Costain Engineering and Construction Ltd 111 Westminster Bridge Road

Report No. January 2005 111 Westminster Bridge Road London SE1 7UE

ACTON HIGH SCHOOL LONDON BOROUGH OF EALING, W3

TQ 1940 7995

SITE CODE AHG 04

ARCHAEOLOGICAL EVALUATION PHASE 2

ACTON HIGH SCHOOL LONDON BOROUGH OF EALING, W3

TQ 1940 7995 SITE CODE AHG 04

CONTROLLED DOCUMENT

Gifford and Partners Document No:			11502/096/F	RO1			
Status:	Final			Сору No:			
		Name		Signature		Date	
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Gifford Approved:					January 2005		

Revision Record								
Rev.	Date	Ву	Summary of Changes	Chkd	Aprvd			

ACTON HIGH SCHOOL LONDON BOROUGH OF EALING, W3

ARCHAEOLOGICAL EVALUATION PHASE 2

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1. NON-TECHNICAL SUMMARY

- 1.1 Archaeological evaluation in advance of the redevelopment of Acton High School, consisted of one machine excavated trial trench and two hand excavated test pits located within the footprint of a proposed new school building. The work was preceded by earlier evaluation trenching in the area of the playing fields and to the east of the existing sports centre (Giffords Taylor 2004). Trench 7 was located to the south of the existing sports centre and Trenches 8 and 9 were located adjacent to the east and west walls of the sports centre.
- 1.2 Trench 7 revealed a NE-SW palaeochannel and a small oval feature, probably natural. Trenches 8 and 9 revealed the sports centre foundations to be at maximum depth of 25.54m OD. The report concludes that although no archaeological features or deposits were recorded within the area to the south of the sports centre, the shallow depth of the sports centre foundations suggests possible survival of archaeological deposits in situ below the existing building.

2. INTRODUCTION

- 2.1 This document is a report on an archaeological evaluation conducted between 20th and 23rd December 2004 in advance of redevelopment on the site known as Acton High School henceforth referred to as 'the site'. The site is bounded by two public gardens on Gunnersbury Lane to the east, by the railway sidings to the south and west and to the north by the backs of residential properties along West Lodge Avenue, King Edwards Gardens and Hillcrest Road. The proposed development consists of demolition of existing buildings, construction of new school buildings and refurbishment of existing sports facilities, services and car parks (Fig. 2). The National Grid Reference (NGR) for the centre of the site is TQ 1940 7995.
- 2.2 The archaeological evaluation sought to assess the archaeological potential of land within the footprint of the proposed new school building (fig. 2).
- 2.3 Gifford and partners have been commissioned by Costain Engineering and Construction Ltd to undertake the field-based evaluation of the site.
- 2.4 The fieldwork was conducted by Pre-Construct Archaeology Ltd (PCA), under the supervision of Kathelen Sayer and the project management of Timothy Bradley. The project was managed by Sean Steadman for Gifford and Partners and monitored by Kim Stabler for English Heritage.

3. PLANNING BACKGROUND

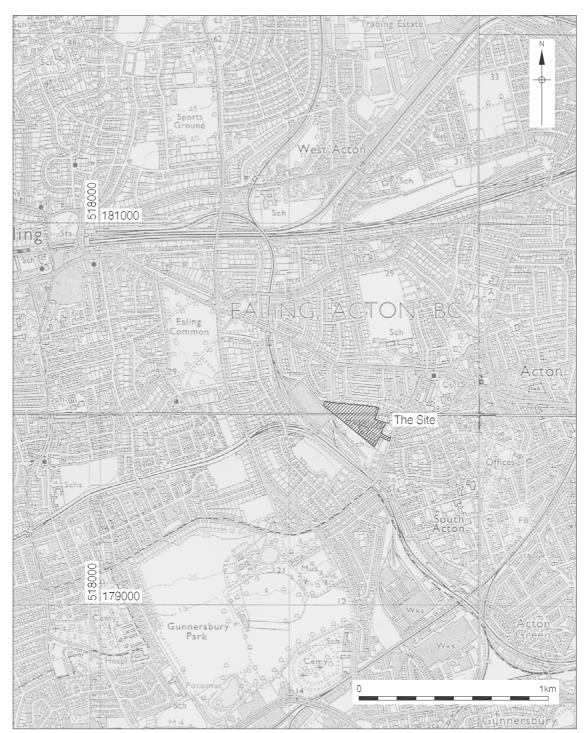
- 3.1 In July 2004 Gifford & Partners Ltd were commissioned by Costain Engineering and Construction Ltd to compile a Method Statement for an Archaeological Evaluation at Acton High School, London Borough of Ealing, W3 as part of the planning process for the site. This is a necessary stage to comply with Planning Policy relating to archaeology and development.
- 3.2 Outline planning for the development was submitted in September 2002 (Ref: TPST 10967/21), resulting in an archaeological condition (Condition 28) being imposed on the development in the Planning Committee report of January 2004. This states that: "No development shall take place until the applicant has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted by the applicant and approved by the Local Planning Authority".
- 3.3 Further, Informative Note 6 of the Planning Committee report advises that: "The development of this site is likely to damage archaeological deposits" and that: "Should significant archaeological remains be encountered in the course of field evaluation, an appropriate mitigation strategy, which may include archaeological excavation, is likely to be required".
- 3.4 Archaeology is now, as a result of the publication of Planning Policy Guidance 16 (Department of Environment 1990) a material consideration in the granting of planning consent. Planning Policy Guidance 16 (PPG 16) provides planning authorities with a staged approach to the consideration of archaeological remains that may survive on a proposed development site and states that where there are "nationally important archaeological remains... that area affected by a proposed development there should be a presumption in favour of their physical preservation" (DoE 1990, A8).
- 3.5 The London Borough of Ealing's approach to sites of archaeological importance is detailed in Section B29 of the Adopted Unitary Development Plan (1998), and in Section 4.9 of the New Plan for the Environment (2004). Although the site itself falls outside designated Areas of

Archaeological Interest, as defined on the Proposals Map (UDP Sheet 9), it is ringed by six of these areas.

3.6 A written brief was issued by the Council's archaeological advisor, in this case the Greater London Archaeology Advisory Service at English Heritage (LAG/09/190). This specified a requirement for six trenches measuring c.20.00m x c.2.00m, which would represent a c.5% sample of the development footprint. Following this initial stage of evaluation, the Council's Archaeology Advisor requested an additional trench, 25m x 2m, and two hand dug test pits to complement the results of the initial archaeological evaluation.

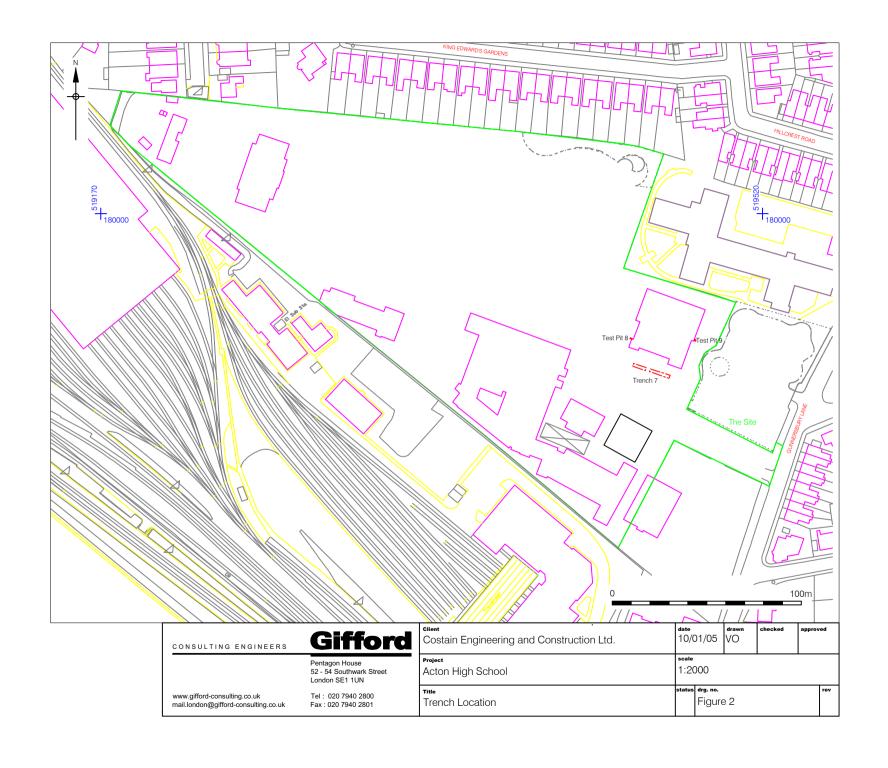
4. GEOLOGICAL AND TOPOGRAPHIC BACKGROUND

- 4.1 The site lies on an outcrop of Lynch Hill Gravels overlying London Clay (British Geological Survey). The Acton High School site lies on the southern edge of the Lynch Hill Gravel Terrace with Langley Silt deposits c.0.5km to the north. The British Geological Survey and Ordnance Survey maps of the area suggest the site sits on a gravel spur between two dry river valleys (Gifford 2004).
- 4.2 Lynch Hill Gravels were encountered in the evaluation trench at a depth of 25.21m OD.
- 4.3 Overall the area of the proposed development is situated on a gentle slope ranging from 27.04m OD in the north, to 26.66m OD in the west, 26.22m OD in the east and 25.61m OD in the south. The area of the phase 2 trenches is situated at the lowest point of this slope.



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CONSULTING ENGINEERS	Gifford	Costain Engineering and Construction Ltd.	date 10/01/0	05 VO	checked	approved	
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www.gifford-consulting.co.uk mail.london@gifford-consulting.co.uk	Tel: 020 7940 2800 Fax: 020 7940 2801	Title Site Location	status drg. Fi(no. gure 1		rev	



5. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

- 5.1 The archaeological potential for the area in the prehistoric period is well known with prehistoric remains in the area traditionally being associated with the gravel terraces and the overlying Langley Silt complex. The British Geological Survey and Ordnance Survey maps of the area suggest that the site is situated on a gravel spur located between two dry river valleys. Consequently the location of the site could potentially be a focus for prehistoric settlement. Archaeological remains from the Roman, Saxon and Medieval periods are less well known in the area.
- 5.2 The Greater London Sites and Monuments Record (SMR) records significant prehistoric discoveries in the area of Acton to the east of the site. In the Late 19th century important Palaeolithic flint tools were retrieved including a hand axe from Berrymead Priory in Acton Lane, flakes from Chaucer Road and a number of implements from Lorne Terrace, Myrtle Road. The most significant Palaeolithic evidence was recovered from a site in Creffield Road during the late 19th century whereby some 732 Levallois flakes, 15 Levallois cores and 2 hand axes were discovered. The artefacts were found below 1.8m 2.7m of brickearth at a level of c. 25.00m OD (Randell 1997).
- 5.3 Redevelopment to the east of the site at Mill Hill Park Estate, Avenue Gardens in 1882 led to the discovery of at least seven Bronze Age cremation urns. The site was consequently excavated between 1981 and 1985. Finds from the site included Palaeolithic flakes at c.19.75m OD, some 10m below the expected level of Palaeolithic activity, Mesolithic flint artefacts and one Bronze Age urn (Randell 1997).
- 5.4 Excavations at Mill Hill Park Estate, Avenue Gardens also found evidence for Roman field Boundaries, pits and quarry pits. Further evidence for Roman occupation in the area has come from King Street to the north-east of the site (Randell 1997). In 1880 fragments of eight Romano-British urns and other Roman artefacts were found in Ealing, though their exact location is not known (Taylor 2002).
- 5.5 An earlier phase of the evaluation undertaken on the site (Gifford, 2004) revealed a small pit containing prehistoric and Saxon pottery to the east of the sports centre in Trench 6. The pit was sealed by a layer of redeposited sand which may represent the remains of an associated earthwork. To the west of the sports centre a possible east-west V-shaped ditch was recorded in Trench 3 but contained no finds. A single residual sherd of Roman pottery was recovered from the topsoil of Trench 1 to the north of the sports centre, suggesting possible Roman activity within the vicinity.
- 5.6 Ealing was not mentioned in the Domesday Book but the place name is indicative of a Saxon settlement or the wider territory of a Saxon community derived from the name Gillingas (Taylor 2002). There is little archaeological evidence for the Saxon and medieval periods in the area (Darton 2002).
- 5.7 Ealing remained predominantly agricultural until the middle of the 19th century when it was transformed into a popular suburb, famous for the healthy living environment created by the lack of industry in the area (Taylor 2002). However, it is not thought that the study site was developed in the post-medieval period and significant post-medieval archaeology is not expected on the site.

6. METHODOLOGY

- 6.1 All work was undertaken in accordance with the Gifford Health and Safety Policy (7th Issue June 2000) and the Pre-Construct Archaeology Ltd Health and Safety Policy (PCAHS-2). Site-specific Risk Assessments are included in the WSI (Giffords 2004) as well as the Gifford and PCA Health and Safety policies.
- 6.2 Evaluation Trench 7 was opened under archaeological supervision by a JCB-type mechanical excavator fitted with a breaker to break out the car park surface and a toothless ditching bucket for excavation of the trench. All machine operatives were certified to industry standards (CITB or equivalent) and along with all site staff wore appropriate Personal Protective Equipment (PPE) at all times whilst working.
- 6.3 Prior to excavation, service plans detailing the location of buried utilities were obtained and the area of each trench was surveyed for buried services using a cable detection device. Trenches were located during the excavation using a Total Station Theodolite.
- 6.4 Where mechanical excavation was undertaken it avoided damage to any archaeological remains and was limited to removal of overburden. The mechanical excavator operated under archaeological supervision at all times. Overburden was removed in spits of up to 200mm thick.
- 6.5 Temporary barriers were erected around the evaluation area to prevent unauthorised access to the trenches. Trench 7 was machine excavated on the first day of the evaluation and was left open at the end of the evaluation. The concrete and cobbles overlying Trench 9 was broken out by machine and both Trenches 8 and 9 were excavated by hand and backfilled at the end of the evaluation.
- 6.6 Backfilling and reinstatement of Trench 7 was not undertaken by Pre-Construct Archaeology Ltd
- 6.7 The evaluation consisted of 3 trenches located in areas where the development is proposed (Fig. 2). Trench 7 was located to establish the southward and westward extent of prehistoric or Saxon features relating to the archaeological feature identified in Trench 6 to the east of the sports centre. Due to services running across the area of Trench 7 a 5m section was left unexcavated towards the western end of the trench. Trenches 8 and 9 were located to establish the current foundation design of the Sports Centre in order to estimate the level of truncation caused by its construction.

Trench 7 measured 20.20m EW x 1.80m NS x 1.70m maximum depth. Trench 8 measured 0.40m NS x 1.15m EW x 0.55m maximum depth. Trench 9 measured 0.70m NS x 0.80m EW x 0.54m maximum depth.

- 6.8 Following fill clearance, all faces of the trench that required examination were cleaned using appropriate hand tools. All investigation of archaeological levels was by hand, with cleaning, examination and recording both in plan and section.
- 6.9 Recording on site was undertaken using the single context recording system as specified in the Museum of London Site Manual. Plans were drawn at a scale of 1:20 or 1:50, and full or representative sections at a scale of 1:10 or 1:20. Contexts were numbered sequentially following on from those assigned during the earlier evaluation and recorded on *pro-forma* context sheets. The site was given the code AHG04.
- 6.10 A temporary benchmark (TBM) was transferred from the Ordnance Survey Bench Mark on Gunnersbury Lane opposite Beatrice House and Helen House (19.98m OD). The TBM had a value of 25.39m OD.

A full photographic record of the excavation and colour transparencies (on 35mm film), principle features and finds discovered.	was prepared, this illustrating in both	included black and detail and general	white prints context the

7. ARCHAEOLOGICAL EVIDENCE

7.1 Natural Sand and Gravel

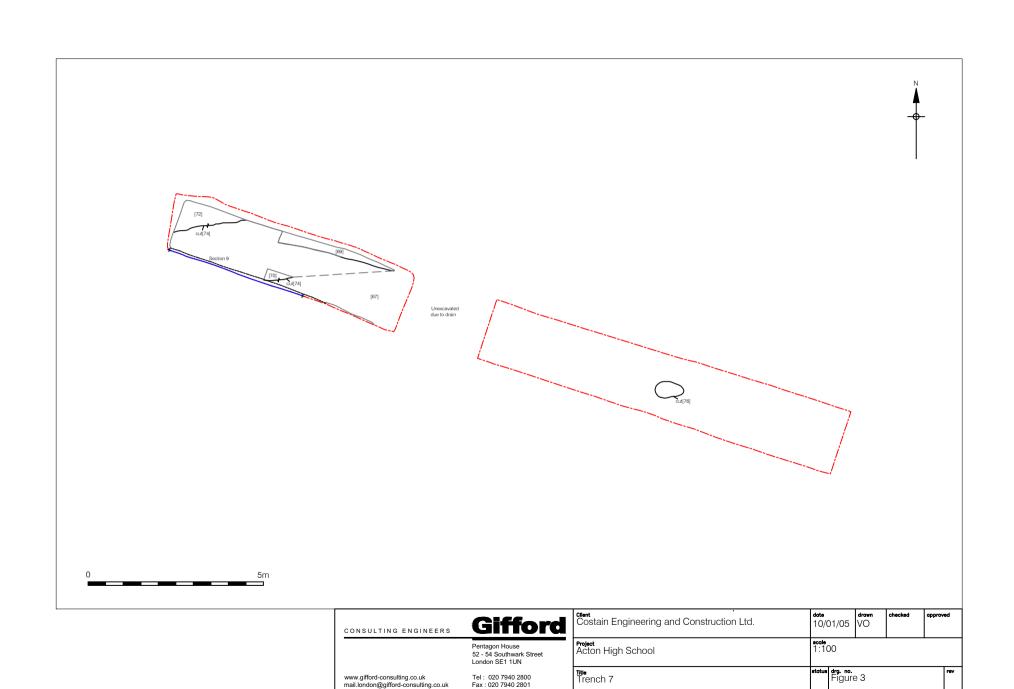
7.1.1 Natural gravelly sand, [67], was encountered in Trench 7 at a depth of 25.21m OD. The deposit was a mid yellowish orange sand with occasional gravel inclusions.

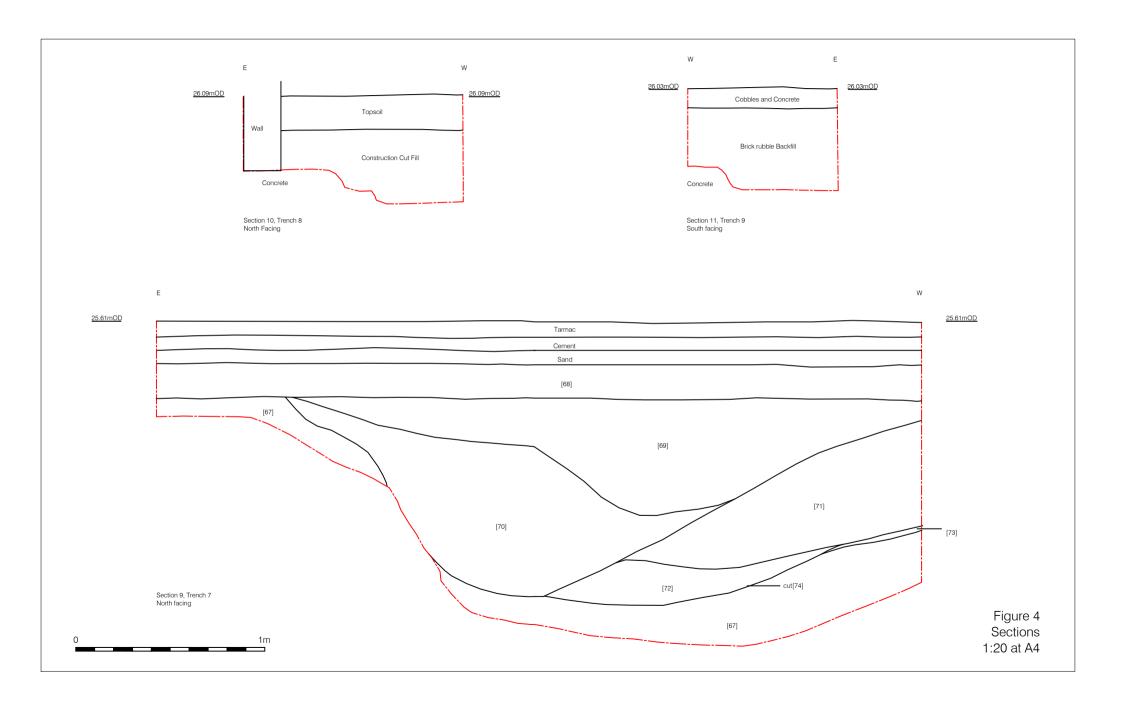
7.2 Palaeochannel

- 7.2.1 A large NE-SW channel, [74], was recorded cutting the natural sand and gravels at 25.21m OD in the western end of Trench 7 (Fig. 3). The channel contained five fills (Fig. 4). The primary fill, [73], was a firm dark yellowish brown sand, 0.03m in depth. The secondary fill, [72], was a firm light bluish grey clayey sand, 0.23m. Overlying this was tertiary fill [71], a firm mid brownish orange gravelly clay, 0.60m in depth, and above this, [70], a firm mid orange and mid orangey blue mottled silty sand, 0.80m in depth. The fifth fill, [69], was a firm mid orange brown clay, 0.60m in depth. The channel measured 3.65m NW-SE x 6.40m NE-SW and was 1.09m in depth.
- 7.2.2 A small oval feature, [76], was recorded to the east of the palaeochannel at 24.92m OD. The pit measured 0.50m NS x 0.78m EW x 0.20m in depth. It was filled by [75], a light whiteish grey sandy gravel with very frequent small well rounded pebble inclusions. No finds were contained within the feature and it is likely to be natural in origin.

7.3 Modern

- 7.3.1 A layer of modern made ground, [68], 0.17m in depth, overlay the palaeochannel and pit throughout Trench 7. Above this was a layer of tarmac 0.09m in depth, at 25.61m OD.
- 7.3.2 Within Trench 8 the foundations of the sports centre were revealed to be concrete stepped foundations on a concrete pad (Fig 4). The highest level of the foundations was recorded at 25.69m OD with the base of the concrete pad at 25.54m OD. The concrete pad extended 0.50m to the west of the wall. Overlying the foundations were 0.40m of brick rubble backfill and 0.18m of topsoil.
- 7.3.3 Within Trench 9 concrete stepped foundations on a concrete pad were recorded at a highest level of 25.62m OD (Fig 4). Only the top of the concrete pad was revealed as it continued beyond the edge of the test pit and underneath a public footpath. The top of this pad was recorded at 25.49m OD. Brick rubble, 0.44m in depth, overlay the foundations with a 0.10m layer of concrete and cobbles on top.





8 Interpretation

- 8.1 The archaeological evaluation recorded the presence of a large NE-SW palaeochannel. A small oval feature, probably natural, was situated to the east of this channel. No other archaeologically significant deposits were recorded during the evaluation.
- 8.3 The archaeological evaluation indicates that the area of Trench 7 has suffered very little truncation in the modern period. Test pits 8 and 9 revealed the sports centre foundations at the lowest level to be 25.54m OD. The Saxon pit found within Trench 6 was recorded at its highest level of 25.32m OD and excavated to depth of 25.14m OD, although its full depth is unknown as the pit continued beyond the limit of excavation. The palaeochannel and oval feature in Trench 7 were found at a height of 25.21m OD and 24.92m OD respectively. It is likely therefore that some archaeological deposits could survive *in situ* beneath the current building.

8. REVIEW OF THE EVALUATION STRATEGY

- 9.1 The aim of the archaeological evaluation was to define the location, character, extent, date and significance of surviving archaeological remains relating to the archaeological feature identified in Trench 6 to the east of the sports centre, to investigate the current foundation design of the sports centre and assess the level of truncation caused by its construction, and to reduce the risk of unforeseen archaeological remains being encountered during construction. An adequate representative sample of all areas, where archaeological remains are potentially threatened, was studied and attention was given to remains of all periods, inclusive of past environments.
- 9.2 The evaluation revealed the presence of a large NE-SW palaeochannel and a small oval feature to the south of the sports centre. The evaluation demonstrated that this area has been relatively unaffected by truncation.
- 9.3 The evaluation revealed that the sports centre foundations consist of a concrete pad to the depth of 25.54m OD. The evaluation therefore has shown the possibility of archaeological deposits surviving *in situ* beneath the existing sports centre.

10. ARCHAEOLOGICAL POTENTIAL OF THE SITE

- 10.1 Although no features relating to the Saxon pit in Trench 6 were found within Trench 7, it was shown that any archaeological deposits within this area would be relatively unaffected by modern truncation. The presence of a palaeochannel might have also attracted activity within the area.
- 10.2 The seemingly shallow foundations of the existing sports centre suggest that its construction would not have completely truncated any underlying archaeological deposits. If some truncation of deposits has occurred it seems likely that the bases of archaeological features would survive in situ.

11. CONCLUSIONS

11.1 The archaeological evaluation has allowed further analysis of the southern area of the proposed development, and the likely effects of the construction of the existing sports centre on archaeological deposits. Further investigation of the area underlying the sports centre could further add to the understanding of evidence of prehistoric, Roman and Saxon periods identified during phase 1 of the evaluation.

12. PUBLICATION PROPOSALS

12.1 The results of the evaluation will be summarised in the London Archaeologist roundup.

13. ARCHIVE DEPOSITION

- 13.1 The completed archive comprising written and drawn records from the evaluation will be deposited with the London Archaeological Archive Research Centre.
- 13.2 Contents of the archive:

Context Sheets - 10

Plans - 1 (8 sheets) Sections - 3 (3sheets)

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ACKNOWLEDGEMENTS

Gifford & Partners Ltd, Pre-Construct Archaeology Ltd and the author would like to thank all those involved in the project. Particularly we wish to thank Costain Engineering and Construction Ltd for funding the project. Thanks also to Kim Stabler, English Heritage, for monitoring the work.

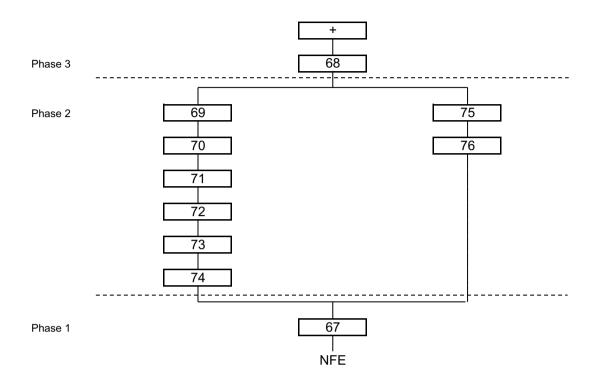
We would also like to thank Jo Taylor and Stuart Watson (Pre-Construct Archaeology) for their work on site. Thanks are also due to Victoria Osbourne, (Pre-Construct Archaeology Ltd), for preparing the site plans and illustrations.

APPENDIX 1: CONTEXT INDEX

Site	Context	Trench	Plan	Section	Phase	Туре	Description	Highest	Lowest
Code	Number		Number	Number					
AHG04	67	7	Tr 7	9	1	Layer	Natural sand and gravels	25.21	
AHG04	68	7		9	3	Layer	Modern made ground	25.39	
AHG04	69	7	Tr 7	9	2	Fill	5 th fill of palaeochannel [74]	25.21	
AHG04	70	7	Tr 7	9	2	Fill	4 th fill of palaeochannel [74]	25.21	24.61
AHG04	71	7		9	2	Fill	Tertiary fill of palaeochannel [74]	25.05	24.36
AHG04	72	7	Tr 7	9	2	Fill	Secondary fill of palaeochannel [74]	24.46	24.11
AHG04	73	7		9	2	Fill	Primary fill of palaeochannel [74]	24.52	24.36
AHG04	74	7	Tr 7	9	2	Cut	Cut of palaeochannel	25.21	24.11
AHG04	75	7	Tr 7		2	Fill	Fill of small pit [76]	24.92	
AHG04	76	7	Tr 7		2		Cut of small pit	24.92	24.65

APPENDIX 2: SITE MATRIX

Site Matrix



APPENDIX 3: OASIS REPORT

Project details

Project name An Archaeological Evaluation at Acton High School Phase 2

> The evaluation consisted of one evaluation trench and two hand excavated test pits located within the footprint of a new school building. The evaluation trench was located to the south the existing sports centre with the aim of investigating this area in relation to features found during

> the first phase of evaluation. A palaeochannel and possible undated small pit were recorded within this trench. The test pits were located against the east and west walls of the sports centre with the aim of investigating the design and depth of the current foundations and their

impact on any archaeological deposits.

Project dates Start: 20-12-2004 End: 23-12-2004

Previous/future work Yes / Not known

Any associated

Short description of

the project

project reference AHG 04 - Sitecode

codes

Type of project Field evaluation

Site status Local Authority Designated Archaeological Area

Current Land use Community Service 2 - Leisure and recreational buildings

Methods

techniques

'Environmental Sampling', 'Sample Trenches', 'Test Pits'

Public building (e.g. school, church, hospital, medical centre, law courts Development type

etc.)

Prompt Planning condition

Position

planning process

After full determination (eg. As a condition)

Project location

Country England

Site location GREATER LONDON EALING ACTON Acton High School

Postcode W3 Study area 36.36 Square metres

National grid TQ 1940 7995 Point

reference

Height OD Min: 25.21m Max: 25.21m

Project creators

Name Gifford and Partners Ltd

Organisation

brief Project Gifford and Partners Ltd originator

Project design Sean Steadman originator

Project Tim Bradley director/manager

Project supervisor Kathelen Sayer

Sponsor or funding Costain Engineering and Construction Ltd body

Project bibliography 1

Grey literature (unpublished document/manuscript) Publication type

Title An Archaeological Evaluation at Acton High School Phase 2

Author(s)/Editor(s) Sayer, K.

bibliographic Other Gifford and Partners Ltd details

Place of issue or London

publication

Kathelen Sayer (archive@pre-construct.com) Entered on 4 January 2005

Entered by

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