Archaeology South-East



Written Scheme of Investigation Archaeological Evaluation Plot 6000 Land Adjacent to the Porsche Garage, Hatfield Avenue, Hatfield Business Park, Hatfield, AL10 9UA

Hertfordshire.

NGR: 521852 209504

Planning Authority: Welwyn Hatfield Borough Planning Ref. 6/2018/2994/VAR

ASE Project No: 190385 HER Request No: 154/19

February 2020

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Reviewed and approved by:	Andy Leonard	Project Manager	
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Revision 1:			

1.0 Introduction

- 1.1 Archaeology South-East (ASE), the contracting division of UCL's Institute of Archaeology Centre for Applied Archaeology, have been commissioned by Caring Homes (the client) to undertake an archaeological evaluation by trial trenching at land adjacent to the Porsche Garage, Hatfield Avenue, Hatfield Business Park (centred NGR: 521852 209504; Fig. 1).
- 1.2 The site is to be developed as a healthcare facility (Planning Ref. 6/2018/2994/VAR). The current planning permission is a minor material amendment to vary the original consented application, the main difference being the removal of the staff beds and their substitution for care beds (Original Planning Ref. 6/2017/0550/MAJ). The development is part of the broader Hatfield Business Park development area, a number of plots of which have already been developed including those to the west and east of the site. The business park as a whole was subject to an archaeological desk-based assessment (DBA) in 1999 (CAT 1999), with subsequent field investigations undertaken in advance of, or during, construction works. The current development was subject to a DBA in 2016 (MOLA 2016). This established the site lies within an area of archaeological potential.
- 1.3 As the site lies within an area of archaeological potential Hertfordshire County Council's (HCC) Historic Environment Advisor has recommended that an archaeological condition be placed on any planning permission. Accordingly the following condition has been applied:

4. (A) Development must not commence until an Archaeological Written Scheme of Investigation has been submitted to and approved by the local planning authority in writing. The scheme shall include an assessment of archaeological significance and research questions; and:

i) The programme and methodology of site investigation and recording;

ii) The programme and methodology of site investigation and recording as required by the archaeological evaluation;

iii) The programme for post investigation assessment;

iv) Provision to be made for analysis of the site investigation and recording;

v) Provision to be made for publication and dissemination of the analysis and records of the site investigation;

vi) Provision to be made for archive deposition of the analysis and records of the site investigation;

vii) Nomination of a competent person or persons/organisation to undertake the works set out within the Archaeological Written Scheme of Investigation. (B) The development shall take place/commence in accordance with the programme of archaeological works set out in the Written Scheme of Investigation approved under condition (A)

(C) The development shall not be occupied/used until the site investigation and post investigation assessment has been completed in accordance with the programme set out in the Written Scheme of Investigation approved under condition (A) and the provision made for analysis and publication where appropriate.

REASON: To enable the inspection of the site by qualified persons for the investigation of archaeological remains in accordance with a written scheme of investigation in accordance with Policy R29 of the Welwyn Hatfield District Plan 2005 and the National Planning Policy Framework 2019.

- 1.4 This Written Scheme of Investigation has been prepared in order to set out the scope of work, methodology and research aims for a programme of archaeological evaluation as required by Condition 4 (A). It has been submitted to the Hertfordshire Historic Environment Officer for approval. All works will be carried out in accordance with this document and/or the relevant *Standards and Guidance* of the Chartered Institute for Archaeologists (CIfA, 2014).
- 1.5 It should be noted that further work and/or measures to preserve archaeological remains *in situ* or by record may be required if archaeological remains are found during the evaluation. In the event that further archaeological investigation, sampling and recording is required it will be subject to a subject to a separate WSI.

2.0 Background

Location, Geology and Topography

- 2.1 The site is located on the northern edge the former Hatfield Aerodrome part of which is being re-developed as the Hatfield Business Park. The site is within the Vale of St Albans. The historic centre of Hatfield and Hatfield new town (Birchwood, Roe Green etc.) lie to the south-east. The A1M and Comet Way run along what was the eastern edge of the aerodrome and aircraft works, now the business park.
- 2.2 The site comprises a c.0.46ha parcel of land which is situated on the north side of Hatfield Avenue. It was most recently an area of parking/hardstanding. The Porsche Garage, constructed in the early 2000s, is located to the east and Hatfield Private Hospital, to the west, was constructed in c.2016. To the north on the other side of Manor Road is a residential area.
- 2.3 The geology of the site is mapped by the British Geological Survey (BGS) as bedrock chalk of the Lewes and Seaford Chalk Formation. The superficial deposits are mapped as a mixed deposit of chalky till of the Lowestoft Formation, dating to the Anglian.
- 2.4 The site lies within the Vale of St Albans, a zone of Quaternary sediments formed between the dip slope of the Chilterns and the hills along the north-east rim of Greater London, of chalk and clay bedrock respectively. The vale is a level plateau within the former aerodrome, at around c.75-80mAOD. The site itself slopes gently to the south and west and is between c.76.10m-75.6m AOD (Topographic Survey dated 2013). The 2013 survey shows spoil bunds on the site, associated with the construction of the hospital to the west but these have since been cleared.

Historical and Archaeological Background

2.5 The following information is drawn from the Desk Based Assessment (MOLA 2016) and is not repeated in full here. In addition up-to-date HER data has been obtained from HCC (HCC HER Search Ref 154/19). The location of HER references is shown on Fig. 1 unless otherwise indicated.

Previous Archaeological Investigations

- 2.6 A number of previous archaeological investigations have been undertaken at the Hatfield Business Park in advance of and during construction works, their distribution is illustrated on Fig. 1. These are summarised as follows:
 - HBP99: DBA of the business park followed by evaluation at Sites 1,2 and 3

- Ellenbrook Diversion: Negative watching brief;
- LM Solutions Development: watching brief;
- Project Time development: watching brief;
- Infrastructure Phase 2: watching brief;
- TK Maxx development: watching brief;
- De Havilland Sports and Social Club: Negative watching brief;
- Southern Balancing Lake: Negative watching brief;
- University of Hertfordshire Playing Fields: Negative watching brief;
- University of Hertfordshire Bus Garage: Watching brief;
- Ocado Car Park: Negative watching brief;
- Porsche Development: Watching brief;
- Howe Dell School: Watching brief;
- Project EISAI: Watching brief;
- Three Valleys Water Hub: Watching brief;
- Residential Areas 1 and 2: Excavation;
- Residential Area 3 and 4: Watching brief
- Plot 5600 and Borrow Pit Area: Excavation (strip, map and sample); and
- Western half of plot 6020 (Hospital Site): Excavation (strip, map and sample).
- 2.7 Archaeological investigations have also been undertaken in the wider area around the business park.
- 2.8 Of the previous archaeological investigations those at the Porsche and hospital developments are the most pertinent; being situated either side of the site. At the Porsche site watching brief works recovered single sherd of Late Bronze Age-Early Iron Age pottery which was residual in later contexts (12842). At the hospital site investigations identified shallow post and stake holes, pits, linear features and prehistoric flints and pottery (31359).

Prehistoric

- 2.9 Across the HBP site as a whole prehistoric activity is largely represented by numerous ditches which are of Late Bronze Age or Early Iron Age date and comprise parts of an extensive field system across the area. Evidence of settlement within this field system, and of a probable broadly contemporary date, was identified to the west at the hospital site. An enclosed settlement was also recorded in the vicinity of the River Ellenbrook (c.1.2km to the west).
- 2.10 Middle Bronze Age settlement remains (small pits and ditches) were recorded at the Bus Station site (11542-3).
- 2.11 Late Bronze Age activity in the HBP is represented by the remains of three cremation burials; one c.500m west of the site (11552) and the others over 1.2km away.

2.12 As noted above prehistoric archaeological remains at the adjacent Porsche site were limited to residual artefacts.

Roman

2.13 Known archaeological remains of Romano-British date within the area are generally sparse, comprising occasional ditches, one urned cremation burial, residual finds and occasional pits. No remains of this date were recorded at the adjacent sites. Overall the available evidence is suggestive of low density rural settlement.

Early Medieval (Anglo Saxon)

2.14 Archaeological evidence of the early medieval period is similarly sparse. Investigations c. 350m west of the site identified several pits of this date along with a large assemblage of early Saxon pottery which is perhaps suggestive of a small settlement in the vicinity. Pottery of this date was also recovered approximately 500m south-west of the site in a poorly stratified context; this too could hint at settlement in the vicinity (11560). As with the Romano-British period the archaeological evidence is suggestive of a rural landscape.

Medieval

- 2.15 As noted above the site lies some distance to the west of the historic core of the settlement at Hatfield in what was primarily a rural landscape of open fields, woodland and scattered farmsteads. No medieval remains were recorded on the adjacent sites.
- 2.16 To the south-west of the site the post-medieval Harpsfield Hall (11536) is situated on the site of an earlier medieval manor house which was mentioned in a 13th century charter. This lies c.900m from the site and archaeological investigations in this general area identified the remains of a medieval building below the later farmhouse. An oven or kiln was also recorded.

Post-medieval and modern

- 2.17 Historic mapping illustrates the development of the landscape in the area through the centuries. That of Dury and Andrews (published in 1766) shows that the route of Manor Road had been established by this date. This linked the main road to the west with Astwick manor. The landscape between this and Harpsfield Hall was made up of enclosed fields. Archaeological remains of post-medieval date were identified in the vicinity of the hall
- 2.18 Historic Ordnance Survey mapping shows that through the late 19th and early 20th century the site lay within a single large field with others around it. In the wider area the settlement of Hatfield was expanding to the west of its historic core with the establishment of New Town. This expansion continued, generally to the west of the town as development to the east was constrained by the presence of Hatfield House and its extensive park.

- 2.19 The Hatfield Aerodrome (9058) was established to the south of the site in 1930. Whilst flying commenced in 1930 the accompanying buildings, located on its eastern edge were not completed until 1933, and included a squash court and pool. This was a grassed airfield. De Havilland also opened a factory to the north of the airfield in c. 1935, this too included sports facilities, including a bowling green and sports ground with pavilion. The concrete runway was added after World War II, and completed in 1947, although the grass runway was still retained¹. Armaments testing was undertaken at gun butts on the edge of woods to the west of the airfield. The Engine Propeller Company (part of de Havilland) factory site was also established in the post-war period to the west of the development site and on the south side of Manor Road. This company moved into the development of rockets and missiles.
- 2.20 The factories and the areodrome remained in use through much of the 20th century, operated by a variety of companies following mergers, sales etc. By 1975 the development site was being used as a sports ground within the wider complex. Aircraft production ceased at Hatfield in 1993 and the last flight left in 1994. The redevelopment of the area commenced in the late 1990s and the current development is part of that wider redevelopment. The road and roundabout to the south had been constructed by 2000 and the Porsche garage by 2005. An aerial photograph of that date shows the site as a parking area associated with the latter. Development to the west, One Hospital, had begun by 2016 and parts of the development site were used for soil storage, parking and compounds during its construction. At the time of writing the site is disused.

3.0 Research Aims and Objectives

- 3.1 The general aims of the archaeological investigation are as follows:
 - To define, insofar as possible, the date, character, form and function of any archaeological features observed on site.
 - To establish the presence or absence of archaeological remains within the footprint of the proposed development and to preserve by record any such remains.
 - To determine the survival, extent and minimum depth below modern ground level of any such remains.
 - To determine the nature and significance of any archaeological deposits.

¹ <u>https://www.dhaetsa.org.uk/dhaets/documents/101457_hatfield_aerodrome_from_the_air_v2.pdf</u> Accessed Feb 2020

- To enable the LPAs archaeological advisors to make an informed decision as to the requirement for and scope of any further archaeological works.
- 3.2 Site specific research questions could include:
 - Is there any evidence for prehistoric activity extending from the area of the adjacent Porsche garage into the site?
- 3.3 There is also potential to contribute to research objectives laid out in *Research and Archaeology Revisited: a revised framework for the East of England.* (Medlycott 2011); for example:
 - How far can the size and shape of [medieval] fields be related to the agricultural regimes identified, and what is the relationship between rural and urban sites? (p. 47).
 - Much of the region has primarily a dispersed pattern [in the medieval period], not nucleated, and smaller hamlets are being discovered all the time. More data will add to our understanding of the way places appear, grow, shift and disappear (p. 70)

4.0 Methodology

- 4.1 A Risk Assessment and Method Statement (RAMS) will be prepared prior to commencement of the work.
- 4.2 A site code (**PHH 20**) has been created and will be used as the unique site identifier for all records.
- 4.3 Six 20m x 1.8m will be excavated as shown on Figure 2; this represents a 5% sample of the 0.46ha site area. Any significant changes to the approved trench layout due to on-site constraints will be agreed in advance. Any such variation will be reviewed and agreed by the County Archaeologist and the client (or their representative).
- 4.4 If the trenches need to be excavated beyond a depth of 1.20m then they shall be stepped accordingly. Minor changes to the trench locations may need to be made due to unforeseen site constraints. Any such variation will be reviewed and agreed the Client and the Archaeological Officer.
- 4.5 The trenches will be accurately located using offsets from known positions or a Digital Global Positioning System (DGPS) and DGPS Total Station (Leica 1205 R100 Total Station, Leica System 1200 GPS).

- 4.6 All trenches will be scanned prior to excavation using a CAT scanner. Trenches will be mechanically excavated using a toothless ditching bucket and under constant archaeological supervision. The trenches will be excavated through modern made ground in spits of no more than 0.25m until archaeological deposits are encountered or the top of the underlying natural sediments reached. Care will be taken that archaeological deposits are not damaged due to over machining. All machining will stop if significant archaeological deposits are encountered.
- 4.7 Machine excavation will continue to the top of archaeological deposits or the surface of natural chalk, whichever is uppermost. The exposed sub-soil or archaeological horizon will be cleaned by hand immediately after machine stripping, if required and any archaeological deposits or negative features planned.
- 4.8 The opportunity to have a meeting on site shall be provided once the trenches are open with the client (or their representative) and the County Archaeologist to assess the result trenches will not be backfilled without the agreement of the County Archaeologist. They will be kept informed of progress by throughout the project and will be contacted in the event that significant archaeological features are discovered.
- 4.9 Backfilling and compaction will be undertaken by the machine on completion of the work, but there will be no reinstatement to existing condition.
- 4.10 Spoil heaps and trench bases will be scanned with a metal detector as will the spoil derived from excavated features. Any finds recovered by this method will be suitably bagged.
- 4.11 An OASIS online record will be compiled for the project.

5.0 Excavation and Recording Techniques

- 5.1 Excavation and recording will be undertaken in accordance with this WSI.
- 5.2 All archaeological features and deposits will be recorded using the standard context record sheets used by Archaeology South-East.
- 5.3 Archaeological structures, features and deposits exposed or excavated will be planned in relation to the trench and the trench planned onto a copy of the Ordnance Survey map not smaller than 1:2,500 scale. Trench plans will be maintained at a scale of 1:20 and sections at 1:10 unless circumstances dictate that other scales would be more appropriate.
- 5.4 A digital photographic record will be maintained throughout the fieldwork. A photographic register will be maintained and will detail, as a minimum, the feature number, location and direction of shot. Any worthy features will also be photographed on B&W and colour film.
- 5.5 It is anticipated that bulk soil samples will be collected from suitable excavated contexts, including datable buried soils, well-sealed slowly silting features, sealed hearths, sealed features containing evident carbonised remains, peats and water-logged deposits. It is anticipated that soil samples will be 40 litres where possible, or 100% of the context if smaller.
- 5.6 County Archaeologist will be informed at the earliest opportunity of any archaeological features or deposits worthy of preservation.

6.0 Treatment of Human Remains

6.1 No burials will be lifted at evaluation stage unless doing so is fundamental to achieving the aims and objectives specified in para. 3.1. Should a cemetery/burial ground be found, excavating at least one of the burials may on rare occasions be necessary to evaluate the site properly as per NPPF paras 128 & 139, and Historic England's 'Guidance for Best Practice for the Treatment of Human Remains Excavated from Christian Burial Grounds in England' (2017). In such an eventuality this will only be undertaken in accordance with an appropriate licence from the Ministry of Justice.

7.0 Treatment of Artefacts and Ecofacts other than Human Remains

- 7.1 Pottery, worked flint, metal and other finds of archaeological significance will be retained and treated according to standard Archaeology South-East procedures. Identification of retained finds will be undertaken by staff of, and specialists contracted by, Archaeology South-East as necessary. All pottery, bone and worked flint recovered from the excavations will be washed and marked with an appropriate code to identify the site and context. Most ceramic and other building material and burnt flint will be identified, counted, weighed and discarded. Samples will be retained as appropriate. Finds will be bagged in polythene bags according to type and context.
- 7.2 The lithic and ceramic finds will be identified by specialists within Archaeology South-East, and preliminary identification of faunal remains may be undertaken if the nature of the deposits justifies such study. All finds in an unstable condition will be stabilised using passive conservation techniques where appropriate before being deposited with the receiving museum.
- 7.3 Bulk samples will be processed using tank flotation unless considered detrimental to the samples or recovery rate (such as for waterlogged samples). Bulk samples will target recovery of plant remains (charcoal and macrobotanicals), fish, bird, small mammal and amphibian bone, and small artefacts. Waterlogged samples will be wet sieved through nested sieves and stored in wet, cool conditions or dried if considered an appropriate form of conservation for the remains. Specialist samples may also be taken from dry or waterlogged contexts. Such samples will target recovery of pollen (using monolith tins), molluscs, foraminifera, parasites and insects. Larger samples (80-100 litres) will be extracted wholesale from deposits rich in marine molluscs and large mammal bones. As a general rule, waterlogged wood specimens will be recorded in detail in their original location. If removed they will be cleaned, photographed and a thin section sample will be taken for identification. Specimens will either be stored in wet cool conditions or dried if considered appropriate for the material. In all instances deposits with clear intrusive material shall be avoided.
- 7.4 Any finds believed to fall potentially within the statutory definition of Treasure, as defined by the Treasure Act 1996, amended 2003, shall be reported to the local Finds Liaison Officer. Should the find's status as Treasure be confirmed the Coroner, the client, landowner and the Historic Environment Officer will also be informed. A record shall be provided to the Coroner and to the Historic Environment Officer of the date and circumstances of discovery, the identity of the finder, and the exact location of the find(s) (OS map reference to within 1 metre, and find spot(s) marked onto the site plan).

8.0 Post-Excavation Analysis, Reporting and Archive

- 8.1 The report will be completed within 4 weeks of the completion of the on-site fieldwork; this will be dependent on the prompt production of any necessary specialist reports. A draft copy will be sent initially to Client for comment and approval and then to the Historic Environment Adviser to inform further advice regarding the planning application. Once the report has been accepted then two final hard copies and one electronic copy in PDF format will be sent on CD at a minimum resolution of 300dpi to the HER.
- 8.2 The report will contain:
 - The aims and methods adopted in the course of the trenching
 - Location plan of the excavated area and/or other fieldwork in relation to the proposed development. At least two corners of each of the trenches shall be given 10 figure grid references.
 - Section drawing(s) showing depths of deposits including present ground level with Ordnance Datum, vertical and horizontal scale.
 - Methodology and detailed results including a suitable conclusion and discussion. Where appropriate the discussion will be completed in consultation with the Eastern Counties Research Agenda and Strategy (Brown and Glazebrook 2000).
 - All specialist reports
 - A concise non-technical summary of the project results.
- 8.3 An HER summary sheet will be completed within four weeks. This will be completed in digital form and emailed to the HER Team Officer. This shall include a plan showing the position of the excavation.
- 8.4 Upon completion of the fieldwork an OASIS (Online Access to the Index of Archaeological Investigations) form will be completed for the project. A print-out of the form will be included as an appendix to the final report.
- 8.5 The archive and any finds will be submitted to North Hertfordshire Museum upon completion of the project. A summary of the contents of the deposited archive will be supplied to the HEM Team at the time of deposition.
- 8.6 Publication of the results (including any further analysis of the finds from the evaluation stage) at least to summary level (i.e. round up of archaeology in Hertfordshire) shall be undertaken in the year following the archaeological fieldwork.

9.0 **Project Management**

9.1 The fieldwork will be managed by Andy Leonard and the postexcavation analysis by Mark Atkinson.

10.0 Health and Safety

10.1 Health and Safety must take priority over archaeological requirements. It is essential that all projects be carried out in accordance with safe working practices and under a defined Health and Safety Policy. A Risk Assessment for the project will be prepared prior to the commencement of work and all relevant health and safety regulations will be adhered to.

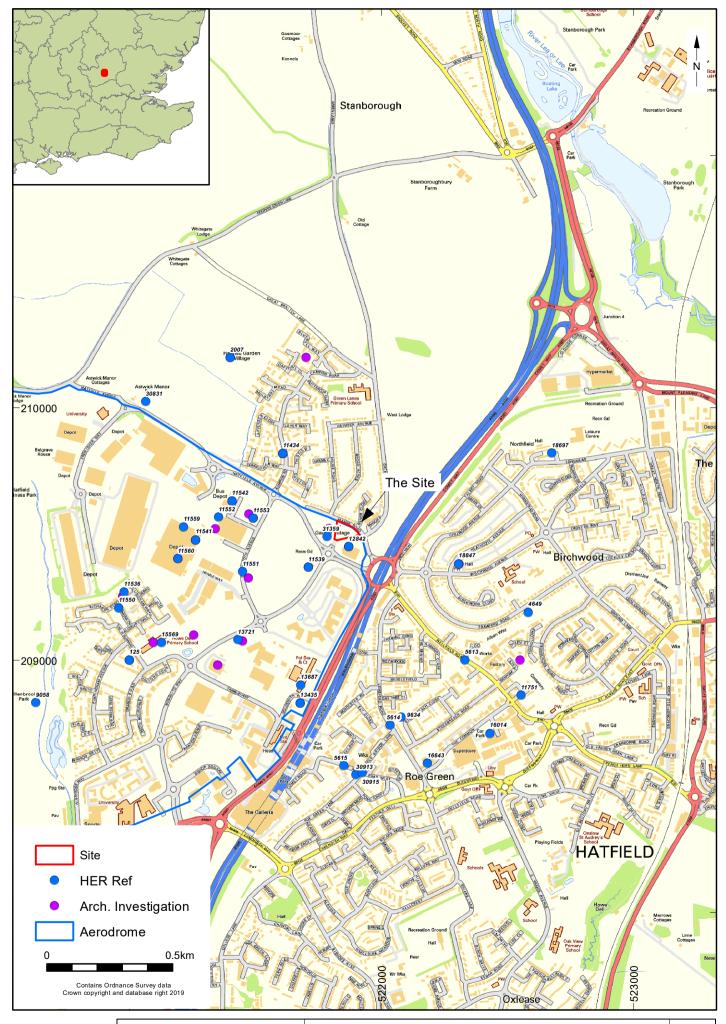
11.0 Insurance

11.1 Archaeology South-East is insured against claims for: public liability to the value of £50,000,000 any one occurrence and in the aggregate for products liability; professional indemnity to the value of £10,000,000 any one occurrence; employer's liability to the value of £50,000,000 each and every loss.

References

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- English Heritage, 2011 Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation
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Project Ref: 190385	Feb 2020	Site location and HER references	
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