Proposed Residential Development

Homerton College Cambridge

Archaeological Evaluation Report

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Proposed Residential Development, Homerton College, Cambridge, Cambridgeshire

NGR TL 459 561

ARCHAEOLOGICAL EVALUATION

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Fig. 10 Extract from Baker's Map of Cambridge 1830

SUMMARY

In June and July 2007 Oxford Archaeology (OA) carried out a geophysical survey and evaluation on land within the grounds of Homerton College, Cambridge, (NGR: TL 459 561), on behalf of Colophon Ltd.. The geophysical survey revealed a large amount of magnetic activity within the site, although only a small percentage was of potential archaeological interest. The subsequent trench evaluation confirmed this low potential. A number of isolated post-medieval features, including a field boundary and a number of pits were investigated. Although largely undated, where pottery or other material was collected it suggests agricultural and quarrying activity from the late nineteenth or early twentieth century in the south-eastern part of the site.

1 INTRODUCTION

1.1 Scope of work

1.1.1 In June and July 2007 OA carried out a geophysical survey and trench evaluation on land within Homerton College, Cambridge (NGR: TL 459 561), on behalf of Colophon Ltd., in respect of a planning application for new residential development. An archaeological Brief was produced by Cambridgeshire Archaeology Planning and Countryside Advice (CAPCA, 2007) and OA prepared a Written Scheme of Investigation (WSI) showing how it would meet these requirements (OA, 2007).

1.1.2 This document first summarises the results of the geophysical survey (reported more fully in Prince 2007) and then details the results of the trench evaluation.

1.2 Location, geology and topography

1.2.1 The development area is located on land within Homerton College, to the south side of Cambridge (Fig.1). The development site covers an area of *c* 1.2 hectares, and slopes gently from approximately 12.8 m OD in the north to 14.8 m OD in the south.

1.2.2 The site is currently used as a playing field. The underlying geology is Third Terrace river gravels.

1.3 Archaeological background

1.3.1 The archaeological background has been detailed within a desk-based assessment (Dickens, 2002). Subsequently, archaeological evaluation of two areas within the college ground has also been carried out (Alexander 1997, Webb & Dickens 2006). A brief summary is provided below.

1.3.2 Very few finds or sites of prehistoric date have been found within the vicinity of the site although a number of ditches of possible prehistoric date were recorded during previous evaluation work (Alexander 1997).

1.3.3 The site is close to the projected line of a Roman road, called the *Via Devana*, which was identified within the grounds of Perse School to the south and a number of other

sites of Roman date, including a cremation, have been found close to the line of the road. A Roman brooch was found to the east of the site (Alexander 1997) and a number of ditches of Roman date were recorded during evaluation of an adjacent area (Webb and Dickens 2006).

1.3.4 No sites or finds of Saxon date are known from the vicinity of the site.

1.3.5 A number of ditches of possible medieval date were recorded to the east of the site during previous evaluation work (Alexander 1996 and Webb and Dickens 2006).

2 AIMS OF THE ARCHAEOLOGICAL INVESTIGATION

2.1.1 To establish the presence/absence of archaeological remains within the proposed development area.

2.1.2 To determine, as far as possible, the location, extent, date, condition, nature, character, significance and quality of any archaeological remains present.

2.1.3 To inform the strategy for any further evaluation as appropriate.

2.1.4 To make available the results of the investigation.

3 GEOPHYSICAL SURVEY

3.1 Methodology

3.1.1 The following is reproduced from the Archaeogeophysical survey report (Prince, 2007)

3.1.2 A survey grid was established at the site using a differential GPS system. Figures 3-5 are based on a geo-referenced version of an architect s site plan, supplied by Oxford Archaeology.

3.1.3 The evaluation area was then investigated by means of a recorded magnetometer survey. Readings were taken with Bartington fluxgate gradiometers at 25cm intervals along transects 50cm apart. Survey coverage at this high resolution should provide a more detailed plan of any archaeological features which are present than would be the case for a standard survey with 1m transect separation. The results are presented in the enclosed plans as a grey scale image in figure 3 and as a graphical (xy trace) plot in figure 4, both at 1:625 scale. An interpretation of the results is also shown on figure 4. This interpretation is reproduced separately in figure 5 to provide a summary of the findings.

3.1.4 The survey plots show the magnetometer readings after standard treatments which include adjustment for irregularities in line spacing caused by variations in the instrument zero setting, and slight linear smoothing. Additional 2D low pass filtering has been applied to the grey scale plot to reduce background noise levels.

3.1.5 Magnetometer surveys can respond favorably to cut features such as ditches and pits where silting with topsoil has occurred. This survey technique is also effective in detecting thermoremanent magnetism of fired materials, notably baked clay structures such as kilns or hearths. It is also equally sensitive to buried bricks, rubble, or other modern magnetic debris.

3.1.6 In addition to the magnetometer survey, a magnetic susceptibility survey was undertaken at the site. This technique relies on the principle that topsoil magnetic susceptibility is enhanced through burning associated with past human occupation. The identification of areas of high susceptibility can therefore provide a broad indication of previously occupied or disturbed areas. Recent as well as ancient magnetic disturbances will again of course be detected.

3.1.7 A Bartington MS2 meter and field sensor loop were used to collect magnetic susceptibility readings at 10m intervals across the survey area. The readings are presented as shaded squares of density proportional to the readings, and included as an inset to figure 5.

3.2 Results

3.2.1 The survey plots show a considerable amount of magnetic activity, a small amount of which could possibly be of archaeological concern.

3.2.2 The main positive findings are clusters of features at A and B (as outlined in red and labeled on figure 5). These include magnetic anomalies of a size and strength which could indicate silted pits, as may be found at ancient settlement sites. They are, however, irregular in shape and plan, and do not form a recognizable plan or pattern which would suggest the presence of an archaeological site. These features could therefore indicate minor or recent soil disturbances, but further investigation could be needed to confirm this.

3.2.3 Some of the remaining magnetic anomalies which are scattered across the western half of the survey are strong peaks indicating buried iron or brick, but some others have been outlined. These include a potentially substantial pit-like feature at C.

3.2.4 There is a noticeably stronger overall magnetic response from the eastern part of the survey area (indicated by cross-hatching on the interpretation), perhaps as a result of previous ground disturbance in leveling or draining the playing field. There are traces of a broken linear feature (D) running north-south on the boundary between the quieter and more noisy part of the site. A linear disturbance of this kind could possibly be of archaeological significance, but its position here at the edge of an area of probably modern disturbances suggests it is more likely to be recent. The anomalies at D could perhaps indicate the line of a drainage channel.

3.2.5 Some pit-like magnetic anomalies have been outlined within the disturbed eastern part of the site, although in this context they may well relate to the surrounding recent magnetic activity. Areas of particularly strong recent magnetic interference are shown by narrow cross-hatching. The two disturbances E1 and E2 represent the

football goalposts. These are of metal construction, and were too heavy to remove prior to the survey.

3.2.6 A linear feature (F) which is possibly a pipe or drainage channel runs close to the boundary wall to the south of the site. This converges with a strong magnetic response (G), which could perhaps be a drain cover.

3.2.7 The magnetic susceptibility survey has produced reasonably high readings across the site but has responded mainly to the modern disturbances to the north and east of the survey (see plot inset in figure 5). There may be a slight correlation between raised susceptibility values and the group of magnetic anomalies at A, but the results are otherwise archaeologically inconclusive.

4 TRENCH EVALUATION

4.1 Methodology

4.1.1 The evaluation consisted of 10 trenches totalling 300 m in length forming a 5% sample of the development area (Fig. 6). The trenches were positioned so as to examine the anomalies recorded during the magnetometry survey.

4.1.2 All the trenches located within the playing field (Trenches 2-10) were de-turfed using a mechanical de-turfer, prior to excavation. The trenches were then excavated under close archaeological supervision by a 360^{o} tracked excavator fitted with a 1.9 m wide toothless ditching bucket. Excavation proceeded to the top of the first significant archaeological horizon or to the top of the underlying natural geology, whichever was encountered first.

4.1.3 The trenches were cleaned by hand and all revealed features were sampled to determine their extent and nature, and to retrieve dating evidence and environmental samples if possible. All features and deposits were issued with unique context numbers. The trenches were planned a scale of 1:50 and all features were planned at 1:20 with sections of features and sample sections drawn at a scale of 1:10. All features, trenches and sections were photographed using colour slide and black and white print film. Recording followed procedures laid down in the *OA Field Manual* (OAU 1992).

4.1.4 Finds were recovered by hand during the course of the excavation and generally bagged by context. No finds of special interest were recovered during the evaluation.

4.1.5 No deposits suitable for palaeo-environmental sampling were encountered during the course of the evaluation.

4.2 Results

4.2.1 All ten trenches came down onto natural gravel deposits. All the soil divisions were clearly defined with little or no mixing between the contexts. The weather conditions were good.

4.2.2 The following descriptions comprise a record of the main features and deposits contained within each trench. These are described by individual numbered context (a unit of archaeological record). All contexts are listed in Appendix 1 and are used to cross reference with recovered artefacts and ecofacts where appropriate. Numbered contexts appear on plans and elevations.

Trench 1

4.2.3 No archaeology was uncovered in this trench. The area appears to have been truncated by previous construction work.

4.2.4 The natural geology (103), was a light reddish brown gravelly sand which was reached at an average depth of 13.02 m above OD. The natural was overlain by a 0.2 m thick building debris layer (102). This was in turn overlain by a maximum 0.3 m thick layer of blackish grey clayey sand and rubble (101). Overlying this was 0.25 m of topsoil (100).

Trench 2

4.2.5 No archaeology was revealed within this trench, although plough marks running approximately N-E were visible in the southern half of the trench. The northern half of the trench appears to have been truncated by previous construction work.

4.2.6 The natural geology (204) was a light reddish brown gravelly sand. It was reached at an average depth of 13.43 m above OD. The stratigraphy of the northern half of the trench was similar to that of Trench 1, with a 0.23 m thick layer of blackish grey clayey sand and rubble (201) overlying the natural. In the southern half of the trench the natural was overlain by a 0.05 m thick layer of dark reddish brown silty sand (203). Overlying this was 0.22 m of topsoil (200).

Trench 3

4.2.7 A total of five features were recorded within this trench, three of some limited archaeological significance. The major part of the finds assemblage, largely of nineteenth/early twentieth century origin, was recovered from these features. The natural geology (302) was a light reddish brown gravelly sand. It was reached at an average depth of 13.8 m above OD.

4.2.8 Cut 303 was an irregular feature, possibly a tree bowl, located to the northern end of Trench 3. It measured 1.3 by 1.0 m with a maximum depth of 0.14 m. It was filled with a light brown slightly clayey sand (304). Pottery and glass dating to the nineteenth/early twentieth century were found within this deposit.

4.2.9 Cut 305 was a linear field boundary ditch aligned ENE-WSW. It was approximately 2.78 m wide and 0.2 m deep with fairly steep, sloped sides. The base of the ditch was concave. It was filled with a brownish yellow silty clay (306). No finds were recovered from this deposit.

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4.2.10 Cut 309 was circular pit located towards the southern end of Trench 3. It had a diameter of 0.94 m and a maximum depth of 0.24 m. The pit had fairly gentle sloping sides and a flat base. It was filled with a dark brown silty clay with occasional patches of reddish brown silty clay. Pottery, bone and glass dating to the nineteenth/early twentieth century were recovered from within this fill.

4.2.11 Of minor significance were two further features. Cut 307 was a land drain aligned with, field boundary ditch 305 and containing a number of finds including medieval tile, post-medieval clay pipe and pottery dating to the nineteenth/early twentieth century. Deposit 312 was a linear hedgerow which was unexcavated. It had a maximum width of 1.0 m and was aligned roughly E-W. A large number of roots were still visible within the fill which was a dark brown silty clay. No finds were recovered from within this deposit.

4.2.12 All of these features were overlain by a 0.2 m layer of dark reddish brown silty sand subsoil (301). This was overlain towards the middle of the trench by a maximum 0.14 m thick layer of building debris (311). This layer is probably associated with previous construction work in the area, or may have been used as a levelling layer when the area was turned into a playing field. Both layers 301 and 311 were overlain by topsoil (300) with a maximum thickness of 0.2 m.

Trench 4

4.2.13 The natural geology (402) was reached at approximately 14.64 m above OD and consisted of a light reddish brown gravelly sand. This was overlain by a 0.05 m thick layer of dark reddish brown silty sand subsoil (401), which was in turn overlain 0.3 m of topsoil (400).

4.2.14 Cut 403 was a large feature only partially uncovered at the southern end of Trench 4 which cut through layer 401. It had a visible length of 1.9 m and a visible width of 1.74 m. The feature was excavated to a depth of 1.0m but not bottomed. It was filled with lenses (404) of varying thickness of between 0.1 and 0.85 m of a chalky clayey sand, varying in colour from a darkish brown, a pale yellow and a light greyish white. No finds were recovered from within this deposit.

4.2.15 Cut 405 was another large feature cut into the subsoil (401), although not fully uncovered within the trench it appeared triangular (Fig 7) in shape. This feature measured a maximum visible length of 4.9 m by 1.9 m and had a maximum depth of 0.76 m. The sides were vertical at the top and then stepped in and became steeply sloped towards a concave base. The feature was filled with compact light greyish white chalky clayey sand. No finds were recovered from within the fill.

4.2.16 Both features 403 and 405 although not fully uncovered would appear to be pits since they are not visible within any other trench (and so unlikely to be linear boundary features for instance). Since they both cut through the subsoil they are most likely post-medieval in date, although no finds were recovered to confirm this.

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Trench 5

4.2.17 A total of two features were uncovered within this trench. The natural geology (502) was a light reddish brown gravelly sand. It was reached at an average depth of 14.25 m above OD.

4.2.18 Cut 503 was a circular pit located towards the eastern end of the trench. It had a diameter of 1.1 m and was 0.31 m deep with steep sloping sides and a concave base. The pit truncates an irregular area of bioturbation (506). The lower fill of the pit was a mottled reddish brown and greyish brown clayey sand (505) with a maximum thickness of 0.17 m. No finds were recovered from this fill. The upper fill had a maximum thickness of 0.28 m and was a dark grey salty sand. Post-medieval pottery was recovered from within this deposit (but was not retained).

4.2.19 Cut 508 was a roughly oval pit orientated E-W, located towards the western end of Trench 5. It measured 1.0 m by 0.76 m and had a maximum depth of 0.21 m. It had gently sloping sides with a concave base and truncated an irregular area of bioturbation (510) to the north. The pit was filled with a dark brown slightly clayey sand (509), and post-medieval pottery (not retained) was recovered from within this fill.

4.2.20 Both pits 503 and 508 were overlain by a 0.14 m thick layer of dark reddish brown silty sand (501), which was in turn overlain by a 0.21 m of topsoil (500). A plastic water pipe was also uncovered running approximately N-S towards the western end of Trench 5, as were a number of plough marks, also aligned roughly N-S.

Trench 6

4.2.21 The natural geology (602) was a light reddish brown gravelly sand and was reached at an average depth of 14.51 m above OD. This was overlain by a 0.05 m layer of dark reddish brown silty sand (601).

4.2.22 Cut 603 (Fig. 8) was a large pit cut into layer 601 towards the eastern end of Trench 6 and extending to the north and south beyond the trench edges. It had a maximum width of 2.8 m and a depth of 1.5 m with near vertical sides and a fairly flat base. The bottom fill of Pit 603 was a 0.1 m thick layer of light greyish white chalky sandy clay (607). This was overlain by a 0.5 m thick layer of mottled grey sandy clay and dark brown sandy silt (605). No finds were recovered in either of these fills. Overlying layer 605 was a 0.85 m thick layer of light greyish white chalky sandy clay (604). One piece of post-medieval building material was recovered from within this fill. Overlying this was a 0.35 m thick layer of mottled reddish brown and grey silty sand (611). No finds were recovered from this fill.

4.2.23 Cut 606 (Fig. 8) was a large pit located towards the eastern end of the trench and which truncates Pit 603 to the east. It had a maximum width of 2.55 m and a depth of 1.6 m with steep sloping sides and a slightly concave base. The pit extends beyond the edge of the trench to the north and south. The bottom fill of the pit was a 0.35 m thick layer of dark reddish brown silty sand with occasional grey sandy clay patches

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(609). This was overlain by 1.1 m thick layer of light greyish white chalky sandy clay (608), which was in turn overlain by 0.35 m thick layer of mottled reddish brown and grey silty sand (610). One piece of nineteenth/early twentieth century pottery was recovered from fill 610, but no finds were recovered from within fills 608 and 609.

4.2.24 Both pits 603 and 606 were sealed by a 0.3 m of topsoil (600). Plough marks were visible running approximately N-S along the western half of the trench.

Trench 7

4.2.25 Two features along with a number of N-S orientated plough marks were recorded within this trench. The natural geology (702) was a light reddish brown gravelly sand. It was reached at an average depth of 14.04 m above OD. This was overlain by a 0.05 m thick layer of dark reddish brown silty sand (701), which was in turn overlain by 0.3 m of topsoil (700).

4.2.26 Cut 703, representing the line of a recent hedgerow, was orientated NE-SW at the northern end of the trench. It had a maximum width of 0.45 m and a depth of 0.07 m. It was filled with a greyish brown sandy silt (704). No finds were recovered from this fill. This was sealed by layer 701.

4.2.27 Cut 705 was a small linear ditch orientated E-W cutting layer 701. It had a width of 0.45 m and was 0.22 m deep with steep sides and a concave base. The ditch was filled with a greyish brown sandy silt (706) and post-medieval pottery and iron nail (neither retained) were recorded. The feature is probably a simple drainage ditch.

Trench 8

4.2.28 No archaeological features were observed with this trench. The natural geology (802) was a light reddish brown gravelly sand and was reached at an average depth of 13.67 m above OD. This was overlain by a 0.05 m thick layer of dark reddish brown silty sand (801). Sealing this layer was 0.25 m of topsoil (800).

Trench 9

4.2.29 No archaeological features were uncovered in this trench. The natural geology (902) was reached at an average depth of 13.6 m above OD and consisted of a light reddish brown gravelly sand. A 0.05 m thick layer of dark reddish brown silty sand (901) overlaid the natural, and was in turn overlain by 0.2 m of topsoil (900).

Trench 10

4.2.30 No archaeological features were observed with this trench. The natural geology (1002) was a light reddish brown gravelly sand and was reached at an average depth of 13.8 m above OD. This was overlain by a 0.05 m thick layer of dark reddish brown silty sand (1001). Sealing this layer was a 0.2 m of topsoil (1000).

5 FINDS

5.1 Animal Bone (Lena Strid OA)

5.1.1 A total of 16 animal bones were recovered from three contexts in trench 3 (see Appendix 2). While most bones were in a poor condition (see Behrensmeyer 1978 for definitions) (see table 1), the preservation condition of the bones varied distinctly between features: Bone in context 310 was much better preserved than bones in context 308. Burnt and gnawed bones were absent

5.1.2 Judging by the surface structure, the bones derived from sub-adult or adult animals.

5.1.3 Butchering marks were found on one large mammal vertebra, which was split longitudinally, indicating suspension of the carcass during butchery.

5.1.4 No further information can be gained from such a small sample of bones, but the data should be further considered should the site proceed to full excavation in the future.

Table 1. Preservation level for bones

Preservation	**N**	**0**	**1**	**2**	**3**	**4**	**5**
% of assemblage	16		12.5%	6.3%	6.3%	75.0%	

Table 2. Bone assemblage.

	Sheep/goat	**Micromammal**	**Large mammal**	**Indeterminate**
Mandible	1			
Vertebra			2	
Pelvis		1		
Long bone			1	
Indeterminate				11
TOTAL	1	1	3	11
Weight (g)	24	0	45	7

Table 3. Sheep/goat tooth wear.

	dp4	**M1**	**M2**	**M3**	**MWS**
Mandible	g	d			10-17

Table 4. Number of bones and weight per context.

Context	**Species**	**No. of bones (refitted)**	**Sum of weight (g)**
304	Indeterminate	1	2
308	Micromammal	1	
	Large mammal	2	
	Indeterminate	10	24
310	Sheep/goat	1	
	Large mammal	1	50

5.2 Pottery (John Cotter OA)

Introduction and methodology

5.2.1 A total of 15 sherds of pottery weighing 253 g. were recovered from 4 contexts in trenches 3 and 6 (Appendix 3). All the pottery was examined and spot-dated during the present assessment stage. For each context the total pottery sherd count and weight were recorded on an Excel spreadsheet, followed by the context spot-date which is the date-bracket during which the latest pottery types in the context are estimated to have been produced or were in general circulation. Comments on the presence of datable types were also recorded, usually with mention of vessel form (jugs, bowls etc.) and any other attributes worthy of note (e.g. decoration etc.).

Date and nature of the assemblage

5.2.2 Overall the pottery assemblage is in a good but fragmentary condition. A complete profile of a bone china saucer was recovered from one context. Ordinary domestic pottery types are represented. The types present are summarised below. More detailed descriptions can be found in the spot-dates list.

5.2.3 The assemblage comprises common mass-produced Victorian tablewares and kitchenwares (19th to early 20th century) plus a couple of small pieces of red terracotta flowerpot of similar date.

Summary and recommendations

5.2.4 The assemblage represents typical Victorian domestic rubbish. In view of the small size, lateness and unremarkable nature of the assemblage no further work is recommended.

5.3 Clay Tobacco Pipes (John Cotter OA)

Introduction and methodology

5.3.1 The excavation produced a total of 5 fragments of clay pipe weighing 18 g. from 2 contexts in trench 3 (Appendix 4). These have been spot-dated and a given a basic catalogue. The catalogue records, per context, the quantity of stem, bowl and mouth fragments, the overall sherd count, weight, and comments on condition and any makers□marks or decoration present.

Summary of the assemblage

5.3.2 The assemblage comprises only pipe stem fragments (two others were re-identified as pottery). Some of these are quite worn, particularly the earlier stems. All are plain and unmarked. Dating is based on stem thickness and stem bore measurements and is therefore only approximate. There is one stem probably of late 18th- or 19th-century date but the other four pieces probably date to the late 17th or early 18th century, although all of these are probably residual.

Recommendations

5.3.3 The assemblage is of mixed 17th- to 19th-century date and in poor condition. No further work is therefore recommended.

5.4 CBM (Cynthia Poole OA)

5.4.1 A total of 40 fragments weighing 954 g were collected during the excavation of evaluation trenches from contexts 308 and 604 (Appendix 2). The material has been visually examined with the aid of a x10 hand lens, quantified and catalogued on an Excel spreadsheet. Quantification of forms is summarised in Table 1.

Table 5. Building material forms quantified by count and weight and fabrics used

Form	Nos	Wt (g)	Fabrics
Brick	29	688	A
Roof: flat	4	84	A, B
Roof: peg	3	123	D
Curved tile: ridge/field drain	1	50	A
Unidentified	3	9	C, D
Totals	40	954	

Fabrics

5.4.2 Four fabric types were identified and have been briefly characterised.

- Fabric A: pale cream and pink laminated sandy clay containing clay pellets. This probably derives from the Oxford clay, which was exploited in the area around Fletton for brick production.
- Fabric B: maroon red clay with small rounded iron oxide grit and clay pellets.
- Fabric C: orange or red sandy clay.

- Fabric D: orange / red fine sandy / silty clay.

Forms

5.4.3 The forms identified were all medieval or post-medieval in date comprising roofing and brick. The roof tile included peg tile, fairly crudely made with few grass/straw impressions on the underside and a circular peg hole 17 mm diameter. This is probably of medieval date or Tudor date. Other fragments of flat roof tile are post medieval or 20th century.

5.4.4 A curved tile fragment could be either a ridge tile or field drain. The remaining identifiable pieces were brick, all made in a distinctive pinkish cream fabric. Only one complete thickness of 42 mm (1" $^{5}/_{8}$), a size more typical of medieval or Tudor bricks. One of the bricks had a thick coating of cream sandy mortar.

Discussion

5.4.5 Apart from a modern roof tile in pit 604, the assemblage came from a post-medieval boundary ditch (308), which contained a mixture of medieval and post-medieval building material. A curved tile from the ditch is likely to be intrusive field drain from a later Victorian field drain (307) which cut the ditch, rather than ridge tile. The building material reflects the presence of medieval and later buildings in the general area, though probably not in the immediate vicinity of the site.

6 DISCUSSION AND INTERPRETATION

6.1 Geophysical Survey

6.1.1 The magnetometer survey findings suggest there are unlikely to be any major concentrations of archaeological features within the survey area. However, the response from the north and east of the survey is obscured by interference associated with recent building work, and there are less concentrated disturbances across much of the eastern part of the site. These appear to be bounded by a linear feature at D, and may relate to earlier leveling or drainage of the playing field which would have caused substantial ground disturbance.

6.1.2 The possibility that some of the remaining magnetic anomalies in the western half of the site, and particularly those outlined at A, B and C could be of archaeological origin cannot be finally excluded on the survey evidence alone (although see the trench evaluation below).

6.2 The trench evaluation

6.2.1 No archaeological features were identified in trenches 1, 2, 8, 9 and 10. Trenches 8 and 9 cut across anomalies recorded in the geophysical survey and confirmed that these were non-archaeological. A combination of the evidence from the geophysical survey and trench evaluation suggests there are no significant archaeological remains surviving in the northern and western part of the site.

6.2.2 A total of ten features of potential archaeological significance were recorded in the central and western part of the site in trenches 3, 4, 5, 6 and 7. These comprise a number of isolated pits and ditches, either undated or nineteenth/early twentieth century in date.

6.2.3 A boundary ditch (305) was located within Trench 3 and can be dated to the early 19th century since it was not visible on the 1807 Trumpington Inclosure Map (Fig. 9) but did appear on Baker's Map of Cambridge, 1830 (Fig. 10).

6.2.4 Four large pits (403, 405, 603, and 605) were partially uncovered within Trenches 4 and 6. The size and type of deposits within them suggest that these may be coprolite quarry pits. The second half of the 19th century saw extensive coprolite mining in and around Cambridgeshire (Grove, 1976). Coprolite was mostly used as a fertiliser but was also used as a raw material for munitions during the First World War.

6.2.5 Plough marks were visible within the majority of the trenches indicating that the area had been heavily ploughed prior to its current use as a playing field.

6.2.6 In places excavated archaeological features did approximately coincide with geophysical anomalies. Pits 603 and 605 were located in an area of magnetic anomalies shown in the geophysical survey. A water pipe was located running north - south towards the western end of Trench 5, along the line of a magnetic anomalies

located during the geophysical survey. Elsewhere, the magnetic anomalies located within Trenches 4, 9 and 8 were either not visible (Trenches 4 and 9) or caused by bioturbation (Trench 8).

6.2.7 The results in the central and western part of the site suggest the remains of eighteenth/nineteenth century agricultural boundaries with limited and isolated pits for coprolite extraction. There is no evidence for earlier activity other than the two fragments of possible medieval building material found in later deposits.

APPENDICES

APPENDIX 1 ARCHAEOLOGICAL CONTEXT INVENTORY

Trench	*Ctxt No*	*Type*	*Length (m)*	*Width (m)*	*Thick/ Depth (m)*	*Comment*	*Finds*	*Date*
1								
	100	Layer			0.25	Topsoil		
	101	Layer			0.3	Building debris		
	102	Layer			0.2	Building debris		
	103	Natural				Natural		
2								
	200	Layer			0.22	Topsoil		
	201	Layer			0.23	Building debris		
	202	Layer			0.25	Topsoil		
	203	Layer			0.05	Subsoil		
	204	Natural				Natural		
3								
	300	Layer			0.2	Topsoil		
	301	Layer			0.2	Subsoil		
	302	Natural				Natural		
	303	Cut	1.3	1.0	0.14	Tree bowl	Pot, glass	
	304	Fill	1.3	1.0	0.14	Fill of tree bowl		
	305	Cut	>1.9	2.78	0.2	Boundary ditch		
	306	Fill	>1.9	2.78	0.2	Fill of ditch	-	
	307	Cut	>1.9	2.74	>0.6	Drainage ditch		
	308	Fill	>1.9	2.74	>0.6	Fill of ditch	Bone, glass, metal, CBM, clay pipe	
	309	Cut	0.94	0.9	0.24	Pit		
	310	Fill	0.94	0.9	0.24	Fill of pit	Pot, bone, glass	
	311	Layer			0.14	Building debris		
	312	Bioturbation		1.0		Hedgerow		

Trench	*Ctxt No*	*Type*	*Length (m)*	*Width (m)*	*Thick/ Depth (m)*	*Comment*	*Finds*	*Date*
4								
	400	Layer			0.3	Topsoil		
	401	Layer			0.05	Subsoil		
	402	Natural				Natural		
	403	Cut	>1.9	>1.74	>1.0	Pit		
	404	Fill	>1.9	>1.74	>1.0	Pit fill		
	405	Cut	>4.9	>1.9	0.76	Pit		
	406	Fill	>4.9	>1.9	0.76	Pit fill		
5								
	500	Layer			0.21	Topsoil		
	501	Layer			0.14	Subsoil		
	502	Natural				Natural		
	503	Cut	1.1	1.0	0.31	Pit		
	504	Fill	1.1	1.0	0.28	Pit fill	Pot	
	505	Fill	0.5	>0.25	0.17	Pit fill		
	506	Cut	0.85	0.7	0.1	Bioturabtion		
	507	Fill	0.85	0.7	0.1	Bioturabtion fill		
	508	Cut	1.0	0.76	0.2	Pit		
	509	Fill	1.0	0.76	0.2	Pit fill	Pot	
	510	Cut	0.53	0.24	0.08	Bioturbation		
	511	Fill	0.53	0.24	0.08	Bioturbation fill		
6								
	600	Layer			0.3	Topsoil		
	601	Layer			0.05	Subsoil		
	602	Natural				Natural		
	603	Cut	2.8	>1.9	>1.5	Pit		
	604	Fill	2.8	>1.9	0.85	Pit fill	Tile	
	605	Fill	2.55	>1.9	0.5	Pit fill		
	606	Cut	2.55	>1.9	1.6	Pit		
	607	Fill	2.1	>1.9	>0.1	Pit fill		
	608	Fill	2.4	>1.9m	1.1	Pit fill		
	609	Fill	2.5	>1.9m	0.35	Pit fill		

Trench	*Ctxt No*	*Type*	*Length (m)*	*Width (m)*	*Thick/ Depth (m)*	*Comment*	*Finds*	*Date*
	610	Fill	2.9	>1.9m	0.6	Pit fill	Pot	
	611	Fill	2.55	>1.9m	0.35	Pit fill		
7								
	700	Layer			0.3	Topsoil		
	701	Layer			0.05	Subsoil		
	702	Natural				Natural		
	703	Cut	>1.9	0.45	0.07	Hedgerow		
	704	Fill	>1.9	0.45	0.07	Hedgerow fill		
	705	Cut	>1.9	0.45	0.22	Ditch		
	706	Fill	>1.9	0.45	0.22	Ditch fill	Pot, metal	
8								
	800	Layer			0.25	Topsoil		
	801	Layer			0.05	Subsoil		
	802	Natural				Natural		
9								
	900	Layer			0.2	Topsoil		
	901	Layer			0.05	Subsoil		
	902	Natural				Natural		
10								
	1000	Layer			0.2	Topsoil		
	1001	Layer			0.05	Subsoil		
	1002	Natural				Natural		

APPENDIX 2 CBM DATA

Ctxt	Nos	Wt (g)	Fab	Form	Description	Comments	TH	W	L	Corners	Abrasion	Date of Obj	Interpretation	Phase	Cut
308	11	300	A	Brick	Shattered fragments all probably from same brick. Hint of rounded corner. Only 2 pieces with original surface, both coated in thin layer of cream sandy mortar.	pale pink sandy fabric strongly laminated.	>30 mm	0	0	0	M	?Med	post med boundary ditch	Pmed	305
308	1	50	A	Ridge	Curved tile could be ridge tile (or possibly field drain)	reddish pink and cream laminations	16	0	0	0			post med boundary ditch	Pmed	305
308	3	123	D	Roof: peg tile	Fairly crudely made tile with undulating surfaces. Underside quite rough with impressions of pebbles and ?straw/organic. Circular peg hole piecing surface at slight diagonal; 17 mm diam.		13-16 mm	0	0	0		Med	post med boundary ditch	Pmed	305
308	1	3	C	tile	Small fragment with flat surface.		>10	>22	0	0			post med boundary ditch	Pmed	305
308	2	6	D	tile	amorphous		0	0	0	0	H		post med boundary ditch	Pmed	305

Ctxt	Nos	Wt (g)	Fab	Form	Description	Comments	TH	W	L	Corners	Abrasion	Date of Obj	Interpretation	Phase	Cut
308	18	388	A	Brick	Smooth even surfaces; fine moulding sand on base. Lots of small fragments shattered off main large piece - some join. Two other joining fragments possibly part of different brick as some of clay pellets and laminations have fired pink.	Cream fabric with cream clay pellets & ? some organic inclusions, just a hint of pinkish streaks & clay pellets in main piece, more overt in 2x fragments.	42 mm [1" $^{5}/_{8}$]	0	0	0			post med boundary ditch	Pmed	305
308	3	30	A	roof tile?	Smooth even surfaces; base pitted from moulding sand but few grains still adhering. One fragment with straight flat edge & rounded arrises.	pale pink - cream fabric; surfaces cream	12	0	0	0			post med boundary ditch	Pmed	305
604	1	54	B	Roof tile	Machine cut corner of flat tile; sharp angular corner & arrises. On back the centre of tile is slightly recessed leaving a margin 24 & 26 mm along either side.		11	0	0	1	0	Modern: mid-late 20th C	post med coprolite pit	Pmed	603

APPENDIX 3 POTTERY SPOT DATES

Context	Spot-date	Sherds	Weight	Comments
304	19-E20C	2	18	Bs (body sherd) mod English brown stoneware ink or blacking bottle. Footring Staffs mass-produced white earthenware dish/plate
308	19-E20C	2	5	Bss red terracotta flowerpot, slightly worn
310	19-E20C	10	170	8 sh from base/lower part of mod English grey stoneware marmalade or preserve jar with corduroy decoration (no maker's mark under). 1 base sherd from cylindrical mug in Staffs mass-produced white earthenware, glaze quality might suggest L19C/E20C poss up to 1940s? 2x joining v narrow ?Creamware cup handle (L18-E19C) or other thin rod-shaped ceramic element - slightly eliptical section, covered in clear glaze (previously mistaken for clay pipe)
610	19-E20C	1	60	Complete profile English bone china saucer. Traces of red painted and poss gilded borders - but decoration mostly worn away
TOTAL		**15**	**253**	

APPENDIX 4 CLAY PIPE SPOT DATES

Context	Spot-date	Stem	Bowl	Mouth	Tot sherds	Tot Wt	Comments
304	17-E18C	1	0	0	1	8	Worn stem, thick. Stem bore diam (SB) c3mm
308	L18-19C	4	0	0	4	10	1x SB c1.25mm, prob 19C (burnt). 3 other worn stems incl 1x 18C & 2x L17/E18C? With SBs to c 3mm
TOTAL		**5**	**0**	**0**	**5**	**18**	

APPENDIX 5 REFERENCE

Alexander, M., 1997, An Archaeological Evaluation at Homerton College, Cambridge, *CAU Report No. 198*

Behrensmeyer, A.K., 1978, 'Taphonomic and ecologic information from bone weathering', *Paleobiology*, Vol. 4. pp. 150-162.

Dickens, A., 2002, Homerton College Cambridge: An Archaeological Desktop Assessment, *CAU Report No. 481*

Grove, R., 1976, 'Coprolite Mining in Cambridgeshire', *The British Agricultural History Society*, Vol. 1 pp. 36-43.

IFA, 2001, *Standard and Guidance for Archaeological Evaluations*

OA, 2007, *Proposed Undergraduate Accommodation, Written Scheme of Investigation*, OA Report

OAU, 1992, *Field Manual* (ed. D. Wilkinson), OA Internal Report

Prince, F.S.M., 2007, *Homerton College, Cambridge, Report on Archaeogeophysical Survey 2007,* Bartlett Clarke Consultancy

Webb, D., and Dickens, A. 2006, Homerton College Cambridge: Archaeological Evaluation of the Site of New Undergraduate Accommodation, *CAU Report No. 720*

APPENDIX 6 SUMMARY OF SITE DETAILS

Site name: *Proposed Residential development, Homerton College, Cambridge*
Site code: CAHOMC07
Grid reference: TL 459 561
Type of evaluation: Geophysical survey and 10 machine-dug trenches, total length 300 m
Date and duration of project: 2 days, 25th - 26th June 2007 Geophysical survey, 6 days, 23rd - 30th July 2007 evaluation.
Area of site: 1.2 hectare
Summary of results: Fragments of eighteenth/nineteenth century agricultural boundaries and isolated pits, some probably representing coprolite extraction..
Location of archive: The archive is currently held at OA, Janus House, Osney Mead, Oxford, OX2 0ES, and will be deposited with Cambridgeshire County Museums Service in due course.

Servergo/AtoH/CAHOMC07/CAHOMCEV/Proposed Undergraduate Accomodation, Homerton College, Cambridge/GS/03.08.07

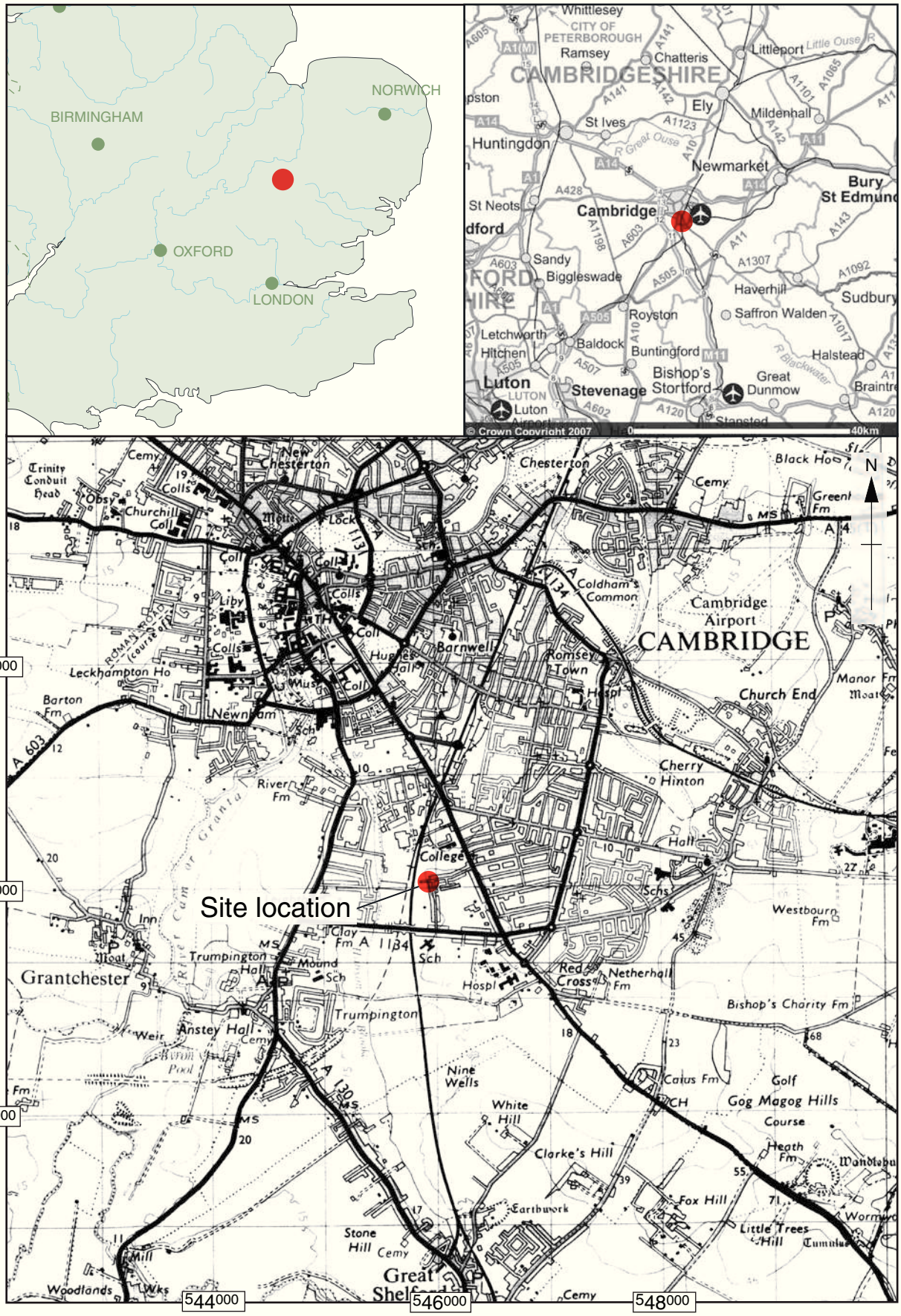

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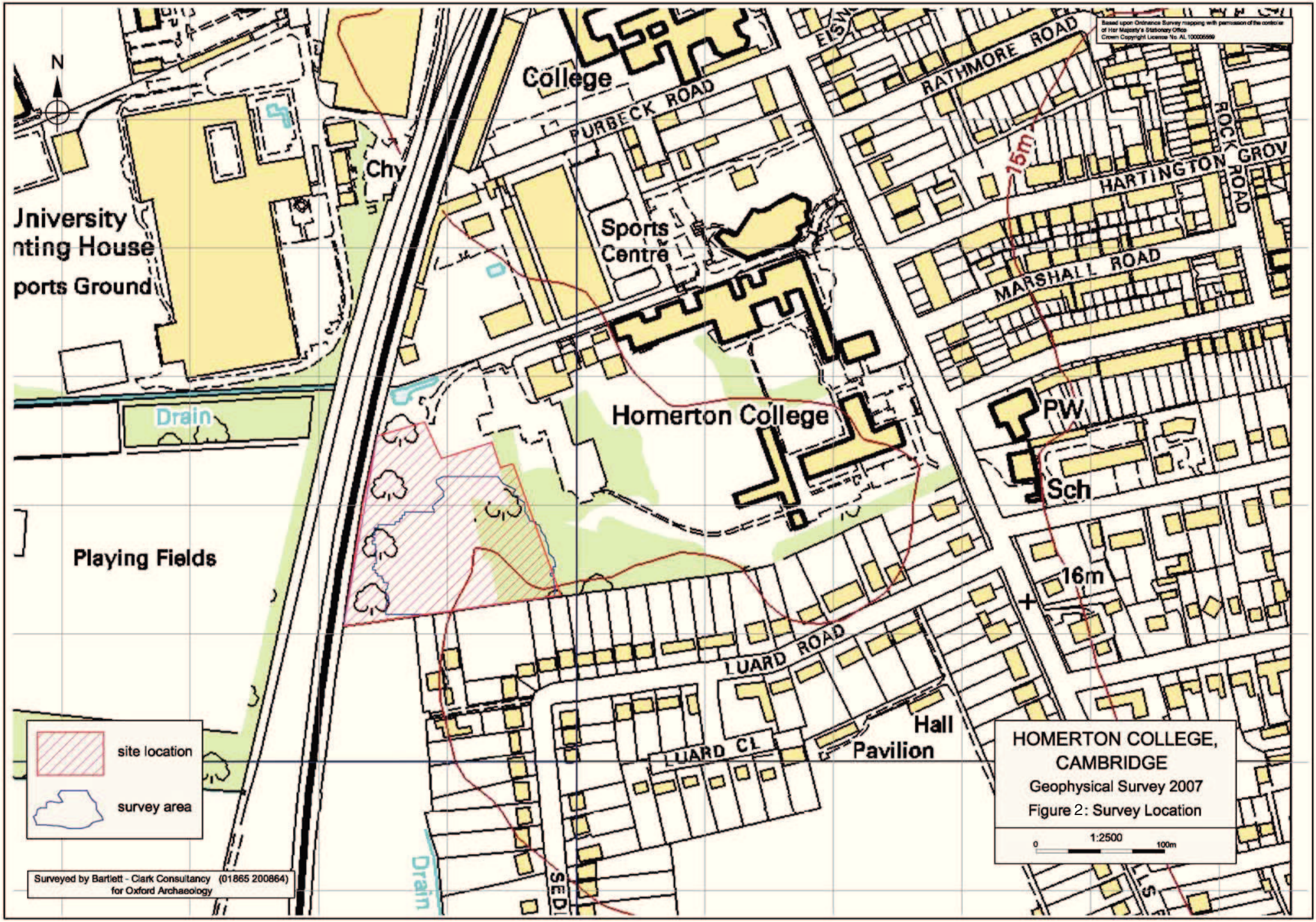
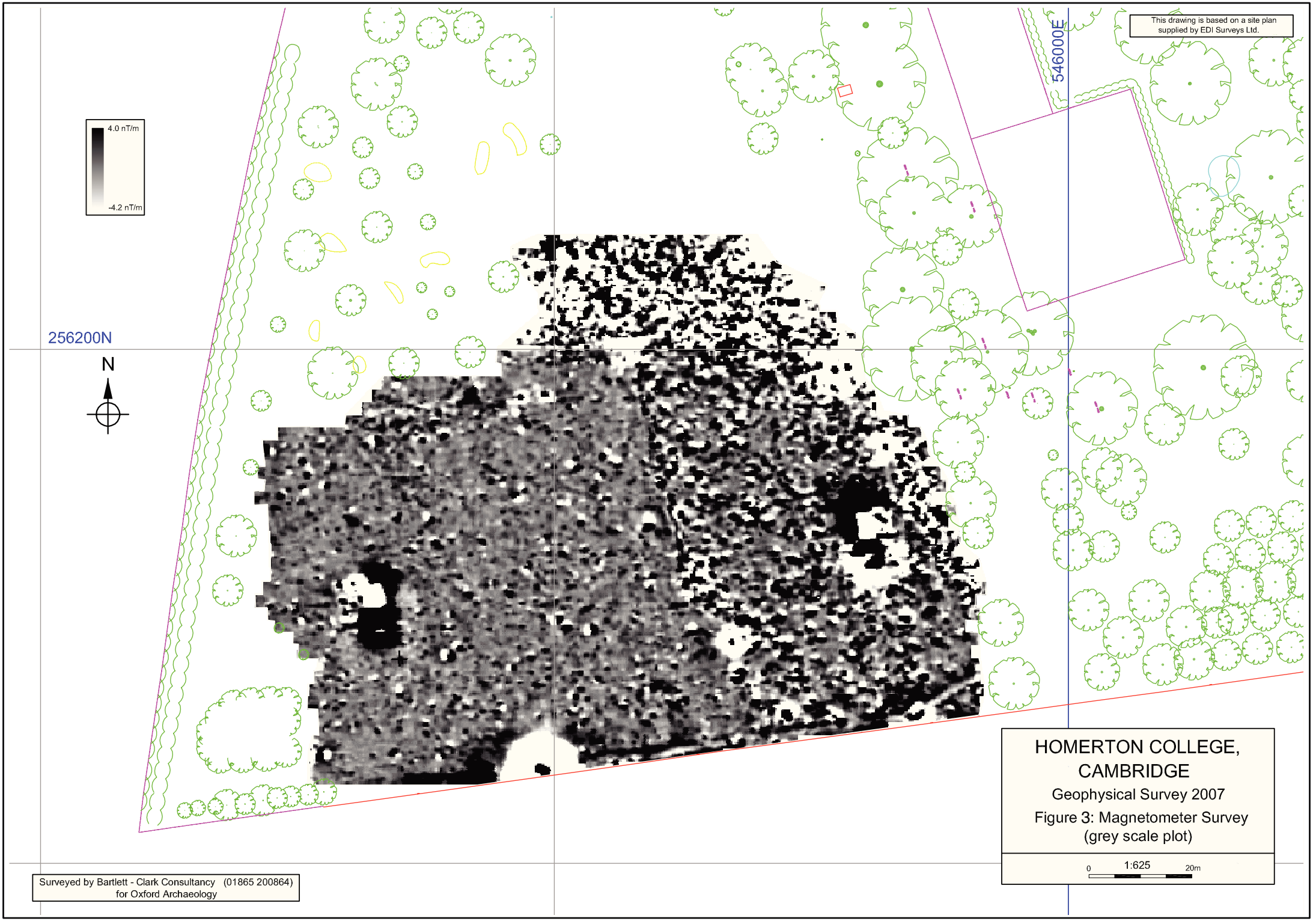
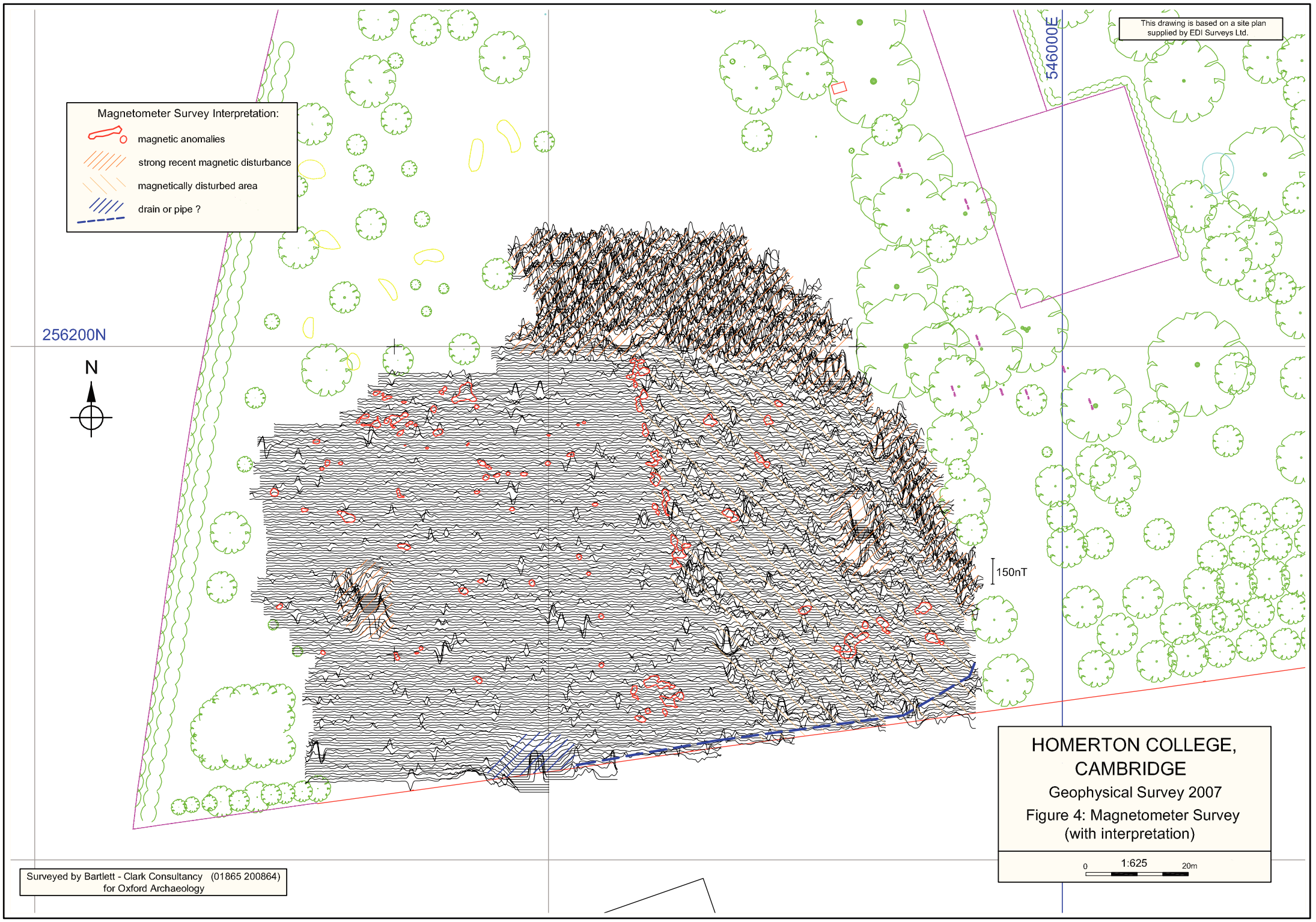
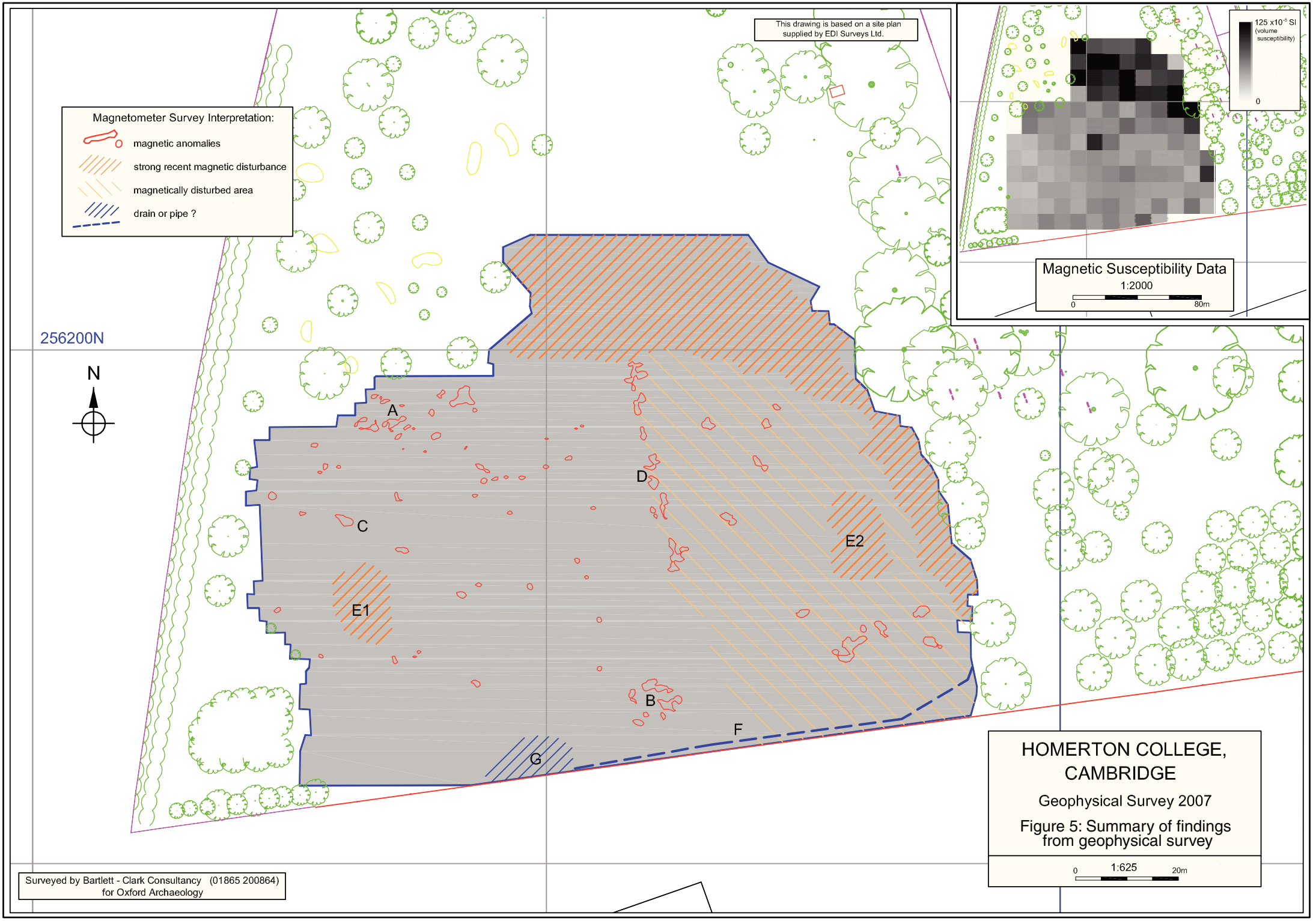
Figure 1: Site location


N
College
PURBECK ROAD
RATHMORE ROAD
HARTINGTON GROV
ROCK ROAD
MARSHALL ROAD
15m
Chy
Sports Centre
Homerton College
PW
Sch
Drain
Playing Fields
16m
LUARD ROAD
LUARD CL
Hall
Pavilion
site location
survey area
Surveyed by Bartlett - Clark Consultancy (01865 200864)
for Oxford Archaeology
HOMERTON COLLEGE, CAMBRIDGE
Geophysical Survey 2007
Figure 2: Survey Location
1:2500
0
100m


4.0 nT/m
-4.2 nT/m
256200N
N
546000E
This drawing is based on a site plan supplied by EDI Surveys Ltd.
HOMERTON COLLEGE, CAMBRIDGE
Geophysical Survey 2007
Figure 3: Magnetometer Survey (grey scale plot)
0
1:625
20m
Surveyed by Bartlett - Clark Consultancy (01865 200864) for Oxford Archaeology


Magnetometer Survey Interpretation:
magnetic anomalies
strong recent magnetic disturbance
magnetically disturbed area
drain or pipe ?
This drawing is based on a site plan supplied by EDI Surveys Ltd.
546000E
256200N
N
150nT
HOMERTON COLLEGE, CAMBRIDGE
Geophysical Survey 2007
Figure 4: Magnetometer Survey (with interpretation)
0
1:625
20m
Surveyed by Bartlett - Clark Consultancy (01865 200864)
for Oxford Archaeology


This drawing is based on a site plan supplied by EDI Surveys Ltd.
Magnetometer Survey Interpretation:
magnetic anomalies
strong recent magnetic disturbance
magnetically disturbed area
drain or pipe ?
125 x10⁻⁵ SI (volume susceptibility)
0
Magnetic Susceptibility Data
1:2000
0
80m
256200N
N
A
B
C
D
E1
E2
F
G
HOMERTON COLLEGE, CAMBRIDGE
Geophysical Survey 2007
Figure 5: Summary of findings from geophysical survey
0
1:625
20m
Surveyed by Bartlett - Clark Consultancy (01865 200864) for Oxford Archaeology

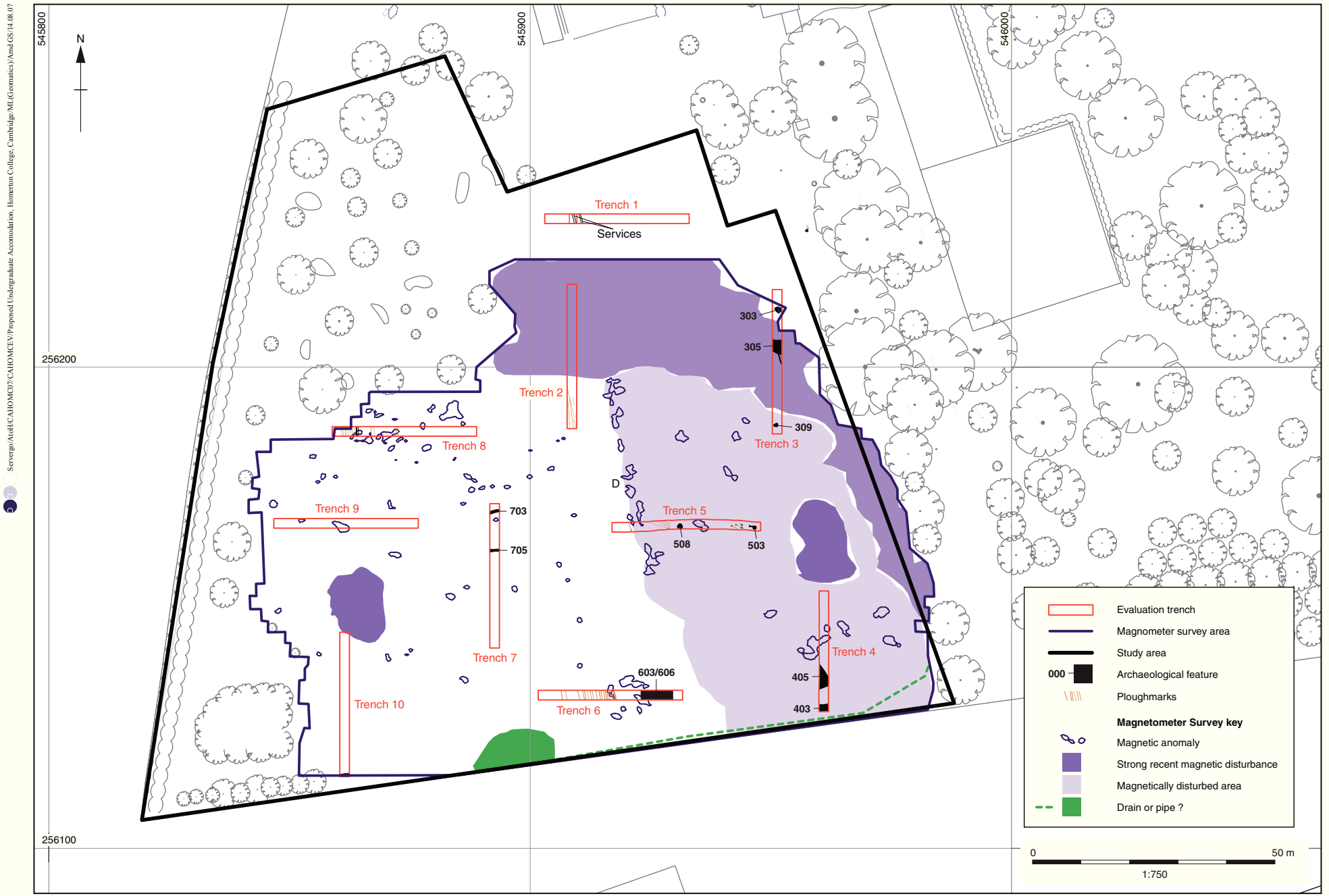


Figure 6: Trench location plan

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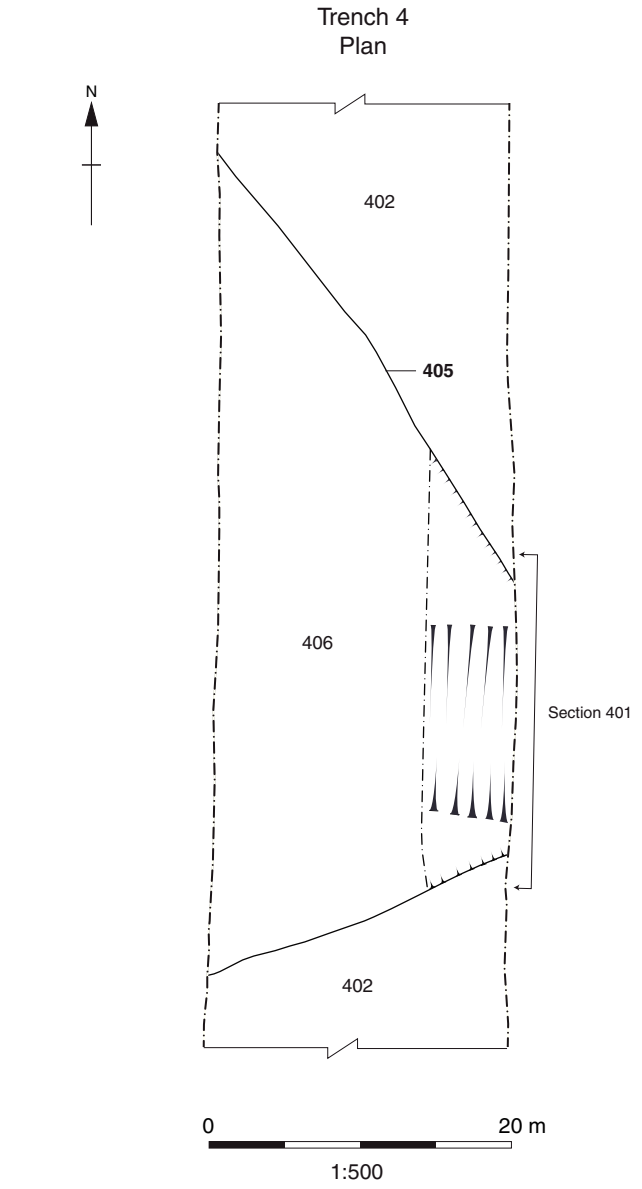

Figure 7: Plan and section of Pit 405

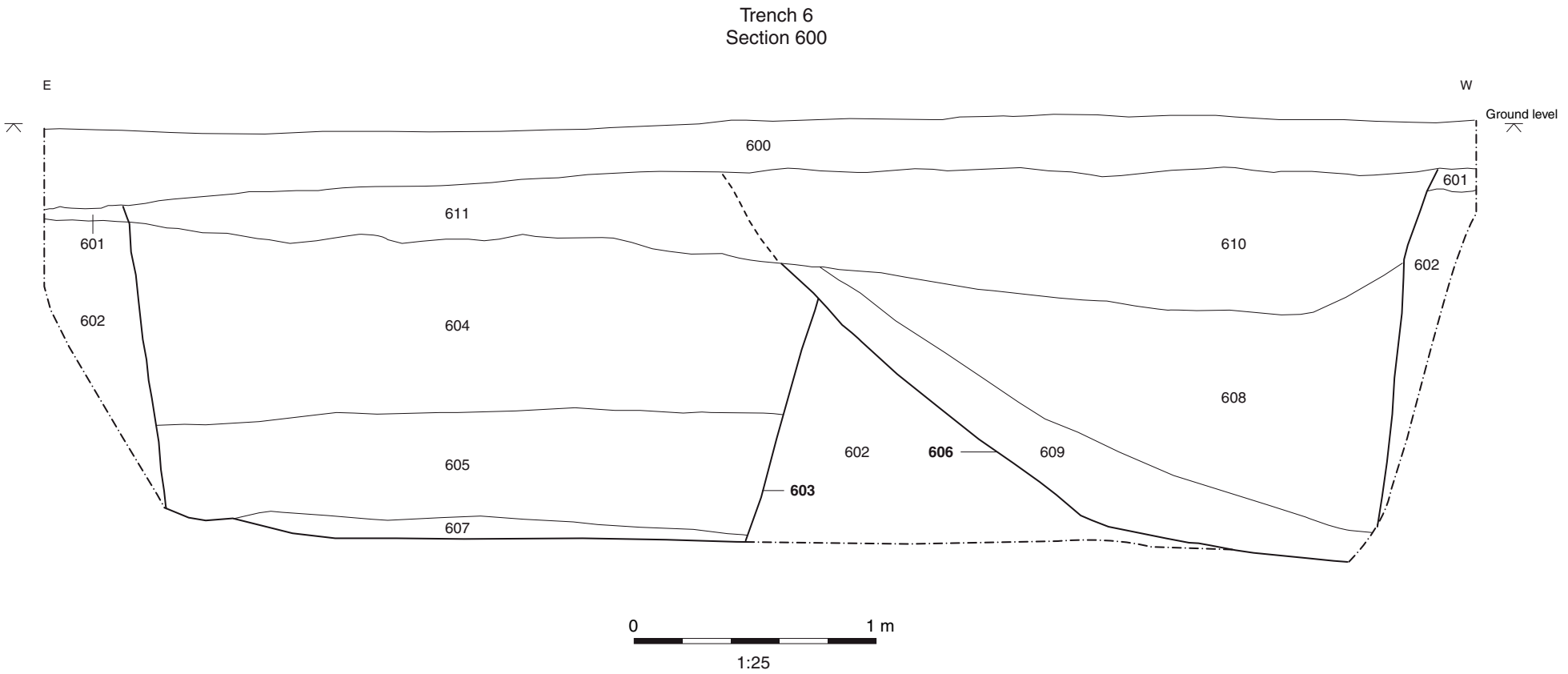

Figure 8: Section of Pits 603 and 606

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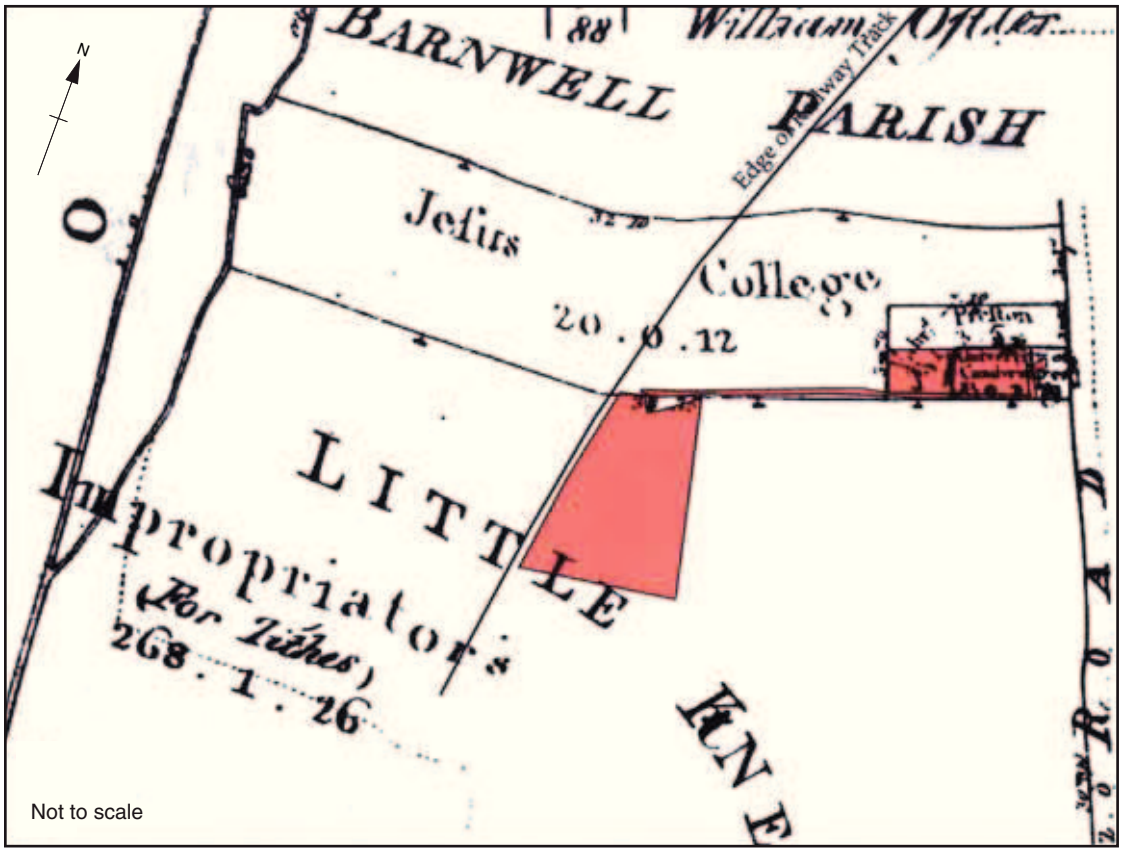

Figure 9: Extract from 1807 Trumpington Inclosure Map

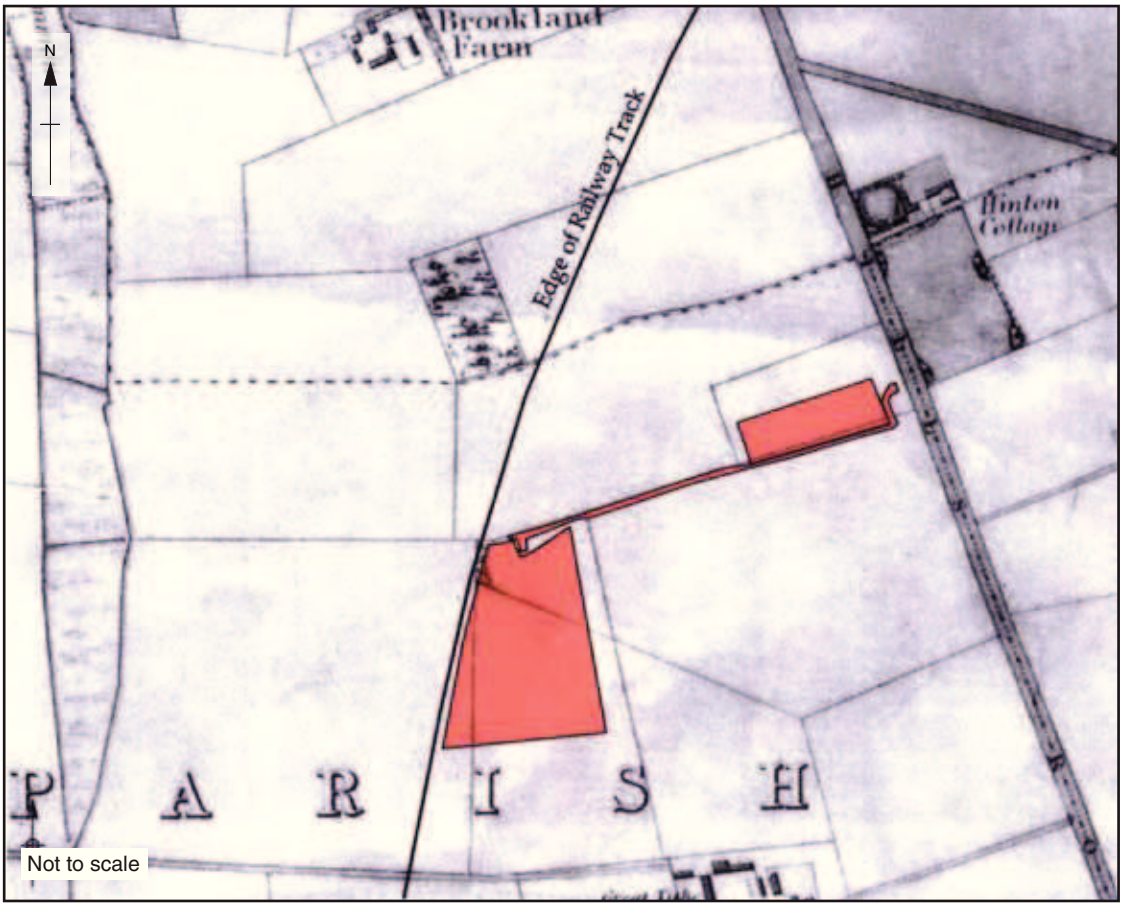

Figure 10: Extract from Baker's Map of Cambridge 1830

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