarine reaches of the River Medway. Here the river occupies a wider valley form in which extensive morphological terraces of the river exist.

2.3 Bedrock Geology

2.3.1 The underlying bedrock geology in this area forms part of the Weald Anticline in which Lower Cretaceous sediments of the Wealden Beds, Atherfield Clay, Hythe Beds, Sandgate Beds, Folkestone Beds, and Gault Clay are present. Gault Clay forms the base of the North Downs scarp slope (Figure 2).

2.4 Superficial Geology

- 2.4.1 The river is relatively unrestricted through this region and has deposited sand and gravel over a wide area in the vicinity of Aylesford and Maidstone. Gravels here are derived from the deposits present within the Weald.
- 2.4.2 The British Geological Survey mapping shows superficial deposits throughout the site, deposits of Alluvium and River Terrace Deposits 1 are recorded across most of the site (Figure 3 & 4).
- 2.4.3 The presence of fluvial gravels and sands across the site has been confirmed by bore hole sampling (Bevins, 2022).

2.5 Palaeolithic Archaeology

- 2.5.1 The River Medway is an ancient river that has made a notable contribution to the correlation of chronostratigraphic sequences for the rivers of southeast England. Importantly the Medway lies beyond the advances of the Quaternary glaciations and has a well preserved sequence of terraces (Bridgland, 2010) (Figure 2), providing a stratigraphical record that possibly dates back to the lower Pleistocene, possibly even the Pliocene (Bridgland, 2003). Prior to the Anglian glaciation the Medway flowed northeast across what is now the Thames estuary, it's on the coast of Essex that there is a series of terraces attributed to this period. The deposits haven't been conclusively dated but are thought to be from MIS 14-12 (Bridgland, 2003).
- 2.5.2 Prolific quantities of Palaeolithic material have come from historical gravel workings in the Aylesford area approximately 2km, southwest of the site, and New Hythe Lane area approximately 4 km, west of the site (Figure 4-5). The Aylesford pits are situated at ~15m O.D and mapped by the BGS as Terrace 2. Although the provenance of the artefacts attributed to here is currently contested, it is thought more likely that they came from the pits at New Hythe Lane (which is mapped as BGS Terrace 3) and were being sold by the workman of this pit (Ashbee, 2005).
- 2.5.3 Three Palaeolithic handaxes were found in Bryce's Sand Pit (800m wets of the site), Forstal Road, Aylesford, but the precise location and geological context is unknown. The collection is annotated with "1906" and held by Maidstone Museum. The artefacts were re-examined in 2005 for the Medway Valley Palaeolithic Project, and are designated to the Palaeolithic Character Area KT-1.
- 2.5.4 The Medway Valley Palaeolithic Project (MVPP) synthesised a new dating and stratigraphic framework for the sand/gravel aggregate deposits in southeast Essex and north Kent associated with the palaeo-Medway River and integrated these with the British record of early hominin settlement. In addition, it identified research priorities, and provided a more strategic overview of how to approach curation of the Palaeolithic resource within the current curatorial framework (Wenban-Smith et al., 2007). The project divided the Medway Valley into discrete areas for research, the project also found that there were more river terraces than recognised by the BGS (Table 1).
- 2.5.5 The site sits within an area defined by the MVPP as KT1, Figure 2 encompasses this area and shows the relation of 'The site' to the mapped BGS River Medway terrace deposits. Within the MVPP area KT1, at least two *Bout Coupé* handaxes have been recovered from gravels

(Terraces B and A) associated with the current Medway alluvium between East Malling and Snodland. These finds are rare and reflect a fleeting Neanderthal occupation in the later part of the last Ice Age (Devensian).

2.5.6 A key outcome from the MVPP was the development of a methodological framework to assess the potential of a Palaeolithic site. This is a judgement based on a combination of two criteria: (a) the likelihood of finding Palaeolithic remains; and (b) the likely importance of any remains that are present (Wenban-Smith, et-al, 2007) (Table 2). This methodology has been applied in this Palaeolithic specialist report to determine Palaeolithic potential of the site. Due to the amount of known findspots from this area, the likelihood of Palaeolithic remains is high, together with the low-level terraces any find would be of high importance; therefore the significance of the site has been confirmed as high.

3 AIMS AND OBJECTIVES

3.1 Specific Aims

3.1.1 The specific archaeological requirement of this project relates to the potential for Palaeolithic finds and/or deposits of Pleistocene interest.

3.2 General Aims

- 3.2.1 The general aims (or purpose) of the evaluation determined by Wessex Archaeology (2022), in compliance with the CIfA Standard and guidance for archaeological field evaluation (CIfA 2014a), are to:
 - Provide information about the Palaeolithic archaeological and geoarchaeological potential of the site.
 - Consider the possible significance of any Palaeolithic archaeological and geoarchaeological evidence present in the context of national and regional research priorities and agendas.
 - Inform either the scope and nature of any further Palaeolithic archaeological work that may be required; or the formation of a mitigation strategy (to offset the impact of the development on the archaeological resource); or a management strategy.

3.3 General Objectives

- 1.1.5 In order to achieve the above aims, the general objectives of the evaluation are to:
 - establish the potential for Quaternary deposits in the site to preserve significant Palaeolithic archaeological and geoarchaeological remains;
 - establish the potential of the Quaternary deposits to preserve significant paleoenvironmental evidence;
 - where appropriate, obtain samples from Quaternary deposits for palaeoenvironmental assessment and scientific dating;
 - make available information about the archaeological and geoarchaeological resource within the site by reporting on the results of the evaluation; and
 - make recommendations for further work, where appropriate, including for paleoenvironmental assessment and scientific dating of retained samples from Quaternary deposits.

4 METHODS

4.1 Fieldwork

- 4.1.1 The methodology followed the archaeological mitigation devised by Knowles (2022), which proposed for two Test Pits (Figure 1) located to target areas of high Palaeolithic-Pleistocene potential and positioned in order to provide suitable coverage across the site.
- 4.1.2 Test Pits were sunk using a mechanical digger with a toothless bucket: 2.0m wide.
- 4.1.3 To meet the aims and objectives, the Test Pits were sunk until, face falls and collapses occurred, which made further excavation unsafe; bedrock was not reached.
- 4.1.4 For scale a surveying staff was used. A photographic record was made of sections of the pits, showing sedimentological changes. The pits were unsafe to enter beyond depths of 1.5m so much of the recording was made from photographs of the lower areas, with the staff in place as a scale, however this could not be safely achieved at the maximum depths of the pits due to the collapsing faces which has somewhat compromised the complete record of sections.
- 4.1.5 The base and faces of the Test Pits were inspected for Pleistocene fossils and Palaeolithic artefacts at intervals during the excavation until the pits were at a depth that was unsafe to

enter (c1.5 m), this process did not reveal any Palaeoenvironmental material or Palaeolithic artefacts.

- 4.1.6 On-site sieving of bed samples using sieves with a mesh of c. 12mm, was carried out where samples were sufficiently dry and sandy, some Beds were clayey and couldn't be sieved, these samples were checked through using archaeological trowels.
- 4.1.7 Consideration was given as excavation progressed to the potential for OSL (optically stimulated luminescence) dating, but no suitable sediments were encountered or were safe to sample, so no OSL dating samples were taken. Gravel samples were collated for clast lithological analysis.
- 4.1.8 The site was given the unique code: AYL-EV-22 (Aylesford Evaluation 2022).

5 RESULTS

5.1.1 Two Palaeolithic geoarchaeological Test Pits were excavated for this evaluation. Due to the operating constraints of the mechanical excavator, the orientation and naming of the pits was changed from those given in Figure 2 of the WSI. Pit naming amendments as follows: Test Pit 1 was furthest south on the site and orientated east-west, Test Pit 2 furthest north on the site and orientated north-south, see Figure 1 amended from WSI.

5.2 Test Pit 1

- 5.2.1 A test pit was excavated in the southern extremity of the evaluation area (Plate 1 9), and spit sampling and sieving was undertaken. The tabulated description of Test Pit 1 is displayed in Table 1.
- 5.2.2 Made ground consisting of ballast, concrete, and brick rubble had to be removed from the top 0.7m of Test Pit 1 (Plate 3).
- 5.2.3 The base of the pit and facies of Beds 2 and 3 (Plates 4 and 5) were visually checked both in the Test Pit and from outside the pit during the excavation and when the bucket was emptied on to the spoil heap. Approximately 100 litre samples were sieved from Beds 2 and 3. Numerous large greensand chert clasts (approximately 1% inclusion) were observed in the base of the pit throughout the excavation (Plate 6) and an example of a particularly large chert cobble retrieved from Bed 3 is shown in Plate 11.

- 5.2.4 The base of the pit and facies of Beds 4, 5, and 6 (Plates 7, 8 and 9) were visually checked from outside the pit during the excavation and when the bucket was emptied on to the spoil heap. 100 litre samples were sieved from each of these beds two.
- 5.2.5 The base of the clayey gravels and sands revealed in bed six (Plate 10), could not be established with the reach available from the mechanical excavator.
- 5.2.6 The sieving didn't reveal any lithics with enough features: bulbs of percussion, flake scars, platforms, conchoidal rings, which could conclusively prove that they were anthropogenically modified.

Depth (m OD)	Depth (m.bgl)	Bed	Description	Stratigraphic Unit
6.10 - 5.40	0.00 - 0.70	1	Made-ground, ballast then broken concrete bricks and loamy soil	Made ground
5.40 - 4.20	0.70 - 1.20	2	Orange Brown silty sand, with large flint clasts 5-10cm	Silty Sand
4.20 - 3.60	1.20 - 2.00	3	Loose, Sandy Brown, cobblySandy Gravsandy gravel, poorly sortedantrix supported, large cobblesflint 5-10cm and greensand chertcobbles up to 30cm	
3.60 - 3.20	2.00 - 2.40	4	Compacted, Light Brown coarse sand and gravel, poorly sorted matrix supported, flint clasts 5- 10cm, mix of chalk derived fresh black flint with chalky cortex and rolled ochreous flint	
3.20 - 2.20	2.40 - 3.40	5	Compacted, Mid Brown coarse sand and gravel, poorly sorted matrix supported, mix of flint and chert clasts.	Sandy Gravel
2.20	3.40 -	6	Compacted, Mid Brown Compacted clayey sandy gravel	Clayey Sandy Gravel

5.2.7 No palaeoenvironmental material was found.

Table 1 Lithostratigraphic description of Test Pit 1

5.3 Test Pit 2

- 5.3.1 A test pit was excavated in the northern extremity of the evaluation area (Plates 12 16), and spit sampling and sieving was undertaken. The tabulated description of Test Pit 2 is displayed in Table 2.
- 5.3.2 Made ground of consisting of ballast, and reinforced concrete had to be broken through to a depth of 0.85m (Plate 12).

- 5.3.3 The base of the pit and facies of Beds 1 to 6 (Plates 12 & 13) were visually checked both in the Test Pit and from outside the pit during the excavation and when the bucket was emptied on to the spoil heap. One 100 litre sample was sieved from Beds 2 and 3 respectively, the separation of Beds 4 and 5 could not be distinguished until the section was cleaned and were sieved as one unit.
- 5.3.4 A section was cleaned in the east facing side of the test pit, which revealed a bedding structure for Beds 2-5, and a dip of deposits in these Beds towards the present river (Plate 14). Flow direction couldn't be established from the alignment of clasts in this section.
- 5.3.5 The base of the pit and facies of Beds 6 and 7 (Plate 15) were visually checked from outside the pit during the excavation and when the bucket was emptied on to the spoil heap. A 100 litre sample was sieved from this bed. Occasional large greensand chert and flint clasts (approximately 10% inclusion) were observed throughout the excavation of this bed.
- 5.3.6 The base of the clayey gravels and sands revealed in Bed 8 (Plate 16), could not be established with the reach available from the mechanical excavator.
- 5.3.7 The sieving didn't reveal any lithics with enough features: bulbs of percussion, flake scars, platforms, conchoidal rings, which could conclusively prove that they were anthropogenically modified.
- 5.3.8 No palaeoenvironmental material was found.

Depth (m aOD)	Depth (m bgl)	Bed Number	Description	Stratigraphic Unit
6.00 - 5.15	0.00 - 0.85	1	Made-ground, ballast then broken Made groun concrete bricks and loamy soil	
5.15 – 4.95	0.85 – 1.05	2	Loose, Orange Brown to Dark Brown Silty San silty sand, with large flint clasts 5- 10cm	
4.95 – 4.80	1.05 – 1.20	3	Loose, Sandy Brown, medium to coarse gravely sand, with 20% inclusion of <3cm angular to subangular flint and chert clasts, bedded and dipping to the south	Sandy Gravel
4.80 - 4.70	1.20 - 1.30	4	Loose, Sandy Brown, fine to medium sand lens, with 1% inclusion of <1cm angular to subangular flint and chert clasts, bedded and dipping to the south	Sandy Gravel
4.70 - 4.65	1.35 – 1.40	5	Loose, Sandy Brown, coarse sand, and grit with 10% inclusion of angular to subangular small <2cm flint and chert clasts, occasional	Sandy Gravel

Depth (m aOD)	Depth (m bgl)	Bed Number	Description	Stratigraphic Unit
			larger clasts ~5cm, bedded and dipping to the south	
4.65 – 3. 85	1.40 -2.20	6	Loose, Light Brown sandy gravel, Coarse sand and grit matrix of poorly sorted gravels, rounded flint and chert clasts, bedding structures not discernible	
3.85 – 2.95	2.20 -3.10	7	Loose, Mid Brown clayey sandy gravel, coarse sand and grit matrix of poorly sorted gravels, rounded chalk derived flint and chert clasts, clasts large 5-20cm, sporadic rolled ochreous flint bedding structures not discernible	Clayey Sandy Gravel
3.10		8	Loose, Mid Brown clayey sandy gravel, coarse sand and grit matrix of poorly sorted gravels, rounded chalk derived flint and chert clasts, clasts large 5-20cm, rolled ochreous flint and iron fe-oxide stained chert, bedding structures not discernible	Clayey Sandy Gravel

Table 2 Lithostratigraphic description of Test Pit 2

5.4 Site Stratigraphy

5.4.1 A basic stratigraphic sequence has been established across the site; this is shown in Table 3.

Bed Deposit	Test Pits	Unit
Made ground	All	1
Silty sand (river terrace)	All	2
Sands and Gravels (river terrace)	All	3
Coarse Gravels (river terrace)	All	4

Table 3 Stratigraphic units

5.5 Archaeology

5.5.1 No archaeological features were present within the trenches and no artefacts were recovered.

6 DISCUSSION AND INTERPRETATION

6.1 Evolutions of the River Medway

- 6.1.1 This evaluation confirmed the expected presence of Pleistocene sands and gravels in both the Test Pits and found a coherent sequence of deposits throughout (Table 3); horizontally bedded Pleistocene sands and gravels were found below the made ground in both Test Pits.
- 6.1.2 The elevation of these deposits has established that the gravels and sands are likely to be Terrace 1 of the River Medway; this concurs well with the BGS mapping and confirms the position of the Terrace outcrops in this area which are shown in Figure 4.
- 6.1.3 The lack of biostratigraphical material or Palaeolithic artefacts makes dating these deposits difficult, however correlation by geochronology may be able to place them within the chronostratigraphic framework of Medway terraces proposed by Bridgland (2003) and Wenban et-al (2007).
- 6.1.4 Historically attempts at correlating the deposits either side of the Medway gap at Cuxton was problematic (Skempton & Worssam, 1976), however Bridgland (2003) has suggested that the Terrace 1 deposits of the Medway north of Cuxton may correlate with the Halling gravels of the Medway and the Kempton Park Gravel of the Thames (Figure 5); this suggests that the Pleistocene gravels that underlie the site may date to the Ipswician interglacial (MIS-5): 130,000 to 60,000 years ago.

7 CONCLUSION AND RECOMMENDATIONS

7.1 Overview

7.1.1 The Geoarchaeological Field Evaluation and Palaeolithic Period investigation on land at CSG Aylesford, followed a programme of test pitting. The evaluation established that Pleistocene gravels and sands of a low terrace of the River Medway (probably Terrace 1) underlie the site. It is likely that they were deposited during the cooling phase leading into MIS 6, this was the beginning of a period that saw a long absence of hominins in Britain (c. 100,000 years), therefore at this site these deposits are unlikely to contain in-*situ* archaeology; although they may still contain important palaeoenvironmental remains and Palaeolithic archaeology reworked from Terrace 2.

- 7.1.2 Several recommendations have been identified following this evaluation
 - To corroborate the suggested age of the fluvial deposits underlying the site, attempts at OSL dating should be made during any further evaluations in the area that reveal deposits of a similar nature.
 - Sieving of large volumes from spit samples is time consuming and inefficient, future work may want to use swing sieves.
 - Face collapses in pit sections highlighted the dangers of excavating deep pits, to improve the safety of these evaluations and to improve the recording of deeper sections it may be desirable to step or terrace pits where detailed recording is required.

7.2 Recommendations

- 7.2.1 Construction of the proposed STW on site had commenced prior to the evaluation and was halted as soon as the archaeological condition was recognised. The development up to that point consisted of the removal of the former concrete hardstanding and underlying redeposited hardcore/stone to a depth of approximately 0.7m (*c*. 5.5m aOD). There are no more groundworks planned for the development area and the engineering set out has already been carried out for the preparation of the formwork and the construction of structures (Plate 2).
- 7.2.2 The current evaluation has provided a valuable insight into the presence and character of Pleistocene sands and gravels in and surrounding the site, and specialist assessment has recommended further study of these deposits should any development be carried out in the future. The deposits of interest were recorded at a depth ranging between 1.5-3m below the existing ground level.
- 7.2.3 In light of the current circumstances, it is therefore recommended that as no further impact on the upper or lower archaeological horizons is proposed for this development (Planning Application Number: MA/22/502575) remains identified be preserved in situ and that the construction of the treatment works is completed. Any further works associated with the larger site area under Planning Application Number MA/17/501165 should be considered separately.



Plate 2 View of the existing site showing extent of development carried out to date

8 REFERENCES

Ashbee, P. (2005). Kent in Prehistoric Times. Tempus Pub.

Bevins, S. J. (2022). Geotechnical Investigation Report atCSG Aylesford, Forstal Road, Aylesford, Kent ME20 7AG for SRM Project Services, Reference: 19989/GIR Rev1.0.

Bridgland, D. R. (2003). The evolution of the River Medway, SE England, in the context of Quaternary palaeoclimate and the Palaeolithic occupation of NW Europe. *Proceedings of the Geologists' Association*, *114*(1), 23-48. <u>https://doi.org/10.1016/S0016-7878(03)80026-3</u>

Bridgland, D. R. (2010). The record from British Quaternary river systems within the context of global fluvial archives. *Journal of Quaternary Science*, *25*(4), 433-446. <u>https://doi.org/10.1002/jqs.1383</u> Knowles, P. G. (2022). Written Scheme of Investigation for a Pleistocene & Palaeolithic Evaluation prior to a development on the site of CSG Aylesford, Forstal Road, Aylesford, Kent (NGR TQ 74174 58602) Planning Reference (MA/22/502575).

Skempton, A. W., & Worssam, B. C. (1976). A Discussion on valley slopes and cliffs in southern England: morphology, mechanics and Quaternary history - The Quaternary history of the Lower Greensand escarpment and Weald Clay vale near Sevenoaks, Kent. *Philosophical Transactions of the Royal Society of London. Series A, Mathematical and Physical Sciences*, 283(1315), 493-526. https://doi.org/10.1098/rsta.1976.0094

Wenban-Smith, F., Bates, M., & Marshall, G. (2007). Medway Valley Palaeolithic project final report: The Palaeolithic resource in the Medway gravels (Kent). *Unpublished report submitted to English Heritage*.

Wessex Archaeology. (2022). Conningbrook Park, Offisite Wetland Mitigation, Ashford, Kent: Written Scheme of Investigation for Archaeological and Geoarchaeological Evaluation.



Aylesford Evluation Site

Figure 1: Revised geoarchaeological test pit locations



Figure 2: Site plan with Geoarchaeological test pit locations and BGS mapped bedrock geology



Figure 3: Site plan with Geoarchaeological test pit locations and BGS mapped superficial deposits



Figure 4: The Site location in relation to the terraces of the River Medway



Figure 5: Long profiles of the Medway terraces, with post-diversion Thames and Thames-Medway terraces also shown for comparison. The positions of the terrace 1 at Aylesford is indicated. Modified from Bridgland (2003)



Plate 3: Test Pit 1, Made ground. Unit 1



Plate 4: Test Pit 1, section facing north, Beds 1-2, silty sand, Unit 2



Plate 5: Test Pit 1, Beds 1-3, cobbly sandy gravel, Unit 3



Plate 6: Test Pit 1, Beds 3, chert cobbles

Plate 7: Test Pit 1, Beds 1-4, coarse sand and gravel, Unit 3

Plate 8: Test Pit 1, Beds 1-5, coarse sand and gravel, Unit 3

Plate 9: Test Pit 1, Beds 1-6, clayey coarse sand and gravel, Unit 4

Plate 10: Test Pit 1, Complete stratigraphic sequence Beds 1-6, Units 1-4

Plate 11: Test Pit 1, chert cobble from bed 3.

Plate 12: Test Pit 2, Made ground. Unit 1

Plate 13: Test Pit 2, section facing east, beds 1-6, Units 1, 2, and 3

Plate 14: Test Pit 2, section facing east, showing detail of beds 2-5.

Plate 15: Test Pit 2, section facing east, beds 1-7, Units 1, 2, and 3.

Plate 16: Test Pit 2, section facing east, beds 1-8, Units 1, 2, and 4.

11 APPENDIX 3 – HER FORM

Site Name: Geoarchaeological Field Evaluation and Palaeolithic Period investigation on land at CSG Aylesford, Forstal Road, Aylesford, Kent, ME20 7AG

RAS Site Code: 33271

Summary:

Ravelin Archaeological Services (RAS) has been commissioned by Cleansing Service Group (the Client), to undertake a programme of archaeological works during the proposed development at CSG Aylesford, Forstal Road, Aylesford, Kent. The works have been carried out as part of a planning application condition requiring an evaluation in order to further characterise the potential archaeological impact from any proposed development. The archaeological evaluation has been successful in evaluating the proposed development site for the possibility of archaeological remains. The evaluation established that Pleistocene gravels and sands of a low terrace of the River Medway (probably Terrace 1) underlie the site, it is likely that they were deposited during the cooling phase leading into MIS 6, this was the beginning of a period that saw a long absence of hominins in Britain (c. 100 000 years).

The archaeological evaluation has assessed the archaeological potential of land intended for development. The results from this work will be used to aid and inform the Senior Archaeological Officer of any further archaeological mitigation measures that may be necessary in connection with any future development proposals.

District/Unitary: Maidstone Borough Council

Period(s): NA
NGR (centre of site to eight figures) NGR 574174 158602
Type of Archaeological work: Archaeological Evaluation
Date of recording: October 2022
Unit undertaking recording: Ravelin Archaeological Services
Geology: Lower Cretaceous sediments of the Wealden Beds, Atherfield Clay, Hythe Beds,
Sandgate Beds, Folkestone Beds and Gault Clay
Title and author of accompanying report: Britchfield, D & Knowles, P, (2022) Archaeological
Monitoring and Recording at CSG Aylesford, Forstal Road, Aylesford, Kent. Ravelin Archaeological
Services Report Ref: 33271.02
Location of archive/finds: Ravelin Archaeological Services. Rochester, Kent
Contact at Unit: David Britchfield
Date: 19/10/2022

12 APPENDIX 4 – OASIS RECORD

OASIS ID (UID): ravelina1-510626

Project Name: CSG Aylesford, Forstal Road, Aylesford, Kent: Pleistocene & Palaeolithic Evaluation Activity type: Archaeological Intervention Project Identifier(s): CSG Aylesford, Forstal Road, Aylesford, Kent: Pleistocene & Palaeolithic **Evaluation Report** Planning Id: MA/22/502575 Reason for Investigation: Planning: Post determination Organisation Responsible for work: Ravelin Archaeological Services Project Dates: 01-Oct-2022 - 01-Nov-2022 HER: Kent HER HER Identifiers: [no data] Project Methodology: Archaeological/Geoarchaeological Evaluation Project Results: Ravelin Archaeological Services (RAS) has been commissioned by Cleansing Service Group (the Client), to undertake a programme of archaeological works during the proposed development at CSG Aylesford, Forstal Road, Aylesford, Kent. The works have been carried out as part of a planning application condition requiring an evaluation in order to further characterise the potential archaeological impact from any proposed development. The archaeological evaluation has been successful in evaluating the proposed development site for the possibility of archaeological remains. The evaluation established that Pleistocene gravels and sands of a low terrace of the River Medway (probably Terrace 1) underlie the site, it is likely that they were deposited during the cooling phase leading into MIS 6, this was the beginning of a period that saw a long absence of hominins in Britain (c. 100 000 years BCE). The archaeological evaluation has assessed the archaeological potential of land intended for development. The results from this work will be used to aid and inform the Senior

connection with any future development proposals.

Keywords:

Archive:

Reports in OASIS:

Britchfield, D. and Knowles, P., (2022). CSG Aylesford, Forstal Road, Aylesford, Kent: Pleistocene & Palaeolithic Evaluation Report. Rochester, Kent: Ravelin Archaeological Services

Archaeological Officer of any further archaeological mitigation measures that may be necessary in

41