

**An Archaeological Evaluation at
The Former Northbrook College, Union Place,
Worthing, West Sussex**



Planning Ref: 05/0914/FULL

NGR 514937, 102910

Project No. 3273

Site Code: NBC 08

ASE Report No. 2008042

OASIS id: archaeol6 44271

Nick Garland MA

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Abstract

An archaeological evaluation was undertaken at the Former Northbrook College, Union Place, Worthing, West Sussex. The work was undertaken between the 21st and 23rd April and the 16th of June 2008 on behalf of CgMs Consulting Ltd. Five trenches, 85m in total length by 2m in width were excavated in advance for the development of residential properties

The natural brick earth, a mid orange clay silt with frequent chalk and flint nodules, was encountered at the lowest point at 8.54m OD to the south-east of the site (Trench 5) and at the highest point at 8.75m OD to the north-east of the site (Trench 2).

A layer of made ground overlay the subsoil and natural in all five trenches, probably associated with the construction of the college. The natural brickearth was disturbed in place in all trenches by previous construction works.

No archaeological deposits or features were discovered during the investigation.

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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 at the UCL Institute of Archaeology, was commissioned by CgMs Consulting Ltd to undertake an archaeological evaluation on land at The Former Northbrook College, Union Place, Worthing West Sussex, (centred NGR 514937,102910), (Fig. 1), in advance of redevelopment on the land.

1.2 Geology and Topography

- 1.2.1 The site is located between 8.98m OD and 9.89m OD. The British and Geological Survey (Sheets 318/333) shows the site lies on Brickearth deposits overlying the Upper/Middle Chalk.

1.3 Planning Background

- 1.3.1 An application for planning permission for the demolition of the existing buildings and development of the site has been granted by Worthing Borough Council (Planning ref. 05/0914/FULL).
- 1.3.2 Following the advice of the West Sussex County Council's Senior Archaeologist, Mark Taylor (in his capacity as advisor to Local Planning Authorities on archaeological planning matters), a condition was placed on the planning permission requiring a programme of archaeological work before the development commenced. The initial stage of this work involved the preparation of a Desk Based Assessment, undertaken by CgMs Consulting Ltd, (CgMs 2008), which informed the current archaeological evaluation.
- 1.3.3 An initial Specification for Evaluation was prepared by CgMs (2008). A Written Scheme of Investigation (WSI) was prepared by Jon Sygrave of ASE (Sygrave 2008). Both documents were approved by Mark Taylor, Senior Archaeologist, WSCC, prior to the commencement of the work.

1.4 Aims and Objectives

- 1.4.1 The Aims and Objectives of the evaluation were laid out in the Written Scheme of Investigation (Sygrave 2008) and are reproduced below.
- (a) To determine whether surviving archaeological remains extend across the development site.
 - (b) To investigate the character date and quality of ancient remains and deposits.
 - (c) To investigate how they might be affected by the development of the site.
 - (d) To determine particularly important remains should be preserved *in situ*.

- (e) To explore what options should be considered for mitigation.

1.5 Scope of Report

- 1.5.1 This report details the findings of the evaluation undertaken by Nick Garland between the 21st and 23rd of April 2008 and the 16th June 2008. On-site assistance was provided by Liane Peyre. The project was managed by Jon Sygrave (Project Manager) and Louise Rayner (Post-Excavation Manager).

2.0 ARCHAEOLOGICAL BACKGROUND

2.1 A preceding archaeological desk based assessment of the site was prepared by Richard Meager of CgMs Consulting Ltd (2008) and is summarised below with due acknowledgement.

2.2 The following is a consideration of known archaeological sites and findspots within a 750 metre radius of the site, discussed by period.

2.2.1 Palaeolithic and Mesolithic

Only one find of Palaeolithic date was found within the surrounding area, comprising of a single handaxe at the Aquarena site to the south east of the site (SMR ref 330-MWS397). No finds of Mesolithic date have been found in the vicinity.

2.2.2 Neolithic, Bronze Age and Iron Age

Neolithic activity in the surrounding area includes a handaxe that was discovered to the north-east of the site at Homefield Park (SMR ref 3326-MWS376) and a flint scatter that was found at Worthing station to the north (SMR 5843-MWS4596).

Bronze Age activity in the area includes a single flint (SMR ref: 3243-MWS314) and a ditch containing Bronze Age flint and pottery at St Pauls Church Hall, both to the west of the site (SMR ref: 7329-MWS7397). A late Bronze Age or Early Iron Age curvilinear ditch and associated features were also discovered at North Street/High Street, to the north-east of the site (SMR ref: 5809-MWS4526, 5941-MWS5833).

2.2.2 Roman

A collection of pottery including jugs, vases etc and a clay oven dating to the Late Iron Age or Early Roman period were discovered at Wykeham Road to the west of the site (SMR ref: 3230-MWS304).

Two possible areas of Roman occupation were discovered in close proximity to the site. A possible farmstead or villa site, including ditches and a cremation burial was also discovered to the north-west of the site at Chapel Street/Chapel Road (SMR ref: 3247-MWS318). A further Romano-British ditch which included grain and pottery within its fill, was discovered to the south of the site at South Street (SMR ref: 3247-MWS318).

Several findspots of Roman coins have been found in the immediate area around the site. This includes a coin of Domitian at Cross street, to the northwest (SMR ref: 3254-MWS324), and coins of Diocletian and Constantine at Park Crescent to the west (SMR ref: 3234-MWS308).

2.2.3 Anglo-Saxon and Medieval

Anglo-Saxon material in close proximity to the site is restricted to the discovery of a group of pits and postholes including pottery to the northeast of the site (SMR ref: 5811-MWS4528).

Three areas of Medieval activity have been identified in close proximity to the area of investigation. Evidence has been identified at Warwick Gardens to the southeast (SMR ref: 3345-MWS394), at Ashdown Road to the north including boundary ditches and pits (SMR ref: 7330-MWS7398) and at Little High Street to the northeast including grain dryers and enclosure ditches (SMR ref: 6412-MWS6702). A concentration of features and finds to the northeast of the site may be indicative of a Medieval village.

2.2.4 Post-Medieval and Modern

A Map regression exercise for the site indicates several phases of development and expansion between the earliest 1805 map to the modern day. The 1805 Plan of Worthing Manor show that the site as an undeveloped area, however, by the 1838 Parish map some development has taken place in the construction of stables, houses and gardens.

By the completion of the First Edition Ordnance survey map in 1875 there are two substantial buildings on the site including Elm Lawn (now a listed building) as well as further ancillary buildings to the north. The revised Ordnance survey map in 1934 shows an Art school building to the south-western corner of the site and the construction of further buildings associated with Elm Lawn.

The final phase of construction has appeared on the 1967-70 Ordnance Survey maps and includes a large rectangular building which was constructed to the north-western corner of the site. By the 2004 Ordnance survey map the school has been renamed Northbrook College.

3.0 ARCHAEOLOGICAL METHODOLOGY

- 3.1** Before the evaluation, the site was cleared of existing buildings. The footprints of the former buildings are shown on Fig. 2. A total of 85m metres of trenches, 2m in width, were excavated by machine under archaeological supervision (Fig. 2). This included two 20m trenches and three 15m trenches. The trench locations were accurately located using offsets from known positions and a Global Positioning System (DGPS) and DGPS Total Station (Leica 1205 R100 Total Station, Leica System 1200 GPS). The location of the trenches were arranged in order to excavate a sample of the site and was agreed with Mark Taylor, Senior Archaeologist (WSCC), prior to the commencement of excavation.
- 3.2** The trial trenches were scanned prior to excavation using a CAT scanner. All trenches were excavated under constant archaeological supervision, using a 13 ton 360° tracked excavator, fitted with a toothless ditching bucket. Revealed surfaces were manually cleaned in an attempt to identify any archaeological deposits or features. The sections of the trenches were selectively cleaned to observe and record their stratigraphy. All spoil removed from the trenches was scanned visually and with a metal detector for the presence of any stray, unstratified artefacts.
- 3.3** All encountered archaeological deposits, features and finds were recorded according to accepted professional standards in accordance with the approved ASE Written Scheme of Investigation using pro-forma context record sheets. Archaeological features and deposits were planned at a scale of 1:20 and sections generally drawn at a scale of 1:10. Deposit colours were verified by visual inspection.
- 3.4** A full photographic record of the trenches and associated deposits and features was kept (including monochrome prints, colour slides and digital), and will form part of the site archive. The archive is presently held at the Archaeology South-East offices at Portslade, East Sussex, and will in due course be offered to a suitable local museum.

3.5

Number of Contexts	15 contexts
No. of files/paper record	1 folder
Photographs	64 photographs

Table 1: Quantification of site archive

4.0 RESULTS

Five trenches were excavated across the site in order to fully examine the extent of any archaeological remains (Fig. 2).

4.1 TRENCH 1 (Fig 4)

Trench 1 measured 15m in length and 2m in width and was orientated in a north-east to south-west direction. It was located to the south-western corner of the area of investigation.

4.1.1 List of recorded contexts

Number	Type	Description	Max. Length	Max. Width	Deposit Depth	Height m.AOD
1/001	Layer	Made ground	Tr.	Tr.	0.86 m	9.55 m
1/002	Layer	Subsoil	Tr.	Tr.	0.23 m	8.69 m
1/003	Layer	Natural	Tr.	Tr.	N/A	8.46 m

4.1.2 Summary

The natural brickearth [1/003], a light brownish orange clayey silt with occasional inclusions of chalk and flint nodules, was observed between 8.27m OD to the north-east of the trench and 8.65m OD to the south-west of the trench.

A 0.23m thick layer of subsoil [1/002], a mid orange grey clayey silt, lay over the natural. It was overlain by a thick layer of made ground consisting of concrete and foundation material, [1/001].

No archaeological features or deposits were discovered within this trench.

4.2 TRENCH 2 (Fig 5)

Trench 2 measured 15m in length and 2m in width and was orientated in a north-west to south-east direction. It was located to the north-western corner of the area of investigation.

4.2.1 List of recorded contexts

Number	Type	Description	Max. Length	Max. Width	Deposit Depth	Height m.AOD
2/001	Layer	Made ground	Tr.	Tr.	0.42 m	9.32 m
2/002	Layer	Subsoil	Tr.	Tr.	0.23 m	8.90 m
2/003	Layer	Natural	Tr.	Tr.	N/A	8.67 m

4.2.2 Summary

The natural brickearth [2/003], a light brownish orange clayey silt with occasional inclusions of chalk and flint nodules, was observed between 8.58m OD to the south-east of the trench and 8.75m OD to the north-west of the trench.

A 0.23m thick layer of subsoil [2/002], a mid brown silty clay, lay over the

natural. It was overlain by a layer of made ground consisting of concrete and foundation material, [2/001].

No archaeological features or deposits were discovered within this trench.

4.3 TRENCH 3 (Fig 6)

Trench 3 measured 20m in length and 2m in width and was orientated in an east to west direction. It was located to the north of the area of investigation.

4.3.1 List of recorded contexts

Number	Type	Description	Max. Length	Max. Width	Deposit Depth	Height m.AOD
3/001	Layer	Made ground	Tr.	Tr.	0.19 m	8.98 m
3/002	Layer	Subsoil	Tr.	Tr.	0.13 m	8.79 m
3/003	Layer	Natural	Tr.	Tr.	N/A	8.66 m

4.3.2 Summary

The natural brickearth [3/003], a mid orange clayey silt with occasional inclusions of chalk and flint nodules, was observed between 8.57m OD to the east of the trench and 8.74m OD to the west of the trench.

A very thin, (0.13m), layer of intermittent subsoil, [3/002], a mid yellowish brown silty clay, lay over the natural. It was overlain by a layer of made ground consisting of concrete and foundation material [3/001].

No archaeological features or deposits were discovered within this trench.

4.4 TRENCH 4 (Fig 7)

Trench 4 measured 20m in length and 2m in width and was orientated in an east to west direction. It was located to the north-east corner of the area of investigation. The location of this trench was slightly altered from the original planned location due to obstacles on site.

4.4.1 List of recorded contexts

Number	Type	Description	Max. Length	Max. Width	Deposit Depth	Height m.AOD
4/001	Layer	Made ground	Tr.	Tr.	0.95 m	9.81 m
4/002	Layer	Subsoil	Tr.	Tr.	0.24 m	8.86 m
4/003	Layer	Natural	Tr.	Tr.	N/A	8.62 m

4.4.2 Summary

The natural brickearth [4/003], a mid orange clayey silt with occasional inclusions of chalk and flint nodules, was observed between 8.595m OD to the west of the trench and 8.64m OD to the east of the trench.

A layer of subsoil [4/002], a mid yellowish brown silty clay, lay over the natural to a depth of 0.24 metres. It was overlain by a layer of made ground

consisting of concrete and foundation material, [4/001].

No archaeological features or deposits were discovered within this trench.

4.5 TRENCH 5 (Fig 8)

Trench 5 measured 15m in length and 2m in width and was orientated in a north to south direction. It was located to the east of the area of investigation.

4.5.1 List of recorded contexts

Number	Type	Description	Max. Length	Max. Width	Deposit Depth	Height m.AOD
5/001	Layer	Made ground	Tr.	Tr.	0.45 m	9.05 m
5/002	Layer	Subsoil	Tr.	Tr.	0.05 m	8.60 m
5/003	Layer	Natural	Tr.	Tr.	N/A	8.55 m

4.5.2 Summary

The natural brickearth, [5/003], a mid orange clayey silt with occasional inclusions of chalk and flint nodules, was observed between 8.54m OD to the south of the trench and 8.56m OD to the north of the trench.

A very thin (0.05m) layer of subsoil [5/002], a mid yellowish brown silty clay, lay over the natural. It was overlain by a thick layer of made ground, a dark brownish grey clayey silt containing large pieces of concrete, brick and foundation material [5/001].

No archaeological features or deposits were discovered within this trench.

5.0 DISCUSSION

5.1 Archaeological Remains

- 5.1.1 The five evaluation trenches excavated across the site have clearly shown a lack of archaeological remains within the area of study. Despite the abundance of archaeological material in close proximity to the site, there is no evidence for occupation of this site prior to the 18th century.

5.2 Levels of Truncation / Made Ground

- 5.2.1 A layer of made ground was found covering all five trial trenches [1/001], [2/001], [3/001], [4/001] and [5/001]. This deposit varied in depth from 0.19 to 0.95 metres and contained a combination of foundation material and rubble from demolished buildings. This layer gives an indication of the construction activity that has been carried out on this site, the majority of which has occurred recently.
- 5.2.2 The abundance of 'made ground' across the entire area, shows the scale of construction, possibly stretching from the initial buildings associated with Worthing Manor to the buildings used recently as Northbrook College.
- 5.2.3 Despite the extensive disturbance across the site, there was still evidence of remaining subsoil in all of the trenches. This was intermittent and thin in Trenches, 3 and 5 (approximately 0.10m thick) and slightly more consistent and thicker in the remaining trenches (averaging 0.24m thick). This suggests that the archaeological horizon, the surface of the brickearth, remains broadly intact across the site. However, there was evidence of local disturbance by the former foundations / services in all trenches and the intermittent survival of the subsoil in Trenches 3 and 5 suggest that in places there is likely to have been a more widespread truncation of the surface of the natural geology.

6.0 CONCLUSIONS

- 6.1** The aims of the fieldwork as outlined in the WSI (Sygrave 2008) and in paragraph 1.4 in this report have been addressed. There were, in summary, no archaeological deposits, features or artefacts present and therefore nothing present that could be considered for preservation in situ. Given these negative results, it is therefore thought unlikely that there are substantial or significant archaeological remains present on the site which will be effected by the development.

BIBLIOGRAPHY

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ACKNOWLEDGEMENTS

The assistance of Richard Meager of CgMs Consulting Ltd and Mark Taylor, Senior Archaeologist, West Sussex County Council (WSCC) is gratefully acknowledged.

SMR Summary Form

Site Code	NBC 08					
Identification Name and Address	Northbrook College, Union Place, Worthing, West Sussex					
County, District &/or Borough	Worthing, West Sussex					
OS Grid Refs.	514937, 102910					
Geology	Sheets 318/333 - Upper/Middle Chalk					
Arch. South-East Project Number	3273					
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. 21/4 to 23/4, 16/6	Excav.	WB.	Other		
Sponsor/Client	CgMs Consulting Ltd					
Project Manager	Jon Sygrave					
Project Supervisor	Nick Garland					
Period Summary	Palaeo.	Meso.	Neo.	BA	IA	RB
	AS	MED	PM	Other Modern ✓		
<p>100 Word Summary.</p> <p><i>An archaeological evaluation was undertaken at the Former Northbrook College, Union Place, Worthing, West Sussex. The work was undertaken between the 21st and 23rd April and the 16th of June 2008 on behalf of CgMs Consulting Ltd. Five trenches, eighty five metres in total length by 2 metres in width were excavated.</i></p> <p><i>The natural brick earth, a mid orange clay, was encountered at the lowest point at 8.545 metres OD and at the highest point at 8.75 metres OD.</i></p> <p><i>A layer of made ground overlay all five trenches and foundations had disturbed the natural brickearth in all trenches. No archaeological deposits or features were encountered.</i></p>						

OASIS Form

OASIS ID: archaeol6-44271

Project details

Project name Northbrook College, Worthing

Short description of the project An archaeological evaluation was undertaken at the Former Northbrook College, Union Place, Worthing, West Sussex. The work was undertaken on the between the 21st and 23rd April and the 16th of June 2008 on behalf of CgMs Consulting Ltd. Five trenches, eighty five metres in total length by 2 metres in width were excavated in preparation for the development of residential properties. The natural brick earth, a mid orange clay with frequent chalk and flint nodules, was encountered at the lowest point at 8.545 metres OD to the south-east of the site (Trench 5) and at the highest point at 8.75 metres OD to the north-east of the site (Trench 2). A layer of made ground overlay the subsoil and natural in all five trenches, demonstrating the extent of construction that has taken place across the site. Foundations from this construction had disturbed the natural brickearth in all trenches. No archaeological deposits or features were encountered in any of the trenches.

Project dates Start: 21-04-2008 End: 16-06-2008

Previous/future work Yes / Not known

Any associated project reference codes NBC08 - Sitecode

Type of project Field evaluation

Site status None

Current Land use Community Service 1 - Community Buildings

Monument type NONE None

Significant Finds NONE None

Methods & techniques 'Targeted Trenches'

Development type Urban residential (e.g. flats, houses, etc.)

Prompt Direction from Local Planning Authority - PPG16

Position in the
planning process After full determination (eg. As a condition)

Project location

Country England

Site location WEST SUSSEX WORTHING WORTHING Northbrook College,
Union Place

Postcode BN11 1

Study area 6380.00 Square metres

Site coordinates TQ 514937 102910 50.8716584214 0.153341743478 50 52 17 N
000 09 12 E Point

Height OD Min: 8.55m Max: 8.75m

Project creators

Name of
Organisation Archaeology South-East

Project brief
originator CgMs Consulting

Project design
originator CgMs Consulting

Project
director/manager Jon Sygrave

Project supervisor Nick Garland

Type of
sponsor/funding
body Developer

Project archives

Physical Archive Exists?	No
Physical Archive recipient	Worthing Museum
Physical Contents	'other'
Digital Archive recipient	Worthing Museum
Digital Contents	'none'
Digital Media available	'Text'
Paper Archive recipient	Worthing Museum
Paper Contents	'other'
Paper Media available	'Context sheet','Photograph','Plan','Report'

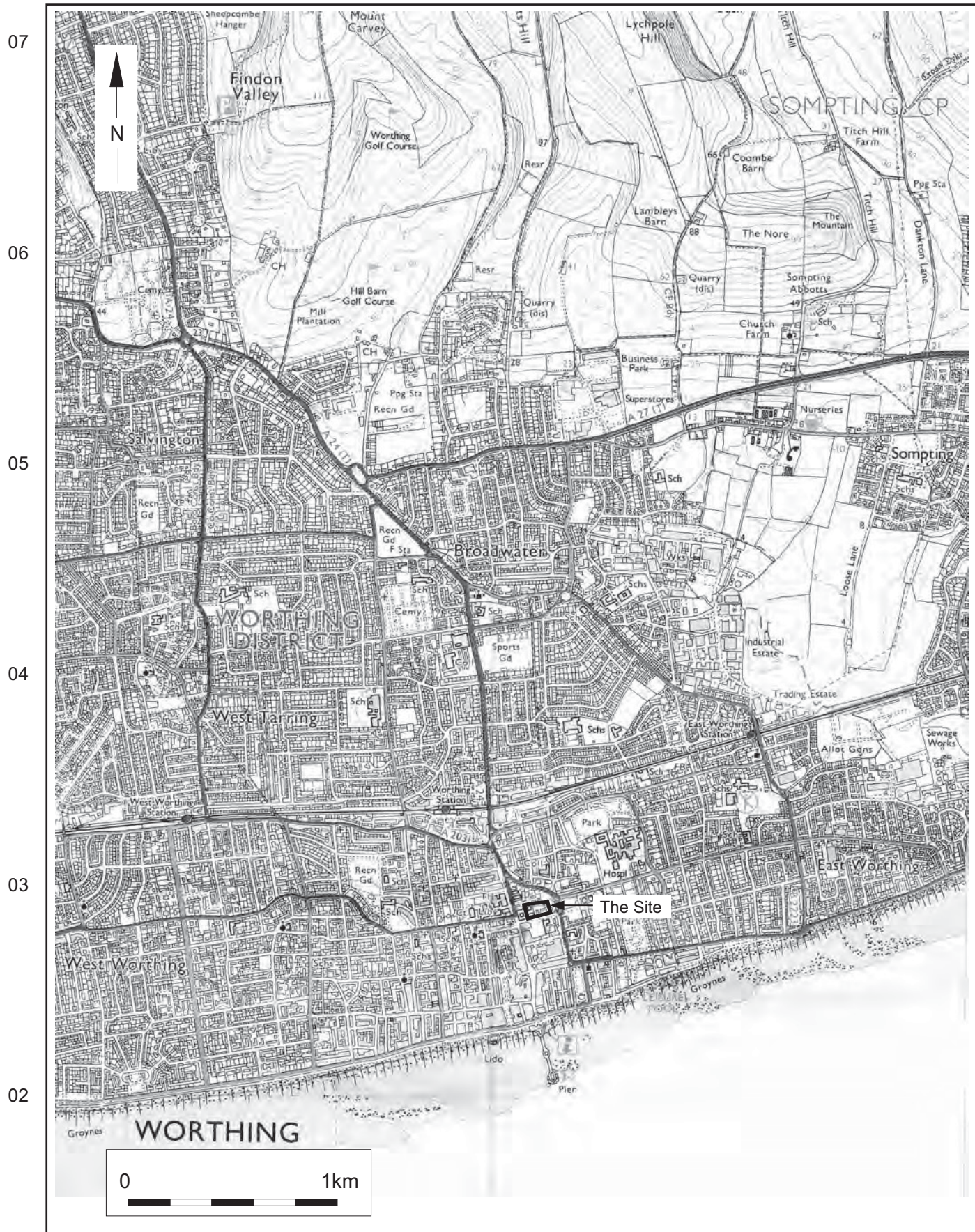
Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	An Archaeological Evaluation at Northbrook College, Union Place, Worthing, West Sussex
Author(s)/Editor(s)	Garland, N
Other bibliographic details	2008042
Date	2008
Issuer or publisher	Archaeology South-East

Place of issue or
publication Portslade, East Sussex

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Entered on 20 June 2008



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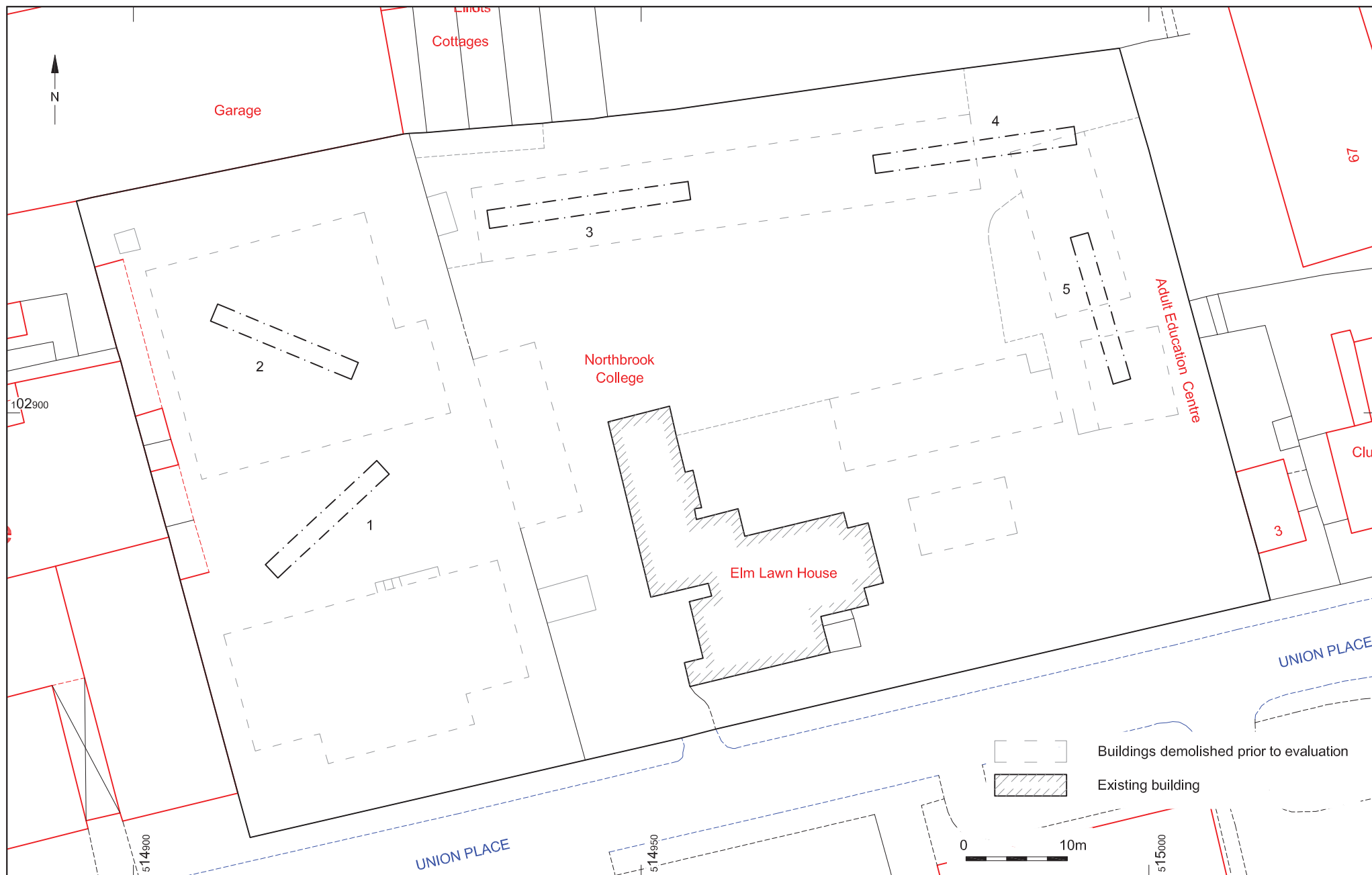
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Northbrook College

Trench Location Plan

Fig. 2



Fig. 3: Working shot of Excavation of Trench 2, facing south-east



Fig. 4: Trench 1, facing north-west

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Fig. 5: Trench 2, facing south-east



Fig. 6: Trench 3, facing east

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Fig. 7: Trench 4, facing east, after removal of made ground 4/001



Fig. 8: Trench 5, facing north

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