

1. ABSTRACT

An archaeological watching brief was carried out between 26th November and 3rd December 2007 at The Fastrack Site within Ingress Abbey, Greenhithe, Kent on behalf of Crest Nicholson. The aim of the watching brief was to record any archaeological remains uncovered during the excavation associated with the development. Palaeolithic activity has previously been observed in the area.

Natural chalk was observed throughout the site at a depth between 2.30m and 3.50m below surface level. The only archaeological feature observed was a well or soak away which is probably Victorian in date.

2 INTRODUCTION

Site Location

- 2.1 The site is located on the south bank of the Thames estuary, immediately to the east of the village of Greenhithe, Kent, and is centred on National Grid Reference (NGR) TQ 5882 7485.

Development Proposals

- 2.2 The proposed development will involve ground reduction for the route, including a cut and cover tunnel, that will impact upon 18th century garden features, as well as possible Roman features and potential Palaeolithic deposits within the parkland, and unknown potential along the route outside of the park. The 18th century garden features are The Grotto and the Cave of the Seven Heads. These are specific elements which have their own specific protection and conservation mitigation measures but monitoring of protection measures forms part of the overall scheme of archaeological works.

3 PLANNING BACKGROUND

- 3.1 The local planning authority is Dartford Borough Council. Archaeological advice to the council is provided by the Heritage Conservation Group of Kent County Council.
- 3.2 In accordance with Planning Policy Guidance: Archaeology and Planning (PPG 16) issued by the Department of the Environment in 1990 (DoE, 1990), an archaeological investigation is to be carried out as a condition of the planning permission (Application Nos.: (DA/98/00664 & DA/06/01226, DA/06/01274, DA/06/01256 & DA/06/01235).
- 3.3 An Archaeological Impact Assessment (AOC 1998) was initially produced in relation to development of the parkland for housing, and the ensuing work provided the archaeological and historical background, as well as revealing the

archaeological potential of the site. There has been no study regarding the impact of the Fastrack route on the Avenue.

4 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

Geology and Topography

- 4.1 The geology of the area indicates that the site is situated near the boundary between the Upper and Lower Trias, incorporating Kueper Marls, Sandstone, and Pebble Beds.
- 4.2 The site is located in a gently rolling landscape, approximately 1.5km northeast of Bourne Brook. The site is at c. 87m Ordnance Datum (OD).
- 4.3 Geotechnical investigations have been conducted within the proposed development area, in the form of six shallow boreholes. All six boreholes demonstrated similar profiles, with up to 0.4m of dark brown sandy topsoil, sitting over moderately compact brown or orangey sandy gravel (Austin Geotech 2006).

Archaeological Background

- 4.4 The following information is derived from the Report on the Results of Excavation and Recording (AOC 2004) and a specification for archaeological work provided by Kent County Council (KCC 2007).

Prehistoric

- 4.5 According to current geological mapping (British Geological Survey 1998) this area contains part of the Boyn Hill/Orsett Heath Pleistocene formation. This formation is preserved on the south side of the Lower Thames as an intermittent east–west trending band from Dartford Heath through Dartford, Stone, Greenhithe and Swanscombe to Northfleet. The deposits in the formation consist of a sequence of predominantly fluvial loam, sand and gravel units laid down by the ancient Thames in the post-Anglian interglacial period between c. 430,000 and 350,000 years BP (Before Present), corresponding with late Oxygen Isotope Stage 12 to early OI Stage 10 of the global framework (Bridgland 1994). These are overlain in places by younger colluvial and solifluction deposits, cutting down through them and filling northward-trending dry valleys and minor tributaries, which sometimes also contain their own systems of post-Boyn Hill/Orsett Heath fluvial deposits.
- 4.6 The Boyn Hill/Orsett Heath formation is rich in significant Palaeolithic archaeological remains, with quarrying activity at numerous locations having produced artefacts, faunal remains and other biological evidence relating to climate and environment. There are several major sites in the immediate vicinity of Ingress

Abbey, the most important of which are Barnfield Pit, the Globe Pit and Dierden's Yard

- 4.7 Barnfield Pit is less than 1km southeast of Ingress Abbey and is recognised as a site of international archaeological significance, as well as being a designated Site of Special Scientific Interest present within any surviving Boyn Hill Gravel deposits. Previous investigations at Ingress Park confirmed the potential of the gravels at this site. If such remains survive in an undisturbed, primary context, are particularly abundant or associated with well-preserved indicators of the contemporary environment, they could be regarded as nationally important and will be considered for preservation *in situ* according to the guidance set out in PPG16.
- 4.9 A Palaeolithic handaxe has been found at the Ingress Abbey site itself, by the collector Henry Stopes, whose collection is held at the National Museum of Wales, Cardiff. Stopes' catalogue (entry no. 751) records a find "in Embleton's garden at Ingress Abbey, Old Garden". This specimen is small, pointed and with a thick, crudely worked butt, typical of handaxes from the Swanscombe Middle gravels.
- 4.10 In April 2007 a 5 trench evaluation was carried out on this site (AOC 2007), test pits were dug into the gravels to investigate the presence of Palaeolithic flints. This did not reveal any significant archaeological remains.

Roman

- 4.11 A number of archaeological remains of Roman date have also been recorded in the area. Two parallel ditches were excavated in 1999 in advance of the development of Ingress Park for housing, and these are likely to have bound a settlement, either military or domestic in character. Roman building material from the ditches indicated that there had been a substantial building in the vicinity (Figure 3). Further Roman remains include a Roman burial (TQ 57 SE 56) found in the 19th century, probably in the quarry to the north of the Lodge at Ingress Abbey, and a denehole or ritual shaft (TQ 57 SE 20), found in the 19th century in the area to the southeast of the application site. This contained large quantities of animal bone, some Roman pottery and human skeletal remains. The remains of another Roman burial (TQ 56 SE 11) have been found immediately to the south.
- 4.12 The standard practice in the Roman world was for cemeteries to be dispersed outside the boundaries of a settlement. These were mostly located within view of the major roads.

Medieval

- 4.13 In 1363 Edward III founded Dartford Priory and endowed it with a farm called 'Ingryce' and a ferry at Greenhithe. It remained with the priory until the suppression of religious houses in 1538. References to the farm, chalk quarrying

and ferrying and lime firing exist for this period. Unfortunately, no more detailed information survives about activity of this date in the area, or how it may have manifested itself by way of buildings or structures.

Post-medieval

- 4.14 The surviving historic structures at Ingress Abbey largely date from the 18th Century, except for the abbey building, which was completed in 1833.
- 4.15 The earliest detailed illustration of the grounds at Ingress is a print by Badeslade (1720), dating to the ownership by Jonathan Smith between 1698 and 1737, who was Sheriff of Kent from 1721. A six-bay house set in a formal arrangement of walled gardens, parterres and avenues is shown.
- 4.16 In 1748, the house was conveyed to Viscount Duncannon, who became Earl of Bessborough in 1758. After the death of his wife and several children in 1760, the estate was sold to John Calcraft, a former army agent, later MP for Rochester. The impact on the landscape during the twelve years of Bessborough's ownership is not entirely clear from the documentary sources, but it is likely that some of the follies in the grounds were initiated by him, particularly the Cave of the Seven Heads, the south tunnel, and the Flint Cave (the grotto). Despite the differing styles of build between the rustic stonework of the Cave of the Seven Heads and the decorative flintwork of the Flint Cave, sources suggest a broad contemporaneity, since Bessborough reportedly had a collection of Roman alters which were displayed in a folly, and the flint Cave is the only likely location for a display.
- 4.17 By 1763, Lancelot (Capability) Brown was involved with the estate, and undertook works to the value of £1000 in two campaigns. These works involved the landscaping of the parkland to the northeast of the estate, approaches to the house through the grounds, and the sloping of the ground around the house itself. The Lodge at the entrance off London Road appears to have been present by 1798. These structures are Grade II listed.
- 4.18 The following historic landscape features are directly affected by this Fastrack scheme: a listed western boundary wall and traditional entrance into Ingress Abbey; The Lodge; The Grotto; and the Cave of the Seven Heads.
- 4.19 The date of the Avenue leading from London Road to Greenhithe waterfront is unproven, but is certainly present by 1769, as shown on a map by Andrews and Drury – A Topographical Map of the County of Kent. An earlier engraving from the 1720s, by Thomas Badeslade is very stylised, and concentrates more on Ingress Abbey itself. These two plans are produced in the Archaeological Impact Assessment (AOC 1998).

5 AIMS OF THE INVESTIGATION

- 5.1 The objective of the Watching Brief was to record the presence or absence of any archaeological deposits along the proposed Fastrack route which were to be disturbed by groundworks or piling. Initial works were intended to ascertain the extent, depth below ground surface, depth of deposit, character, significance and condition of any archaeological remains at the site.
- 5.2 General aims of the investigation were:
- a) to enable the Archaeology Advisor to make an informed decision on the status of the condition on the planning permission, and any possible requirement for further work in order to satisfy that condition.
 - b) to make available to interested parties the results of the investigation in order to inform the mitigation strategy as part of the planning process.

6 METHODOLOGY

- 6.1 An experienced archaeologist was present at the excavating of all groundworks.
- 6.2 All recording was in accordance with the standards and requirements of the *Archaeological Field Manual* (Museum of London Archaeology Service 3rd edition 1994).
- 6.3 All archaeological contexts was recorded individually on context record sheets. A further more general record of the work comprising a description and discussion of the archaeology was maintained as appropriate. These records continued from the numbering of the evaluation conducted in February 2007.
- 6.4 A plan to indicate the location of the boundaries of the excavated area and the site grid was drawn at a scale of 1:1250 or another suitable scale. Plans to indicate the locations of archaeological features were drawn at a scale of 1:100 (or other suitable scale) with more detailed plans as necessary. Detailed plans were drawn at a scale of 1:20, or 1:100 if appropriate and sections at a scale of 1:10. All detailed plans and sections were related to the 1:100 or 1:1250 plans. The 1:1250 and 1:100 plans were related to the National Grid.
- 6.5 All plans and sections were drawn on polyester based drafting film and each plan and/or section was clearly labelled.
- 6.6 A full black and white and colour (35mm transparency) photographic record of the work was kept. The photographic record is regarded as part of the site archive.
- 6.7 All artefacts recovered during the excavations on the site are the property of the Landowner. All identified finds and artefacts would be collected and retained. Certain classes of material, such as post-medieval pottery and building material,

may be discarded after recording if a representative sample is kept. No finds would be discarded without the prior approval of the archaeology advisor. They will be suitably bagged, boxed and marked in accordance with the *United Kingdom Institute for Conservation, Conservation Guidelines no. 2*. On completion of the archaeological post-excavation programme the Landowner would arrange for them to be deposited in a museum or similar repository agreed with the Local Planning Authority and the County Archaeologist.

7 RESULTS

- 7.1 The excavated areas have been divided into trenches to make the differentiation between them and the previous five evaluation trenches clear.

Trench 6

CONTEXT	THICKNESS	LENGTH	WIDTH	DESCRIPTION
6/001	0.30m	25.00m	2.00m	Dark, loose silt topsoil,
6/002	0.70m	25.00m	2.00m	Mid brown firm silty sand subsoil
6/003	0.10m	25.00m	2.00m	Naturally deposited gravel
6/004	2.50m	25.00m	2.00m	Naturally deposited sand
6/005	NFE	25.00m	2.00m	Natural chalk

- 7.3 This trench was excavated in the area of the intended roadway. Natural chalk (6/005) was reached 3.6m below surface level. Above the chalk natural sand (6/004) and natural gravel (6/003) were present. The gravel was sealed by a made layer (6/002) and in turn sealed by a made layer (6/001).
- 7.3 No archaeological remains were present in this trench.

Trench 7

CONTEXT	THICKNESS	LENGTH	WIDTH	DESCRIPTION
7/001	0.40m	12.00m	8.00m	Mid brown grey topsoil
7/002	0.50m	12.00m	8.00m	Pale yellow brown made ground
7/003	0.28m	12.00m	8.00m	sandy silt with chalk + flint, made ground
7/004	0.20m	12.00m	8.00m	Dark silt, buried topsoil
7/005	2.00m	12.00m	8.00m	Green brown orange sand, natural
7/006	NFE	12.00m	8.00m	Natural chalk

- 7.4 Trench 7 was excavated in the area of the intended road. The natural chalk (7/006) was present 3.38m below surface level and was sealed by layer of natural sand (7/005). Overlying (7/005) was a buried topsoil (7/004). This was overlaid

by two made soils (7/003) and (7/002) respectively. Sealing (7/002) was the topsoil (7/001).

7.5 No archaeological features were observed in this trench.

Trench 8

CONTEXT	THICKNESS	LENGTH	WIDTH	DESCRIPTION
8/001	0.20m	3.00m	2.00m	Tarmac
8/002	0.40m	3.00m	2.00m	Made ground, hardcore, rubble, flint
8/003	NFE	3.00m	2.00m	Mid brown green sandy silt, redeposited natural

7.6 This trench was dug for a bridge support and was machined to a redeposited natural deposit (8/003) at 0.60m below surface level. Sealing this was a rubble layer (8/002) and a tarmac layer (8/001).

7.7 No archaeological remains were noted in this trench.

Trench 9

CONTEXT	THICKNESS	LENGTH	WIDTH	DESCRIPTION
9/001	0.20m	3.00m	2.00m	Tarmac
9/002	0.40m	3.00m	2.00m	Made ground, hardcore, rubble, flint
9/003	NFE	3.00m	2.00m	Mid brown green sandy silt, redeposited natural

7.8 This trench was a second small area dug for a bridge support and was machine excavated to a redeposited natural deposit (9/003) at 0.60m below surface level. Sealing this is a rubble layer (9/002) and a tarmac layer (9/001)

7.9 No archaeological features were identified.

Trench 10

CONTEXT	THICKNESS	LENGTH	WIDTH	DESCRIPTION
10/001	2.70m	1.70m	1.60m	Loose white fill of well or soak away
10/002	1.84m	1.70m	1.60m	Brick, flint and sandstone wall of well or soak away
10/003	2.40m	1.70m	1.60m	Cut of well or soak away

7.10 Trench 10 was machine excavated to the base of the Victorian soak away or well [10/003]. The base was 2.40m below ground level. The walls of the feature

(10/002) sat on the natural chalk at 1.84m below ground level. The entire feature contained a homogenous fill (10/001).

- 7.11 The wall of this feature was capped with Victorian bricks 0.21m x 0.13m x 0.08m in size; lower down it contained sandstone blocks similar to those found in the nearby lodge. The feature itself may have been a soak away for the nearby culvert.

Trench 11

CONTEXT	THICKNESS	LENGTH	WIDTH	DESCRIPTION
11/001	0.50m	12.00m	5.00m	Truncated road surface
11/002	1.80m	12.00m	5.00m	Pale yellow green coarse Thanet sand
11/003	NFE	12.00m	5.00m	Natural chalk with flint nodules

- 7.12 Trench 11 was excavated in the area of the intended roadway, it was dug to the natural chalk (11/003) at 2.30m below ground level. Sealing this was a layer of sand (11/002) and a truncated road surface of tarmac (11/001).

- 7.13 No archaeology was found in this trench.

8 FINDS

- 8.1 No finds were recovered during the course of the watching brief.

9 CONCLUSIONS

- 9.1 Natural chalk was present across the entire site, however, the layers sealing it varied from natural gravels and sands to made layers and road surfaces.
- 9.2 The only feature identified was the well or soak away in Trench 10. This had already been observed in the previous evaluation. It seems likely to be a Victorian feature judging by the bricks capping it. Its purpose was probably to drain water from the culvert it was located in.
- 9.3 The watching brief achieved its aims of informing the relevant parties of the results of the investigation and making the Archaeology Advisor aware of the potential for archaeology on the site.

10 ARCHIVE DEPOSITION

- 10.1 Following completion of the fieldwork the site archive will be prepared in the format agreed with the recipient museum.

10.2 Publication of the results will be through the ADS OASIS form

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Figure 1 Site Location

Figure 2 Detailed Site Location/Trench Location

APPENDIX A Context Register

Context No.	Context Description	Length/m	Width/m	Depth/m
6/001	Dark, loose silt topsoil,	25.00m	2.00m	0.30m
6/002	Mid brown firm silty sand subsoil	25.00m	2.00m	0.70m
6/003	Naturally deposited gravel	25.00m	2.00m	0.10m
6/004	Naturally deposited sand	25.00m	2.00m	2.50m
6/005	Natural chalk	25.00m	2.00m	NFE
7/001	Mid brown grey topsoil	12.00m	8.00m	0.40m
7/002	Pale yellow brown made ground	12.00m	8.00m	0.50m
7/003	sandy silt with chalk + flint, made ground	12.00m	8.00m	0.28m
7/004	Dark silt, buried topsoil	12.00m	8.00m	0.20m
7/005	Green brown orange sand, natural	12.00m	8.00m	2.00m
7/006	Natural chalk	12.00m	8.00m	NFE
8/001	Tarmac	3.00m	2.00m	0.20m
8/002	Made ground, hardcore, rubble, flint	3.00m	2.00m	0.40m
8/003	Mid brown green sandy silt, redeposited natural	3.00m	2.00m	NFE
9/001	Tarmac	3.00m	2.00m	0.20m
9/002	Made ground, hardcore, rubble, flint	3.00m	2.00m	0.40m
9/003	Mid brown green sandy silt, redeposited natural	3.00m	2.00m	NFE
10/001	Loose white fill of well or soak away	1.70m	1.60m	2.70m
10/002	Brick, flint and sandstone wall of well or soak away	1.70m	1.60m	1.84m
10/003	Cut of well or soak away	1.70m	1.60m	2.40m
11/001	Truncated road surface	12.00m	5.00m	0.50m
11/002	Pale yellow green coarse Thanet sand	12.00m	5.00m	1.80m
11/003	Natural chalk with flint nodules	12.00m	5.00m	NFE

APPENDIX B OASIS FORM