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FAIRLOP QUARRY, ALDBOROUGH HATCH, ALDBOROUGH ROAD AND HAINAULT ROAD, LITTLE HEATH, ROMFORD, ESSEX RM6 5SS, LONDON BOROUGH OF REDBRIDGE

PHASE E

ARCHAEOLOGICAL TRIAL TRENCH EVALUATION

Authors:	Thomas Muir (Fieldwork and report) Lauren Wilson (Research)	
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NGR: TQ 4535 8935		Report No: 5296
District: LB Redbridge		Site Code: HAN17
Approved: Claire Halpin CMIfA		Project No: 3294
		Date: 10 February 2017

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OASIS SUMMARY

Project details			
Project name	*Fairlop Quarry, Aldborough Hatch, Aldborough Road and Hainault Road, Little Heath, Romford, Essex RM6 5SS*		
In January 2017 Archaeological Solutions Ltd (AS) carried out an archaeological trial trench evaluation of Phase E land at Fairlop Quarry, Aldborough Hatch, Aldborough Road and Hainault Road, Little Heath, Romford, Essex RM6 5SS (NGR TQ 4535 8935). The evaluation was commissioned by David L. Walker Ltd and Phoenix Consulting Archaeology Ltd on behalf of their client Brett Tarmac Limited, to provide supplemental information additional to that presented in the Environmental Statement already submitted in support of the planning application for the proposed extensions at Fairlop. It will address the consultation response in relation to the application provided by the Historic England Greater London Archaeological Advisory Service (HE GLAAS). *Trenches 6, 7 and 9 overlay suspected 'ring ditches'. That overlain by Trench 9 correlated with the archaeological features (Ditch F1052 and Ditch Terminus F1062), though none were dated. The suspected ring ditch overlain by Trench 7 was less convincing. A ring ditch was not readily discernible though Ditch Terminus F1041 and Ditch F1066 did contain late Bronze Age pottery. Finally, the suspected ring ditch overlain by Trench 6 was not identifiable. Ditches were present but were broadly parallel (Ditches F1029, F1031, F1033 and F1038), and either undated or modern. Large ditch F1045 was medieval and contained residual Late Bronze Age pottery).* *Prehistoric, Late Bronze Age, pottery was derived from ditches located within Trenches 6 (F1045) and 7 (F1041 and F1066). The Late Bronze Age pottery assemblages were quite large (15, 14, 11 and 7 sherds). A burnt flint and sparse fragments of daub were found in association with the Late Bronze Age pottery (F1045).* *Seven Early to Middle Saxon sherds were present as residual sherds within medieval Ditches F1043 and F1045.* *Medieval features were also recorded in Trenches 6 (F1043 and F1045) and 7 (F1085), and the features were all ditches. Ditch F1045 contained both Late Bronze Age and also medieval pottery. It cut Ditch F1043 and therefore the prehistoric pottery is residual. Sparse fragments of daub were found in association with the medieval pottery. The medieval features may be associated with the moat, yards and pleasure gardens associated with 'Aldborough Hall', which lay outside of the area of investigation to the west.*		
Project dates (fieldwork)	*January 2017*		
Previous work (Y/N/?)	*Y*	*Future work*	*TBC*
P. number	*3294*	*Site code*	*HAN17*
Type of project	*Archaeological Trial Trench Evaluation*		
Site status			
Current land use	*Agriculture*		
Planned development	*Extractions*		
Main features (+dates)	*Ring ditches, ditches*		
Significant finds (+dates)	*Late Bronze Age and medieval (10^{th} – 12^{th} C)*		
Project location			
County/ District/ Parish	*Greater London*	*Redbridge*	*Little Heath*
HER/ SMR for area	*GLHER*		
Post code (if known)	*RM6 5SS*		
Area of site	*Phase E overall c.25 ha*		
NGR	*TQ 4535 8935*		
Height AOD (min/max)	*c. 27m AOD*		
Project creators			
Brief issued by	*HE GLAAS*		
Project supervisor/s (PO)	*Archaeological Solutions Ltd*		
Funded by	*Brett Tarmac Ltd*		
Full title	*Fairlop Quarry, Aldborough Hatch, Aldborough Road and Hainault Road, Little Heath, Romford, Essex RM6 5SS, London Borough of Redbridge. Phase E: Archaeological Trial Trench Evaluation*		
Authors	*Muir, T. and Wilson, L.*		
Report no.	*5296*		
Date (of report)	*10 February 2017*		

FAIRLOP QUARRY, ALDBOROUGH HATCH, ALDBOROUGH ROAD AND HAINAULT ROAD, LITTLE HEATH, ROMFORD, ESSEX RM6 5SS LONDON BOROUGH OF REDBRIDGE

PHASE E

ARCHAEOLOGICAL TRIAL TRENCH EVALUATION

SUMMARY

In January 2017 Archaeological Solutions Ltd (AS) carried out an archaeological trial trench evaluation of Phase E, land at Fairlop Quarry, Aldborough Hatch, Aldborough Road, Romford, Essex RM6 5SS (NGR TQ 4535 8935). The evaluation was commissioned by David L. Walker Ltd and Phoenix Consulting Archaeology Ltd on behalf of their client Brett Tarmac Limited, to provide supplemental information additional to that presented in the Environmental Statement already submitted in support of the planning application for the proposed extensions at Fairlop. It will address the consultation response in relation to the application provided by the Historic England Greater London Archaeological Advisory Service (HE GLAAS).

Trenches 6, 7 and 9 overlay suspected `ring ditches'. That overlain by Trench 9 correlated with the archaeological features (Ditch F1052 and Ditch Terminus F1062), though none were dated. The suspected ring ditch overlain by Trench 7 was less convincing. A ring ditch was not readily discernible though Ditch Terminus F1041 and Ditch F1066 did contain late Bronze Age pottery. Finally, the suspected ring ditch overlain by Trench 6 was not identifiable. Ditches were present but were broadly parallel (Ditches F1029, F1031, F1033 and F1038), and either undated or modern. Large ditch F1045 was medieval and contained residual Late Bronze Age pottery).

Prehistoric, Late Bronze Age, pottery was derived from ditches located within Trenches 6 (F1045) and 7 (F1041 and F1066). The Late Bronze Age pottery assemblages were quite large (15, 14, 11 and 7 sherds). A burnt flint and sparse fragments of daub were found in association with the Late Bronze Age pottery (F1045).

Seven Early to Middle Saxon sherds were present as residual sherds within medieval Ditches F1043 and F1045.

Medieval features were also recorded in Trenches 6 (F1043 and F1045) and 7 (F1085), and the features were all ditches. Ditch F1045 contained both Late Bronze Age and also medieval pottery. It cut Ditch F1043 and therefore the prehistoric pottery is residual. Sparse fragments of daub were found in association with the medieval pottery. The medieval features may be associated with the moat, yards and pleasure gardens associated with 'Aldborough Hall', which lay outside of the area of investigation, to the west.

AS are satisfied that the scope and content of the investigations are sufficient to arrive at an informed judgment on sensitivity and significance, and as such adequate archaeological inflation is now available to support a determination.

1 INTRODUCTION

1.1 In January 2017 Archaeological Solutions Ltd (AS) carried out an archaeological trial trench evaluation of Phase E, land at Fairlop Quarry, Aldborough Hatch, Aldborough Road, Romford, Essex RM6 5SS (NGR TQ 4535 8935; Figs. 1 - 2). The evaluation was commissioned by David L. Walker Ltd and Phoenix Consulting Archaeology Ltd on behalf of their client Brett Tarmac Limited, to provide supplemental information additional to that presented in the Environmental Statement already submitted in support of the planning application for the proposed extensions at Fairlop. It will address the consultation response in relation to the application provided by the Historic England Greater London Archaeological Advisory Service (HE GLAAS).

1.2 The evaluation was carried out according to the requirements of HE GLAAS. If remains are present, the LPA as advised by HE GLAAS may require a further scheme of mitigation for archaeological remains to comply with a planning condition imposed on any approval, prior to development commencing.

1.3 The evaluation was carried out in accordance with a requirement of the local planning authority as advised by HE GLAAS (Archaeological Advisors to the LPA). It adhered to a specification prepared by AS (dated 9th January 2017). It also adhered to the HE GLAAS Guidelines for Archaeological Projects in Greater London (2015). The project was also conducted in accordance with the Chartered Institute for Archaeologists' *Code of Conduct* and *Standard and Guidance for Archaeological Field Evaluations* (revised 2014).

Aims and Objectives

1.4 The evaluation determined, as far as is reasonably possible, the location, extent, date, character, condition, significance and quality of suspected archaeological remains liable to be threatened by the proposed development. An adequate representative sample of all areas where archaeological remains were potentially threatened was studied, and attention was given to sites and remains of all periods (inclusive of past environments).

1.5 The evaluation sought to clarify the nature and extent of existing disturbance and intrusions and hence assessed the degree of archaeological survival of buried deposits and surviving structures of archaeological significance, as well as any palaeoenvironmental remains. It particularly targeted anomalies revealed as cropmarks and as identified during the previous geophysical survey.

Planning Policy Context

1.6 The National Planning Policy Framework (NPPF 2012) states that those parts of the historic environment that have significance because of their historic,

archaeological, architectural or artistic interest are heritage assets. The NPPF aims to deliver sustainable development by ensuring that policies and decisions that concern the historic environment recognise that heritage assets are a non-renewable resource, take account of the wider social, cultural, economic and environmental benefits of heritage conservation, and recognise that intelligently managed change may sometimes be necessary if heritage assets are to be maintained for the long term. The NPPF requires applications to describe the significance of any heritage asset, including its setting that may be affected in proportion to the asset's importance and the potential impact of the proposal.

1.7 The NPPF aims to conserve England's heritage assets in a manner appropriate to their significance, with substantial harm to designated heritage assets (i.e. listed buildings, scheduled monuments) only permitted in exceptional circumstances when the public benefit of a proposal outweighs the conservation of the asset. The effect of proposals on non-designated heritage assets must be balanced against the scale of loss and significance of the asset, but non-designated heritage assets of demonstrably equivalent significance may be considered subject to the same policies as those that are designated. The NPPF states that opportunities to capture evidence from the historic environment, to record and advance the understanding of heritage assets and to make this publicly available is a requirement of development management. This opportunity should be taken in a manner proportionate to the significance of a heritage asset and to impact of the proposal, particularly where a heritage asset is to be lost.

2 DESCRIPTION OF THE SITE

2.1 The sites of the proposed extensions to the existing Fairlop Quarry are located within the parish of Aldborough Hatch, which lies within the London Borough of Redbridge. The sites are referred to as Phases E and F:

- Phase E, the Aldborough Hatch site, comprises 25 hectares of agricultural land associated with Aldborough House Farm and is predominately in use for paddocks and rough grassland.

- Phase F, the Hainault Road site, comprises 8.3 hectares of agricultural land associated with Hainault Farm.

2.2 The evaluation and this report relates to the Phase E area only. An earlier geophysical survey of Phase F did not suggest the presence of any below ground archaeological remains (Bartlett 2015).

2.3 Phase E is bounded to the south by Oaks Road. At the southern boundary of the site is Aldborough House Farm and its associated outbuildings and yards. The eastern boundary of the site is formed Aldborough Road which extends towards the existing Fairlop Quarry. The northern boundary of the site is an unmarked boundary across existing farmland, although it partially follows the course of a drain and respects the property boundaries of Redbridge's Station Road Centre and Barkingside's football ground to the north-west of the site.

2.4 The London Borough of Redbridge Archaeological Priority Areas Appraisal (Millward 2016) places all parts of the borough within one of four different tiers of archaeological significance and potential. The tiers vary depending on the archaeological significance and potential of that particular area. Archaeological Priority Areas (APAs) have been categorised into one of Tiers 1-3 while all other areas (i.e. those not in an Archaeological Priority Area) within the borough will be regarded as being in Tier 4. Tier levels indicate when there is a need to understand the potential impact of the proposed development on the heritage asset's significance. The type of planning applications and the tier level it is located in indicate the likelihood that archaeology will be a consideration in reaching a planning decision (Millward 2016, 2). The Aldborough Hatch site lies partially within the Fairlop Plain APA and the Fairlop Plain (Fringes) APA (Tier 3 3.2).

3 TOPOGRAPHY, GEOLOGY AND SOILS

3.1 The 25 hectares of agricultural land that form Phase E comprise part of the tenure of Aldborough Hatch Farm, which lies along the southern boundary of the site. The Cran Brook flows on a north to south alignment 30m beyond the site's western boundary, while a number of small farm drains run north to south and west to east across the site. The majority of the site lies on a flat relief at *c.* 28m AOD, although its western edge, close to the Cran Brook, slopes from 27 – 21m AOD. The majority of the Phase E site is situated on a geology of Boyn Hill Gravel, which is the earliest and highest of the Saalian gravel terrace of the River Thames (MoLAS 2000). However, the western edge of the site, which forms the small valley of the Cran Brook, lies on the geology of London Clay. Overlying the Boyn Hill Gravel and London Clay is a drift geology of Ilford's silty and sandy loams, as well as soils of the Windsor association, which are described as slowly permeable seasonally waterlogged clayey soils mostly with brown subsoils, and include some fine loamy over clayey and fine silty over clayey soils (Soil Survey of England and Wales 1983).

4 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

4.1 The site is discussed in a recent archaeological desk-based assessment (Wilson & Henry 2016). In summary:

Aerial Photo Survey

4.2 Phase E has previously been subject to an aerial photographic survey conducted in 2008 (Palmer 2008). This noted that the only suspected archaeological features within this area are the arcs of three possible ring ditches that may indicate the sites of Bronze Age funerary monuments external to the proposed extraction area. These are likely to have suffered plough damage. Within the western ring ditch are two short parallel ditches, or possible ditches, and a second pair have been identified some 40 metres to the west. A group of possible ditches has been mapped in the field in the south-west corner of the Phase E. The character of the crop-marked features was questionable as archaeological but the presence of an apparent double ditch added a level of uncertainty to the interpretation. The features are likely to be cut, but may survive from post-medieval land division rather than be

of earlier date. A linear feature of military origin cuts through the extreme northern part of Phase E.

Geophysical Survey

4.3 Magnetometry surveys have been conducted on both Phase E (Bartlett 2011) and Phase F (Bartlett 2015) of the proposed development site.

4.4 In Phase E (Bartlett 2011), the survey detected a limited number of features of potential archaeological origin, but there were no groups or concentrations of findings of a kind which could indicate a large or significant archaeological site. In the south-western part of Phase E linear features were recorded which could indicate traces of ditched enclosures (or perhaps more recent drains). In the south-western part, findings include one of the cropmark ring-ditches (again indicating potential damage through ploughing), previously identified from aerial photographs (Palmer 2008) and pit-like features possibly containing recent debris.

4.5 It was therefore suggested that Phase E has only a low potential for archaeology dating to the early prehistoric, Romano-British and Anglo-Saxon periods, and a moderate potential for Iron Age, early modern and modern remains. It had a higher potential for Bronze Age remains as such features are well-documented in the area and suspected ring ditches are located in the site's south-eastern part.

5 METHODOLOGY

5.1 HE GLAAS required archaeological trial trench evaluation of the site to determine the location, extent, date and character of any archaeological remains. Phoenix Consulting Archaeology Ltd prepared a trench plan which was approved by HE GLAAS.

5.2 Undifferentiated overburden was removed under close archaeological supervision using a mechanical excavator fitted with a toothless ditching bucket. Thereafter, all investigation was undertaken by hand. Exposed surfaces were cleaned as appropriate and examined for archaeological features and finds. Deposits were recorded using *pro forma* recording sheets, drawn to scale and photographed. Excavated spoil was checked for finds and the trenches were scanned by metal detector.

6 DESCRIPTION OF RESULTS

6.1 Individual trench descriptions are presented below:

Trench 1 (Figs. 2 - 3)

Sample section 1A: *0.00m = 27.01m AOD*		
0.00 – 0.42m	L1000	Topsoil. Firm, dark brown grey clay silt with occasional small sub-rounded flint.
0.42 – 0.60m	L1001	Subsoil. Firm, mid orange brown silty clay with occasional small sub-rounded flint.
0.60m +	L1003	Natural deposits. Friable, mid greyish brown yellow silty sand with frequent small sub-rounded and sub-angular flints.

Sample section 1B: *0.00m = 26.92m AOD*		
0.00 – 0.40m	L1000	Topsoil. As above.
0.40 – 0.52m	L1001	Subsoil. As above.
0.52m +	L1002	Natural deposits. Firm, mid brown orange silty clay.

Description: Trench 1 contained a modern land drain, F1021.

Drain F1021 was linear in plan (25.0 x 0.28 x 0.55mm), orientated north-west/south-east. It had vertical sides and its base was unseen. The basal fill, L1022, was a friable, light greyish orange silt sand. It contained no finds. The upper fill, L1023, was a firm, mid brownish grey clayish silt with occasional small sub-rounded flints. It contained no finds.

Trench 2 (Fig. 2)

Sample section 2A: *0.00m = 27.11m AOD*		
0.00 – 0.30m	L1000	Topsoil. As above, Trench 1.
0.30 – 0.52m	L1001	Subsoil. As above, Trench 1.
0.52m +	L1003	Natural deposits. As above, Trench 1.

Sample section 2B: *0.00m = 271.9m AOD*		
0.00 – 0.30m	L1000	Topsoil. As above, Trench 1.
0.30 – 0.50m	L1001	Subsoil. As above, Trench 1.
0.50m +	L1003	Natural deposits. As above, Trench 1.

Description: Trench 2 contained no archaeological features or finds.

Trench 3 (Fig. 2)

Sample section 3A: *0.00m = 27.21m AOD*		
0.00 – 0.34m	L1000	Topsoil. As above, Trench 1.
0.34 – 0.63m	L1001	Subsoil. As above, Trench 1.
0.63m +	L1003	Natural deposits. As above, Trench 1.

Sample section 3B: *0.00m = 27.24m AOD*		
0.00 – 0.34m	L1000	Topsoil. As above, Trench 1.
0.34 – 0.52m	L1001	Subsoil. As above, Trench 1.
0.52m +	L1002	Natural deposits. As above, Trench 1.

Description: Trench 3 contained no archaeological features or finds.

Trench 4 (Figs. 2 - 3)

Sample section 4A: *0.00m = 27.28m AOD*		
0.00 – 0.35m	L1000	Topsoil. As above, Trench 1.
0.35 – 0.49m	L1001	Subsoil. As above, Trench 1.
0.49m +	L1002	Natural deposits. As above, Trench 1.

Sample section 4B: *0.00m = 27.22m AOD*		
0.00 – 0.34m	L1000	Topsoil. As above, Trench 1.
0.34 – 0.49m	L1001	Subsoil. As above, Trench 1.
0.49m +	L1002	Natural deposits. As above, Trench 1.

Description: Trench 4 contained Pit F1024 which was possibly a quarry pit. It contained modern (late 18th – early 20th century) pottery.

Large Pit F1024 was elongated in plan (1.80m+ x 6.55 x 0.77m +). It had moderately sloping sides and its base was unseen. Its basal fill, L1025, was a firm, mid red brown sandy clay with frequent patches of gravel throughout. It contained early modern (late 17th – 18th century) pottery (1; 15g). Above, L1026, was a friable, dark brown grey sandy silt and it contained no finds. Above L1026, L1027, was a firm, mid yellow brown silt clay with occasional medium-sized gravel patches throughout. It contained no finds. The uppermost fill, L1028, was a friable, mid grey brown sandy silt with occasional small sub-rounded flint. It contained CBM (541g) and modern (late 18th – early 20th century) pottery (3; 5g). The aerial photographic assessment suggested this feature was a hand-dug quarry pit.

Trench 5 (Figs. 2 & 4)

Sample section 5A: *0.00m = 27.29m AOD*		
0.00 – 0.37m	L1000	Topsoil. As above, Trench 1.
0.37 – 0.54m	L1001	Subsoil. As above, Trench 1.
0.54m +	L1003	Natural deposits. As above, Trench 1.

Sample section 5B: *0.00m = 27.24m AOD*		
0.00 – 0.31m	L1000	Topsoil. As above, Trench 1.
0.31 – 0.39m	L1001	Subsoil. As above, Trench 1.
0.39m +	L1002	Natural deposits. As above, Trench 1.

Description: Trench 5 contained four ditches (F1004, F1006, F1012, and F1014), a gully (F1008), and three pits (F1010, F1017, and F1019). Ditches F1004, F1012 and F1014, and Pit F1010 contained post-medieval or early modern (17th – 19th century) and CBM.

Gully F1008 was linear (5.75+ x 0.34 x 0.13m), orientated north- east/south-west. It had moderately sloping sides and a concave base. Its fill, L1009, was a firm, mid grey brown sandy clay with moderate, small, sub-angular flint. It contained daub (1; 4g).

Pit F1010 was sub-circular in plan (0.55 x 0.50 x 0.13m). It had gently sloping sides and a concave base. Its fill, L1011, was a firm, mid grey brown silt clay. It contained CBM (93g).

Pit F1017 was sub-circular in plan (0.80 x 0.75 x 0.19m). It had gently sloping sides and a concave base. Its fill, L1018, was a firm, mid grey brown clay silt. It contained no finds.

Pit F1019 was sub-circular in plan (1.10+ x 0.35 x 0.24m). It had steep sides and its base was unseen. Its fill, L1020, was a firm, mid grey brown clay silt. It contained no finds.

The ditches are tabulated below:

Feature	Plan/profile (dimensions)	Fill	Relationship	Finds
F1004	Linear in plan (1.80+ x 0.95 x 0.12m), oriented north/south. Moderately sloping sides and an irregular flattish base.	L1005: Firm, mid grey brown clay silt with occasional small sub-rounded flints.	-	CBM (25g)
F1006	Linear in plan (1.80+ x 1.20 x 0.14m), oriented north/south. Moderately sloping sides and an irregular flattish base.	L1007: Firm, mid grey brown clay silt with occasional small, sub-rounded flints.	Cut Gully F1008	None
F1012	Linear in plan (1.80+ x 1.20 x 0.50m), oriented north/south. Steep – vertical sides and a flattish base.	L1013: Firm, mid grey brown silt clay.	-	Modern (18th – 19th C) pottery (9; 90g), CBM (231g)
F1014	Linear in plan (1.80+ x 1.11 x 0.39m) oriented north/south. Steep – vertical sides and a flattish base.	L1015: Basal fill. Firm, mid yellow brown silt clay with occasional small sub-rounded flints.	-	Modern (17th – 19th C) pottery (2; 6g), CBM (25g)
		L1016: Upper fill. Firm, mid grey brown silt clay with occasional small sub-rounded flints.		None

Trench 6 (Figs. 2 & 4)

Sample section 6A: *0.00m = 27.22m AOD*		
0.00 – 0.34m	L1000	Topsoil. As above, Trench 1.
0.34 – 0.53m	L1001	Subsoil. As above, Trench 1.
0.53m +	L1002	Natural deposits. As above, Trench 1.

Sample section 6B: *0.00m = 27.18m AOD*		
0.00 – 0.32m	L1000	Topsoil. As above, Trench 1.
0.32 – 0.61m	L1001	Subsoil. As above, Trench 1.
0.61m +	L1002	Natural deposits. As above, Trench 1.

Description: Trench 6 contained six ditches (F1029, F1031, F1033, F1038, F1043 and F1045) and Gully, F1050.

Ditches F1029, F1031, F1033 contained modern (19th – 20th century) pottery and CBM. Ditch F1043 contained medieval (11th – 12th century) pottery, and Ditch F1045 contained Late Bronze Age and medieval (11th – 12th century) pottery. Ditch F1045 cut Ditch F1043 and therefore the prehistoric pottery is residual.

Gully F1050 was linear in plan (6.50+ x 0.45 x 0.18m), orientated north-east/south-west. It had moderately sloping sides with a concave base. Its fill, L1051, was a firm, light brownish grey silt clay with occasional small sub-rounded flints. It contained no finds.

The ditches are tabulated below:

Feature	**Plan/profile (dimensions)**	**Fill**	**Relationship**	**Finds**
F1029	Linear in plan (1.80+ x 0.92 x 0.14m), oriented north/south. Steep sides and a flattish base.	L1030: Firm, mid grey brown silt clay with occasional small sub-rounded flints.	-	Modern (19th – 20th C) pottery (1; 8g), CBM (3g), glass (6g)
F1031	Linear in plan (1.80+ x 1.06 x 0.34m), oriented north/south. Steep sides and a flattish base.	L1031: Firm, dark brown grey silt clay with occasional small, sub-rounded flints.	-	CBM (110g)
F1033	Linear in plan (1.80+ x 1.17 x 0.44m), oriented north/south. Steep sides and a flattish base.	L1034: basal fill. Firm, dark grey brown silt clay with occasional small sub-rounded flints.	-	CBM (132g)
		L1035: Upper fill. Firm, mid grey brown silt clay with occasional small sub-rounded flints.		Modern (19th – 20th C) pottery (1; 2g), CBM (100g), Fe. Frag. (71g)
F1038	Linear in plan (1.80+ x 1.11 x 0.36m), oriented north/south. Steep sides and a flattish base.	L1039: Basal fill. Firm, dark grey brown silt clay with occasional small sub-rounded flints.	-	None
		L1040: Upper fill. Firm, mid grey brown, silt clay.		None
F1043	Linear in plan (1.80+ x 1.40 x 0.20m), oriented north/south. Steep sides and a concave base.	L1044: Firm, mid grey brown silt clay with occasional small sub-rounded flints.	Cut by Ditch F1045	Medieval (11th – 12th C) pottery (14; 164), daub (60g)
F1045	Linear in plan (1.80+ x 1.50 x 0.70m), oriented north/south. Moderately sloping sides and a concave base.	L1046: Basal fill. Friable, mid black grey candy clay with occasional charcoal throughout.	Cut Ditch F1043	Late Bronze Age pottery (7; 53g), animal bone (11g), burnt flint (5g)

		L1047: Firm, mid yellow brown silt clay with occasional small sub-rounded flints.		Medieval (11th – 12th C) pottery (31; 368), daub (467g)
		L1048: Firm, dark blue grey silt clay.		Late Bronze Age pottery (15; 170g), daub (3g)
		L1049: Upper fill. Firm, medium grey brown sandy clay with occasional small sub-rounded flints.		Fired clay (7g), slag (301g)

Trench 7 (Figs. 2 & 5)

Sample section 7A: *0.00m = 27.07m AOD*		
0.00 – 0.36m	L1000	Topsoil. As above, Trench 1.
0.36 – 0.49m	L1001	Subsoil. As above, Trench 1.
0.49m +	L1002	Natural deposits. As above, Trench 1.

Sample section 7B: *0.00m = 27.13m AOD*		
0.00 – 0.35m	L1000	Topsoil. As above, Trench 1.
0.35 – 0.59m	L1001	Subsoil. As above, Trench 1.
0.59m +	L1002	Natural deposits. As above, Trench 1.

Description: Trench 7 contained Ditches F1036, F1066, and F1085, Ditch Terminus F1041, Gully Terminus F1070, Posthole F1087, and Pit F1078. Ditch F1066 and Ditch Terminus F1041 contained Late Bronze Age pottery, Ditch F1085 contained medieval (10th – 12th century) pottery.

Ditch F1036 was curvilinear in plan (1.80+ x 1.40 x 0.16m). It had gently sloping sides and a flattish base. Its fill, L1037, was a friable, dark grey brown silt clay. It contained no finds.

Ditch F1066 was linear in plan (1.80+ x 1.17 x 0.29m), oriented north/south. It had steep sides and a flattish base. Its fill, L1067, was a firm, light brownish grey, silt clay. It contained Late Bronze Age pottery (1; 11g) and daub (118g).

Ditch F1085 was linear in plan (1.80+ x 0.98 x 0.22m), orientated north/south. It had moderately sloping sides and a flattish base. Its fill, L1086, was a firm, light brownish grey silt clay with occasional small, sub-angular flints. It contained medieval (10th – 12th century) pottery (2; 9g).

Terminus F1041 was linear in plan (1.10+ x 1.35 x 0.66m), orientated north/south. It had steep sides and a concave base. Its lower fill, L1061, was a firm, mid grey brown silt clay with moderate small sub-angular flints. It contained Late Bronze Age pottery (11; 227g). Its upper fill, L1042, was a firm, dark grey brown silt clay. It also contained Late Bronze Age pottery (14; 461g).

Gully Terminus F1070 was linear in plan (0.90+ x 0.72 x 0.14m), orientated north-east/south-west. It had gently sloping sides and a concave base. Its fill, L1071, was a friable, mid grey brown silt clay with occasional small sub-angular flints. It contained no finds.

Posthole F1087 was sub-circular in plan (0.22 x 0.18 x 0.15m). It had steep sides and a narrow concave base. Its fill, L1088, was a firm, mid grey brown silt clay with occasional small sub-angular gravel. It contained no finds.

Pit F1078 contained multiple fills as tabulated below. It contained no finds.

Feature	Plan/profile (dimensions)	Fill	Finds
F1078	Sub-circular in plan (0.98 x 0.30+ x 0.41m). Steep sides and a concave base.	L1079: Friable, light blue grey silt clay.	None
		L1080: Friable, dark grey brown sandy clay.	None
		L1081: Friable, mid grey brown silt clay with occasional small sub-angular flints.	None
		L1082: Upper fill. Friable, dark grey brown sandy clay.	None

Trench 8 (Figs. 2 & 6)

Sample section 8A: *0.00m = 27.05m AOD*		
0.00 – 0.34m	L1000	Topsoil. As above, Trench 1.
0.34 – 0.48m	L1001	Subsoil. As above, Trench 1.
0.48m +	L1002	Natural deposits. As above, Trench 1.

Sample section 8B: *0.00m = 26.99m AOD*		
0.00 – 0.32m	L1000	Topsoil. As above, Trench 1.
0.32 – 0.48m	L1001	Subsoil. As above, Trench 1.
0.48m +	L1002	Natural deposits. As above, Trench 1.

Description: Trench 8 contained Ditch F1076, three postholes (F1068, F1072, and F1083), and Pit F1074. None of the features are dated.

Ditch F1076 was linear (1.80+ x 0.95 x 0.35m), orientated north/south. It had moderately sloping sides and a flattish base. Its fill, L1077, was a firm, light brownish grey silt clay with occasional small to medium sub-angular flints. It contained daub clay (73g).

Pit F1074 was sub-circular in plan (0.80+ x 0.40 x 0.14m). It had moderately sloping sides and a concave base. Its fill, L1075, was a friable, mid orange brown silt clay with occasional small gravel patches. It contained no finds.

The remaining postholes are tabulated below. None contained finds.

Feature	Plan/profile (dimensions)	Fill	Relationships	Finds
F1068	Sub-circular in plan (0.29 x 0.20 x 0.03m). Moderately sloping sides and a flattish base.	F1069: Firm, light greyish brown, silt clay.	-	None
F1072	Sub-circular in plan (0.40+ x 0.36 x 0.13m). Steep sides and a concave base.	F1073: Friable, dark brownish grey, silt clay with occasional small sub-rounded flints.	-	None
F1083	Circular in plan (0.20 x 0.20 x 0.04m). Steep sides and a flattish base.	F1084: Firm, mid brown grey silt clay.	-	None

Trench 9 (Figs. 2 & 6)

Sample section 9A: *0.00m = 26.93m AOD*		
0.00 – 0.33m	L1000	Topsoil. As above, Trench 1.
0.33 – 0.50m	L1001	Subsoil. As above, Trench 1.
0.50m +	L1003	Natural deposits. As above, Trench 1.

Sample section 9B: *0.00m = 26.96m AOD*		
0.00 – 0.37m	L1000	Topsoil. As above, Trench 1.
0.37 – 0.57m	L1001	Subsoil. As above, Trench 1.
0.57m +	L1002	Natural deposits. As above, Trench 1.

Description: Trench 9 contained Postholes F1057, and F1059, Ditch F1052, Ditch terminus F1062. None contained finds. A modern ditch, F1055, was also recorded.

Posthole F1057 was sub-circular in plan (0.45 x 0.40 x 0.15m). It had moderately sloping sides and a concave base. Its fill, L1058, was a friable, mid orange brown clayish gravel. It contained no finds.

Posthole F1059 was sub-circular in plan (0.30 x 0.29 x 0.19m). It had steep sides and a narrow concave base. Its fill, L1060, was a firm, mid brownish grey silt clay. It contained no finds.

Ditch F1052 was linear in plan (1.80+ x 1.45 x 0.47m), orientated east/west. It had moderately sloping sides and a concave base. Its basal fill, L1054, was a friable, mid orange brown, clayish gravel with moderate small sub-rounded flints. It contained no finds. Its upper fill, L1053, was a firm, mid brown grey silt clay with occasional small sub-rounded flints. It contained no finds.

Ditch F1055 was linear in plan (1.80+ x 0.82 x 0.50m), oriented east/west. It had moderately sloping sides and a concave base. Its fill, L1056, was a firm, mid orange brown, clayish silt. It contained modern CBM (139g).

Ditch Terminus F1062 was linear in plan (1.50+ x 1.60 x 0.70m), orientated east/west. It had moderately sloping sides and a concave base. Its basal fill, L1063, was a compact, dark blackish brown silt clay. It contained no finds. Its secondary fill, L1064, was a firm, light brownish grey, silt clay. It contained no finds. Its upper

fill, L1065, was a firm, mid grey brown clayish silt with occasional small sub-rounded flints. It contained daub (7g).

Trench 10 (Figs. 2 & 7)

Sample section 10A: *0.00m = 26.43m AOD*		
0.00 – 0.33m	L1000	Topsoil. As above, Trench 1.
0.33 – 0.36m	L1001	Subsoil. As above, Trench 1.
0.36m +	L1003	Natural deposits. As above, Trench 1.

Sample section 10B: *0.00m = 26.59m AOD*		
0.00 – 0.34m	L1000	Topsoil. As above, Trench 1.
0.34 – 0.44m	L1001	Subsoil. As above, Trench 1.
0.44m +	L1003	Natural deposits. As above, Trench 1.

Description: Trench 10 contained three large, modern (19th – 20th century) quarry pits (F1089, F1091, and F1093).

Pit F1089 was sub-circular in plan (7.75+ x 1.80+m). Its fill, L1090, was a firm, light grey brown silt clay with occasional small sub-rounded flints. It contained CBM (214g) and was unexcavated.

Pit F1091 was sub-circular in plan (2.80 x 1.80+ x 0.90m). It had moderately sloping sides and a concave base. Its fill, L1092, as a firm, mid brown grey silt clay with occasional small sub-rounded flints. It contained modern (18th – 19th century) pottery (3; 35g), CBM (4330g) and glass (3g).

Pit F1093 contained multiple fills, tabulated below. The base of this pit was unseen due to its depth. It contained modern (19th – 20th century) pottery and CBM.

Feature	Plan/profile (dimensions)	Fill	Finds
F1093	Sub-circular in plan (5.60 x 1.80+ x 0.90+m). Steep sides; base unseen.	L1096: Basal fill. Firm, light brown grey silt clay with occasional small sub-rounded flints.	None
		L1097: Friable, mid brown orange silt gravel with moderate small sub-angular flints.	None
		L1094: Firm, dark brown grey clay silt with occasional small sub-rounded flints.	CBM (916g)
		L1095: Upper fill. Firm, light grey brown clay silt with occasional small sub-rounded flints.	Modern (19th – 20th C) pottery (2; 20g), CBM (500g)

7 CONFIDENCE RATING

7.1 It is not felt that any factors inhibited the recognition of archaeological features or finds within the site.

8 DEPOSIT MODEL

8.1 Uppermost was Topsoil L1000, a dark brownish grey, firm, clayish silt with occasional small, sub-rounded flint (0.30 to 0.42m thick). Below L1000 was Subsoil L1001, a firm, mid orange brown silt clay with occasional small, sub-rounded flint (0.03m to 0.29m thick). Below the subsoil were natural deposits, L1002, and L1003. L1002 was a mid brown orange, firm, silt clay. L1003 was mid brown orange, firm, clay gravel.

9 DISCUSSION

9.1 The features recorded in each trench are tabulated:

Trench	Context	Description	Date/ Finds
1	F1021	Land drain	Modern
4	F1024	Quarry Pit	Modern (late 18th – 20th C)
5	F1004	Ditch	Modern (17th – 19th C)
	F1006	Ditch	-
	F1008	Gully/Land drain	-
	F1010	Pit	Modern (17th – 19th C)
	F1012	Ditch	Modern (17th – 19th C)
	F1014	Ditch	Modern (17th – 19th C)
	F1017	Pit	-
	F1019	Pit/Terminus	-
6	F1029	Ditch	-
	F1031	Ditch	-
	F1033	Ditch	-
	F1038	Ditch	-
	F1043	Ditch	Medieval (11th – 12th C)
	F1045	Ditch	Medieval (11th – 12th C) Residual Late Bronze Age pottery
	F1050	Gully/Land drain	-
7	F1036	Ditch	-
	F1041	Ditch Terminal	Late Bronze Age
	F1066	Ditch	Late Bronze Age
	F1070	Gully Terminal	-
	F1078	Pit	-
	F1085	Ditch	Medieval (10th – 12th C)
	F1087	Posthole	-
8	F1068	Posthole	-
	F1072	Posthole	-
	F1074	Pit	-
	F1076	Ditch	-
	F1083	Posthole	-
9	F1052	Ditch	-
	F1055	Ditch	Modern
	F1057	Posthole	-
	F1059	Posthole	-
	F1062	Ditch Terminal	-
10	F1089	Quarry Pit	Modern
	F1091	Quarry Pit	Modern
	F1093	Quarry Pit	Modern

9.2 The prehistoric (Late Bronze Age) pottery was derived from ditches located within Trenches 6 (F1045 (residual)) and 7 (F1041 and F1066), and these trenches overlay suspected 'ring ditches' recorded during the aerial photographic and geophysical surveys. No prehistoric pottery was found within the ditch (F1052) and ditch terminal (F1062) located with Trench 9, which also overlay a suspected ring ditch. The features in this trench contained no finds, except modern Ditch F1055. The ring ditches are discussed below (Section 9.10). The Late Bronze Age pottery assemblages were quite large (15, 14, 11 and 7 sherds). The assemblage contains two diagnostic vessels, comprising a fine ware cup and jar, both contained in Ditch Terminus F1041 (Pottery Report below). A burnt flint and sparse fragments of daub were found in association with the Late Bronze Age pottery (F1045).

9.3 Seven Early to Middle Saxon sherds were present as residual sherds within medieval Ditches F1043 and F1045.

9.4 The medieval features were also recorded in Trenches 6 (F1043 and F1045) and 7 (F1085), and the features were all ditches. Ditch F1045 contained both Late Bronze Age and also medieval pottery. It cut Ditch F1043 and therefore the prehistoric pottery is residual. Sparse fragments of daub were found in association with the medieval pottery. The medieval features may be associated with the moat, yards and pleasure gardens associated with '*Aldborough Hall*', which lies to the west.

9.5 Small groups of daub were recovered from Ditches F1043 (medieval), F1045 (medieval), F1066 (prehistoric) and F1076 (undated), with sparse small fragments also recovered from Gully F1008 (undated) and Ditch Terminus F1062 (undated). Larger fragments in the groups exhibit closely-spaced parallel rod impressions (20-30mm wide), indicative of the daub being packed on to a wattle frame in order to build a wall or comparable structure. Ditch F1066 also contained late Bronze Age pottery, and comparable daub of this date was associated with round houses at Hunt's Hill Farm (Daub and CBM Report below).

Correlation with the Aerial Photographic Survey and Geophysical Survey

9.6 The trenches targeted anomalies identified by the aerial photographic survey (Palmer 2008) and geophysical survey (Bartlett 2011), and the trial trenching broadly reflected the results of the previous surveys, although it was not always clear that the identified features related to the suspected ring ditches.

9.7 Trenches 1 and 2 overlay geophysical survey anomaly (K) described in the geophysical survey as 'an irregular linear marking. Perhaps the trace of an enclosure, but very week' (Bartlett 2011). A modern land drain (F1021) was recorded in Trench 1 and no features were present in Trench 2.

9.8 Trench 3 did not overlay an anomaly and was devoid of features.

9.9 Trenches 4 and 10 overlay J ('a group of strong disturbance corresponding to short linear cropmarks') and N ('pit-like features correspond to cropmarks but perhaps contain recent debris') (Bartlett 2011). Palmer (2008) refers to these

features as hand dug quarry pits. Quarry pits were revealed and they were demonstrated to be modern.

9.10 Trenches 6, 7 and 9 overlay the suspected ring ditches. That overlain by Trench 9 correlated with the archaeological features (Ditch F1052 and Ditch Terminus F1062), though none were dated. F1062 contained daub. The suspected ring ditch overlain by Trench 7 was less convincing. A ring ditch was not readily discernible though Ditch Terminus F1041 and Ditch F1066 did contain late Bronze Age pottery. The suspected ring ditch overlain by Trench 6 was not identifiable. Ditches were present but were broadly parallel (Ditches F1029, F1031, F1033 and F1038), and either undated or modern. Large ditch F1045 was medieval and contained residual Late Bronze Age pottery).

9.11 Trench 5 did not overlie an anomaly and contained a modern pit (F1010) and modern ditches (F1004, F1012 and F1014).

9.12 Trench 8 did not overlay an anomaly and it contained an undated ditch (F1076), a small undated pit and postholes.

Research Potential

9.13 Evidence for Bronze Age occupation and funerary activity has previously been recorded within land belonging to Fairlop Quarry (Weston 2004; Williamson 2007; Stone *et al.* 2008). The features recorded during this phase of investigation could potentially be seen as part of a wider Bronze Age landscape with the potential to provide information regarding the extent, density and character of activity of this date and affording an opportunity to study this activity on a wider scale. The identified features, however, were not clearly seen to be ring ditches, as previously indicated by the non-intrusive surveys.

9.14 The residual Anglo-Saxon pottery is of interest as it indicates human activity in an area in which previously recorded contemporary archaeology is limited. Examining the possibility that the identified medieval activity had direct Saxon precursors may form part of any further work that is carried out. The identified medieval activity, consisting of ditches, has the potential to provide information about the character and appearance of the surrounding area; topography and landscapes in the medieval period are identified as an important research subject for the Greater London area (MoL 2002, 58-9). The economy and production are also identified as important research areas for Greater London (*ibid.* 63) and understanding how the agricultural land surrounding the capital was used and arranged can make an important contribution to this.

10 CONCLUSION

10.1 These investigations have been commissioned to address the consultation response in relation to the application provided by the Historic England Greater London Archaeological Advisory Service (HE GLAAS) dated 1 December 2016.

10.2 The investigations have shown that the suspected ring ditches are either absent or if present, they are not that well preserved. Whilst Bronze Age pottery was recovered, most ditch sections were devoid of finds. It is considered that previous phases of reporting and assessment have been correct in indicating a local and at best regional level of significance for these features.

11 DEPOSITION OF THE ARCHIVE

11.1 Archive records, with an inventory, will be deposited with the London Archaeological Archive and Resource Centre (LAARC). The archive will be quantified, ordered, indexed, cross-referenced and checked for internal consistency. In addition to the overall site summary, it will be necessary to produce a summary of the artefactual and ecofactual data.

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APPENDIX 1 CONCORDANCE OF FINDS

Feature	Context	Trench	Description	Spot Date (Pottery Only)	Pottery (Qty)	Pottery (g)	CBM (g)	Animal Bone (g)	Other Material	Other (Qty)	Other (g)
1004	1005	5	Fill of Ditch				25				
1008	1009	5	Fill of Gully						Daub	1	4
1010	1011	5	Fill of Pit				93				
1012	1013	5	Fill of Ditch	18th-19th C	9	90	231				
1014	1016	5	Fill of Ditch	17th-19th C	2	6	25				
1024	1025	4	Fill of Quarry Pit	Late 17th-18th C	1	15					
	1028	4	Fill of Quarry Pit	Late 18th-early 20th C	3	5	541				
1029	1030	6	Fill of Ditch	Mid 19th-Mid 20th C	1	8	3		Glass	1	6
1031	1032	6	Fill of Ditch				110				
1033	1034	6	Fill of Ditch				132				
	1035	6	Fill of Ditch	Mid 19th-Mid 20th C	1	2	100		Fe Frag	1	71
1041	1042	7	Fill of Terminus	Late Bronze Age	14	461					
	1061	7	Fill of terminus	Late Bronze Age	11	227					
1043	1044	6	Fill of Ditch	11th-12th C	14	164			Daub	8	115
1045	1046	6	Fill of Ditch	Late Bronze Age	7	53		11	Burnt Flint	1	5
	1047	6	Fill of Ditch	11th-12th C	31	368			Daub		910
	1048	6	Fill of Ditch	Late Bronze Age	15	170			Daub	4	5
	1049	6	Fill of Ditch						Daub Slag	2 3	7 301
1055	1056	9	Fill of Ditch				139				
1062	1065	9	Fill of Terminus						Daub	2	13
1066	1067	7	Fill of Ditch	Late Bronze Age	1	11			Daub	3	118
1076	1077	8	Fill of Ditch						Daub		181
1085	1086	7	Fill of Ditch	10th-12th C	2	9					
1089	1090	10	Fill of Quarry Pit				214				
1091	1092	10	Fill of Quarry Pit	18th-19th C	3	35	4230		Glass Cu Thimble	1 1	3 6
1093	1094	10	Fill of Quarry Pit				916				
	1095	10	Fill of Quarry Pit	19th-Early 20th C	2	20	500				

APPENDIX 2 SPECIALIST REPORTS

The Prehistoric Pottery

Andrew Peachey MCIfA

The evaluation recovered a total of 46 sherds (907g) of late Bronze Age pottery in a fairly well-preserved and un-abraded condition. The assemblage contained two diagnostic vessels, comprising a fine ware cup and jar, both contained in Ditch Terminus F1041; with sparse non-diagnostic body sherds in comparable fabrics contained in two further ditches.

Methodology

The pottery was quantified by sherd count, weight (g) and R.EVE with fabrics examined at x20 magnification and fully described in the report. Rim type, profile and decoration were also recorded in free text comments in accordance with the guidelines developed by the Prehistoric Ceramics Research Group (PCRG 1995). All data will be entered into a Microsoft Excel spreadsheet that will form part of the site archive.

Discussion

The prehistoric pottery comprises two fabrics, described below, with fabric Q1 represented only by the single piece (74g) that comprises the cup in Ditch Terminus F1041 (L1042), with the remainder of the assemblage formed of fabric Q2. The bulk of fabric Q2, including numerous cross-joining fragments from a single jar was distributed in Ditch Terminus F1041 (L1042 and L1061) and appears to represent a single vessel, with the limited Q2 body sherds in Ditches F1045 and F1066 probably only representing single further vessels in each feature, if they are not associated with the Q2 jar in Ditch Terminus F1041.

Q1 Black surfaces, thin oxidised margins and a dark grey core. Inclusions comprise common to abundant fine silty quartz (<0.2mm) with occasional black charcoal/organic (?) grains (0.5-4mm) that sometimes bleed into the body. A fine fabric with a slightly powdery finish.

Q2 Dark brown-orange to grey-brown surfaces over a dark grey core. Inclusions comprise common poorly-sorted quartz (generally 0.1-0.75mm, occasionally poly-crystalline to 3.5mm), with sparse black charcoal/organic (?) grains (0.5-4mm) that sometimes bleed into the body, and occasional crushed flint (<5mm). A fine-medium fabric with a slightly silty to abrasive feel.

The diagnostic vessels appear to represent two relatively fine vessels deposited near or wholly complete in the terminus of a ditch (partially recovered in a fragmentary condition). They comprise a small cup in fabric Q1, which is *c*.60-70% complete; with a slight neck, a rounded shoulder and a pronounced omphalos base; comparable to cups recorded at Mucking (Brudenell 2015, 131: groups 5-6). The fabric Q2 jar has an upright rim on a sinuous bi-partite body, with plain burnishing on the rim and neck; comparable to a jar at Hunt's Hill Farm (Howell *et al* 2011, 40: P49). These vessels correspond with Barrett's (1980) Class V and II respectively of late Bronze Age vessel types, and should both be regarded as fine ware vessels within the post-Deverel Rimbury (PDR) ceramic style. The large diagnostic groups at Mucking suggest they belong to the 'early decorated ware' phase of development, probably *c*.850-750BC (Brudenell 2015, 131), a chronology supported by C14 dating

at Hunt's Hill Farm (Howell *et al* 2011, 128). Fine and coarse ware vessels in this ceramic style are relatively well-recorded on the gravel landscapes of east London, including at Marks Warren (Brudenell 2011, 23: fig.12.5), as well as the sites above, notably associated with roundhouse gullies and related settlement enclosures, but the evidence within this assemblage is of insufficient volume to allow further analysis based on technological traits or spatial distribution.

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The Saxon, Medieval and Post-Medieval Pottery
Peter Thompson

The archaeological trial trench evaluation recovered 72 sherds weighing 737g from 10 features. The pottery assemblage is multi-period comprising Early to Middle Saxon, medieval and post-medieval to modern wares (Table 1).

Period	Sherd Number	Fabric Weight (g)
Early-Middle Saxon	7	80
Early medieval	44	480
Post-medieval to modern	21	177
Total	*72*	*737*

Table 1: Quantification of sherds by period

Methodology

The sherds were examined and recorded in keeping with the Medieval Pottery Research Group Guidelines (Slowikowski 2001; Table 2). The Essex post-Roman pottery codes are provided in brackets in the key (Cottar 2000).

The Pottery

There are seven fairly thick handmade sherds with brown surfaces in relatively fine sandy fabrics, bar one sherd which contains flint and chert and may derive from local gravels. These are Early to Middle Saxon in appearance, although all are residual from Ditches F1043 and F1045. There is one partial profile of a simple upright rim to an ovoid or weak shouldered jar.

There are 44 handmade sherds which are mainly oxidised which are probably all Early Medieval in date, although there are few diagnostic elements present. This pottery dated three features. Ditch F1043 contained four simple outurned jar/cooking pot rims, one 20cm in diameter. Ditch F1045 contained a heavily abraded outurned jar rim. Ditch F1085 contained two sherds in a quartz sandy grey ware in a fabric fairly similar to Thetford type ware but sandier.

Ditches F1012, F1014, F1029, F1033, and Quarry Pits F1024, F1091 and F1093 all contained post-medieval to modern sherds including glaze red earthenware, Transfer Printed ware and English porcelain.

KEY:

ESFS (3): Early Saxon fine sand 4^{th}-7^{th} / 9^{th}
ESMS (3): Early Saxon medium sand 4^{th}-7^{th} / 9^{th}
ESFF (4): Early Saxon fine flint: 4^{th}-7^{th}/ 9^{th}
EMW1 (13): Early medieval ware (fine to medium sand with occasional coarse to very coarse quartzite, flint or limestone), oxidised ?11^{th}-12^{th}
EMW2 (13): Early medieval ware (abundant medium to coarse quartz), oxidised ?11^{th} – 12^{th}
EMW3 (13): Early medieval ware (common medium to coarse rounded quartz, occasional sub-angular flint/quartzite and rounded ironstone). Dark grey, mottled ?10^{th}-12^{th}
EMW4 (13): Early medieval ware (abundant sub-rounded to rounded medium and less commonly coarse quartz, few other inclusions). Dark grey. Smoothed outer surfaces. Looks a little like Thetford ware ?10^{th}-12^{th}
EMWS (12C): Early medieval ware with shell ?11^{th}-12^{th}
GRE (40): Glazed red earthenware 16^{th}+
PMBL (40bl): Post-medieval black glazed red earthenware mid 16^{th}+
LONS (36): London stoneware late 17^{th}-19^{th}
TPW (48): Transfer Printed ware late 18^{th}+
ENPO (48): English porcelain mid 18^{th}+

Feature	Context	Quantity	Date	Comment
Ditch 1012	1013	9x91g GRE	18^{th}-19^{th}	GRE: x1 strap handle
Ditch 1014	1016	1x1g GRE 2x5g EMWS	17^{th}-19^{th}	GRE: moderately abraded EMWS: heavily abraded
Quarry Pit 1024	1025	1x15g GRE	Late 17^{th}-18^{th}	GRE: light abrasion, dish rim
	1028	3x5g TPW	Late 18^{th}-early 20^{th}	TPW: plate, abraded
Ditch 1029	1030	1x8g ENPO	Mid 19^{th}-mid 20^{th}	ENPO: TPW plate rim
Ditch 1033	1035	1x1g ENPO	Mid 19^{th}-20^{th}	ENPO: good condition
Ditch 1043	1044	10x99g EMW1 2x41g EMWS 1x6g ESMS 1x18g ESFF	?11^{th} – 12^{th}	EMW1: heavily abraded x1 simple everted rim 20cm diam; x3 simple everted rim, x1 cooking pot neck with charcoal residue
Ditch 1045	1045	2x17g EMW3	11^{th}-12^{th}	

	1047	2x25g ESFS 3x31g ESMS 25x293g EMW1 1x16g EMW2	11th-12th	EMW1: heavily abraded x1 simple outurned rim WEFS: heavily abraded ESMS: heavily abraded ovoid cup with simple upright rim
Ditch 1085	1086	2x9g EMW4	10th-12th	EMW4: heavily abraded
Quarry Pit 1091	1092	2x27g PMBL 1x8g LONS	18th-19th	PMBL: abraded jug/ mug base LONS: good condition
Quarry Pit 1093	1095	1x17g GRE 1x4g ENPO	19th-early 20th	GRE: moderately abraded with yellow slip possibly Metropolitan slipware ENPO: good condition

Table 2: Quantification of sherds by context

References

Cotter, J.P., 2000, *Post-Roman pottery from excavations in Colchester, 1971-85*, Colchester Archaeological Report 7, *English Heritage*

Slowikowski, A., Nenk, B. and Pearce, J., 2001, *Minimum Standards for the Processing, Recording, Analysis and Publication of Post-Roman Ceramics,* Medieval Pottery Research Group Occasional Paper 2

The Daub and Ceramic Building Materials
Andrew Peachey

The evaluation recovered a total of 59 fragments (739g) of daub, and 68 fragments (7256g) of early modern CBM (Table 3). By the nature of its sun-dried fabric the daub was recovered in a friable and highly fragmented condition; while the early modern CBM appears to have been re-deposited or re-cycles in field boundaries, therefore is highly fragmented and best classified as rubble, with the exception of the broken field drain, which was likely in situ.

Daub/ CBM Type	**Date**	**Fragment Count**	**Weight (g)**
Daub	Prehistoric	59	739
Soft red brick	Late 18th to 19th century	27	4530
Peg tile		15	1371
Pantile		6	228
Field drain		20	1127
Total		*127*	*7995*

Table 3: Quantification of daub and CBM

Methodology

The daub and CBM was quantified by fragment count and weight (g), with fabrics examined at x20 magnification and any extant technological traits measured or characterised. All data will be entered into a Microsoft Excel spreadsheet that will form part of the site archive.

The Daub

The daub appears to have been manufactured using local deposits derived from the London Clay, with minimal evidence of tempering or processing. The inclusions in the fabric are inconsistent but predominantly include common quartz (<0.75mm), red

iron rich grains and crushed flint/small gravel (both <3mm, occasionally larger), and sparse white silty lenses (<10mm). The daub has not been fired but after being left to dry in the sun/air has developed red-orange exposed 'external surfaces over a dark grey 'core'.

Small groups of daub were recovered from Ditches F1043, F1045, F1066 and F1076, with sparse small fragments also recovered from Gully F1008 and Ditch Terminus F1062. Larger fragments in the groups exhibit closely-spaced parallel rod impressions (20-30mm wide), indicative of the daub being packed on to a wattle frame in order to build a wall or comparable structure. Ditch F1066 also contained late Bronze Age pottery, and comparable daub of this date was associated with round houses at Hunt's Hill Farm (Howell *et al* 2011, 46).

The CBM

The ceramic building materials are entirely of late 18th to 19th century date and are not associated with any structures on the site, but with likely Victorian agriculture, including efforts to improve the drainage of soils and boundary ditches by the addition of CBM to plough soils through manuring and the installation of field drains. Over half of the medieval CBM was contained in Quarry Pit F1091, including a shattered field drain, and fragments of rounded soft red brick, on which the field drain may have been laid as supports or as a free-draining media. Similar small groups were contained in Quarry Pits F1024 and F1093, while the remainder of the assemblage comprised very small, sparsely scattered fragments of brick, peg tile and pantile in several ditches, likely re-distributed numerous times before resting in field boundaries.

Reference

Howell, I., Swift, D., & Waterson, B., with Cotton, J., & Greenwood, P., 2011, *Archaeological Landscape of East London: Six multi-period sites excavated in advance of gravel quarrying in the London Borough of Havering*, London, MOLA Monograph 54

The Animal Bone
Mark S. Blagg-Newsome

A very small assemblage of 4 bones (total 11g) was recovered from trial trench excavations at Fairlop Quarry, Essex (Table 4). All of the bone derived from a single, late Bronze Age Ditch Fill L1046 (F1045). Bone preservation was rated a generally ok on a five point scale from very poor through to excellent. There was no bone abrasion and fragmentation was generally low with few fresh breaks. Half of the assemblage was identifiable to size categories only (2 bones), and only one of the fragments was identifiable to order level, a galliform tarsometatarsus. This tarsometatarsus was juvenile with much of the bone still very porous in nature. The proximal epiphysis was also unfused and clear lines of fusion were present on the shaft between the individual elements. The other of the two bird bones could only be identified as a large sternal rib. The final bone to be identified to a size category only,

was a large mammal (horse or cattle size) thoracic vertebrae that only had the spinous process and caudal inferior articular facets present. No gnawing, butchery or pathological lesions were observable on any of the bones. No further comment is possible.

Feature	Context	Description	Spot Date	Galliform	Bird	Large Mammal	Unidentifiable	Total (Not inc. Unid)
1045	1046	Fill of Ditch	Late Bronze Age	1	1	1	1	3
			Total	1	1	1	1	3

Table 4: Quantification of animal bone from Fairlop Quarry, Hainault Road, Little Heath, Romford, Essex

The Environmental Samples

Dr John Summers

Introduction

During trial excavations at Fairlop Quarry, eight bulk soil samples were taken and processed for environmental archaeological assessment. The dateable deposits were from the late Bronze Age. This report presents the results from the assessment of the bulk sample light fractions and discusses the significance and potential of any remains recovered.

Methods

Samples were processed at the Archaeological Solutions Ltd facilities in Bury St. Edmunds using standard flotation methods. The light fractions were washed onto a mesh of 500µm (microns), while the heavy fractions were sieved to 1mm. The dried light fractions were scanned under a low power stereomicroscope (x10-x30 magnification). Botanical remains were identified and recorded using reference literature (Cappers *et al.* 2006; Jacomet 2006) and a reference collection of modern seeds. Potential contaminants, such as modern roots, seeds and invertebrate fauna were also recorded in order to gain an insight into possible disturbance of the deposits.

Results

The assessment data from the bulk sample light fractions are presented in Table 5. Carbonised plant macrofossils were largely absent, being represented by a single brome grass (*Bromus* sp.) seed in ditch fill L1047 (F1045). This may have been present as an arable weed, although there is no way to confirm this. A small amount of charcoal was present in four samples, although it was insufficient for any detailed comment.

Conclusions

It is apparent from the largely blank samples that the sampled features were not receiving carbonised debris from either the use or processing of cereals or other plants during the late Bronze Age. However, the small number of sampled features may not be representative of the site-wide pattern and prehistoric sites often produce low densities of carbonised plant macrofossils. Should further excavation be undertaken at the site, it is recommended that further bulk sampling is undertaken in an attempt to recover environmental archaeological remains of significance for understanding the agricultural economy and subsistence of the site during the late Bronze Age.

Potential for AMS radiocarbon dating

The absence of carbonised plant material in any significant concentration, along with the absence of animal bone in the hand collected assemblage, means that no material is presently available to submit for an AMS radiocarbon date. Should further excavation be undertaken at the site, bulk sample light fractions and residues will continue to be assessed in terms of their potential for radiocarbon dating.

References

Cappers, R.T.J., Bekker R.M. and Jans J.E.A., 2006, *Digital Seed Atlas of the Netherlands. Groningen Archaeological Studies Volume 4*, Eelde, Barkhuis Publishing

Jacomet, S., 2006, *Identification of Cereal Remains from Archaeological Sites* (2nd edn), Laboratory of Palinology and Palaeoecology, Basel University

Site code	Sample number	Context	Feature	Description	Spot date	Volume taken (litres)	Volume processed (litres)	% processed	Cereals			Non-cereal taxa		Hazelnut shell	Charcoal		Molluscs		Contaminants					Other remains
									Cereal grains	Cereal chaff	Notes	Seeds	Notes		Charcoal>2mm	Notes	Molluscs	Notes	Roots	Molluscs	Modern seeds	Insects	Earthworm capsules	
HAN17	2	1037	1036	Fill of Ditch	-	40	20	50%	-	-	-	-	-	-	-	-	-	-	X	X	-	-	-	-
HAN17	3	1042	1041	Fill of Terminus	LBA	40	20	50%	-	-	-	-	-	-	X	-	-	-	X	X	-	-	-	-
HAN17	4	1049	1045	Fill of Ditch	LBA	40	20	50%	-	-	-	-	-	-	X	-	-	-	X	X	X	-	-	-
HAN17	5	1048	1045	Fill of Ditch	LBA	40	20	50%	-	-	-	-	-	-	X	-	-	-	X	X	X	-	-	-
HAN17	6	1047	1045	Fill of Ditch	LBA	40	20	50%	-	-	-	X	*Bromus* sp. (1)	-	X	-	-	-	X	X	X	-	-	-
HAN17	7	1046	1045	Fill of Ditch	LBA	20	10	50%	-	-	-	-	-	-	-	-	-	-	X	-	X	-	-	-
HAN17	8	1065	1062	Fill of Terminus	-	20	10	50%	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-
HAN17	9	1053	1052	Fill of Ditch	-	40	20	50%	-	-	-	-	-	-	-	-	-	-	X	-	-	-	X	-

Table 5: Results from the assessment of bulk sample light fractions from Fairlop Quarry

PHOTOGRAPHIC INDEX

1
Modern drain 1021 looking north-west

2
Ditch 1004 in Trench 5 looking south

3
Ditch 1004 in Trench 5 looking south

4
Pit 1010 in Trench 5 looking west

5
Ditch 1012 in Trench 5 looking south

6
Pit 1017 in Trench 5 looking west

7
Ditches 1043 and 1045 in Trench 6 looking south

8
Ditch 1041 in Trench 7 looking north

9
Ditch 1066 in Trench 7 looking north

10
Pit 1078 in Trench 7 looking west

11
Ditch 1085 in Trench 7 looking south

12
Post hole 1087 in Trench 7 looking south

13
Posthole 1072 in Trench 8 looking south

14
Ditch 1076 in Trench 8 looking north

15
Posthole 1083 in Trench 8 looking west

16
Ditch 1052 in Trench 9 looking south-east

17
Posthole 1059 in Trench 9 looking north

18
Ditch 1062 in Trench 9 looking west

19
Quarry pit 1091 in Trench 10 looking north

20
Quarry pit 1093 in Trench 10 looking south

21
Late Bronze Age cup from terminus of Ditch 1041

22
Late Bronze Age cup from terminus of Ditch 1041

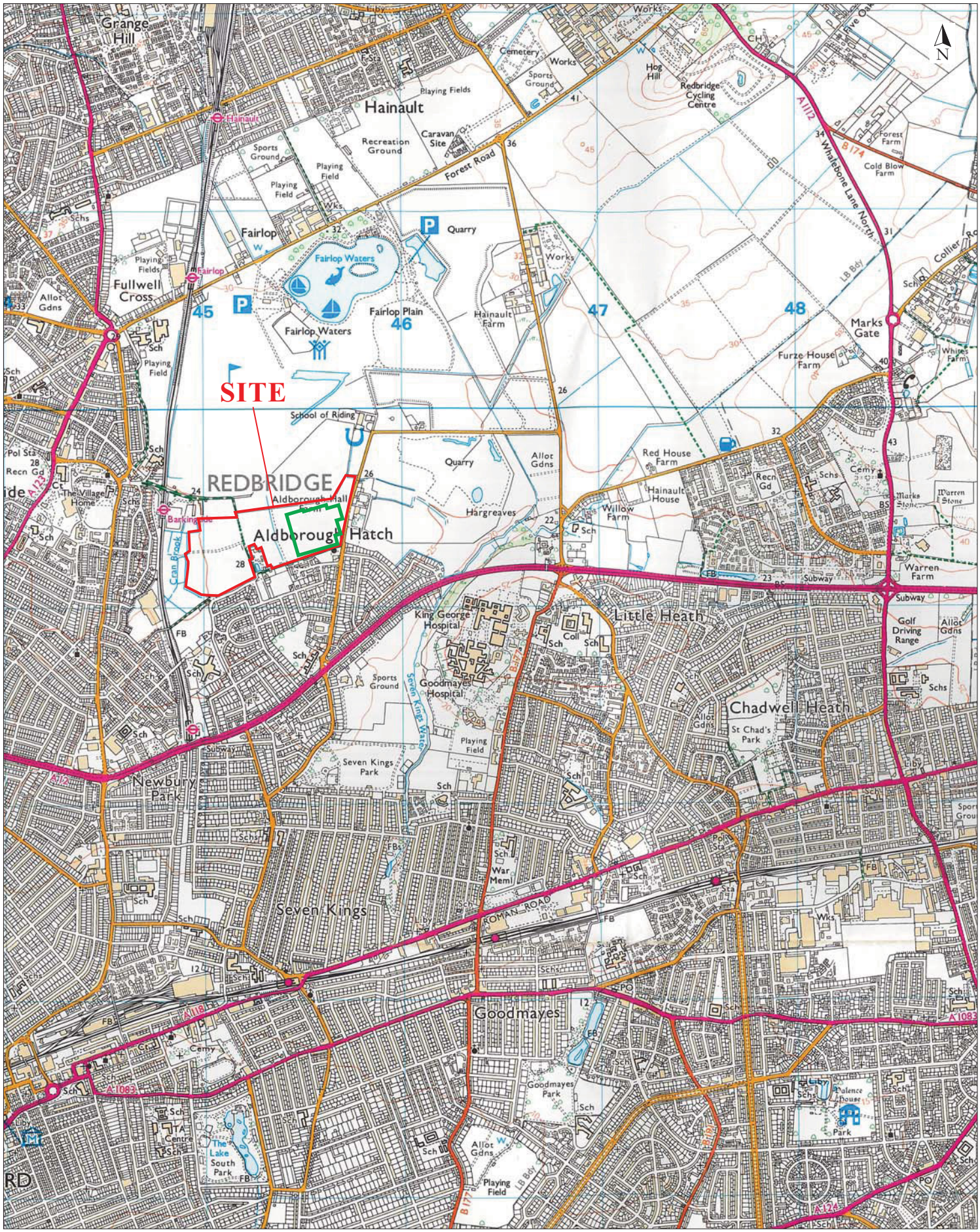

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Fig. 1 Site location plan

Scale 1:25,000 at A4

Fairlop Quarry, Aldborough Hatch, London (P3294)

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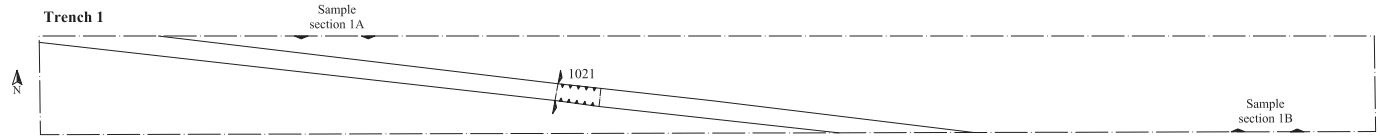
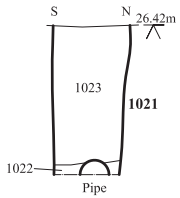
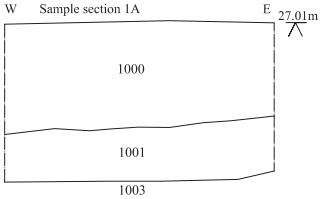
Fig. 2 Trench location plan

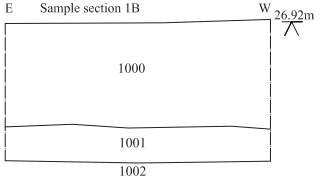
Scale 1:1000 at A3

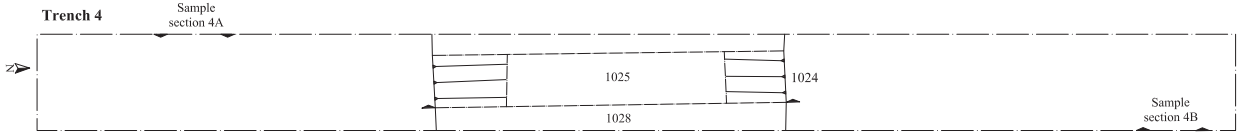
Fairlop Quarry, Aldborough Hatch, London (P3294)

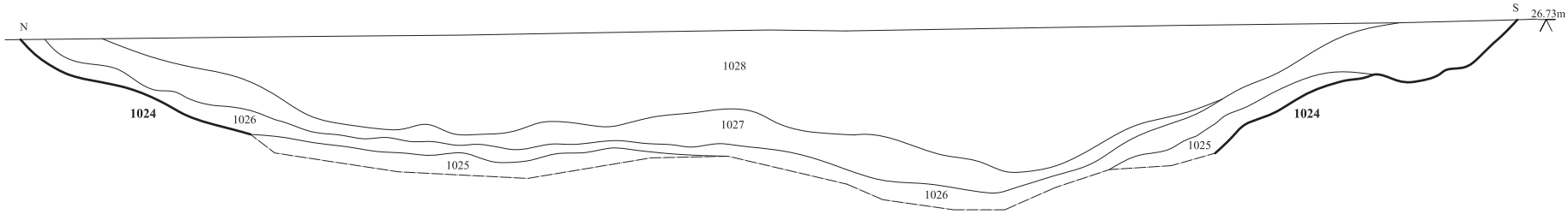


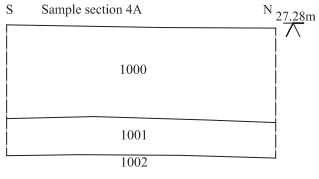












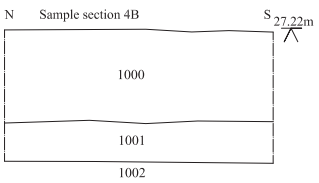


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Fig. 3 Trench plans and sections
Scale 1:100 and 1:20 at A3
Fairlop Quarry, Aldborough Hatch, London (P3294)

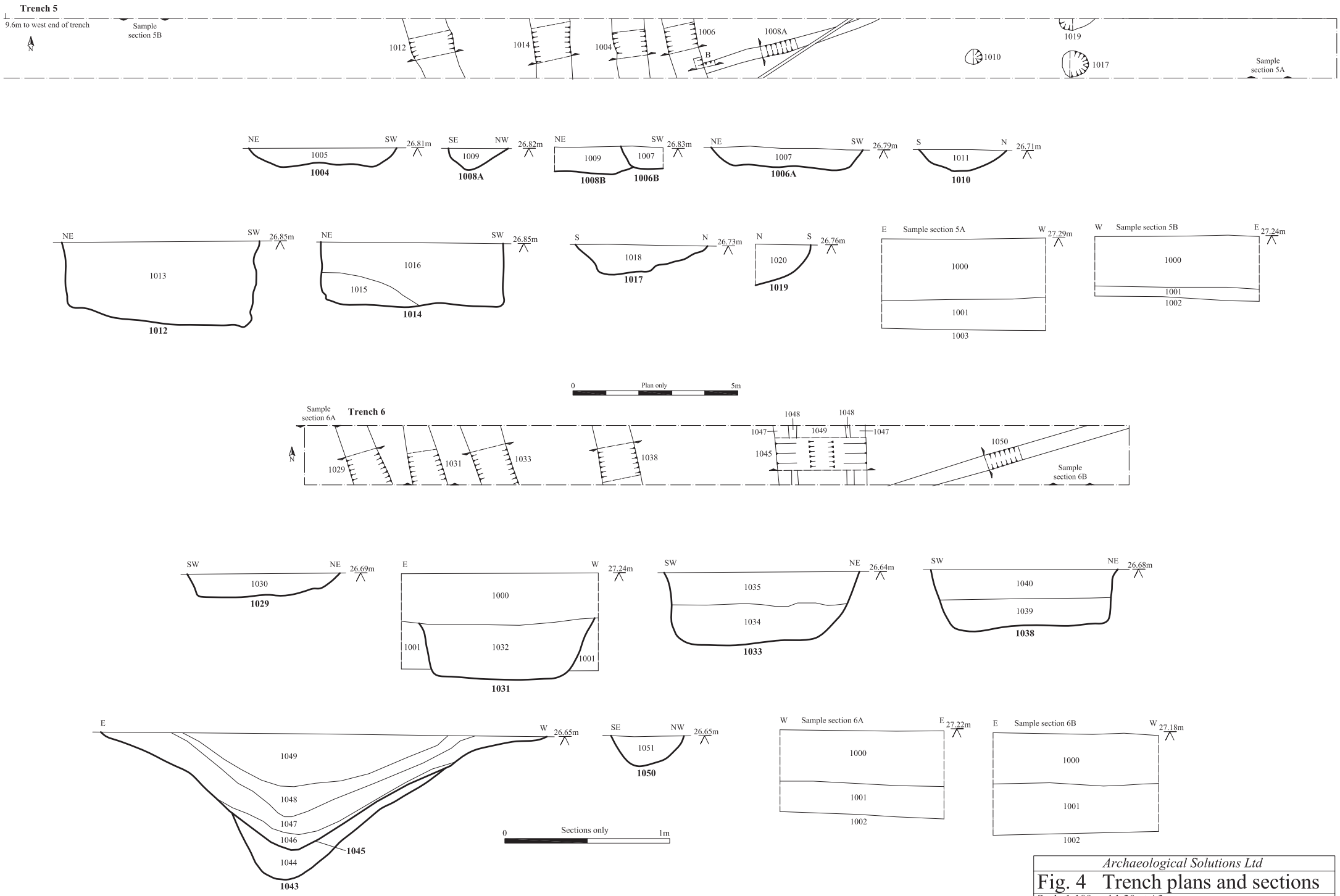

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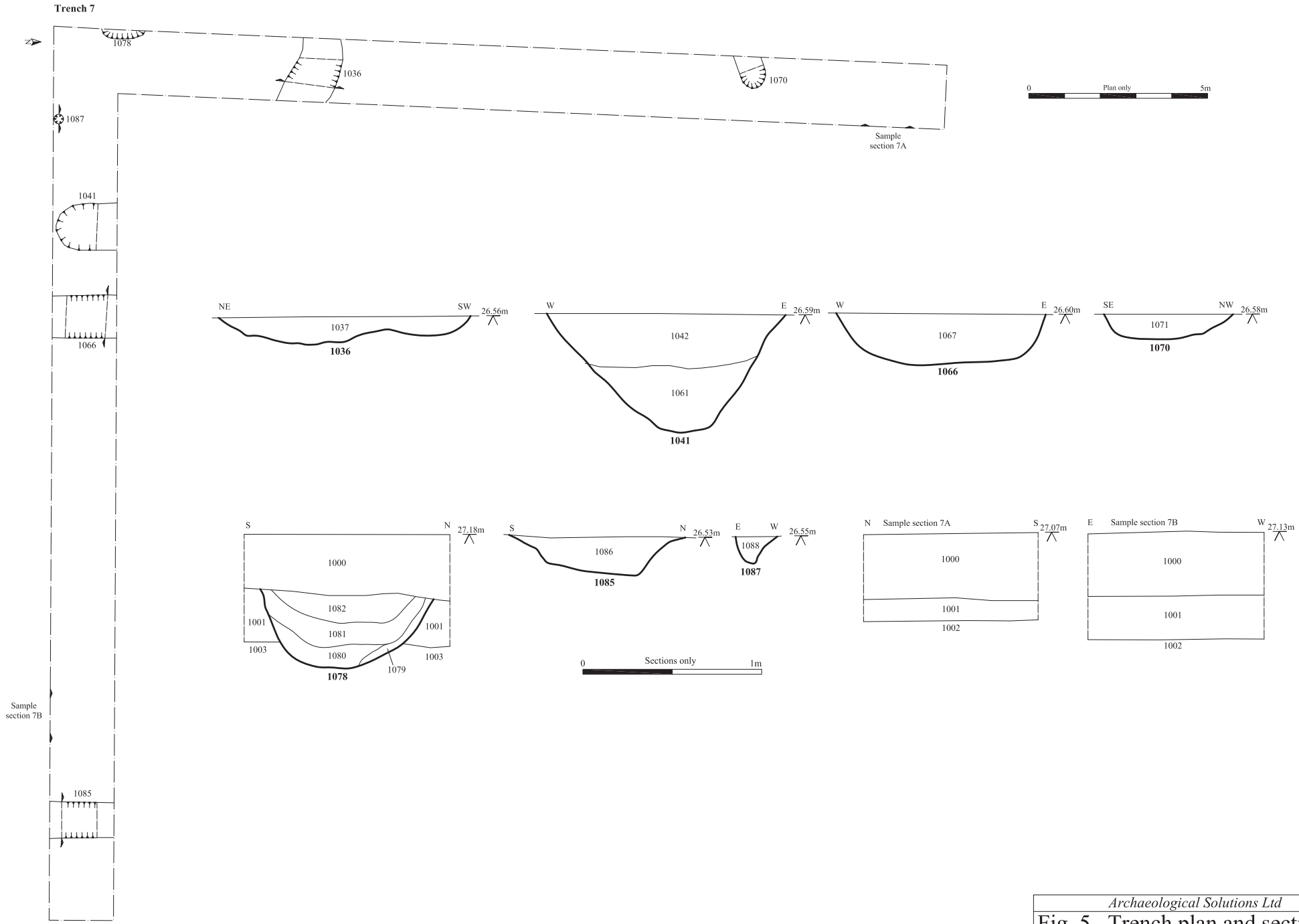
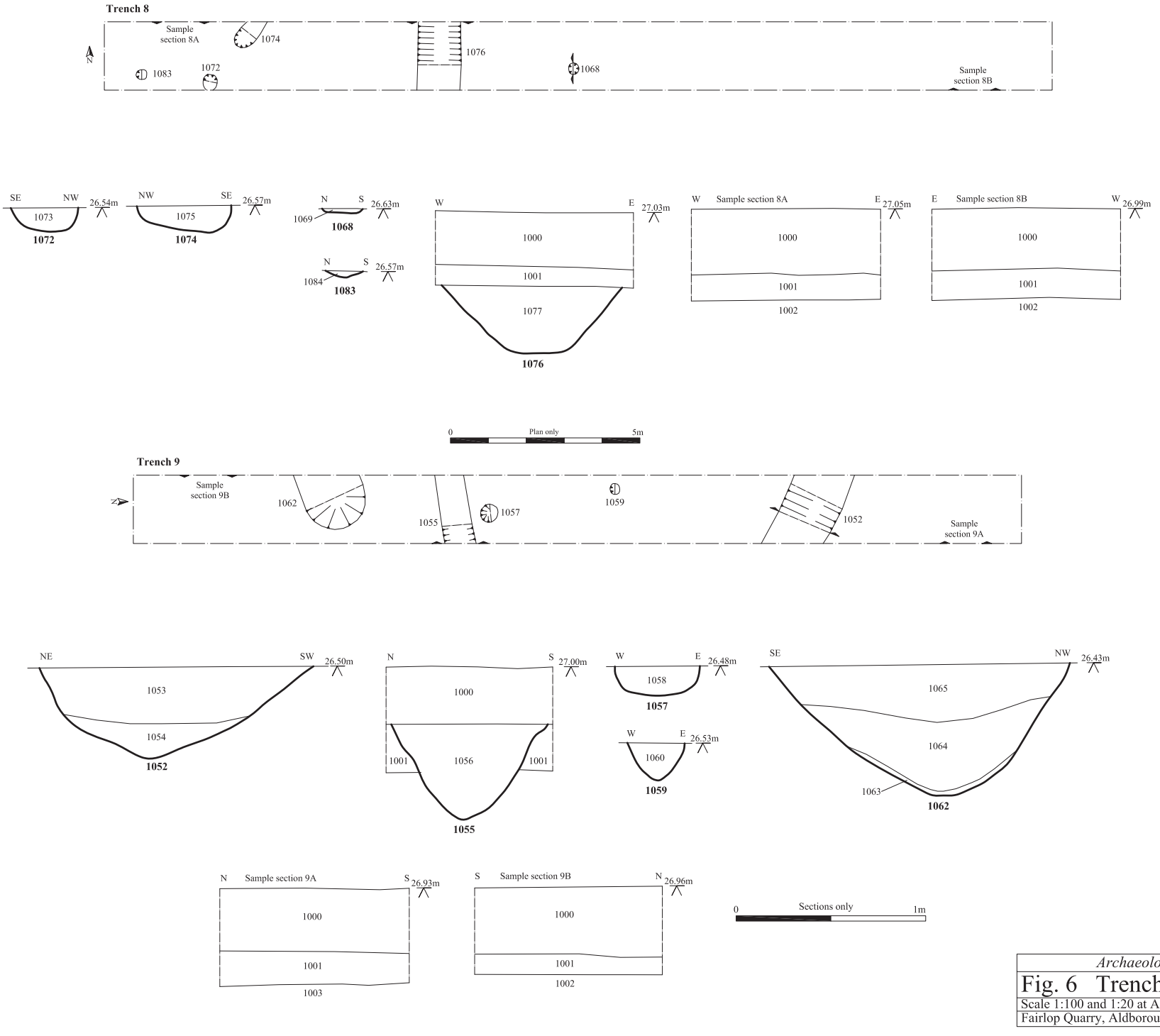
Fig. 4 Trench plans and sections

Scale 1:100 and 1:20 at A3

Fairlop Quarry, Aldborough Hatch, London (P3294)



Archaeological Solutions Ltd
Fig. 5 Trench plan and sections
Scale 1:100 and 1:20 at A3
Fairlop Quarry, Aldborough Hatch, London (P3294)

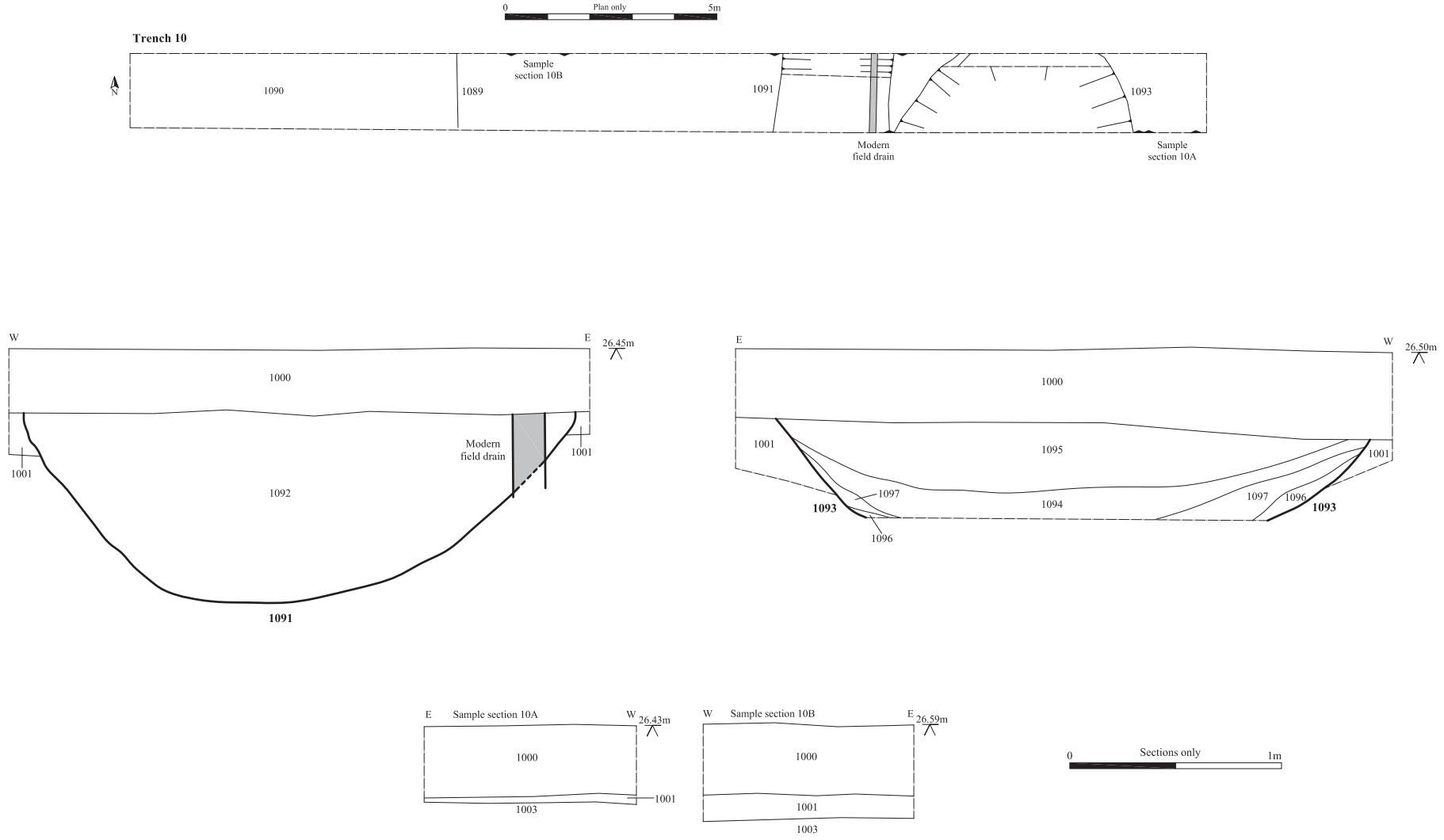


Archaeological Solutions Ltd

Fig. 6 Trench plans and sections

Scale 1:100 and 1:20 at A3

Fairlop Quarry, Aldborough Hatch, London (P3294)



Archaeological Solutions Ltd
Fig. 7 Trench plans and sections
Scale 1:100 and 1:20 at A3
Fairlop Quarry, Aldborough Hatch, London (P3294)