

**WRITTEN SCHEME OF
INVESTIGATION
FOR
ARCHAEOLOGICAL
EXCAVATION**

**Land at Nyton Road and
Northfields Lane,
Westergate, West Sussex**

APP/ C3810/ A/ 142217385

Prepared with: Archaeology
South-East



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1.0 Introduction

- 1.1 This document represents a Written Scheme of investigation (WSI) to undertake an archaeological excavation of land at Westergate, West Sussex, hereafter referred to as 'the site'. The site is centred at National Grid Reference (NGR) 494235 105904 and its location is shown on Figure 1.
- 1.2 Planning consent (APP/C3810/A/14/2217385) was granted for up to 268 dwellings at the site subject to a suite of conditions. Condition 8 related to archaeology and states:

An archaeological investigation of the site asset shall be carried out at the expense of the developer in accordance with a written scheme of investigation to be submitted to and agreed in writing by the Local Planning Authority prior to the commencement of development.

- 1.3 Having considered the results of previous archaeological work it has been agreed between the Archaeological Adviser (James Kenny) to the Local Planning Authority (hereafter the LPA Archaeologist) and CgMs Consulting (on behalf of Taylor Wimpey) that a programme of mitigation work (archaeological excavation) be undertaken.
- 1.4 The site is irregular in shape and measures c.11ha. It is bound by residential units to the south, Northfields Lane to the west, open fields to the north and Fontwell Avenue to the east. The current land use over most of the site consists of pasture fields and paddocks which are separated into land parcels by a mix of post and wire fencing and electric fences. A light industrial unit/barn lies in the centre of the site and is accessed by a farm track off of Fontwell Avenue at the eastern end of the site. A disused plant nursery, including a large greenhouse, occupies the southwest corner of the site and is accessed via a track off Nyton Road. The site lies at a height of around 12m AOD.
- 1.5 According to the British Geological Survey (BGS 2017) the bedrock geology of the site comprises London Clay Formation – clay, silt and sand. This is overlain by a Head deposit across most of the site with an area of river terrace sands, silts and clays recorded at the central southern edge in the vicinity of the greenhouse.
- 1.6 Evaluation trenching carried out at the site identified three periods of archaeological activity: Early Neolithic (Period 1), Late Bronze Age (Period 2) and post-medieval (Period 3). Period 1 (c.3650-3300 BC) activity was represented by pits/tree-boles. Period 2 (c.1150-800 BC) and Period 3 (Late 18th Century) activity was represented by ditches, probably elements of field systems. With the exception of three features of probable Early Neolithic date, the general absence of discrete

features, suggests that the site was utilised for pastoral or arable farming activity, perhaps since the Late Bronze Age (ASE, 2013).

- 1.7 This document represents a Written Scheme of Investigation (WSI) for the archaeological works. It has been prepared following consultation between CGMS and the LPA Archaeologist in accordance with relevant Standards and Guidance of the Chartered Institute for Archaeologists (CIfA 2014). All work will be carried out in accordance with the *Sussex Archaeological Standards* (2015), which outlines the methodology to be used in the field, and in reporting and archiving of the results.
- 1.8 This WSI will be submitted to the LPA Archaeologist prior to the commencement of work on the scheme for information.

2.0 Historical and Archaeological Background

- 2.1 The following summary is drawn from the Desk Based Assessment of the site (Ramboll 2013) and the evaluation trenching (ASE, 2013). For a complete background, please refer to those reports.

Prehistoric

- 2.2 The evaluation identified Early Neolithic activity at the northeast of the site. Similarly dated evidence has been found at other sites in the area, for example a polished stone axe at Hales Barn Farm and flint tools and flint-working debris found near Nyton (Ramboll 2013). Early Neolithic pottery is usually sparse and confined to very small groups from individual pits, but much of the evidence for it across the Coastal Plain has been identified at locations relatively close to the current site, including at Oving, Westhampnett, Barnham (Bedwin & Holgate 1985; Chadwick 2006; Dunkin et al in prep) and more recently at Medmerry in Selsey (ASE *forthcoming*).
- 2.3 The evaluation identified a coherent, but intermittently surviving, field system, broadly aligned west-northwest to east-southeast. Although sparse, the dating evidence would suggest that the field system was infilling sometime in the Late Bronze Age. Structural daub fragments identified in some of the ditch fills may be indicative of nearby settlement activity, although no features directly associated with structures were identified on the site itself.

Romano-British

- 2.4 There are several sites and findspots on the HER within the vicinity of the site, including cremation burials and a probable villa to the southwest of the site. It is clear that the area was well exploited and settled during this time. Despite significant Romano-British activity

within this part of West Sussex, the only evidence of activity of this date found during the evaluation was a residual, reworked Roman tile.

Early medieval and medieval

- 2.5 Westergate is not mentioned in the Domesday Book but it is not clear if its origins were from this period or earlier. Certainly the site lay in the agricultural hinterland of Westergate by the later medieval period, with the historic maps clearly depicting it as part of an open field.

Post-medieval

- 2.6 Throughout most of the post-medieval period the site remained in use as agricultural land, initially being divided up into several, relatively small, holdings which had occurred by the time of the 1777 Enclosure Act. The results of the evaluation, combined with the cartographic evidence, suggests that the site remained in use as agricultural land throughout the post-medieval period, initially being divided up into several, relatively small, holdings until the 19th century when the holdings were 'rationalised' into larger plots.

3.0 Research aims and objectives

3.1 Site specific aims:

- Can the excavation shed light on the nature of the Early Neolithic activity recorded during the evaluation?
- Can the excavation identify any evidence of Late Prehistoric settlement, as suggested by the presence of structural daub fragments identified in some of the ditch fills excavated during the evaluation?

3.2 Research Aims

The site has the potential to address the following research aims from the South-East Research Framework (SERF):

- Can further investigation of the area of Neolithic activity in the northeastern part of the site aid in an understanding of how the Sussex coastal plain was utilised during the Early Neolithic?
- Can further evidence from the excavation contribute to an understanding of the reasons for the apparent settlement hiatus between the Late Bronze Age and early Iron Age on the coastal plain?

4.0 Methodology

- 4.1 The work comprises the mechanical excavation of two areas with a combined area of c. 5159m² (Figure 2). The areas will be accurately located by means of a Digital Global Positioning System (DGPS) and Total Station (Leica 1205 R100 Total Station, Leica System 1200 GPS or similar).
- 4.2 It is possible that significant archaeological features may extend beyond the limit of the excavation area. In this event, a contingency will be employed and the features will be exposed by machine either in their entirety or until their form and function is clarified to the satisfaction of CgMs Consulting and the LPA Archaeologist.
- 4.3 Prior to excavation the area will be scanned prior to excavation using a Cable Avoidance Tool (CAT) operated by accredited ASE personnel.
- 4.4 Machine stripping will be undertaken using a tracked excavator fitted with a toothless ditching bucket under the supervision of an experienced archaeologist. Overburden deposits will be removed in spits of no more than 0.25m in thickness. Machine excavation will be carried down on to the top of archaeological deposits or the surface of natural deposits, whichever is uppermost. Care will be taken not to machine off seemingly homogenous layers that may include the upper parts of archaeological features. The resultant surfaces will be cleaned as necessary and planned.
- 4.5 Once the machine strip of the areas is complete a fixed site grid will be established relative to Ordnance Datum using a Total Station and/or survey grade Global Positioning System (GPS). A full pre-excavation plan will be prepared as the stripping progresses using Global Positioning System (GPS) planning technology in combination with Total Station surveying. This will be available to the Project Manager, the Supervisor and the LPA Archaeologist immediately, or at the latest the day after the recording has taken place. This pre-excavation plan will be available in Autocad or PDF format and will be printed at a suitable scale (1:20 or 1:50) for on-site use. The plan will be updated by regular visits to site by the Archaeology South-East Surveyor who will plot excavated features and record levels in close consultation with the Supervisor and/or the excavators. Where it is deemed necessary (for example detailed structural features or burials) features will be hand planned at a scale of 1:20 from the grid and then digitised to be included on the overall plan.
- 4.6 All excavation work will be carried out in line with the Recommended Standards Archaeological Conditions (WSCC 2015).

- 4.7 After the cleaning and planning of the excavation area the following sampling strategy will be employed:
- All structures and all zones of specialised activity (e.g. funerary, ceremonial, industrial, agricultural processing) will be fully excavated and all relationships recorded.
 - Ditches and gullies will have all relationships defined, investigated and recorded. All terminals will be excavated. Sufficient of the feature lengths will be excavated to determine the character of the feature over its entire course.
 - Discrete features will be 50% sampled (half sectioned/quadrated as appropriate). The remaining 50% will be removed if the feature is manifestly rich in ancient palaeoenvironmental remains.
 - For complex/ very significant features/ deposits/ artefact assemblages/ artefacts, the excavation feature sampling policy is to be subject to further discussion. If of exceptional nature, the advice of Historic England may be sought.
 - Highly/nationally significant features (e.g. high status burials) strategy for excavation/scientific investigation/conservation etc. to be agreed between ASE, CgMs and LPA Archaeologist before work resumes.
 - For layers a decision on-site will be made between ASE, CgMs and the LPA Archaeologist as to the extent that they will be excavated. The factors governing the judgement will include the possibility that they mask earlier remains, the need to understand function and depositional processes, and the necessity to recover sufficient artefacts to date the deposit and to meet the project aims.
- 4.8 All excavated deposits and features will be recorded according to current professional standards using the standard context record sheets used by ASE employing a single context recording system.
- 4.9 A photographic record will be maintained. This will illustrate the principal features and finds both in detail and in a general context. The photographic record will also include working shots to represent more generally the nature of the fieldwork.
- 4.10 All finds recovered from excavated deposits will be collected and retained in line with the ASE artefacts collection policy.
- 4.11 All finds that are covered by the Treasure Act will be moved to a safe place and reported to the coroner's office according to the procedures of this Act. Where removal cannot be effected on the same working day

as the discovery, suitable security measures will be taken to protect the artefacts from theft or damage.

- 4.12 Any finds of human remains will be left in situ, covered and protected. The coroner's office will be informed. Excavation, recording and removal will only take place under the relevant Ministry of Justice licence and local authority environmental health regulations.

5.0 Environmental Sampling Strategy

- 5.1 On-site sampling methodology, processing and recording will be undertaken within the guidelines laid out by Historic England (2011) and WSCC Recommended Standard Conditions (WSCC 2015) and in close consultation with the ASE environmental specialist (Dr Lucy Allott).
- 5.2 Samples will be collected from suitable excavated contexts, including dated/datable buried soils, well-sealed slowly silted features, sealed hearths, sealed features containing evident carbonised remains, peats, water-logged or cess deposits. In all instances deposits with clear residual or intrusive material will be avoided.
- 5.3 The sampling will aim to recover spatial and temporal information concerning the occupation of the site. This will be best achieved by sampling a range of feature types (e.g. pits, ditches, post-holes, cess pits) from across the site, the fills of which can be compared and contrasted. Where clearly defined fills are evident within features or in large features with superficially homogenous fills, stratified data will be obtained by taking multiple samples spread through the deposits.
- 5.4 A standard bulk sample size of 40litres (or 100% of small features) will be taken from dated/datable sealed contexts to recover environmental remains such as fish, small mammals, molluscs and botanicals. Larger samples of 80-100litres will be taken wholesale from some contexts, rich in large mammal bones and shell.
- 5.5 Sub-samples of up to 10 litres will be kept aside from the bulk samples for specialist processing and analysis to target retrieval of insects, fish bone and parasites for example. Where appropriate deposits are encountered column samples will be taken to assess pollen, ostracods and sediment profiles. Waterlogged wood samples will be recorded in situ if possible, sampled if large or removed for further analysis and identification.
- 5.6 Suitable sampling should be considered throughout the programme of archaeological fieldwork to ensure that material suitable for radiocarbon dating can be achieved. The precise requirements will be discussed

and established with the archaeology adviser to the Local Planning Authority' as fieldwork progresses.

6.0 Processing and Post-Excavation Assessment

- 6.1 A brief summary report with feature plan will be provided within three weeks of the complete cessation of on-site investigation if required.
- 6.2 All hand-collected, bulk finds (pottery, bone, stone, worked flint, building material) will be washed, dried and bagged by material and context. The pottery will be marked with site code and context number. All bulk finds will be counted and weighed and quantification presented on a context by context basis for each material group. Ceramic building material and burnt flint may be discarded after recording and quantification in line with the Guidelines of the Society of Museum Archaeologists (1993). Samples will be retained as appropriate.
- 6.3 All registered finds (coins, individual objects etc.) will be washed, dried and packaged as appropriate. Requirements for remedial conservation will be ascertained and carried out in order to stabilise objects. Site specific numbers will be assigned to each registered find for identification purposes.
- 6.4 All retained environmental samples will be processed by experienced and qualified staff and recorded using pro-forma recording sheets. Bulk samples from dry (non-waterlogged) deposits will be processed using flotation. As a minimum, 50% of each sample will be processed. The flots and residues from these samples will be retained, dried and sorted for environmental and archaeological remains. Samples from waterlogged deposits will be wet sieved through nested sieves and stored in anaerobic, wet, cool conditions or dried if considered an appropriate form of conservation. Column samples and samples extracted for analysis of insects or parasites for example will be sent to an appropriate specialist for assessment. Waterlogged wood specimens will be recorded, sampled for identification and stored in wet, cool conditions. All will be assessed and retained as appropriate.
- 6.5 A post-excavation assessment report and updated project design will be prepared within six months of completion of the site work.
- 6.6 The assessment report will be in line with guidelines set out in Management of Research Projects in the Historic Environment (MoRPHE; Historic England 2006) and MoRPHE Project Planning Note 3: Archaeological Excavation (Historic England 2008) and will adhere to the standards laid out in the WSCC Recommended Standard Archaeological Conditions (2007); specifically Section 6 and Annex C which apply to post-excavation reporting standards.

- 6.7 A draft copy of the report will be sent to CGMS & the LPA Archaeologist in the first instance for their comments and approval. Once the report has been accepted further copies and one electronic copy in PDF format will be sent. A copy will be forward to Local Planning Authority by the client or by Archaeology South-East on their behalf.
- 6.8 A copy of the post-excavation assessment report will be supplied to the County SMR on the understanding that it will become a public document after an appropriate period of time not exceeding six months.
- 6.9 An Online Access to the Index of Archaeological Investigations (OASIS) form will be completed at <http://ads.ahds.ac.uk/project/oasis/> following the completion of the Assessment report and included as an appendix.

7.0 Final Reporting and Archive Deposition

- 7.1 In line with the recommendations of the Post-excavation Assessment and Updated Project Design report, agreement shall be reached with the LPA Archaeologist regarding the format and destination of subsequent publication(s) arising from all investigations.
- 7.2 Upon completion of the final report for publication, the archive will be prepared for deposition in accordance with the Guidelines for the Preparation of Excavation Archives for Long-term Storage (United Kingdom Institute for Conservation 1990) and Standards in the Museum Care of Archaeological Collections (Museums and Galleries Commission 1994).
- 7.3 Permission will be sought for the deposition of the site archive and finds as soon as a start date for the field work is confirmed. An accession number will be obtained as necessary.
- 7.4 In the event that there is important archaeology on the site, a wider, community and educational approach to communicating the heritage of the site will be implemented in consultation with the LPA Archaeologist and the client.

8.0 Project Management

- 8.1 This project will be managed by Darryl Palmer (Fieldwork) and Jim Stevenson (Post-Excavation).

9.0 Health and Safety

- 9.1 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.

10.0 Insurance

- 10.1 Archaeology South-East is insured against claims for: employer's liability to the value of £50,000,000 each and every loss, any one occurrence; primary public/products liability to the value of £50,000,000 any one occurrence and in the aggregate for products liability, with an extension for no-fault compensation up to £50,000,000 in the aggregate; professional indemnity to the value of £50,000,000 any one occurrence and in the aggregate.

References

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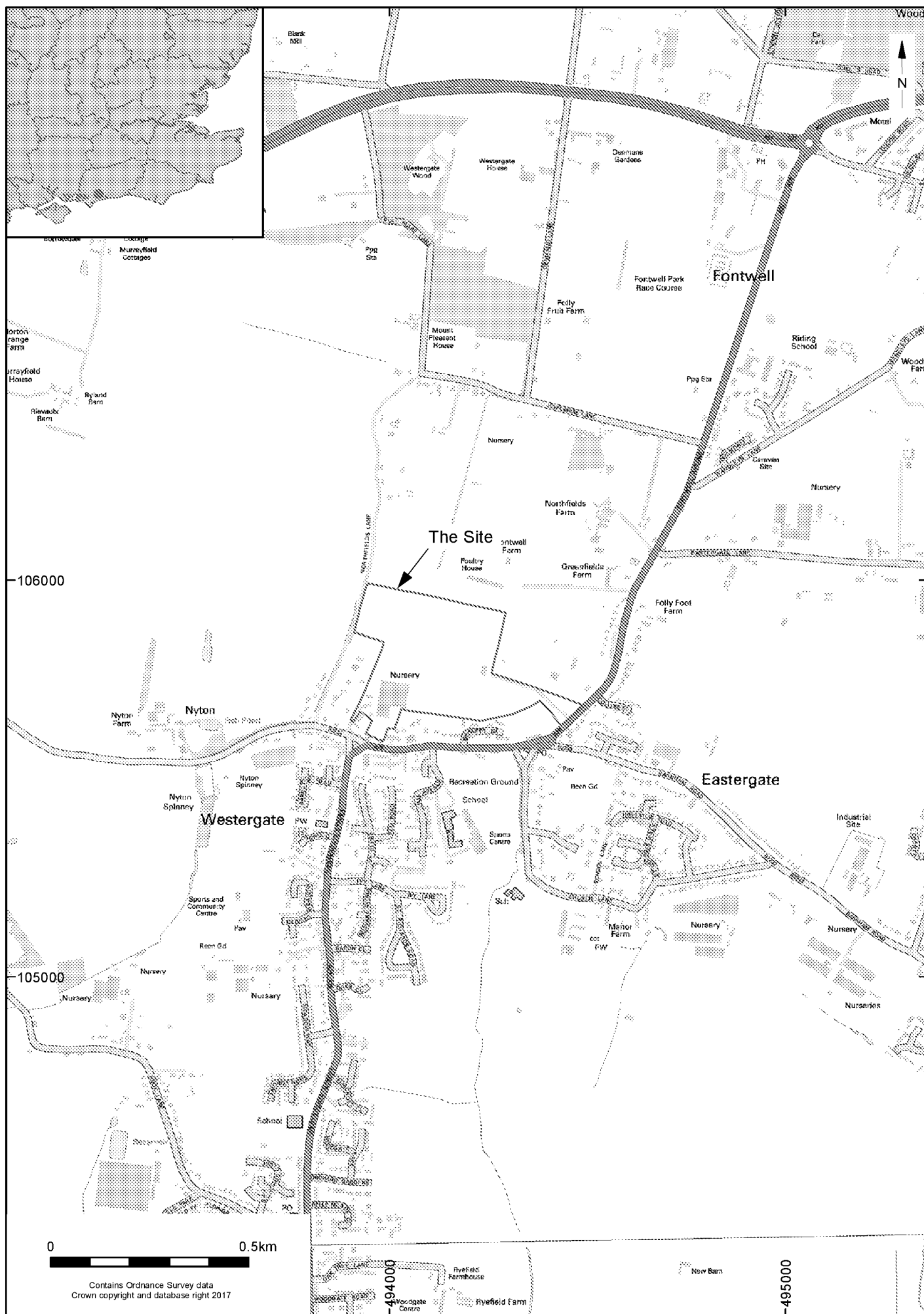
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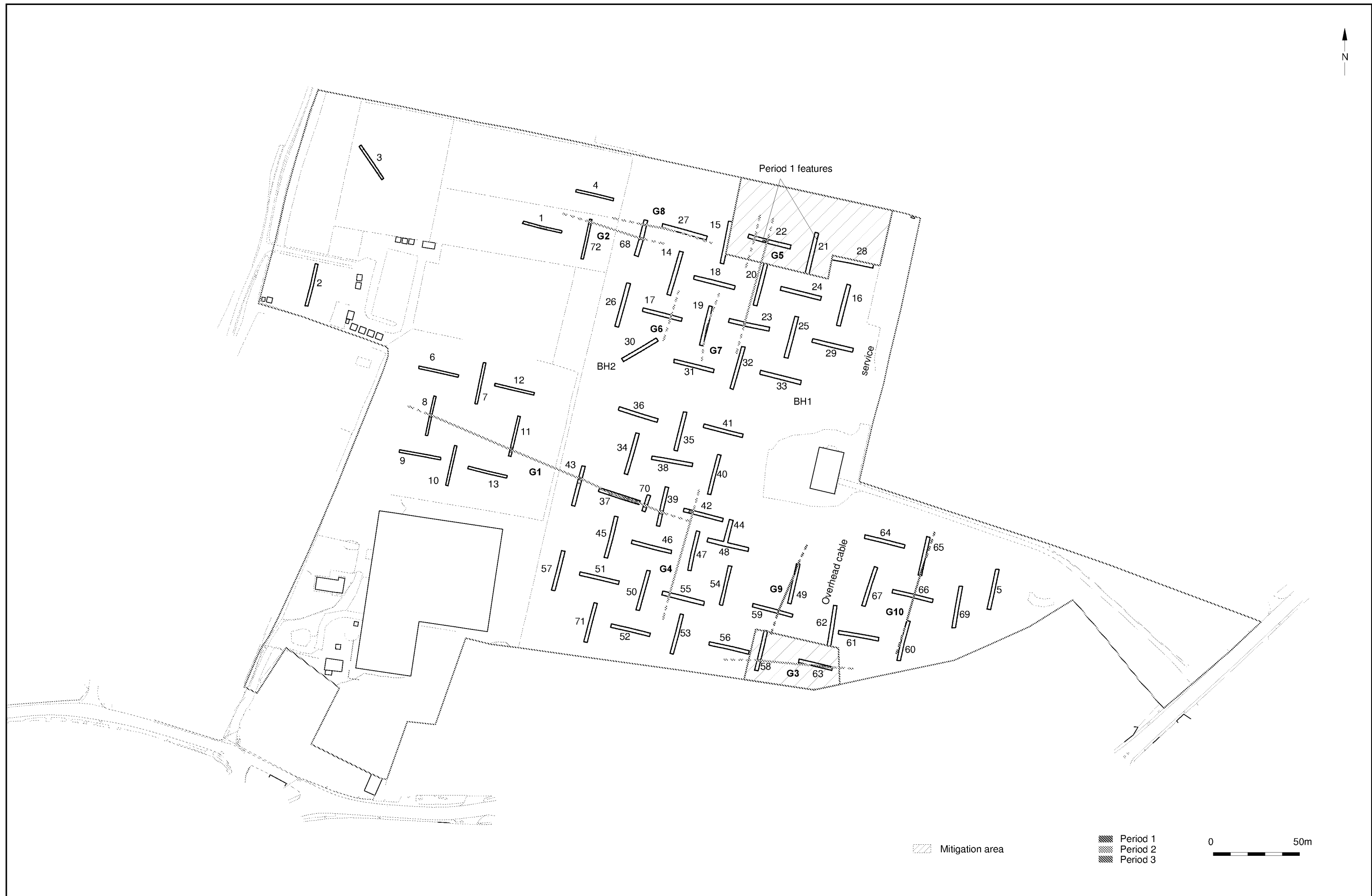
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© Archaeology South-East		Land at Westergate	Fig. 1
Project Ref: 7997	June 2017	Site location	
Report Ref:	Drawn by: JLR		



© Archaeology South-East		Land at Westergate	Fig. 2
Project Ref: 7997	June 2017	Plan of evaluation results showing proposed archaeological mitigation areas	
Report Ref:	Drawn by: JR		

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