

Archaeological Evaluation Report



Ref: 89480.02 June 2013





# **Archaeological Evaluation Report**

# Prepared for:

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#### **Quality Assurance**

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<sup>\*</sup> I = Internal Draft; E = External Draft; F = Final

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# **Archaeological Evaluation Report**

### **Summary**

Wessex Archaeology was commissioned by Kier Construction to undertake an archaeological evaluation at Hilltop Primary School, Ditchling Hill, Crawley, West Sussex centred on National Grid Reference (NGR) 526350, 135670.

Planning consent was granted for an extension to the existing primary school, a new hard play area and relocated canopy together with associated hard and soft landscaping works, on condition that a programme of archaeological works was undertaken.

In consultation with the Senior Archaeological Officer at West Sussex County Council, a total of two trial trenches were positioned across the proposed new hard play area (Area C) to assess the archaeological potential.

No archaeological features or deposits of archaeological significance were encountered in the trenches. The stratigraphic sequence revealed evidence of previous landscaping; topsoil had been removed and replaced with made ground deposits to form a level playing field. A layer of subsoil was recorded within both trenches indicating that the natural clay had not been impacted upon by previous landscaping works.



# **Archaeological Evaluation Report**

### **Acknowledgements**

The archaeological evaluation was commissioned by Kier Construction and the assistance of Cliff Denman and Matthew Barker is gratefully appreciated in this respect. Thanks are also extended to John Mills, Senior Archaeological Officer to West Sussex County Council, for his advice and guidance.

The fieldwork was directed by Sarah Mounce. The report was compiled by Sarah Mounce and the illustrations were prepared by Rob Goller. The ceramic building material was assessed by Lorraine Mepham and the slag was assessed by Phil Andrews. The project was managed on behalf of Wessex Archaeology by Sue Farr.



# **Archaeological Evaluation Report**

#### 1 INTRODUCTION

# 1.1 Project background

- 1.1.1 Wessex Archaeology was commissioned by Kier Construction (hereafter referred to as 'the Client') to carry out an archaeological evaluation on land at Hilltop Primary School, Ditchling Hill, Crawley, West Sussex (hereafter referred to as 'the Site') and centred on National Grid Reference (NGR) 526350, 135670 (**Figure 1**).
- 1.1.2 The development plan comprises the extension to the primary school, a new hard play area and relocated canopy together with associated hard and soft landscaping works (Local Planning Authority's Reference No. WSCC/076/12/CR). The archaeological evaluation was undertaken in order to assess the archaeological potential within Area C of the Site where a hard play area, bund, landscaping and soakaway were proposed.
- 1.1.3 The archaeological work was undertaken in accordance with a Written Scheme of Investigation (WSI; Wessex Archaeology 2013), which was agreed in advance of the fieldwork with the Senior Archaeological Officer at West Sussex County Council. All works were carried out in accordance with the relevant guidance given in the Institute for Archaeologist's Standard and Guidance for Archaeological Field Evaluation (IfA 2009).
- 1.1.4 The archaeological evaluation comprised the machine excavation of two archaeological trial trenches and took place between 28<sup>th</sup> and 29<sup>th</sup> May 2013. This report documents the results from the archaeological evaluation along with an assessment of the archaeological material recorded.

#### 1.2 The Site

- 1.2.1 The Site lies centrally within the town to the south of the historic core of Crawley. It is bounded to the east by Rackham Close and Ditchling Hill, to the south by properties fronting onto Caburn Heights and to the north and west by further residential development.
- 1.2.2 The Site itself comprises an irregular shaped parcel of land with the main single storey school building located centrally within the plot. Land to the north and south is in use as a playing field with an area to the south-east covered in tarmacadam and in use as a playground. A further detached single storey building is positioned on the easternmost side of the Site with several mature trees noted.
- 1.2.3 Access to the Site is via Ditchling Hill to the south-east. The Site is generally level lying at approximately 94m above Ordnance Datum (aOD).
- 1.2.4 The underlying geology for the Site is mapped as Newhaven Chalk which is overlain at the western side of the Site by Head deposits.



#### 2 ARCHAEOLOGICAL BACKGROUND

#### 2.1 Introduction

- 2.1.1 Although known as one of the six new towns proposed in the New Towns Act 1946, Crawley's history is more extensive comprising the creation of an earlier planned town on the London-Shoreham road in *c*. 1200 with further considerable expansion following the arrival of the railway (1848).
- 2.1.2 The archaeological and historical background to the town is detailed in the Historic Character Assessment Report for Crawley (Harris 2008) which has shown evidence in the town from the prehistoric period onwards.

#### 2.2 Designated Sites

- 2.2.1 There are no designated heritage assets within the Site itself.
- 2.2.2 Seven Listed Buildings are recorded within 1km of the Site. All are Grade II, with the exception of the parish church of St John the Baptist which is Grade II\*. The earliest Grade II building comprises the 16<sup>th</sup> century timber framed farmhouse at Cheals Garden Centre to the west of the Site. Others include Tilgate Flint Cottage an early 19<sup>th</sup> century former lodge to the south and the Church of St Francis and St Anthony, designed and built between 1955-59 as the friary church of the Capuchin order which had resided in Crawley since the late 1850s.
- 2.2.3 There are no Scheduled Monuments within 1km of the Site, although three are located within the modern suburbs of Crawley (all moated sites).

#### 2.3 Archaeological Background

- 2.3.1 The archaeological background of the Site has been outlined by the WSCC Archaeological Officer, in his comments on the Planning Application. These comments are summarised below with due acknowledgement.
- 2.3.2 The key heritage interest of the Site relates to the ironworking industry recorded to the immediate south-west of the Site and in the wider Crawley area. Ironworking is known to have started in the Late Iron Age and continued until the 4<sup>th</sup> century AD, at Broadfield (Cartwright, 1992) to the south-west. Evidence of over 100 furnaces have been recorded, with mine pits and associated industrial and domestic areas spread over approximately 12ha. Ore-roasting facilities, shaft-furnaces and slag dumps were all recorded and continued in use until the 4<sup>th</sup> century AD.
- 2.3.3 At Hambleton Court to the west of the School and Caburn Heights to the south, linear ditches containing quantities of Romano-British pottery were recorded and were considered to have formed part of a larger enclosure with the school itself at the centre.

#### 3 METHODOLOGY

#### 3.1 Aims and objectives

3.1.1 The general aim of the archaeological evaluation, as set out in the WSI (WA 2013), was to determine the location, extent and potential significance of archaeological remains on the Site that may be impacted by the proposed development. The results of the evaluation aim to:



- Clarify the presence/absence and extent of any buried archaeological remains within the Site that may be impacted by development.
- Identify, within the constraints of the evaluation, the date, character, condition and depth of any surviving remains within the Site.
- Assess the degree of existing impacts to sub-surface horizons and to document the extent of archaeological survival of buried deposits.
- Produce a report which will present the results of the evaluation in sufficient detail to allow an informed decision to be made concerning the Site's archaeological potential.
- Consider the results of the evaluation in light of the archaeological potential of the Site to contribute to current local, regional and wider archaeological research objectives.

# 3.2 Fieldwork methodology

- 3.2.1 In accordance with the WSI (WA 2013), the archaeological evaluation comprised the excavation of two trenches, measuring 10m by 1.8m. Each trench was positioned over a man-made bund, and as a result Trench 1 was moved 6m to the south-west and Trench 2 was also moved 3m to the south-west.
- 3.2.2 Trench locations were surveyed using a GPS SmartNet Rover and tied into the Ordnance Survey National Grid. All trenches were marked out prior to excavation to an accuracy of ±50mm and were 'swept' before and during excavation with a Cable Avoidance Tool (CAT) to verify the absence of any underground services.
- 3.2.3 All trenches were opened with a JCB fitted with a toothless grading bucket.
- 3.2.4 All trenches were excavated under constant archaeological supervision. Topsoil and subsoil/made ground was stockpiled separately, adjacent to the trenches from which they derived. Machine excavation continued in spits down to the top of the archaeological deposits or undisturbed natural geology, whichever was encountered first. Where required the base of the trench was cleaned by hand to ascertain the extent of any archaeological features.
- 3.2.5 All excavated spoil was visually scanned for artefacts.

#### 3.3 Recording

- 3.3.1 All archaeological features and deposits encountered during the evaluation were recorded using Wessex Archaeology's *pro forma* recording sheets using a continuous unique numbering system.
- 3.3.2 A representative section, not less than 1m in length, of deposits from ground surface to the top of the natural geology was recorded within each trench. All excavated archaeological features and deposits were drawn at an appropriate scale, typically 1:10 for sections and 1:20 or 1:50 for plans.
- 3.3.3 Photographs were taken as appropriate, providing a record of the excavated trenches and images of the overall Site. The photographic record comprises black and white, colour images and digital photography. A photographic register of all photographs taken is contained within the project archive.
- 3.3.4 All interventions were surveyed using a GPS tied into the Ordnance Survey.



#### 3.4 Health and Safety

- 3.4.1 Health and Safety considerations were of paramount importance in conducting all fieldwork and safe working practices overrode archaeological considerations at all times.
- 3.4.2 All work was carried out in accordance with the *Health and Safety at Work etc. Act* 1974 and the *Management of Health and Safety Regulations* 1992, and all other relevant Health and Safety legislation, regulations and codes of practice in force at the time. Wessex Archaeology supplied a copy of their Health and Safety Policy and a Risk Assessment to the Client before the commencement of any fieldwork.

#### 4 ARCHAEOLOGICAL RESULTS

#### 4.1 Introduction

- 4.1.1 The following section provides a summary description of the results of the archaeological evaluation. Details of individually excavated contexts and features are retained in the Site archive and a detailed tabulated version of these and the trenches is provided in **Appendix 1** of this report.
- 4.1.2 **Figure 1** presents the overall location of each trench within Area C of the Site and **Plate 1** to **6** provide photographs of the excavated trenches which detail evidence of previous landscaping across Area C.
- 4.1.3 The following Results Section should be read in conjunction with **Appendix 1**.

#### 4.2 Site-wide stratigraphy and geology

4.2.1 The stratigraphy of deposits was similar across the Site and characterised by up to 0.21m of existing turf and mid brown clayey silt topsoil, which sealed made ground deposits comprising light yellow brown clay to a maximum depth of 0.96m below ground surface (Trench 1). Beneath the made ground deposits a buried subsoil measuring up to 0.13m (Trench 1) in thickness sealed the natural clay.

#### 4.3 Trench descriptions

# Trench 1 (Plates 1-3)

- 4.3.1 No archaeological features or deposits were identified within Trench 1.
- 4.3.2 The natural clay gradually descended from the south-west (94.32m aOD) to the north-east end (93.84m aOD) of the trench, with mid grey brown silty clay subsoil above. Directly above the subsoil, a thick deposit of made ground (0.76m deep) was recorded which was then sealed by topsoil.
- 4.3.3 The made ground deposit had been truncated by a modern land drain positioned centrally through the trench and aligned northeast-southwest.

#### Trench 2 (Plates 4-6)

- 4.3.4 No archaeological features or deposits were identified within Trench 2, however the subsoil layer contained fragments of medieval roof tile and slag.
- 4.3.5 Within the trench, the natural clay descended from the west (94.77m aOD) to the east (94.31m aOD) end. The natural geology was sealed by a thick deposit of mid yellow brown silty clay subsoil 0.44m thick. Directly above the subsoil, a thin deposit of made ground 0.05m thick at the west end and 0.1m thick at the east end of the trench was recorded. This made ground deposit was then sealed by topsoil.



#### 5 ARTEFACTUAL EVIDENCE

- 5.1.1 Four fragments of ceramic building material (weighing 265g) were recovered from subsoil context **203** (Trench 2). All are in hard, slightly sandy fabrics with macroscopically visible inclusions (clay pellets and iron compounds), and belong to flat roof tiles of medieval date.
- 5.1.2 Three fragments of ironworking slag (weighing 1106g) were recovered from subsoil context **203** (Trench 2). All are dense with some evidence of a flow structure on the (upper) surface, though all three fragments are heavily abraded. The density and flow structure indicate that they represent iron smelting debris, of likely Roman or medieval date, though there is no way of clarifying this further. However, ironworking is known to have started in the Late Iron Age and continued until the 4<sup>th</sup> century AD at Broadfield (Cartwright, 1992), immediately to the south-west of the Site, and thus a Roman date is considered most probable for this small, residual assemblage from the Hilltop Primary School site.
- 5.1.3 All modern artefacts were noted but not retained.

#### 6 ENVIRONMENTAL EVIDENCE

6.1.1 No features or deposits suitable for environmental sampling were identified during the course of the evaluation

#### 7 DISCUSSION

- 7.1.1 The archaeological evaluation has confirmed the absence of any features or deposits of archaeological significance within this small area of the Site.
- 7.1.2 The stratigraphic sequence revealed evidence of previous landscaping; topsoil had been removed and replaced with made ground deposits to form a level playing field. A layer of subsoil was still present within both trenches indicating that the natural clay had not been impacted upon by previous landscaping.
- 7.1.3 The evaluation has been successful in fulfilling the aims of the specification. The archaeological potential within Area C of the Site has been tested there is a relatively low potential for further archaeological remains to be present. Despite previous ground disturbance within Area C, the presence of intact subsoil deposits within both trenches has demonstrated that had archaeological features been present, they would have survived previous landscaping within the Site.

#### 8 STORAGE AND CURATION

#### 8.1 Museum

8.1.1 The complete project archive will be prepared in accordance with Wessex Archaeology's *Guidelines for Archive Preparation* and in accordance with *Guidelines for the Preparation of Excavation Archives for Long-Term Storage* (Walker 1990) and following nationally recommended guidelines (SMA 1995). On completion of the project, the archive will be deposited with the appropriate museum.

#### 8.2 Archive

8.2.1 Following the fieldwork the archive and all artefacts were subsequently transported to Wessex Archaeology's Salisbury office where they were processed and assessed for this report. The accompanying documentary records from the archaeological works have been



compiled into a stable fully cross-referenced and indexed archive in accordance with *Management of Research Projects in the Historic Environment* (English Heritage 2006).

- 8.2.2 The contents of the project archive comprises two A4 ring-bound file containing the following:
  - 2 Trench Record Sheets
  - 1 A3 Drawing, including 1 Graphics Register
  - 1 Photographic Record Sheet
  - Day Book
  - A copy of the WSI
  - A copy of this Evaluation Report
- 8.2.3 The project archive including plans, photographs and written records are currently held at Wessex Archaeology's Rochester office under the Site code **89480**. The project archive will be deposited with the local museum.
- 8.2.4 Details of the Site, including a copy of this report, will be submitted online to the OASIS (Online Access to the Index of Archaeological Investigations) database.

### 8.3 Copyright

8.3.1 The full copyright of the written/illustrative archive relating to the Site will be retained by Wessex Archaeology Ltd under the Copyright, Designs and Patents Act 1988 with all rights reserved. The recipient museum, however, will be granted an exclusive license for the use of the archive for educational purposes, including academic research, providing that such use shall be non-profit making, and conforms to the Copyright and Related Rights regulations 2003.

#### 8.4 Security Copy

8.4.1 In line with current best practice, on completion of the project a security copy of the paper records will be prepared, in pdf format. A copy of the microfilm will be submitted to the National Monuments Record Centre (NMR) (English Heritage) in Swindon; a second copy will be deposited with the paper records at a local museum, and a third copy will be retained by Wessex Archaeology.

#### 9 REFERENCES

#### 9.1 Bibliography

Cartwright, C. 1992, The excavation of a Romano-British ironworking site at Broadfield, Crawley, West Sussex. SAC 130: 22-59

English Heritage, 1991, Management of Archaeological Projects. London

Harris, 2008, Historic Characterisation Assessment Report for Crawley

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Wessex Archaeology, 2013, Hilltop Primary School, Crawley, West Sussex. Archaeological Trail Trench Evaluation: Project Health and Safety Risk Assessment. Ref.: 89480

Wessex Archaeology, 2013, Hilltop Primary School, Crawley, West Sussex. Written Scheme of Investigation for an Archaeological Evaluation. Ref.: 89480.01



# 10 APPENDICES

# **Appendix 1: Table of Trench Descriptions**

All (+) indicate deposits/features not fully excavated CBM – ceramic building material

	<b>Dimensions</b> : 10m x 1.8m x 1.14m				
Trench 1	Land use: Playing field				
	Coordinates:	E526349.733 N135676.077, 95.038m aOD			
Context	Category		Description	Dimensions	
101	Topsoil		Mid brown clayey silt with occasional charcoal, ceramic and CBM	0.00-0.2m	
102	Redeposited clay / Levelling layer		Light yellow brown clay with yellow and grey mottles and occasional CBM, drain pipe and sub-rounded flints	0.2-0.96m	
103	Subsoil		Mid grey brown silty clay with occasional small CBM, coal and iron panning	0.96-1.09m	
104	Natural		Mottled mid yellow and light grey clay with moderate iron panning	1.09m+	

	Dimensions :	imensions: 10m x 1.8m x 0.8m			
Trench 2	Land use:	Playing field			
	Coordinates:	E526362.0	362.698 N135661.949, 95.122m aOD		
Context	Category	Description		Dimensions	
201	Topsoil		Mid brown clayey silt with occasional small sub- rounded flints	0.00-0.21m	
202	Redeposited clay / Levelling layer		Light yellow brown clay with yellow and grey mottles and occasional iron panning	0.21-0.31m	
203	Subsoil		Mid yellow brown slightly silty clay with moderate post- medieval tile, CBM and slag, and occasional sub- rounded flints	0.31-0.75m	
204	Natural		Light yellow brown clay with grey and orange mottles and patches of abundant iron panning	0.75m+	



# **Appendix 2: Oasis Record Form**

Hilltop Primary School, Crawley, West Sussex - Wessex Archaeology OASIS ID - wessexar1-153641

Versions

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Details Location Creators Archive **Publications** 

Yes Yes 1/1 Yes Yes

Validated sections in current version

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submitted? filename/s

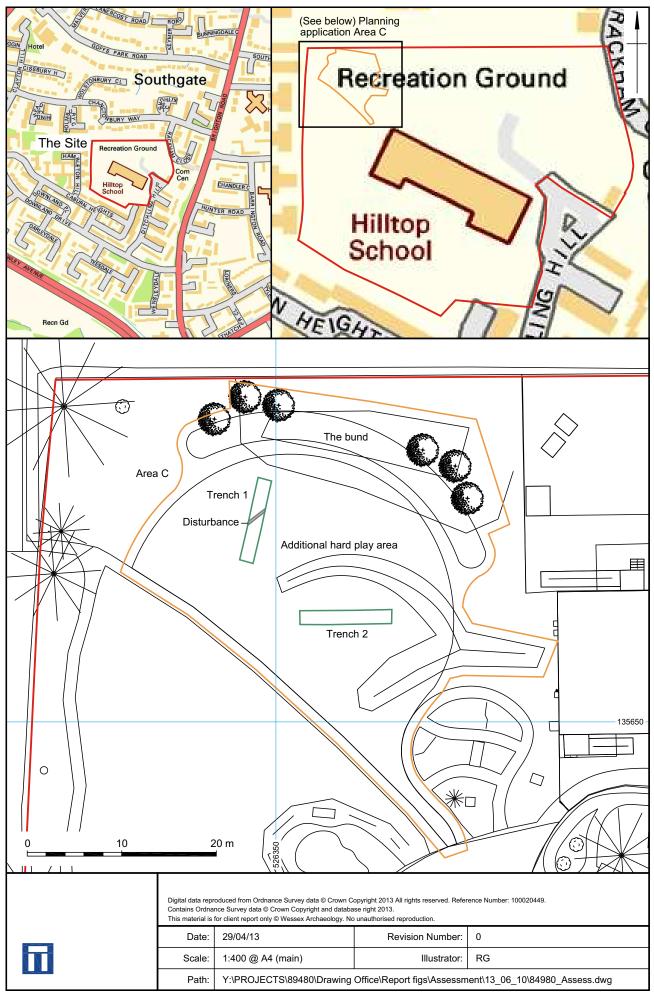
Report release delay Release into ADS library once Yes

Release delay specified? signed off

Images submitted? No Image filename/s

Boundary file submitted? No Boundary filename

HER signed off? NMR signed off?



Site and trench location Figure 1



Plate 1: Trench 1 viewed from the north east



Plate 4: Trench 2 viewed from the east



Plate 2: North west facing representative section at north eastern end of trench 1



Plate 5: South facing representative section at eastern end of trench 2



Plate 3: North west facing representative section at south western end of trench 1



Plate 6: South facing representative section at western end of trench 2

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