Archaeological Watching Brief Report

Former Railway Sidings, Three Bridges
Crawley, West Sussex

NGR: TQ 28677 36361

Planning Ref: CR/2011/0075/FUL

Project No: 5221
Site Code: FRS 11

ASE Report No: 2013138
OASIS ID: archaeol6-152330

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Abstract

Archaeology South-East was commissioned by Network Rail to undertake an archaeological watching brief on land at the Former Railway Sidings, Three Bridges, Crawley, West Sussex, in advance of the development of the site.

The work comprised the monitoring of the ground reduction on the site. Test pits and a trench were also excavated to determine the thickness of the overburden. Natural weald clay was recorded within two of the test pits and the trench. This was overlain by buried topsoil, which in turn was overlain by modern made ground. The made ground was encountered throughout the area of ground reduction.

No archaeology was observed during the watching brief.

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1.0 INTRODUCTION

1.1 Site Background

1.1.1 Archaeology South-East (ASE), the contracting division of the Centre for Applied Archaeology (CAA), Institute of Archaeology (IoA), University College London (UCL) was commissioned by Network Rail to undertake an archaeological watching brief on the Former Railway Sidings, Three, bridges, West Sussex (Figure 1, NGR TQ 28677 36361).

1.2 Geology and Topography

1.2.1 The British Geological Survey (2011) mapped the site as underlain by a solid geology comprising both Upper Tunbridge Wells Sandstone and Weald Clay. Superficial geology comprises alluvium and alluvial gravels of a minor tributary of the River Mole system, the Gatwick Stream.

1.2.2 The site is relatively flat and appears to occupy a floodplain of a size incommensurate with the apparent current fluvial system, suggesting major alluvial infilling of a larger valley and considerable reorganisation of the natural drainage by modern culverts, presumably as part of development of the site.

1.2.3 The flat and featureless topography of the site relates, to a degree, to its floodplain location but more significantly to major landscaping and levelling undertaken as part of the construction of railway sidings. This construction process would have involved the emplacement of made ground and possible truncation of the underlying geology. It would certainly have involved the removal of topsoil.

1.3 Planning Background

1.3.1 Planning permission for the erection of a three storey operating centre was granted by Crawley Council subject to conditions (Ref: CR/2011/0075/FUL).

1.3.2 Condition 11 of the planning permission states:

"No development shall be carried out on the site until the applicant, or their agents or successor in titles has secured the implementation of a programme of archaeological work (observation of ground works by an archaeologist) in accordance with a written Cultural Heritage Mitigation Strategy document, specification and timetable which have been submitted to and approved in writing by the Local Planning Authority."

1.3.3 A Written Scheme of Investigation was prepared (AECOM 2011) and approved by the John Mills of west Sussex County Council (WSCC) in his capacity as advisor to the Local Planning Authority on archaeological matters.

1.3.4 Prior to the commencement of further groundworks a site meeting took place to discuss the details of the works and associated archaeological monitoring. It was noted that some ground reduction works had already taken place

within made ground. The former rail track within the development site had also been removed but retained on site.

1.3.5 It was agreed that the watching brief should be maintained during further ground reduction to assess and review the nature of the deposits revealed. A requirement for further archaeological monitoring in this area would be dependent upon these results. Additional groundworks for the attenuation tanks should be monitored and assessed in a similar way.

1.3.6 The data from existing borehole logs (ASE 2012) indicated that the site straddles a channel edge environment preserving alluvium with potential for organic preservation, although no peat was recorded.

1.4 Aims and Objectives

1.4.1 The objectives of the archaeological watching brief were:

- To establish whether any archaeological remains survive.
- To allow for the recording of any archaeological features located.
- Assess the area for its geoarchaeological potential and sampling as appropriate.

1.5 Scope of Report

1.5.1 This report details the results of the archaeological watching brief carried out on the site on the 9th February 2012 and has been prepared in accordance with the Written Scheme of Investigation (AECOM 2011). The work was carried out by Andrew Margetts (Archaeologist) and managed by Neil Griffin (Fieldwork) and Jim Stevenson (Post-excavation).

2.0 ARCHAEOLOGICAL BACKGROUND

2.1 Prehistoric

The following archaeological background is summarised with due acknowledgement from the Written Scheme of Investigation (AECOM 2011) as well as the cultural heritage chapter which was written as part of an Environmental Impact Assessment by Ove Arup and Partners Ltd (2011).

2.1.2 Although there is no evidence for prehistoric settlement or activity within the development area, material dating to the prehistoric period has been identified within the wider area. This includes find spots of flint flakes and an arrowhead c. 300m to the north, and Mesolithic material from Maidenbower 1.2km to the south east and Tilgate 2km to the south west. It has also been suggested that palaeoenvironmental deposits associated with the River Mole might survive within the bounds of the development site (AECOM 2011).

2.2 Roman

2.2.1 No evidence for Roman activity has been found in the locality of the site.

2.3 Early Medieval and Medieval

2.3.1 There is no evidence for early medieval activity within the development site or the wider area. However, there is evidence for activity from the medieval period with a medieval oven and clamp base dating to 1160-1290 recorded at Maidenbower to the south east. A moated site known as Pound Hill has also been recorded approximately 1.2km to the north east. This latter site, which is also a Scheduled Monument, consists of a rectangular feature some 100m by 96m with associated fishponds, and both sites suggest settlement within the wider area during the medieval period.

2.4 Post- Medieval

2.4.1 The development area seems to have remained relatively undeveloped during the post-medieval period although industrial activities were taking place within the wider area. The Hammer Mead, Blackwater Green Forge, and Tilgate Furnace iron working sites were all located within 1km to the south east and south west of the site boundary, and were all linked by Maidenbower Lane. However, it would seem that the development site was largely used for agriculture until it was developed by the railways in the first half of the nineteenth century.

2.4.2 The settlement of Three Bridges, from which the station takes its name, seems to have developed during the late eighteenth century, although the earliest surviving structure in the area is Blackwater Cottage to the east which is dates to 1667-1732. Late eighteenth century mapping also shows that the road system is very similar to that which survives to the present, with the name of the settlement stemming from the three bridges that crossed the River Mole.

2.4.3 The 1840 tithe plan of the area depicted the railway line cutting through the agricultural land with the station added in 1841, and by the 1874 Ordnance Survey map of the area the station had expanded and a junction linking branch lines had been added to the south.

2.5 Previous Work

2.5.1 In January 2012 ASE conducted the excavation of two geoarchaeological boreholes on the site (ASE 2012); one revealed the presence of up to a metre of organic alluvium overlying fluvial gravels. The alluvium was truncated and mixed but displayed potential to preserve palaeoenvironmental remains. The deposit was sub-sampled for pollen analysis.

2.5.2 The pollen analysis showed a largely open environment with few trees and shrubs in the local area. Pollen of oak, hazel and possibly birch are from farther distances. There was evidence for grassland, probably pasture but also with cereal cultivation. Cereal pollen was in evidence and may have come directly from cultivation or indirectly from crop processing releasing pollen. The depositional habitat was probably a floodplain habitat with grasses sedges and other taxa of such habitats. Alder was growing along the fringe and drier zones of the wetland area.

3.0 METHODOLOGY

3.1 Archaeological Methodology

3.1.1 All work was undertaken with reference to the WSI (AECOM 2011) and the relevant standard and guidance documents of the Institute for Archaeologists (IfA 2008) and English Heritage (EH 2008).

3.1.2 The work comprised shallow ground reduction along the north-eastern edge of the site. Three test pits measuring approximately 2.0m^2 were excavated within the area to ascertain the depth of the overburden (Figure 2). The main area of impact from the works was between test pits 1 and 3 and for this reason an archaeological evaluation style trench (measuring 41.0m by 1.80m) was excavated between them to evaluate this area fully.

3.1.3 Spoil heaps were visually scanned for finds.

3.1.4 All archaeological remains and deposits were recorded using ASE standard context sheets, with colours recorded by visual inspection only. All archaeological remains were recorded on plastic drawing film at appropriate scales.

3.2 Site Archive

3.2.1 The site Archive, summarised in the table below, is currently held at the offices of ASE in Portslade, East Sussex, and will be offered to a local museum in due course.

Number of Contexts	3
No. of files/paper record	1
Plan and sections sheets	0
Bulk Samples	0
Photographs	20 Digital
Bulk finds	None
Registered finds	None
Environmental flots/residue	None

Table 1: Quantification of site archive

4.0 RESULTS (Figure 2)

4.1 Test Pits and Ground reduction

4.1.1 A total of three contexts were recorded during the archaeological watching brief and these are tabulated below.

Context	Type	Description	Max. Length m	Max. Width m	Deposit Thickness m
001	Layer	Made ground			0.20-0.60
002	Layer	Topsoil			0.30
003	Layer	Weald Clay			0.20

Table 2: List of recorded contexts

4.1.2 The ground reduction carried out prior to archaeological monitoring on site had revealed bluish grey rubbly clay made ground [001].

4.1.3 The base of test pits 1 and 3 revealed natural mid orange-yellow Weald Clay [003]. In both cases 0.20m of [003] was overlain by 0.30m of buried topsoil [002] comprising dark yellowish brown sandy silt and measuring 0.30m thick. This in turn was overlain between 0.20m and 0.60m of bluish grey rubbly clay made ground [001]. Test pit 2 was excavated to a similar depth but was found to be entirely within made ground [001].

4.1.4 The trench revealed similar deposits of weald clay [003], buried topsoil [002] and made ground [001].

4.1.5 No archaeology was observed during the groundworks.

5.0 THE FINDS

5.1 No finds were retrieved during the fieldwork.

6.0 DISCUSSION AND CONCLUSIONS

6.1 Natural Weald Clay was observed within two test pits and the trench, overlain by buried topsoil and modern made ground. The only deposit noted in test pit 2 was modern made ground. However, this is not surprising as it was located further north, closer to the location of the boreholes in which a much greater depth of made ground was recorded (ASE 2012).

6.2 No archaeology or deposits of geoarchaeological potential were identified during the works, and given the lack of impact of the groundworks no further site visits were made.

BIBLIOGRAPHY

AECOM 2011. *Three Bridges, Crawley, West Sussex, Cultural Heritage Mitigation Strategy WSI*

ASE 2012, *Former Railway Sidings, Three Bridges, Crawley, West Sussex: geoarchaeological Borehole Survey Report*

BGS 2011 British Geological Survey, Geology of Britain Viewer, accessed 04 6 13. http://maps.bgs.ac.uk/geologyviewer_google/googleviewer.html

English Heritage, 2008 *Management of Research Projects in the Historic Environment*

IfA 2008 *Standard and guidance for an archaeological watching brief.*

ACKNOWLEDGEMENTS

ASE would like to thank Network Rail for commissioning the work and John Mills of WSCC for his guidance and monitoring.

HER Summary Form

Site Code	FRS 11					
Identification Name and Address	Former Railway Sidings, Three Bridges, Crawley, West Sussex					
County, District &/or Borough	Crawley					
OS Grid Refs.	TQ 286 363					
Geology	Weald Clay					
Arch. South-East Project Number	5221					
Type of Fieldwork	Eval.	Excav.	Watching Brief✓	Standing Structure	Survey	Other
Type of Site	Green Field	Shallow Urban✓	Deep Urban	Other		
Dates of Fieldwork	Eval.	Excav.	WB. 09-02-2013	Other		
Sponsor/Client	Network Rail					
Project Manager	Andy Leonard					
Project Supervisor	Andrew Margetts					
Period Summary	Palaeo.	Meso.	Neo.	BA	IA	RB
	AS	MED	PM	Other None		

Summary

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Printable version

OASIS ID: archaeol6-152330

Project details

Project name	Former Railway Sidings, Three Bridges, Crawley
Short description of the project	The work comprised the monitoring of the ground reduction on the site. Test Pits were also excavated to determine the thickness of the overburden. Natural Weald Clay was recorded within two of the test Pits; it was overlain by a buried topsoil which was overlain by modern made ground, the made ground was encountered throughout the ground reduction. No archaeology was observed during the watching brief.
Project dates	Start: 09-02-2012 End: 09-02-2012
Previous/future work	Yes / No
Any associated project reference codes	5221 - Contracting Unit No.
Any associated project reference codes	FRS 11 - Sitecode
Any associated project reference codes	archaeol6-124577 - OASIS form ID
Type of project	Recording project
Site status	None
Current Land use	Vacant Land 1 - Vacant land previously developed
Monument type	NONE None
Significant Finds	NONE None
Investigation type	"Watching Brief"
Prompt	National Planning Policy Framework - NPPF

Project location

Country	England
Site location	WEST SUSSEX CRAWLEY CRAWLEY Former Railway Sidings, Three Bridges
Study area	1.52 Hectares
Site coordinates	TQ 286 363 51 0 51 06 39 N 000 09 45 W Point

Project creators

Name of Organisation	Archaeology South-East
Project brief originator	west sussex county council
Project design originator	west sussex county council
Project director/manager	Neil Griffin/Jim Stevenson
Project supervisor	Andrew Margetts
Project supervisor	Ian Hogg
Type of sponsor/funding body	Developer
Name of sponsor/funding body	Network Rail

Project archives

Physical Archive Exists?	No
Digital Archive recipient	Crawley Museum
Digital Contents	"Stratigraphic"
Digital Media available	"Images raster / digital photography","Text"
Paper Archive recipient	Crawley Museum
Paper Contents	"Stratigraphic"
Paper Media available	"Context sheet","Plan","Report","Section","Unpublished Text"

Entered by	Ian Hogg (ian.hogg@ucl.ac.uk)
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OASIS:

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