NEWBEECH HOUSE, LONG READINGS LANE, SLOUGH, BERKSHIRE.

NGR: SU 95643 82808

ARCHAEOLOGICAL EVALUATION

January 2012 Report No. 771

Quality Assurance

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Author: A. Hood

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Approved: R. King

QA Checked: D. King

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109 Albion Street, Swindon, SN1 5LP Tel: 01793 525993 Fax: 01793 529403

Email: admin@foundations.co.uk

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Site name: Newbeech House, Long Readings Lane, Slough

Site code: NHS11

Grid reference: SU 95643 82808

Site activity: Excavation of archaeological evaluation trenches and

associated geoarchaeological test pits

Date of fieldwork: 7th December 2011 to 9th December 2011

Site area: 2000m^2

Project manager: Andrew Hood
Site supervisor: Rob Hedge
Archive location: to be advised
Accession code: to be advised

SUMMARY

An archaeological evaluation was undertaken by Foundations Archaeology on land at Newbeech House, Long Readings Lane, Slough (NGR: SU 95643 82808) in response to a condition attached to outline planning permission **S/00671/000**.

The evaluation comprised the excavation of eight trenches, with associated geoarchaeological test pits, across the development area. The trenches were excavated to the top of archaeological deposits or the natural substrates, whichever was encountered first. Subsequently, the test pits were excavated into the natural substrates, in order to determine the geoarchaeological potential of the site.

No archaeological features or finds were present within the evaluation trenches. A lack of intact subsoils in the general area of the former Newbeech House indicated that the majority of the site had previously been stripped to the top of natural gravel substrates. Severe truncation of the gravels was noted in Trench 3, within the footprint of the former Newbeech House.

Geoarchaeological test pitting identified the presence of stratified Pleistocene deposits; which comprised sand, overlaid by grey clay, which was, in turn, sealed by gravels.

GLOSSARY OF ARCHAEOLOGICAL TERMS AND ABBREVIATIONS

Archaeology

For the purpose of this project archaeology is taken to mean the study of past human societies through their material remains from prehistoric times to the modern era. No rigid upper date limit has been set, but AD 1900 is used as a general cut-off point.

CBM

Ceramic building material.

Medieval

The period between the Norman Conquest (AD 1066) and c. AD 1500.

Natural

In archaeological terms this refers to the undisturbed natural geology of a site.

NGR

National Grid Reference from the Ordnance Survey Grid.

OD

Ordnance datum; used to express a given height above sea-level.

OS

Ordnance Survey.

Post-medieval

The period from c. AD 1500 onwards.

Pleistocene

The epoch from c. 2,500,000 to c. 12,000 years BP that spans repeated glaciations.

Prehistoric

The period prior to the Roman invasion of AD 43. Traditionally sub divided into; Palaeolithic – c. 500,000 BC to c. 12,000 BC; Mesolithic – c. 12,000 BC to c. 4,500 BC; Neolithic – c. 4,500 BC to c. 2,000 BC; Bronze Age – c. 2,000 BC to c. 700 BC; Iron Age – c. 700 BC to AD 43.

Romano-British

Term used to define the fusion of indigenous Iron Age traditions with invasive Roman culture. Traditionally dated AD 43 to *c.* AD 410.

1 INTRODUCTION

- 1.1 In December 2011 Foundations Archaeology undertook an archaeological evaluation on land at Newbeech House, Long Readings Lane, Slough (NGR: SU 95643 82808). The work was commissioned by Slough Borough Council in response to an archaeological condition attached to outline planning permission S/00671/000. The application proposal comprises the demolition of Newbeech House and the subsequent construction of a residential development.
- 1.2 The evaluation was undertaken in accordance with the Written Scheme of Investigation (WSI) prepared by Foundations Archaeology (2011). The WSI was prepared in accordance with the standard brief issued by Berkshire Archaeology, the *Standard and Guidance for Archaeological Evaluation* issued by the Institute for Archaeologists (2008), Archaeological Guidance Paper 4: *Archaeological Evaluation:* (guidelines) issued by English Heritage (London Region) and *General Standards for Fieldwork Projects* (Berkshire Archaeology n.d.).
- 1.3 This document presents the findings of the archaeological evaluation and conforms to the specification set out in MoRPHE (English Heritage 2006).

2 BACKGROUND

- 2.1 The site is located to the east of Long Readings Lane, immediately north of Beechwood School. The underlying geology comprises floodplain terrace gravels.
- 2.2 Archaeological excavations related to quarrying, on various sites nearby, have revealed good survival of below-ground deposits from the Prehistoric through to the Medieval periods. An independent desk based assessment, carried out in the area, states that the terrace gravels have the potential for archaeological remains of Palaeolithic date.
- 2.3 The main archaeological potential of the site was, therefore, for the presence of evidence relating to the Palaeolithic period. This did not prejudice the evaluation against features and finds associated with other periods.
- 2.4 Prior to the archaeological site works, the former Newbeech House was demolished, in advanced of the proposed development. An area at the east of the site was demarcated by Heras fencing and contained trees and a large landscaped mound. At an on-site meeting with Khedapa Mukarram of Slough Borough Council and Dave Hepper of J. Mould Demolition, it was confirmed that this area was not available for evaluation at this stage.

3 AIMS

- 3.1 The aims of the archaeological evaluation were to gather high quality data from the direct observation of archaeological deposits in order to provide sufficient information to establish the nature, extent, preservation and potential of any surviving archaeological remains; as well as to make recommendations for management of the resource, including further archaeological works if necessary. In turn this would allow reasonable planning decisions to be taken regarding the archaeological provision for the areas affected by the proposed works.
- 3.2 These aims were achieved through pursuit of the following specific objectives:
 - i) to determine the existence or absence of any archaeological remains; and should remains be found to be present, to assess their general nature and significance;
 - ii) to determine or confirm the approximate date or date range of the remains by means of artefactual or other evidence;
 - iii) to determine or confirm the approximate extent of the remains;
 - iv) to determine the condition and state of preservation of the remains;
 - v) to determine the degree of complexity of the horizontal and/or vertical stratigraphy present;
 - vi) to assess the associations and implications of any remains encountered with reference to the historic landscape;
 - vii) to determine the implications of the remains with reference to economy, status, utility and social activity;
 - viii) to determine or confirm the likely range, quality and quantity of the artefactual evidence present;
 - ix) to determine the potential of the site to provide palaeoenvironmental and/or economic evidence and the forms in which such evidence may be present.
- 3.3 When archaeologically significant remains were revealed the following mitigation objectives were pursued:
 - i) where possible, to preserve *in-situ* any archaeological remains or, if this was not possible, to preserve by record to the highest possible standard;
 - ii) to identify where archaeological remains of exceptional significance are present in order that they might adequately be dealt with.

4 METHODOLOGY

4.1 Evaluation Trenches

- 4.1.1 A total of eight 10m by 1.8m evaluation trenches were to be excavated, as shown in Figure 2. Trenches 1, 2, 6 and 7 were re-located due to on-site constraints. The excavation of Trench 3 was abandoned due to the presence of deep and unstable Modern in-fill deposits. All amendments to the trenching methodology were agreed, on site, with the representative of Berkshire Archaeology.
- 4.1.2 All mechanical excavation was undertaken by use of an appropriate machine equipped with a toothless grading bucket, whilst under the constant direction of an experienced archaeologist.
- 4.1.3 Non-significant overburden was removed to the top of archaeological deposits or natural ground, whichever was encountered first, in a series of level spits. Thereafter cleaning and excavation was conducted by hand.

4.2 Geoarchaeological Test Pits

- 4.2.1 Geoarchaeological test pits were excavated, within the confines of the evaluation trenches, into undisturbed natural deposits. The excavation was undertaken by use of an appropriate mechanical excavator, under the constant direction of a geoarchaeologist. The test pits were located in order to attempt to provide a representative sample of the spatial distribution of underlying deposits across the site.
- 4.2.2 Each test pit was approximately 2.5m long by 1.8m wide at the top and was excavated, within relevant safety constraints, to the base of the geoarchaeological sequence, or the mechanical excavator's maximum working depth, whichever was encountered first.
- 4.2.3 Geoarchaeological deposits with the potential to contain archaeological artefacts and/or ecofacts were subjected to on site shovel sieving by an archaeologist with a good working knowledge of Palaeolithic finds types.
- 4.3 All excavation and recording work was undertaken in accordance with the WSI and the Foundations Archaeology Technical Manual 3: Excavation Manual.

5 RESULTS

5.1 A full stratigraphic description of all contexts identified in the course of the evaluation trenching is given in Appendix 1, along with a report on the geoarchaeological test pits in Appendix 2 and a report on the flints recovered from the test pits in Appendix 3. A summary discussion is given below:

- 5.2 No archaeological features or finds were present within the evaluation trenches. A lack of intact subsoils in the general area of the former Newbeech House indicated that the majority of the site had previously been stripped to the top of natural gravel substrates. Severe truncation of the gravels was noted in Trench 3, within the footprint of the former Newbeech House.
- 5.3 The geoarchaeological test pits revealed a clear sequence of stratified Pleistocene layers, comprising sand (Unit I) overlaid by grey clay (Unit II), which was, in turn, sealed by gravel (Unit III). These deposits are possibly representative of cold (Unit I) warm (Unit II) cold (Unit III) conditions.
- 5.4 The geoarchaeological sequences preserved at the site are representative of those commonly found within the Middle Thames area and, consequently are not exceptional; however, the grey clay (Unit II) is not described on other sites in the general vicinity and may be of local significance. This layer could perhaps be indicative of the position of interglacial sediments and, possibly, associated land surfaces, within the site area.
- 5.5 None of the sampled flints showed evidence of deliberate working and were either natural pieces of gravel, or had breaks and/or flake scars that were caused by the mechanical excavator.

6 CONCLUSIONS

- 6.1 The evaluation trenching has indicated a low potential for the presence of archaeological features situated above, or cut into, the top of the natural gravel deposits.
- 6.2 Geoarchaeological test pitting has identified the presence of stratified Pleistocene deposits; which comprised sand, overlaid by grey clay, which was, in turn, sealed by gravels. Although no artefacts were recovered from the test pits, previous work in the vicinity of the site has indicated that these deposits have a high potential for the preservation of Palaeolithic remains.
- 6.3 It is recommended that any subsequent development groundworks, which have the potential to impact upon the Pleistocene deposits, be monitored by a suitably experienced archaeologist with appropriate input from a Palaeolithic specialist. The monitoring should be undertaken in accordance with an agreed WSI, which contains a detailed, site specific artefact and palaeoenvironmental sampling methodology.
- 6.4 The archive is currently held at the offices of Foundations Archaeology, but will be deposited within 12 months with the appropriate museum. A short note will be submitted for publication in a relevant journal and an OASIS form will also be submitted to ADS.

7 BIBLIOGRAPHY

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8 ACKNOWLEDGEMENTS

Foundations Archaeology would like to thank Khedapa Mukarram, Jeff Owen and Howard Albertini of Slough Borough Council and Mary Neale of Berkshire Archaeology for their assistance during the course of this project. The fieldwork was undertaken by Rob Hedge, Martin Bates and Jack Crennell.

APPENDIX 1: Evaluation Trench Stratigraphic Data

СХТ	L(m)	W(m)	D(m)	DESCRIPTION	CUTS/LATER THAN	CUT BY/EARLIER THAN
				EVALUATION TRENCH 1: 10m long by 1.8m wide.		
101	na	na	1.1	Clay and gravel mix, which contained frequent pieces of plastic and fragments of concrete.	natural gravels	na
				No archaeological features or finds within the trench.		
				Levels: top of natural gravels NE end of trench = 48.14mOD, SW end = 48.20mOD.		
				EVALUATION TRENCH 2: 10m long by 1.8m wide.		
201	na	na	1	Clay and gravel mix, which contained frequent pieces of plastic and brick fragments.	natural gravels	na
				No archaeological features or finds within the trench.		
				Levels: top of natural gravels W end of trench = 48.34mOD, E end = 48.10mOD.		
				EVALUATION TRENCH 3: 2.5m long by 1.8m wide.		
301	na	na	1.5	Mixed Modern in-fill deposits.	?	na
				Excavation of trench abandoned due to unsafe sections.		
				No archaeological features or finds within the trench.		
				Level: top of trench = 49.36mOD.		
				EVALUATION TRENCH 4: 10m long by 1.8m wide.		
401	na	na	0.2	Topsoil; grey brown silt sand.	402	na
402	na	na	0.3	Grey silt sand, which contained occasional gravel.	403	401
403	na	na	0.5	Grey silt sand, which contained frequent gravel.	natural gravels	402
				No archaeological features or finds within the trench.		
				Levels: top of natural gravels SW end of trench = 49.02mOD, NE end = 49.08mOD.		

СХТ	L(m)	W(m)	D(m)	DESCRIPTION	CUTS/LATER THAN	CUT BY/EARLIER THAN
				EVALUATION TRENCH 5: 10m long by 1.8m wide.		
501	na	na	8.0	Clay and gravel, which contained frequent pieces of plastic and fragments of brick.	natural gravels	na
				No archaeological features or finds within the trench.		
				Levels: top of natural gravels N end of trench = 48.52mOD, S end = 48.96mOD.		
				EVALUATION TRENCH 6: 10m long by 1.8m wide.		
601	na	na	1.07	Clay and gravel, which contained occasional pieces of concrete.	natural gravels	na
				No archaeological features or finds within the trench.		
				Levels: top of natural gravels S end of trench = 48.87mOD, N end = 48.38mOD.		
				EVALUATION TRENCH 7: 10m long by 1.8m wide.		
701	na	na	0.7	Clay and gravel, which contained frequent fragments of brick and tarmac, along with pieces of plastic.	natural gravels	na
				No archaeological features or finds within the trench.		
				Levels: top of natural gravels SW end of trench = 49.09mOD, NE end = 48.57mOD.		
				EVALUATION TRENCH 8: 10m long by 1.8m wide.		
801	na	na	0.9	Clay and gravel, which contained frequent fragments of concrete and tarmac, along with pieces of plastic.	natural gravels	na
				No archaeological features or finds within the trench.		
				Levels: top of natural gravels S end of trench = 48.59mOD, N end = 48.11mOD.		

APPENDIX 2: Geoarchaeological Test Pit Report

By Dr Martin Bates

School of Archaeology, History and Anthropology University of Wales

Methods

- 1. Eight test pits were excavated by machine with a toothed bucket under the supervision of a suitably qualified geoarchaeologist. A toothed bucket was used due to the dense, compact nature of the gravels. The excavation of Test Pit 3 was abandoned due to the presence of deep and unstable Modern in-fill deposits, which were present to a depth of at least 1.5m below the top of the Modern ground surface.
- 2. Excavation of the test pits proceeded from the base of the trench in a controlled manner removing spits of approximately 20cm thickness in sequence to the base of the excavation.
- 3. Stratigraphy was recorded using standard geological terminology and by measuring from the ground surface. Detailed descriptions are presented in Table 1.
- 4. Excavations ceased when the pits encountered water, sides collapsed or the maximum reach of the machine/base of the geological sequence was reached.
- 5. A representative of Foundations Archaeology undertook a photographic record of each test pit.
- 6. Representative samples of key stratigraphic units were taken for examination for artefacts. 100 litres of each spit taken was examined with a trowel for any contained artefacts.
- 7. Small samples were taken from one trench to check for the presence of microfaunal material.

Results

The evidence from the trenches indicate that three main sediment types are present across the site area. These consist of:

- 1. Coarse (usually) red brown flint gravels that are typically matrix supported. The gravels consist of (usually) poorly sorted clasts, rounded to sub-angular in shape and typically rolled. These are designated Unit III.
- 2. Yellow to brown sands (sometimes slightly clayey towards top). Occasionally bedded and occasionally containing evidence of rooting. These are designated Unit I.

3. Grey clays (sometimes containing gravel clasts and with evidence for rooting). These are designated Unit II.

These sequences were not observed to contain any macro-faunal remains (bones, molluscs etc.) although samples for assessment of micro-faunal material were taken from Test Pit 5.

Three broad environments of deposition are probably represented by sediments:

- 1. Flint gravels (Unit III) probably represent deposition under moderate to high energy conditions in braided channel conditions. Typically these are likely to represent cold climate environments associated with periglacial conditions.
- 2. Sands (Unit I) were probably deposited under medium energy conditions within channels, possibly as bar forms. Cool to cold climate conditions are inferred as for the gravels.
- 3. Clays (Unit II) probably represent deposition on or within the floodplain under low energy conditions. It is possible that these conditions existed during temperate episodes in the past, possibly interglacial conditions.

The sediments also indicate a clear stratigraphic order with the following sequence noted:

- 1. Sands (Unit I) at the base of nearly all test pits.
- 2. Clays (Unit II) overlying these basal sands in TP 5.
- 3. Gravels (Unit III) overlying the basal sands or the clays above the basal sands (where present).

Conclusions

The sequences preserved at the site are representative of those commonly found within the Middle Thames area and consequently are not exceptional. The absence of any obvious faunal remains or artefacts cannot be used to ascertain significance to the site.

The nature of the stratigraphic sequence indicates the possibility that a cold (I)-warm (II)-cold (III) tripartite sandwich of deposits is preserved which would be in keeping with models proposed for sequence development within the area by workers such as Bridgland (1994, 2006) or Gibbard (1985).

Comparison of the sequences here with the evidence described by Gibbard (1985) or Wymer (1968) suggests that the main grey clay (Unit II) recorded here is not described elsewhere and may be of local significance and perhaps indicative of the position of the interglacial sediments (?and associated landsurfaces) within the site area.

Recommendations for additional work

It is suggested that processing of the four small pinch samples taken from Test Pit 5 are assessed for microfaunal presence. If a presence of any remains is demonstrated

further sampling of the clay unit (II) where impacted on by development should be seen as a priority.

Further works on site should also be determined on the basis of the design footprint in relationship to the distribution of the gravels. It is not considered likely that gravels in the vicinity of test pits that did not contain artefacts are devoid of artefacts simply that none were recovered during sampling. Consequently any impact on the gravels may require further sampling of the gravels to provide an adequate sample of artefacts presence.

References

Bridgland, D.R. 1994 Quaternary of the Thames. Chapman & Hall, London. Bridgland, D.R. 2006 The Middle and Upper Pleistocene sequence in the Lower Thames: a record of Milankovitch climatic fluctuation and early human occupation of southern Britain. Proceedings of the Geologists' Association 117, 281 – 306. Gibbard, P.L. 1985 Pleistocene history of the Middle Thames Valley. Cambridge University Press, Cambridge.

Wymer, J.J. 1968 Lower Palaeolithic Archaeology in Britain as represented by the Thames Valley. John Baker: London.

Table 1: Geoarchaeological Test Pit Logs

Depth below base of	Lithology	Inferred environment of deposition	Unit
Trench 1 (m)			
0.00 – 0.65	Strong reddish brown flint gravel. Matrix supported with medium to coarse sand and some clay. Clasts are <1cm to >5cm, rounded to subangular and rolled. Structureless and massive. sharp contact	High energy fluvial, probably braided channel environment under cool to cold conditions	III
0.65 - 0.70	Strong red brown medium to coarse sand.	Moderate to high energy fluvial, possibly sand bars in braided channel environment. Probably cool to cold conditions.	I
	sharp contact		
0.70 - 0.73	Grey clayey sand.	Moderate to low energy fluvial floodplain	I
	sharp contact		
0.73 - 0.83	Strong reddish brown sand with gravel clasts. Clasts <5cm, sub-angular and rolled.	Moderate to high energy fluvial, possibly sand bars in braided channel environment. Probably cool to cold conditions.	I
	sharp contact		
0.83 – 0.87	Strong red brown medium sand.	Moderate to high energy fluvial, possibly sand bars in braided channel environment. Probably cool to cold conditions.	I
	sharp contact		
0.87 - 0.89	Grey clayey sand.	Moderate to low energy fluvial floodplain	I
	sharp contact		
0.89 – 1.90	Strong brown to red brown sand with black manganese staining. Very soft and structureless	Moderate to high energy fluvial, possibly sand bars in braided channel environment. Probably cool to	I

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	with occasional patches of grey clayey sand. Coarsens downwards into gritty sand with small flint clasts (<0.5cm)diffuse contact	cold conditions.	
1.90 – 3.30	Strong brown to red brown sand with black manganese staining. Very soft and structureless with occasional patches of grey clayey sand.	Moderate to high energy fluvial, possibly sand bars in braided channel environment. Probably cool to cold conditions.	I
3.30 – 3.50	Sand with patches of strong red claybase of trench	Mixed bedrock with Pleistocene sands.	I
Spits sampled	Trench base exceeded reach of machine bucket. S1, 1.80-1.95m		

Depth below base of	Lithology	Inferred environment of deposition	Unit
Trench 2 (m)			
0.00 - 0.40	Strong reddish brown gravel. Matrix supported with medium sand. Clasts are <1cm to >8cm, rounded to subangular and rolled. Moderately compact.	High energy fluvial, probably braided channel environment under cool to cold conditions	III
	sharp contact		
0.40 – 0.90	Medium to coarse yellow red bedded sands. Fine bedding, beds c.0.5cm thick, parallel and laminar. Occasional thicker reddened horizons in places.	Moderate to high energy fluvial, possibly sand bars in braided channel environment. Probably cool to cold conditions.	III
	sharp contact		
0.90 – 1.10	Reddish brown fine gravel. Clasts <3cm, sub-angular. Matrix supported, medium sand matrix.	High energy fluvial, probably braided channel environment under cool to cold	III

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		conditions	
	sharp contact		
1.10 – 1.11	Grey clay. Occasional small (<4cm), sub-angular, rolled clasts. Dense network of fine, branching root canals.	Low energy floodplain, possibly weathered surface	III
	sharp contact		
1.11 – 1.40	Grey brown medium to coarse sand. Structureless and massive.	Moderate to high energy fluvial, possibly sand bars in braided channel environment. Probably cool to cold conditions.	III
	sharp contact		
1.40 – 2.20	Red brown gravel with clasts from 2cm to >10cm, sub- angular to rounded and rolled. Medium sand matrix, matrix supported.	High energy fluvial, probably braided channel environment under cool to cold conditions	III
	sharp contact		
2.20 – 2.60	Grey brown medium sand.	Moderate to high energy fluvial, possibly sand bars in braided channel environment. Probably cool to cold conditions.	I
	base of trench		
	Bottom of trench too loose and unconsolidated to dig further.		
Spits sampled	S1, 1.45-1.55m		
- -	S2, 1.90-2.05m	7	

TEST PIT 4

Depth below base of	Lithology	Inferred environment of deposition	Unit
Trench 4 (m)		-	
0.00 – 0.90	Reddish-brown flint gravel. Very loose and unconsolidated. Very poorly sorted with clasts <1cm to >8cm, mixed subangular to rounded. Well rolled. Matrix supported with medium sand matrix. With depth gravel clasts become coarser but also decrease in frequency.	High energy fluvial, probably braided channel environment under cool to cold conditions	III
	abrupt contact		
0.90 – 1.10	Grey to yellowish brown coarse sand. Soft and unconsolidated.	Moderate to high energy fluvial, possibly sand bars in braided channel environment. Probably cool to cold conditions.	I
	sharp contact		
1.10 – 1.60	Grey very coarse sand with some red brown sandy patches.	Moderate to high energy fluvial, possibly sand bars in braided channel environment. Probably cool to cold conditions.	Ι
	abrupt contact		
1.60 – 2.20	Grey brown gravlley sand with a few very large flint clasts (>15cm). Firm, dense and compact.	Moderate to high energy fluvial, possibly sand bars in braided channel environment. Probably cool to cold conditions.	Ι
	abrupt contact		
2.20 – 2.90	Yellowish brown slightly clayey sand. Structureless and massive. No clasts visible.	Moderate to high energy fluvial, possibly sand bars in braided channel environment. Probably cool to cold conditions.	Ι
	base of trench		

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	Reached end of machine arm reach	
Spits sampled	S1, 0.00-0.15m	
	S2, 0.50-0.65m	
	S3, 1.60-1.85m	
	S4, 2.00-2.15m	

Depth below base of	Lithology	Inferred environment of deposition	Unit
Trench 5 (m)			
0.00 – 1.60	Mid reddish brown very coarse flint gravels. Clasts 2->20cm, rounded to sub-angular and all rolled. Burrow flint common. Coarse to medium sand matrix. Relatively loose and unconsolidated. Grey patches of sand in places – appears mixed together.	High energy fluvial, probably braided channel environment under cool to cold conditions.	III
	sharp/undulating/dipping across trench		
1.60 – 2.60	Grey clay with brown mottles. Very dense, compact and firm.	Low energy floodplain surface.	II
	diffuse contact		
2.60 – 2.70	Pale yellow brown soft medium sand. Structureless and loose.	Moderate to high energy fluvial, possibly sand bars in braided channel environment. Probably cool to cold conditions.	I
	base of trench		
	Base of trench at maximum reach of machine bucket.		
Spits sampled	S1, 0.20-0.35m		
	S2, 0.70-0.85m		

S3, 1.20-1.25m	

Depth below base of	Lithology	Inferred environment of deposition	Unit
Trench 6 (m)			
0.00 – 0.45	Strong reddish brown flint gravel. Relatively well sorted with clasts 1-6cm, rounded to sub-angular and rolled. Matrix of medium sand. Structureless and loose.	High energy fluvial, probably braided channel environment under cool to cold conditions.	III
	diffuse contact		
0.45 – 1.25	Greyish brown to reddish brown sandy gravel. Poorly sorted, with clasts <6cm. Coarse sand matrix. Becomes grey brown colour with depth.	High energy fluvial, probably braided channel environment under cool to cold conditions.	III
	abrupt contact		
1.25 – 2.65	Grey clay-silt with brown clayey sand in patches. Moderately cohesive and firm. Sand becomes finer with depth.	Moderate energy fluvial (perhaps low energy floodplain at surface), possibly sand bars in braided channel environment. Probably cool to cold conditions.	II
	abrupt contact		
2.65 – 2.85	Mid brown sand with stiff reddish clay.	Possible mixed zone of bedrock and Pleistocene sands.	Ι
	base of trench		
	Trench depth exceeded reach of machine.	_	
Spits sampled	S1, 0.00-0.15m		
	S2, 0.50-0.65m	7	
	S3, 0.85-1.00m]	

Depth below base of	Lithology	Inferred environment of deposition	Unit
Trench 7 (m)			
0.00 – 1.98	Strong reddish brown very coarse flint gravel. Clasts 1cm to >20cm. Unit is clast supported with medium to coarse sand matrix. Very loose and unconsolidated. With depth unit becomes coarser and dark red in colour.	High energy fluvial, probably braided channel environment under cool to cold conditions.	III
	sharp contact		
1.98 – 3.50	Greyish brown clayey sand. Very clean and no clasts. Moderately compact and firm. Possibly finely laminated in places. Becomes looser and less well consolidated with depth.	Moderate to high energy fluvial, possibly sand bars in braided channel environment. Probably cool to cold conditions.	I
	base of trench		
	Base of test pit exceeded reach of machine bucket		
Spits sampled	S1, 0.00-0.15m S2, 0.30-0.45m		
	S3, 0.70-0.85m		

TEST PIT 8

Depth below base of	Lithology	Inferred environment of deposition	Unit
Trench 8 (m)			
0.00 - 0.60	Dark brown to reddish brown coarse flint gravel. Matrix supported, poorly sorted (<1cm to >20cm), clasts are subangular to rounded and rolled. Loose and unconsolidated.	High energy fluvial, probably braided channel environment under cool to cold conditions.	III
	abrupt contact		

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0.60 - 0.70	Yellow brown to grey brown sandy gravel (similar to above)	High energy fluvial, probably braided	III
	but with occasional clay patches.	channel environment under cool to cold	
		conditions.	
	sharp contact		
0.70 - 2.10	Mid brown to yellowish brown clayey sand. Clay content decreases with depth. Possibly bedded. Soft and	Moderate to high energy fluvial, possibly sand bars in braided channel environment.	I
	unconsolidated.	Probably cool to cold conditions.	
	base of trench		
	Base of trench exceeds reach of machine bucket.		
Spits sampled	S1, 0.00-0.15m		
	S2, 0.30-0.45m		
	S3, 0.60-0.75m		

APPENDIX 3: The Flints Report

By Dr Francis Wenban-Smith

Department of Archaeology (CAHOR - Centre for Applied Human Origins Research) University of Southampton

Introduction

A collection of lithic material (n=13 pieces) was received from field evaluation at Newbeech House, Slough. This report analyses the received pieces, and considers the Palaeolithic potential of the site.

Background

According to current geological mapping (British Geological Survey 1990) the development plot is underlain by Pleistocene Thames Terrace gravels, attributed to the Boyn Hill Terrace. It has been recognised since the early-mid 20th century that these deposits can be divided into higher and lower groups, and that the site is underlain by the lower group, attributed since the 1980s to the Lynch Hill Terrace of the Middle Thames (Gibbard 1985).

This terrace has long been a very prolific source of Lower/Middle Palaeolithic material, containing some of Britain's richest sites and producing some of Britain's finest Palaeolithic artefacts. One particularly prolific site – Baker's Farm Pit (SU 958 827) – was within c. 300 metres of the site (Wessex Archaeology 1996: 70, map MTV2 site 45), and produced abundant material, including handaxes and flakes towards the base of the gravels and Levalloisian material towards their top (Lacaille 1940; Wymer 1968: 239-241). Further Palaeolithic remains were later recovered in the 1950s from drainage trenches dug in the same deposits in the road network in the vicinity of the site (Wessex Archaeology 1996: 70, map MTV 2 site 43).

Test pits and lithic sampling

Seven test pits were dug, distributed evenly around the site and mostly 3-4 metres deep. Pleistocene terrace deposits were present in all test pits with the base of the Pleistocene sequence not being reached in any. The Pleistocene deposits were divided into three units I-III (M. Bates' geoarchaeological report) with, upwards from the base: the lower unit I being a predominantly sand deposit; the middle unit II being a clayey deposit, only present in TP5; and the upper unit III being coarse gravels that were present in most test pits. A representative selection of 100 litre samples was taken and sorted through for lithic artefacts from all of the test pits (**Table 2**).

In total, 16 samples were examined from the unit III gravel, and 3 samples from the unit I sands, from which 13 pieces of flint were collected and sent for specialist analysis. None of the material recovered was a Palaeolithic artefact. All of the pieces sent for analysis were either natural pieces of gravel, or had breaks and/or flake scars that were so exceedingly fresh that it is certain they were caused by the mechanical excavator, rather than Palaeolithic knapping.

Discussion and recommendations

Despite the absence of Palaeolithic evidence, the Pleistocene gravels under the site must be regarded as of high potential if impacted by development, particularly at their deeper levels. The prolific and significant site of Baker's Farm Pit is very close, besides the record of further Palaeolithic remains from drainage trenches in the vicinity of the site.

It is possible that the lack of systematic sieving of the gravel samples reduced the chances of finding lithic artefacts, although the adopted method of trowel-sorting is normally reasonably reliable as an alternative. Furthermore, previous finds at Baker's Farm Pit were often reported from towards the base of the sequence (Lacaille 1940), so it is possible that the richest part of the deposit was not reached by the field evaluation, which did not reach the bottom of the Pleistocene sequence.

It is, therefore, recommended that monitoring be undertaken by a Palaeolithic specialist of any future excavations into the Pleistocene deposits during development, particularly where the impact is of greatest depth, to look for any Palaeolithic artefacts and to make additional geological records.

Summary

No Palaeolithic artefacts were recovered by the field evaluation, despite a systematic investigation of the Pleistocene deposits that underlay the site. This was puzzling as the same deposits have previously produced abundant remains in the vicinity. Therefore, despite this absence of evidence, it is recommended that monitoring for Palaeolithic remains be carried out of any deeper impact into the terrace deposits at the site.

References

British Geological Survey. 1990. *Beaconsfield. England and Wales Sheet 255. Solid and Drift Geology.* 1:50,000. British Geological Survey, Keyworth, Nottingham.

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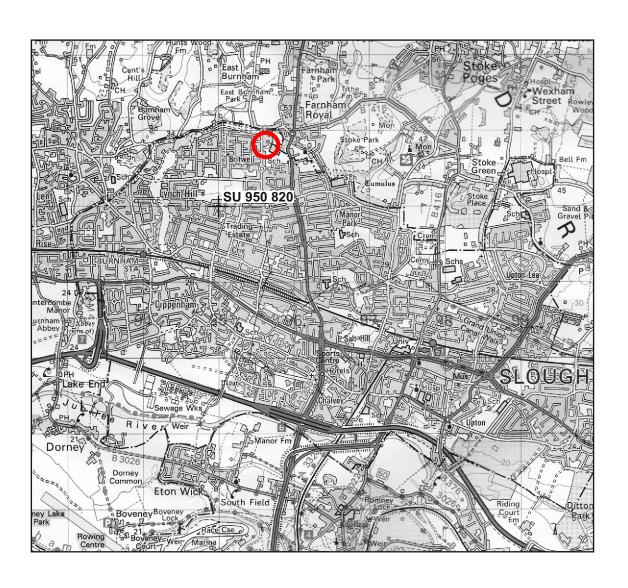
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Wessex Archaeology. 1996. English Rivers Palaeolithic Project, Report No. 1 — The Thames Valley and the Warwickshire Avon. Wessex Archaeology, Salisbury.

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Table 2. Lithic material from deep test pits 1-8

		Sample		
Unit	TP	Sample-	Lithic material	
		spit	Lunic maieriai	
III	2	S1	-	
		S2	One v fresh chip, prob machine	
			One lump with natural scars + fresh scars from machine	
	4	S1	-	
		S2	-	
_	5	S1	-	
		S2	One v fresh chunk, prob machine	
		S3	-	
	6	S1	One well-abraded chip, natural gravel	
		S2	One v fresh chip, prob machine	
			One well-abraded chip, natural gravel	
		S3	-	
	7	S1	One natural lump	
		S2	Two well-abraded chips, natural gravel	
		S3	One well-abraded lump, natural gravel	
		0.5 –	One large natural lump	
		2.1 m		
	8	S1	-	
		S2	-	
		S3	-	
Ι	1	S1	One small v fresh flake, prob machine	
	4	S3	-	
		S4	One natural lump	

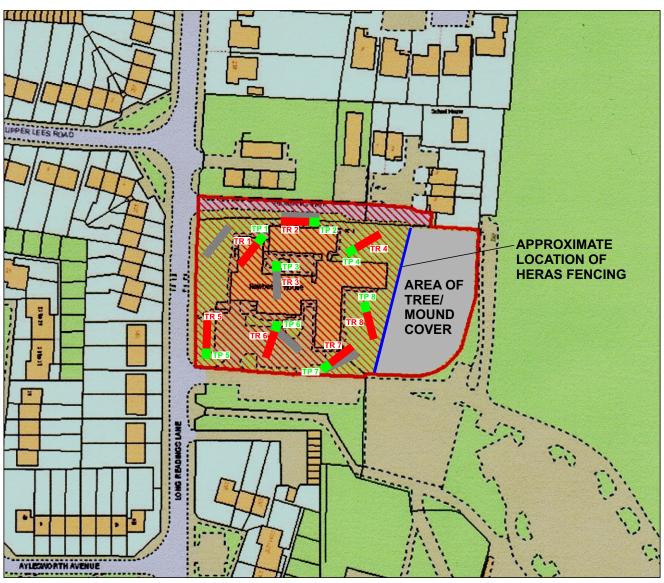


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FIGURE 1: Site Location



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