A421 IMPROVEMENTS: M1 JUNCTION 13 TO BEDFORD

ARCHAEOLOGICAL TRIAL TRENCHING

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Preface

Every effort has been made in the preparation of this document to provide as complete a summary as possible within the terms of the Specification and Method Statement. All statements and opinions in this document are offered in good faith. Albion Archaeology cannot accept responsibility for errors of fact or opinion resulting from data supplied by a third party, or for any loss or other consequence arising from decisions or actions made upon the basis of facts or opinions expressed in this document.

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Structure of the Report

This report presents the results of the archaeological trial trenching. The first section introduces the project and summarises the archaeological background. The results of the trial trenching are presented in Section 2, which in turn forms the basis of Section 3: Synthesis. Section 4 is a Bibliography. Appendix 1 contains detailed descriptions of the archaeological features and deposits recorded within the trenches. Appendix 2 presents stratigraphic matrices for each trench.

Key Terms

Throughout this report the following terms or abbreviations are used:

BCC	Bedfordshire County Council
CAO	County Archaeological Officer
CI!	D 10 D 44 T 4 1

Client Balfour Beatty Ltd

CAC Client's Archaeological Consultant: Scott Wilson Ltd

IFA Institute of Field Archaeologists

OD Ordnance Datum





Non-Technical Summary

This report present the results of a programme of archaeological trial trenching undertaken in April 2006. The purpose of the work was to provide more information for the Environmental Statement on the preferred route of the A421 Improvements between M1 Junction 13 and Bedford. All work was carried out in accordance with the Specification issued by the Highways Agency. In addition, the fieldwork was monitored by the Client's Archaeological Consultant and the County Archaeological Officer of Bedfordshire County Council.

The trial trenching was designed to assess the reliability of results from previous assessment works and to provide additional information on date, nature and preservation. Six trial trenches, totalling 600m², were targeted on ditch- and pit-type geophysical anomalies.

Four of the six trenches contained archaeological features. The results from these can be summarised as follows:

- Trenches 5 and 6 (north of Brogborough)- archaeological features, including a possible roundhouse, and artefacts were located suggestive of a farmstead which may have originated in the late Iron Age, but continued to function into the Roman period. Rural settlements such as this have the potential to address a number of national and regional research objectives.
- Trench 4 (north-west of Brogborough)- archaeological features and artefacts were located suggestive of a field system which may have originated in the late Iron Age. Field systems are an understudied element of the archaeological record which have the potential to address national and regional research objectives. In addition, the existence of a field system is strongly suggestive of nearby rural settlement. A contemporary farmstead was identified in Trenches 5 and 6, c. 350m away. However, known settlement patterns in Bedfordshire and the absence of significant geophysical anomalies between this farmstead and the field system suggest that a second farmstead, not necessarily within the road corridor, may exist in the vicinity of Trench 4.
- Trench 8 (south-west of Marston Moretaine)- archaeological features located evidence for quarrying which may date to the early Roman period. Although such features have not been specifically referred to in national and regional research agenda, they do have the potential to address objectives related to the rural landscape.

The trial trenching has investigated three archaeological sites which were initially identified by geophysical survey. It has provided some information on their date, nature and level of preservation. However, their full extent and any spatial variations within them are still unknown. This could only be achieved by further trial trenching at a higher percentage coverage. In addition, because non-intrusive survey, which has been undertaken extensively along the route, is notorious for under-representing the sub-surface archaeological features, additional sites may exist within the road corridor which can only be located by more extensive, arrayed trial trenching.





1 INTRODUCTION

1.1 Project Background

A programme of archaeological trial trenching was required to provide information for the Environmental Statement on the proposed route of the A421 improvements. It was undertaken by Albion Archaeology for Balfour Beatty (The Client) on behalf of the Highways Agency.

Non-intrusive archaeological investigation had previously been undertaken to assess the impact of the Scheme and to inform the Design Brief. The results of these investigations have been reviewed by the Client's Archaeological Consultant (CAC) and utilised in the production of a Specification for Trial Trenching (Highways Agency 2006).

The Archaeological Method Statement (Albion Archaeology 2006) detailed the design and proposed programme of archaeological trial trenching. It was designed to assess the reliability of results from previous assessment works through the excavation of ten targeted trial trenches within the preferred route between M1 Junction 13 and Bedford. Landowner concerns meant that only six of the ten trenches envisaged in the Specification were undertaken. The total size of the investigated areas was 600m^2 .

This document reports the findings of the fieldwork and the post-fieldwork analysis.

1.2 Site Location and Description (Figure 1)

The preferred route alignment of the A421 improvements between M1 Junction 13 and Bedford is shown on Figure 1. It runs to the NW of the present road, deviating significantly from its current alignment to the SW of Marston Moretaine.

The six trenches were located in three pre-defined areas along the route:

- Area 2 was located to the west of Brogborough, centred around SP9610038400;
- Area 4 was located between Brogborough and Marston Moretaine, centred around SP9790040700;
- Area 5 was located to the north of Marston Moretaine, centred around SP9940042000.

Area 2 covered an area of high ground, overlooking the M1. Its highest point was around c.100 m OD and was split between pasture on its SW facing slope and arable on its crest. Area 4 occupied isolated, low-lying arable land at c.45 m OD, to the north of Escheat Farm. Area 5 was situated on arable land adjacent to the A421 and Beancroft Road. It was located at a height of c.40 m OD.

1.3 Archaeological Background

In December 2004 the Museum of London Archaeology Service (MoLAS), commissioned by Hyder Consulting (UK) Ltd on behalf of the Highways Agency, completed a DMRB Stage 2 Cultural Heritage Assessment of the



preferred route of the A421 improvements. On the basis of aerial photographs and information in Bedfordshire County Council's Historic Environment Record (HER), this identified a number of possible archaeological sites along the route.

In 2005, MoLAS, commissioned by Hyder Consulting (UK) Ltd, carried out a watching brief on geotechnical test pits along the preferred route of the road improvements. This study concluded that there existed the potential for the survival of untruncated archaeological remains within the area. This was followed by detailed magnetometer survey of 72ha of the preferred route, identifying a range of geophysical pit- and ditch-type anomalies. The majority of the anomalies were interpreted as former ridge and furrow. However, anomalies possibly suggestive of settlements, were located in two areas (Area 2 and 4).

1.4 Aims and Objectives

The investigation aimed to provide information for the Environmental Statement on the proposed route of the A421 improvements.

Specific aims of the trial trenching were to:

- Establish the importance, nature and character of the previously identified archaeological resource;
- Determine the location, nature, extent, date, condition, preservation, significance and stratigraphic complexity of archaeological deposits and determine the general distribution of prehistoric, Roman and post-Roman evidence within the proposed scheme alignment;
- Provide sufficient supporting evidence for the A421 Improvements Environmental Impact Assessment and Environmental Statement;
- Determine the level of risk that the archaeological resource would present to the road construction programme at these locations and aid the determination of a suitable mitigation work specification and programme;
- Determine the condition or state of preservation of any archaeological deposits or features encountered;
- Test the interpretations of the anomalies identified by the geophysical survey;
- Determine the likely range, quality and quantity of artefactual evidence present.

1.5 Methodology

A detailed method statement for trial excavation (Albion Archaeology 2006) was approved by the Client's Archaeological Consultant (CAC) and the County Archaeological Officer (CAO) of Bedfordshire County Council (BCC) and is therefore not repeated here. All trenches were excavated with a JCB-type wheeled excavator under close archaeological supervision.



2 RESULTS OF THE TRIAL TRENCHING

2.1 Introduction

This section summarises the results of the trial trenching which was undertaken between 10th and 26th April 2006. It was delayed by a period of three weeks, at the request of the landowners, due to wet weather conditions. A total of six trenches were opened. They were generally 50m by 2m in extent, although Trench 6 was split into 30m and 20m segments to avoid overhead electricity cables. The trenches were inspected by the CAC and the CAO of BCC on the 12th and 19th April 2006.

A total of 65 contexts were investigated within the trenches. These comprised 27 "cut" type archaeological features (Table 1). The following discussion is arranged by trench and feature type, with separate sections for artefactual and ecofactual information. Plans of each trench are included at the rear of the report (Figures 2 to 7). Representative sections have also been reproduced alongside the relevant plans. Further detailed context descriptions can be found in Appendix 1.

Trench	Ditches	Pits	Furrows	Modern features	Finds
4	3	0	1	0	Yes
5	3	2	4	1	Yes
6	5	2	5	0	Yes
8	0	1	0	0	Yes
9	0	0	0	0	No
10	0	0	0	1	No

Table 1: Summary of archaeological features by trench



2.2 Trench 4 (Figure 2)

Trench 4 was located in a field of pasture, accessed from Salford Road, Brogborough. The trench was positioned to investigate several linear geophysical anomalies which appeared to be part of an "E-shaped" enclosure.

2.2.1 Topsoil and subsoil

The topsoil layer (400) consisted of plastic dark grey brown silty clay, ranging from 0.3m to 0.4m deep. No finds were recovered.

The subsoil (401) deepened and became more clayey towards the north of the trench, ranging from 0.2m to 0.3m. It is likely that this deposit represents disturbance caused by ploughing of the soil. No finds were recovered.

2.2.2 Ditches

Three ditches were identified within Trench 4 (403, 409 and 411). All were relatively substantial and each corresponded with linear, ditch-type anomalies identified by the geophysical survey.

Ditch 403 was aligned NNW-SSE and had a concave profile (Figure 2: Section 3). It was 0.5m deep and 1.4m wide. Its fill was a dark brown grey silty clay that contained animal bone. The relatively sterile silty fill (404), and the presence of whole mollusc shells, might suggest that the ditch fell into disuse and infilled naturally.

NE-SW ditches 409 and 411 were both of similar size (1.6 to 1.7m wide by 0.6 to 0.7m deep) and shape (Figure 2: Sections 1 and 2). They were filled by dark brown grey silty clay, although the lower fill (412) of ditch 411 was noticeably lighter in colour. The upper fill of ditch 409 was cut by furrow 411 and it is, therefore, likely to be of pre-medieval origin. The two small sherds of pottery from fill 410 of ditch 409 were highly abraded and not very diagnostic. However, their fabric suggests that they may be late Iron Age or early Roman in date. The lower fill (412) of ditch 411 produced small quantities of animal bone and some ferrous slag, which could be indicative of iron working in the area.

The geophysical survey suggests that all three ditches are contemporary and part of the same enclosure system. However, the limited quantity and absence of the full range of domestic debris suggests that they were probably located some distance from a settlement core.

2.2.3 Furrow

Feature 407 was 1.1m wide and had a shallow, concave profile that was only 0.12m deep. It clearly cut ditch 409 and is interpreted as a medieval furrow.

2.2.4 Undisturbed geological deposits

The undisturbed geological deposit (402) within Trench 4 was a mid-yellow brown sandy clay with occasional small stones.



2.3 Trench 5 (Figure 3)

Trench 5 was located in an arable field to the NW of Brogborough Picnic Site. The trench was positioned to investigate several linear geophysical anomalies, including a possible penannular enclosure.

2.3.1 Topsoil and subsoil

The topsoil (500) consisted of firm dark grey brown silty clay, 0.2m deep. No finds were recovered.

The subsoil (501) was a firm dark grey brown silty clay with occasional stones; it was 0.15m deep. It is likely that this deposit represent disturbance caused by ploughing of the soil. No finds were recovered.

2.3.2 Ditches or gullies

Three ditches or gullies were identified within Trench 5 (506, 508 and 514). Only the two larger ones 508 and 514 had been identified by the geophysical survey. The third 506 is significantly smaller and is, therefore, described in this report as a gulley.

Ditches 508 and 514 corresponded with the penannular curvilinear geophysical anomaly. They were both quite substantial (1.5 to 2m wide by 0.3 to 0.5m deep respectively) with wide concave profiles (Figure 3: Sections 6 and 8). Based on the geophysical survey it is likely that 508 and 514 are part of the same ditch and that their differences are explained by the trial trench crossing them obliquely. They both contained significant quantities of early Roman pottery and animal bone suggesting that they had been backfilled with domestic refuse. The size (*c*. 18m in diameter) and penannular shape formed by the ditches is suggestive of a small enclosure or even a drainage ditch around a roundhouse.

Gulley 506 was not identified by the geophysical survey; however, it was only 0.6m wide and 0.12m deep (Figure 3: Section 7). It also yielded early Roman pottery and animal bone. It appears to be on the same alignment as ditch-type anomalies to the NW and SE.

2.3.3 Pits

Two pits 503 and 510 were identified in Trench 5; neither was detected by the geophysical survey. They were c. 6m apart and both were steep-sided and flat-bottomed. They were between 0.6 and 0.7m deep (Figure 3: Sections 4 and 5). Their full extent was not visible within the trench, but they are likely to be under 1.5m in diameter. The fill of pit 510 had been truncated by furrow 512. The fills of both pits were mid-dark grey brown silty clay and they contained small amounts of late Iron Age and early Roman pottery and animal bone. Although both pits have clearly been used to dispose of domestic refuse, their substantial size and straight-sided form could suggest they were originally dug as storage pits.

2.3.4 Furrows

Four NNE-SSW parallel furrows 512, 517, 519 and 521 were located within the trench and corresponded with linear geophysical anomalies. The regularity of the spacing suggests that a fifth furrow probably existed in the vicinity of ditch 508,



but was obscured by a land drain. Nearly all the furrows had had modern land drains dug into them suggesting that they survived until relatively recently as hollows in the field. A sherd of 17th -18th century pottery was recovered from 519.

2.3.5 Modern Feature

A 2m wide band of sandy gravel was present between ditch 508 and furrow 519. This was dug from just below the topsoil and had the appearance of a modern service trench; it was not excavated.

2.3.6 Undisturbed geological deposits

The undisturbed geological deposit (502) within Trench 5 was a mid orange brown sandy clay with occasional small to medium stones.



2.4 Trench 6 (Figure 4 and Figure 5)

Trench 6 was located in an arable field to the NW of Brogborough Picnic Site, *c*. 35m from Trench 5. It was divided into two to avoid overhead electricity pylons: Trench 6a was 20m by 2m and Trench 6b was 30m by 2m. The trenches were positioned to investigate several linear geophysical anomalies including a possible "D-shaped" enclosure.

2.4.1 Topsoil and subsoil

The topsoil 600 consisted of plastic dark grey brown silty clay, ranging from 0.15m to 0.25m deep. No finds were recovered.

The subsoil 601 was a firm dark red brown silty clay with occasional stones; it was 0.1m deep. It is likely that this deposit represent disturbance caused by ploughing of the soil. No finds were recovered.

2.4.2 Ditches

Five ditches were identified within the two parts of Trench 6, three on NE-SW alignments within Trench 6a (606, 620, and 628) and two on NW-SE alignments within Trench 6b (607 and 613). All the ditches were filled by a mid-dark grey brown silty clay with variable quantities of domestic debris.

Ditch 606 in Trench 6a and ditch 613 in Trench 6b both corresponded with the same linear geophysical anomaly which appears to form the boundary of an enclosure. Both were substantial ditches, greater than 1.2m wide and under 0.8m deep with slightly stepped profiles (Figure 5: Sections 11 and 12). Both contained significant quantities of early Roman pottery and animal bone. The fill (605) of ditch 606, however, yielded over six times as much pottery (642g) and quantities of fired clay (42g), which may suggest that it was closer to a focus of occupation than ditch 613.

Ditch 620, adjacent to ditch 606 in Trench 6a, also had a slightly stepped profile and was 1.3m wide and under 0.4m deep (Figure 5: Section 9). Its single fill 619 contained a large amount of early Roman pottery (622g), along with fragments of fired clay (24g) and animal bone (57g). The quantity of domestic debris recovered from this ditch supports the suggestion that this feature, like 606, was close to a focus of early Roman occupation.

Ditch 628 was masked by furrow 625, but on excavation proved to be 1.6m wide and 0.64m deep with a stepped profile (Figure 5: Section 10). Its two fills (636 and 627) produced early Roman pottery (392g), animal bone (615g) and fired clay (21g). The quantity of domestic debris recovered from this ditch supports the suggestion that this feature like the others in Trench 6a were close to a focus of early Roman occupation. The geophysical survey identified this feature and suggested that it was part of a more extensive boundary.

Although ditch 607 in Trench 6b was parallel to ditch 613, the geophysical survey suggests that the two cross each other and are therefore unlikely to be contemporary. It was 1.6m wide, 0.4m deep with an asymmetrical concave profile (Figure 5: Section 13). Its three fills (608, 609, and 610) produced the largest assemblage of pottery and animal bone from a single feature in all the



trenches. A total of 2890g of early Roman pottery and 400g of animal bone were recovered. Although a single piece of post-medieval roof tile was also recovered, it is likely to be intrusive and have derived from furrow 611 that truncates the ditch.

2.4.3 Pits

Three pits were identified within Trench 6a; only the larger one was identified by the geophysical survey. All the pits were filled by mid-dark grey brown silty clay with variable quantities of domestic debris.

The largest pit 621 was located centrally in the trench, in the location suggested by the geophysical survey. Hand excavation revealed that it had asymmetrical sides and was 4.7m diameter and over than 0.7m deep (Figure 5: Section 14). It was not bottomed due to health and safety concerns. It contained 1433g of early Roman pottery, 758g of animal bone and 278g of fired clay. The latter may have originated from an oven or hearth in the vicinity. The upper fill 623 yielded a complete glass bead (RA 600), whilst the lower fill produced two pieces of iron nail (RA 601 and RA 602). The size of this feature suggests that it functioned as a waterhole and the quantity and nature of the domestic debris recovered from it suggests that this was probably associated with a focus of early Roman settlement.

Pits 630 and 632 were both located at the eastern end of the trench and were not identified by the geophysical survey. They were not contemporary and 630 was truncated by ditch 628. Both pits were truncated by furrow 625 and, therefore, their full extent could not be determined. However, they were both under 1.5m in diameter and under 0.5m deep (Figure 5: Section 10). Both pits contained late Iron Age pottery and animal bone.

2.4.4 Furrows

Two furrows were identified in Trench 6a (604 and 625) and one furrow was identified in Trench 6b (611, excavated as 615 and 617). They averaged 2.5m wide and were less than 0.3m deep and were cut by modern land drains. They are likely to be medieval in origin but have survived as landscape features into the 20^{th} century.

2.4.5 Undisturbed geological deposits

The undisturbed geological deposit (602) within Trench 6 was a mid orange to yellowish-grey sandy clay with occasional small stones.



2.5 Trench 8 (Figure 6)

Trench 8 was located in an arable field to the north of Escheat Farm. It was accessed from Little Park Farm, Wood End. The trench was positioned to evaluate a series of linear and pit-type geophysical anomalies.

2.5.1 Topsoil and subsoil

The topsoil 800 consisted of plastic dark grey brown silty clay, 0.30m deep. No finds were recovered.

The subsoil 801 was a mid reddish-brown silty clay, 0.15m deep. No finds were recovered.

2.5.2 Quarry pits

Most of Trench 8 contained a fill, the shape of which in plan is suggestive of a series of intercutting pits (803). Where excavated these had steep sides and were over 0.3m deep (Figure 6: Section 15). The fill comprised mid-dark grey brown silty clay and light orange red sandy gravel with the upper fills containing frequent small stones in contrast to the lower fill. Two sherds of early Roman pottery and a small quantity of animal bone were recovered. It is likely that these features represent an area of intercutting quarry pits for the extraction of clay or localised patches of gravel. Some of the linear and pit-type geophysical anomalies in this area probably reflect the intercutting quarry pits but they do not form a coherent pattern.

2.5.3 Modern Feature

Three of the five land drains identified within the trench coincided with linear geophysical anomalies.

2.5.4 Undisturbed geological deposits

The undisturbed geological deposit (802) within Trench 8 was predominantly firm mid orangish-grey sandy clay with a moderate frequency of small stones.



2.6 Trench 9 (Figure 7)

Trench 9 was located in an arable field adjacent to the current A421, and accessed from Beancroft Road, Marston Moretaine. The trench was positioned to evaluate two parallel linear geophysical anomalies.

2.6.1 Topsoil and subsoil

The topsoil 900 consisted of firm dark grey brown silty clay, 0.20m deep. No finds were recovered.

The subsoil 901 was a firm orangish-brown sandy clay, 0.10m deep. No finds were recovered.

2.6.2 Undisturbed geological deposits

The geological deposit 902 within Trench 9 was a firm mid orangish-grey sandy clay with a moderate frequency of small to medium stones. However, it contained numerous patches of pale grey and patches of fine gravel. Two of the greyer patches corresponded with the parallel linear geophysical anomalies. These variations, along with several others, were investigated by hand-dug test pits. These contained no artefacts and were clearly variations in the natural geology.



2.7 Trench 10 (Figure 8)

Trench 10 was also located in an arable field adjacent to the current A421, and accessed from Beancroft Road, Marston Moretaine. The trench was positioned to evaluate a series of linear geophysical anomalies.

2.7.1 Topsoil and subsoil

The topsoil 1000 consisted of firm dark grey brown silty clay, 0.20m deep. No finds were recovered.

The subsoil 1001 was a firm orangish-brown sandy clay, 0.10m deep. No finds were recovered.

2.7.2 Pit

Pit 1003, 2.5m in diameter with an irregular profile, was identified at the eastern end of Trench 10. The fill 1004 was very humic and contained modern tile and glass (not retained). Because of this it was not excavated.

2.7.3 Undisturbed geological deposits

Most of the undisturbed geological deposit 1002 within Trench 10 was a firm mid orangish-grey sandy clay with a moderate frequency of small to medium stones. However, it contained numerous patches of pale grey clay and patches of fine gravel. These variations, along with several others, were investigated by hand-dug test pits. These contained no artefacts and were clearly variations in the natural geology. Only the westernmost variation clearly corresponded with a geophysical anomaly.



2.8 Artefacts

2.8.1 Introduction

The investigations produced a finds assemblage comprising mainly pottery and animal bone, the majority associated with features in Area 2 (principally Trenches 5 and 6: Table 2). The material was scanned to ascertain its nature, condition and, where possible, date range. No finds were recovered from Trenches 9 or 10.

Tr.	Feature	Type	Context	Spot date*	Pottery	Other finds
04	403	Ditch	404	-		Animal bone (675g)
	409	Ditch	410	-	2:19	
	411	Ditch	412	-		Animal bone (73g); ferrous slag (36g)
05	503	Pit	504	Early Roman	1:9	Animal bone (10g)
	503	Pit	505	Early Roman	2:13	Animal bone (77g)
	506	Gulley	507	Early Roman	6:25	Animal bone (16g)
	508	Ditch	509	Early Roman	27:543	Animal bone (188g)
	510	Pit	511	Late Iron Age	5:49	
	514	Ditch	516	Early Roman	21:322	Animal bone (224g)
	519	Furrow	520	Post-medieval	1:22	
	521	Furrow	522	Roman	1:29	
06	606	Ditch	605	Early Roman	65:642	Animal bone (74g); fired clay (42g);
						shell (21g)
	607	Ditch	608	Early Roman	2:27	Animal bone (9g)
	607	Ditch	609	Early Roman	157:2280	Animal bone (389g); roof tile (42g)
	607	Ditch	610	Early Roman	43:583	Animal bone (2g)
	613	Ditch	614	Early Roman	13:92	Animal bone (41g)
	620	Ditch	619	Early Roman	41:622	Animal bone (57g); fired clay (24g)
	621	Pit	622	Early Roman	45:811	Animal bone (191g); fired clay (131g);
						iron nails (RA 601 and 602) (20g)
	621	Pit	623	Early Roman	58:622	Glass bead (RA 600); animal bone (567g);
						fired clay (147g)
	628	Ditch	626	Early Roman	27:230	Animal bone (527g)
	628	Ditch	627	Early Roman	7:162	Animal bone (88g); fired clay (21g)
	630	Pit	629	Late Iron Age	2:53	Animal bone (44g)
	632	Pit	631	Late Iron Age	23:311	Animal bone (338g)
08	803	Quarry pit	806	Early Roman	2:48	Animal bone (9g)

^{* -} spot date based on date of latest artefact in context

Table 2: Artefact summary by trench and context

2.8.2 Pottery

A total of 551 pottery sherds weighing 7.6kg was recovered. These were examined by context and quantified using minimum sherd count and weight. Sherds are fairly small (average weight 14g) and exhibit variable degrees of abrasion. Several vessels are, however, represented by more than single sherds, suggesting the assemblage is largely undisturbed. Twenty-six fabric types were identified in accordance with the Bedfordshire Ceramic Type Series, maintained by Albion Archaeology, and are listed below (Table 3) in chronological order.

The pottery spans the late 'Belgic' Iron Age and early Roman periods. The majority of the assemblage derives from features in Trench 6, notably ditch 607, which yielded 2.8kg of pottery. One sherd of 17th-18th century glazed earthenware was recovered from furrow [519].



Fabric type	Common name	Total Sherd No.	Context/Sherd No.
Late Iron Age			
Type F03	Grog and sand	1	(627):1
Type F05	Grog and shell	15	(516):3, (614):1, (619):3, (622):2, (626):5, (631):1
Type F06B	Medium grog	71	(505):1, (507):1, (516):2, (605):2, (609):33,
			(610):20, (614):1, (619):5, (622):4, (626):1, (629):1
Type F06C	Coarse grog	25	(511):1, (516):4, (610):2, (626):3, (631):15
Type F07	Shell	121	(509):9, (608):2, (609):66, (610):7, (619):23,
			(623):4, (626):2, (627):2, (629):1, (631):5
Type F09	Sand and grog	98	(507):1, (509):9, (511):4, (516):1, (605):5,
			(609):27, (610):7, (614):1, (619):7, (622):5,
			(623):13, (626):11, (627):4, (631):2, (806):1
Type F34	Sand	2	(623):2
Roman			
Type R03A	Fine whiteware	1	(622):1
Type R03B	Gritty whiteware	10	((609):6, (610):3, (623):1
Type R05A	Orange sandy	2	(505):1, (623):1
Type R05B	Fine orange	4	(605):4
Type R06B	Coarse greyware	31	(516):1, (605):6, (609):8, (614):1, (622):10, (623):5
Type R06C	Fine greyware	2	(619):1, (623):1
Type R06D	Micaceous greyware	12	(605):1, (626):1
Type R06E	Calcareous greyware	9	(605):1, (614):8
Type R06F	Grog and sand greyware	26	(504):1, (509):6, (516):6, (605):2, (609):5, (610):3,
			(623):3
Type R07B	Sandy blackware	21	(609):4, (610):1, (619):1, (622):8, (623):7
Type R07C	Gritty blackware	17	(507):3, (509):1, (516):1, (605):8, (609):1, (626):3
Type R10A	Buff gritty	5	(509):1, (619):1, (623):3
Type R10B	Fine buff	10	(622):10
Type R13	Shell	35	(507):1, (509):1, (522):1, (605):25, (614):1,
			(622):3, (623):2, (806):1
Type R14	Sand (red-brown harsh)	13	(516):3, (605):1, (609):6, (622):2, (626):1
Type R36	Orange gritty	1	(609):1
Type R38	Colour coat (unid)	16	(623):16
Post-medieval			
Type P01	Glazed red earthenware	1	(520):1
UNID	Undatable	2	(410):2

Table 3: Pottery type series

Late Iron Age pottery (333 sherds) constitutes 60% of the total assemblage and comprises wheel-thrown and hand-made grog-tempered vessels in the 'Belgic' tradition (types F05, F06B, F06C and F09). A proportion of shell and sand tempered vessels also occur (types F07 and F34 respectively). Diagnostic forms are everted and bead rim jars, lid-seated jars and bowls, cordoned jars, platters and large (?storage) vessels, some of the latter with combed decoration. The late Iron Age component of the assemblage is broadly paralleled by pottery recovered from nearby excavations at Beancroft Road, Marston Moretaine (Shotliff and Crick 1999).

Two hundred and fifteen sherds are datable to the early Roman period. Fabric types are mainly locally manufactured reduced sand and shell tempered coarsewares (types R06/R07 and R13 respectively). Regional imports are represented by eleven sherds of 2nd century whiteware from the Verulamium (St Albans) region. It is perhaps worth noting that no continental imports, such as samian, were present in the assemblage.

Diagnostic forms comprise lid-seated and everted rim jars, cordoned and neckless jars, flagons, beakers, large jars and a platter or lid. Burnishing occurs on one



sand tempered vessel, and a number of the shelly wares are rilled and sooted, the latter indicating their use as cooking pots.

Two undiagnostic shell tempered sherds (19g) derived from the fill of ditch 410. They are probably of either late Iron Age or early Roman origin, although their poor condition precludes further classification.

2.8.3 Fired clay

Twenty-three redeposited fired clay fragments weighing 365g were recovered, the majority deriving from the fills of pit 621. Most are made from a soapy organic and sand tempered fabric, while a small quantity (42g) occurs in a fine sandy fabric. Several have finger smoothed surfaces and may represent structural elements associated with a feature such as a hearth or oven.

A small piece of post-medieval flat roof tile, considered to be intrusive, was recovered from the fill of early Roman ditch 607.

2.8.4 Non-ceramic finds

An amorphous lump of ferrous slag (36g) was recovered from undated ditch 411, and two pieces of iron nail (RA 601 and 602) from the lower fill 622 of early Roman pit 621. The upper fill 623 of the same feature yielded a complete square-sectioned, opaque blue/green glass bead (RA 600) of c. 11mm in length (c.f. Guido 1978 fig. 37/6). Such objects are generally thought to be datable to the later Roman period (Guido 1978, 96), although examples are known from deposits dating from the late 2nd century onwards at Castleford, West Yorkshire (Cool and Price 1998, 183).

2.8.5 Animal bone

The faunal assemblage comprises 362 fragments weighing 3.5kg and occurs in undated and late Iron Age/early Roman features mainly in Trenches 5 and 6. The largest quantities derived from the fills of pit 621 and ditch 628 which respectively contained 758g and 615g of bone. The assemblage is generally fragmented, with the average piece weighing only 9g. Bone preservation is variable, with some fragments displaying greater surface erosion than others, although the material generally survives in good condition. Diagnostic elements are long bone, rib, vertebrae, mandible and teeth fragments, representing horse, cow and sheep/goat.



3 SYNTHESIS OF RESULTS

3.1 Summary of discoveries in relation to the geophysical survey

Trial trenching has successfully determined the date, nature and character of subsurface archaeological features in selected areas of the route of the A421 road improvements. With one or two noticeable exceptions, the trial trenches confirmed that the geophysical survey had correctly identified sub-surface features of human origin.

Specifically:

- **Trench 4** all three linear geophysical anomalies were confirmed as subsurface archaeological features.
- **Trench 5** the penannular geophysical anomaly was confirmed as subsurface archaeological features. In addition, a gulley and two pits were identified.
- **Trench 6a** all three linear and a single pit-type geophysical anomaly were confirmed as sub-surface archaeological features. In addition, two small pits were identified.
- **Trench 6b** both linear geophysical anomalies were confirmed as subsurface archaeological features.
- **Trench 8** the majority of the linear geophysical anomalies were found to be land drains. However, some of the other geophysical anomalies appear to reflect a large area of intercutting quarry pits.
- **Trench 9** the parallel linear geophysical anomalies were found to be variations in the natural geology.
- **Trench 10** some of the linear geophysical anomalies were found to be variations in the natural geology.

3.2 Summary of results

3.2.1 Trench 4

Trench 4 confirmed the existence of ditches, which based on the layout of the linear geophysical anomalies, would appear to be boundaries within an enclosure or field system. In terms of dating this system only one ditch produced artefacts. These included two small sherds of pottery which were highly abraded and not very diagnostic. However, based on their fabric they may be late Iron Age or early Roman in date. While the date of the pottery is consistent with a premedieval date (as indicated by the fact that the ditch fills are truncated by furrows) it should not be viewed as conclusive.

The abraded nature of the pottery and small quantity of other domestic debris in the form of animal bone confirms that the ditches in Trench 5 are probably associated with fields rather than settlement. Comparable results have been found during investigations at Whitsundoles Quarry, Salford *c.* 3.5km to the NW (Albion 2005). The presence of ferrous slag within one of the ditches in Trench 4 might suggest that iron working was undertaken in the vicinity.

The existence of a field system strongly suggests that a rural settlement existed in the vicinity. A contemporary farmstead c. 350m away was located in Trenches 5



and 6 (see below). Known settlement patterns for Bedfordshire suggest that the county was intensely occupied during this period. Late Iron Age/Roman farmsteads within the Biddenham Loop occurred at intervals of between c 300m and 1km (Albion in prep.).

The archaeological features and deposits were relatively well preserved in this trench, although the pottery was abraded.

3.2.2 Trenches 5, 6a and 6b

These trenches confirmed the existence of ditches which the geophysical survey indicates are boundaries within an enclosure or field system (Figure 9). Three of the seven pits produced pottery dated to the late Iron Age, suggesting that human activity in this area may have originated before the Roman Conquest. This is consistent with many other rural settlements in Bedfordshire where their origins lie in the late Iron Age (Dawson in prep), e.g. Beancroft Road, Marston Moretaine (Shotliff and Crick 1999), Marsh Leys Farm, Kempston (Albion 2002) etc. The other four pits, along with the ditches, contained early Roman pottery indicating activity continuing into the late 1st and early 2nd century. The glass bead from one of the pits in Trench 6 is of interest because such objects are generally thought to date to the later Roman period. The layout of the ditch-type geophysical anomalies suggests that not all the boundaries are contemporary, supporting the likelihood that the enclosure system had been redesigned on at least one occasion.

The presence of pits, along with significant quantities of domestic debris, suggests that the ditched rectangular enclosures contained settlement. The layout of the enclosures and nature of the artefacts probably indicate that this can be interpreted as a farmstead. As such, it is comparable to the settlement at Marsh Leys Farm, Kempston (Albion 2002). Although speculative due to the limited number of trenches undertaken, the absence of continental imports of pottery may suggest that its inhabitants were relatively "low" in status. Features in Trenches 5 and 6 contained pottery, fired clay, iron nails, shell and animal bone suggesting that these trenches may have been located in the domestic core of the farmstead. The penannular ditch within Trench 5 is intriguing because, on the basis of its shape in plan as indicated by the geophysical survey, it could represent a drainage gulley around a roundhouse. Although the pottery recovered from the ditch suggests that it would date to after the Roman Conquest, Hingley (1989, 31) believes that roundhouses may have been very common throughout lowland Britain during the 1st and 2nd centuries AD. This has been demonstrated at a number of sites in the region e.g. Luton Road Wilstead (Luke and Preece forthcoming), Wavendon Gate, Milton Keynes (Williams et al 1996, 86) etc.

The archaeological features in this area represent ditches and pits with no small features such as postholes present. This could be explained by the effects of modern ploughing on the hilltop location removing the smaller features. However, the presence of a range of artefacts, including objects of glass and iron, suggests that preservation within the surviving features is good.

3.2.3 Trench 8

Trench 8 contained an area of intercutting pits interpreted as the remains of quarrying. Although many of the geophysical anomalies in this area were proved



to be land drains, others may reflect the extent of the quarry pits. Two sherds of early Roman pottery were recovered and it is possible that these indicate the date for this activity. Comparable evidence for Roman quarrying was identified in association with the farmstead at Marsh Leys Farm, Kempston (Albion 2002) and more recently during investigations in advance of the Bedford Western Bypass (Albion ongoing). The pottery and animal bone assemblage was small suggesting that this area was away from settlement.

The quarrying within this area will almost certainly have resulted in the destruction of any earlier archaeological features.

3.3 Discussion of potential and significance

At a national level, English Heritage's criteria for prioritising archaeological "sites" is still evolving. Its funding criteria for rescue projects, as set out in *Exploring our Past* in 1991, were similar to those it uses to define a "site" as being of schedulable quality. These included period, rarity, group value, survival/condition, fragility/vulnerability and potential. More recently a draft Research Agenda built upon the earlier criteria, with the aim of developing an approach reflecting 'the greater determination to pursue research themes' and 'wider interests (e.g. in landscapes)'. These included goals such as advancing understanding of England's archaeology, supporting the development of national, regional and local research frameworks and promoting public appreciation and enjoyment of archaeology. Although the Research Agenda was intended for projects seeking English Heritage resources, i.e. not those undertaken within the PPG 16 framework, its goals and objectives are relevant to the A421 Improvement investigations.

The archaeological resources of the East Anglian region were assessed in 1997 and a regional research agenda and strategy were produced in 2000. Although these did not specifically include Bedfordshire, the nature of the archaeological evidence and topography of the county are comparable with those of the rest of the East Anglian region. This makes the agenda and strategy of particular relevance. More recently, and awaiting publication, is a draft resource and research agenda specifically for Bedfordshire (Oake forthcoming).

National priorities for the periods most relevant to the trial trench evidence, i.e. the Iron Age and Roman periods, were formalised over 15 years ago by English Heritage in *Exploring our Past* (1991), Hingley (1989) and Millet (1990). More recently an agenda has been published for the Iron Age by Haselgrove et al (2002) and a separate one for the Roman period by James and Millet (2001).

3.3.1 Late Iron Age-Roman farmstead (Trenches 5 and 6)

The results of the trial trenches and geophysical survey indicate the existence of a late Iron Age-Roman farmstead in the vicinity of Trenches 5 and 6. The absence of pottery imported from the continent may suggest that this is of relatively low status.

As long ago as 1989, Hingley in particular has argued forcefully for an increased level of study into lower status forms of rural settlement. Investigations of Roman sites over the last fifteen years have gone some way to address the imbalance between the number of investigations on high status sites such as



villas and towns, and those of low status such as farmsteads. Despite this, both English Heritage (1997) and Goring (1997, 38) believe that the examination of rural, especially low status, Roman settlements should be a research priority. With regard the Eastern Region, Goring has stated: "little is known of villages, farmsteads, hamlets and other kinds of rural settlement in which, one imagines, the bulk of the population in the region actually lived" (1997, 38). Dawson (forthcoming) has highlighted in the draft research framework for Bedfordshire that the distribution of investigations in the county has largely been restricted to valley sites or gravel deposits.

The farmstead within the route of the A421 improvements would appear to provide the potential to address a number of local, regional and national research objectives. It has the potential to inform on research issues such as the transition from Iron Age to Roman, settlement morphology and development, settlement densities on the clay, status and trade. The East Anglian Regional Research Agenda states that "further work is needed on rural sites, characterising activities associated with cleaning, malting and storage" (Brown and Glazebrook 2000, 21). Although no evidence was recovered from the trial trenches for arable cultivation or processing, this does not mean that it does not survive in features outside those investigated.

3.3.2 Late Iron Age or early Roman field system (Trench 4)

The results of the trial trenching and geophysical survey indicate the existence of an early Roman field system in the vicinity of Trench 4. Such field systems are often associated with farmsteads and, although one was not located during the trial trenching, the existence of one in the vicinity cannot be ruled out.

Although various landscapes of fields and trackways have been suggested for the Roman period in the Eastern Region, these have only been investigated on a limited scale and "rarely (if ever?) been tied into detailed settlement evidence' (Going and Plouviex 2000).

The field system would appear to provide the potential to address a number of local, regional and national research objectives with regard Roman field systems. Its significance would be enhanced, if it was proved to be associated with the farmstead in Trenches 5 and 6.

3.3.3 Early Roman quarrying (Trench 8)

The results of the trial trenches and geophysical survey indicate the existence of an area of early Roman quarrying in the vicinity of Trench 8.

Similar evidence was located and investigated at Marsh Leys Farm (Albion 2002) and recently on Bedford Western Bypass Site 11 (Albion ongoing). Although not specifically referred to in the regional research frameworks, such features do represent an understudied element of the wider rural landscape.

3.4 Recommendations for further fieldwork

The trial trenching has investigated three archaeological sites which were initially identified by geophysical survey. It has provided basic information on their nature and dating. However, the geophysical survey suggests that the sites are quite extensive and, therefore, their full extent and any spatial variations



within them are still unknown. For example, Trench 4 was the only trench within an area of linear geophysical anomalies extending over c. 1ha. It is therefore possible that the evidence from this trench is not representative of the larger site. The full extent of sites and any spatial variations within them could only be achieved by further trial trenching at a higher percentage coverage. Sites of a similar nature, for example Marsh Leys Farm (Albion 2002) were evaluated by trial trenching at between 3% and 5% prior to the determination of a mitigation strategy.

In addition, because non-intrusive survey is notorious for under-representing the sub-surface archaeological features, especially relating to the prehistoric and Saxon periods, additional sites may exist within the road corridor which can only be located by more extensive, regularly arrayed trial trenching.

3.5 Publication Proposals

It is proposed that the results of the trial trenching do not warrant publication in their own right at this stage. However, they should be incorporated into the publication of the results of any future investigations associated with the A421 improvements between M1 Junction 13 and Bedford.

3.6 Archive Storage and Curation

The project archive of project records and drawings will be deposited with Bedford Museum. It comprises:

Context List Sheets	2
Trench Record Sheets	6
Context Register Sheets	12
Registered Artefact List	1
Site Drawing List	1
Section List	1
Photographic Record Sheets	5
Plan Level Sheets	2
B&W Print Film	1
Colour Slide Film	1
Digital Films	3
Drawing Film Sheets	6
Boxes of Finds	3





4 BIBLIOGRAPHY

- Albion Archaeology, 2001, Procedures Manual Vol 1: Fieldwork.
- Albion Archaeology, 2005, Marsh Leys Farm: Assessment of Potential and Updated Project Design (Report 02/42)
- Albion Archaeology, 2005, Whitsundoles Farm, Salford, Bedfordshire: Archaeological open area excavation and watching brief; Interim Report 7 (Report 05/60)
- Albion Archaeology, 2006, A421 Improvements: M1 Junction 13 to Bedford: Method Statement for Archaeological Evaluation by Trial Trenching (Report 06/33)
- Brown N and Glazebrook J, 2000, Research and Archaeology: a Framework for the Eastern Counties 2. Research Agenda and Strategy. East Anglian Archaeology, Occasional Paper No.8.
- Cool, HEM, and Price, J, 1998, 'The Glass and Frit Objects' in HEM Cool and C. Philo (eds.) *Roman Castleford Excavations 1974-85, Volume I The Small Finds*, 181-194.
- Dawson forthcoming, 'Late Bronze Age to Roman period' in Oake forthcoming
- English Heritage, 1991, Exploring our past: strategies for the archaeology of England.
- English Heritage Archaeology Division 1997 Research Agenda (unpub.)
- Glazebrook, J (ed.), 1997, Research and Archaeology: a Framework for the Eastern Counties, 1. resource assessment. East Anglian Archaeology, Occasional Paper No.3.
- Goring, C, 'Roman', in Glazebrook 1997
- Guido, M, 1978, *The Glass Beads of the Prehistoric and Roman periods in Britain and Ireland*. Reports of the Research Committee of the Society of Antiquaries of London No. XXXV.
- Haselgrove C, Armit I, Champion T, Creighton J, Gwilt A, Hill JD, Hunter F and Woodward A 2002 *Understanding the British Iron Age: An Agenda for Action*. Iron Age Research Seminar and Council of the Prehistoric Society
- Highways Agency, 2006, A421 Improvements: M1 Junction 13 to Bedford. Specification for Trial Trenching (D109831-P1A-ACH-R001)
- Hingley R 1989, Rural settlement in Roman Britain



- IFA, 1999a, Institute of Field Archaeologists' Code of Conduct.
- IFA, 1999b, Institute of Field Archaeologists' Standard & Guidance documents (Desk-Based Assessments, Watching Briefs, Evaluations, Excavations, Investigation and Recording of Standing Buildings).
- IFA, 2001, Guidelines for Finds Work.
- James, S, and Millett, M, 2001, *Britons and Romans: advancing an archaeological agenda*
- Luke, M and Preece, T, forthcoming, 'Iron Age, Roman and Saxon settlement on the Oxford Clay at Luton Road Wilstead' *Bedfordshire Archaeology*
- Millet, M, 1990 The Romanisation of Britain
- Oake, M, forthcoming, Bedfordshire: A resource assessment and research agenda
- Shotliff, D, and Crick, J, 1999, 'Iron Age settlement within the Oxford Clay Vale at Beancroft Road, Marston Moretaine', *Bedfordshire Archaeology* 23, 32-42.
- Williams R J, Hart P J and Williams A T L 1996, Wavendon Gate: A Late Iron Age and Roman settlement in Milton Keynes, Bucks Arch Soc Monograph 10



5 APPENDIX 1: CONTEXT SUMMARIES BY TRENCH





Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.4 m. Max: 0.6 m.

Co-ordinates: OS Grid Ref.: SP9597038300

OS Grid Ref.: SP9601338274

Context:	Type:	Description:	Excavated: Finds	Present:
400	Topsoil	Plastic dark grey brown silty clay moderate small-medium stones . 0.4m deep.	✓	
401	Subsoil	Plastic mid yellow grey silty clay occasional small-medium stones . 0.2m deep.	V	
402	Natural	Firm mid yellow grey sandy clay occasional small stones		
403	Ditch	Linear NNW-SSE profile: concave base: flat dimensions: max breadth 1.35m, max depth 0.51m, max length 1.m . NNW/SSE aligned ditch appearing to confirm geophysical results. Probably part of a field boundary system. The presence of whole mollusc shells within the fill suggests ditch fell into disuse an infilled naturally.		
404	Fill	Firm dark brown grey silty clay moderate small-medium stones	\checkmark	✓
405	Land drain	Straight linear NNW-SSE profile: near vertical base: concave dimensions: ma breadth 0.14m, max depth 0.32m, max length 1.m	X 🗸	
406	Fill	Firm mid yellow grey silty clay moderate small-medium stones	✓	
407	Furrow	Straight linear N-S profile: concave base: concave dimensions: max breadth 1.1m, max depth 0.12m, max length 1.m	~	
408	Fill	Firm mid red brown silty clay moderate small-medium stones	\checkmark	
409	Ditch	Linear NE-SW profile: concave base: concave dimensions: max breadth 1.7m, max depth 0.7m, max length 1.m . NE/SW aligned ditch appearing to confirm geophysical results. Probably part of a field boundary system. The presence of whole mollusc shells within the fill suggests ditch fell into disuse and infilled naturally.	•	
410	Fill	Firm dark brown grey silty clay moderate small-medium stones	✓	\checkmark
411	Ditch	Linear NE-SW profile: convex base: concave dimensions: max breadth 1.6m, max depth 0.59m, max length 1.m . NE/SW aligned ditch appearing to confirn geophysical results. Probably part of a field boundary system. The presence of whole mollusc shells within the fill suggests ditch fell into disuse and infilled naturally.		
412	Lower fill	Firm mid yellow grey silty clay	✓	\checkmark
413	Main fill	Firm dark brown grey silty clay moderate small-medium stones	✓	\checkmark



Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.4 m. Max: 0.4 m.

Co-ordinates: OS Grid Ref.: SP9625038514

OS Grid Ref.: SP9620138499

Context:	Type:	Description: Ex	cavated:	Finds Present:
500	Topsoil	Firm dark grey brown silty clay moderate small-medium stones . 0.20m deep.	✓	
501	Subsoil	Firm mid grey brown silty clay moderate small stones . 0.15m deep.	✓	
502	Natural	Firm mid orange brown sandy clay occasional small-medium stones		
503	Pit	Square $$ profile: near vertical base: uneven dimensions: max depth 0.55m, max diameter 1.47m $$	✓	
504	Lower fill	Friable mid grey brown silty clay occasional small-medium stones	✓	✓
505	Upper fill	Friable dark grey brown silty clay occasional small-medium stones	✓	✓
506	Gulley	Linear NE-SW $$ profile: concave base: concave dimensions: max breadth 0.6m, max depth 0.12m, max length 1.m $$	✓	
507	Fill	Firm dark grey brown silty clay occasional small stones	✓	✓
508	Ditch	Linear NNE-SSW profile: concave base: concave dimensions: max breadth 1.48m, max depth 0.3m, min length 1.25m	✓	
509	Fill	Firm mid red brown silty clay moderate small-medium stones	✓	✓
510	Pit	Circular profile: concave base: concave dimensions: max depth 0.7m, max diameter 1.32m	V	
511	Fill	Firm dark grey brown silty clay occasional small-medium stones	✓	✓
512	Furrow	Linear NNE-SSW $$ profile: concave base: flat dimensions: min breadth 0.45m, max depth 0.12m, min length 0.8m $$	✓	
513	Fill	Firm mid red brown silty clay moderate small stones	✓	
514	Ditch	Linear NW-SE $$ profile: concave base: concave dimensions: max breadth 1.9m, max depth 0.47m, max length 1.5m	V	
515	Lower fill	Firm light yellow brown silty clay occasional small stones	✓	
516	Main fill	Firm dark grey brown silty clay moderate small-medium stones	✓	✓
517	Furrow	Linear NNE-SSW dimensions: max breadth 1.9m, min length 2.5m		
518	Fill	Firm mid red brown silty clay moderate small-medium stones		
519	Furrow	Linear NNE-SSW		
520	Fill	Firm mid red brown silty clay moderate small-medium stones		✓
521	Furrow	Linear NNE-SSW		
522	Fill	Firm mid red brown silty clay moderate small-medium stones		\checkmark



Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.3 m. Max: 0.3 m.

Co-ordinates: OS Grid Ref.: SP9618638526

OS Grid Ref.: SP9616538572

Context:	Type:	Description: Excav	vated: Finds	Present:
600	Topsoil	Firm dark grey brown silty clay moderate small-medium stones . 0.20m deep.	✓	
601	Subsoil	Firm mid red brown silty clay occasional small-medium stones . 0.10m deep.	✓	
602	Natural	Firm mid yellow grey sandy clay occasional small stones		
604	Furrow	Linear NE-SW profile: concave base: concave dimensions: max breadth 2.6m, max depth 0.14m, max length 2.m	✓	
603	Fill	Firm mid red brown silty clay moderate small-medium stones	✓	
606	Ditch	Linear NE-SW profile: stepped base: concave dimensions: max breadth 1.9m, max depth 0.8m, max length 1.m . Situated in Trench 6a. Appears to correlate with geophys survey therefore turning sharply through 90* and continuing as [613] in Trench 6b.	✓	
605	Fill	Firm dark grey brown silty clay moderate small stones, occasional large stones	~	✓
607	Ditch	Linear NW-SE profile: concave base: concave dimensions: max breadth 1.59m, max depth 0.44m, max length 1.m	✓	
608	Fill	Firm mid grey brown silty clay moderate small-medium stones	\checkmark	✓
609	Fill	Firm dark grey brown silty clay moderate small-medium stones	✓	✓
610	Fill	Firm mid grey brown silty clay moderate small-medium stones	✓	✓
611	Furrow	Linear NNE-SSW profile: concave base: concave dimensions: min breadth 0.55m, max depth 0.17m, max length 2.13m . Same as [615] and general no [617].	✓	
612	Fill	Firm mid red brown silty clay moderate small-medium stones	~	
613	Ditch	Linear NW-SE profile: convex base: v-shaped dimensions: max breadth 1.3m, max depth 0.43m, max length 1.m . Situated in Trench 6b. Appears to correlate with geophys survey therefore turning sharply through 90* and continuing as [606] in Trench 6a.	✓	
614	Fill	Firm mid grey brown silty clay moderate small-medium stones	~	✓
615	Furrow	Linear NNE-SSW profile: concave base: concave dimensions: min breadth 0.55m, max depth 0.1m, max length 1.4m . Same as [611] and general no [617].	✓	
616	Fill	Firm mid red brown silty clay moderate small-medium stones	✓	
617	Furrow	Linear NNE-SSW dimensions: min breadth 0.65m, max length 21.m . General number for furrow.Segments = [611] [615].		
618	Feature	Firm mid red brown silty clay moderate small-medium stones		
620	Ditch	Linear NW-SE profile: stepped base: concave dimensions: max breadth 1.27m, max depth 0.43m, max length 1.m	✓	
619	Fill	Firm dark grey brown silty clay occasional large stones, occasional small stones	✓	✓
621	Pit	Oval profile: irregular dimensions: min depth 0.36m, max diameter 4.7m	✓	
622	Fill	Firm mid grey brown silty clay moderate small-medium stones, occasional large stones	✓	✓
623	Upper fill	Firm dark grey brown silty clay moderate small-medium stones	\checkmark	✓
625	Furrow	Linear NE-SW profile: concave base: concave dimensions: max breadth 2.3m, max depth 0.35m, max length 1.m	✓	



Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.3 m. Max: 0.3 m.

Co-ordinates: OS Grid Ref.: SP9618638526

OS Grid Ref.: SP9616538572

Context:	Type:	Description: Ex	xcavated: Finds	Present:
624	Fill	Firm mid red brown silty clay moderate small-medium stones	✓	
628	Ditch	Linear NE-SW profile: stepped base: uneven dimensions: max breadth 1.6m, max depth 0.64m, max length 1.m	~	
626	Upper fill	Firm dark grey brown silty clay frequent flecks charcoal, occasional small stones	\checkmark	✓
627	Lower fill	Firm mid orange brown silty clay moderate small-medium stones	\checkmark	\checkmark
630	Pit	Oval profile: concave base: concave dimensions: max breadth 0.8m, max depth 0.2m, max length 0.5m	V	
629	Fill	Firm mid grey brown silty clay occasional small-medium stones	\checkmark	\checkmark
632	Pit	Oval NW-SE profile: stepped base: uneven dimensions: max breadth 1.5m, max depth 0.52m, max length 1.m	x 🗸	
631	Fill	Firm mid grey brown silty clay occasional small-medium stones	\checkmark	\checkmark



Trench: 8

Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: 0.3 m. Max: 0.3 m.

Co-ordinates: OS Grid Ref.: SP9795140732

OS Grid Ref.: SP9800040745

Reason: Test Geophysical anomalies

Context:	Type:	Description:	Excavated: Fine	ds Present:
800	Topsoil	Firm dark grey brown silty clay moderate small-medium stones . 0.30m dec	ep.	
801	Subsoil	Firm mid red brown silty clay moderate small-medium stones . 0.15 deep.	✓	
802	Natural	Firm mid orange grey sandy clay moderate small stones		
803	Quarry	Irregular profile: irregular dimensions: min depth 0.3m, min diameter 4.m		
804	Backfill	Plastic dark grey brown silty clay	\checkmark	
805	Backfill	Compact light orange red sandy gravel frequent small stones	✓	
806	Backfill	Spongy mid grey brown silty clay frequent small-medium stones	\checkmark	✓



Trench: 9

Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: m. Max: m.

Co-ordinates: OS Grid Ref.: SP9932641984

OS Grid Ref.: SP9936841956

Reason: Test Geophysical anomalies

Context:	Type:	Description:	Excavated: Finds Present:	
900	Topsoil	Firm dark grey brown silty clay moderate small-medium stones . 0.20m de	ep.	
901	Subsoil	Firm mid orange brown sandy clay $$ moderate small-medium stones $$. 0.10m deep.	✓	
902	Natural	Firm mid orange grey sandy clay $$ moderate small-medium stones $$, patches of pale grey clay and of fine gravel	of \Box	



Trench: 10

Max Dimensions: Length: 50.00 m. Width: 2.00 m. Depth to Archaeology Min: m. Max: m.

Co-ordinates: OS Grid Ref.: SP9942942005

OS Grid Ref.: SP9947941995

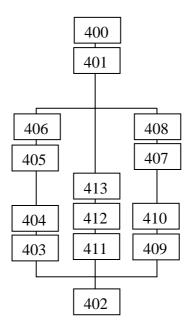
Reason: Test Geophysical anomalies

Context:	Type:	Description:	Excavated: F	inds Present:
1000	Topsoil	Firm dark grey brown silty clay moderate small-medium stones . 0.20m dee	p. 🗸	
1001	Subsoil	Firm mid orange brown sandy clay $$ moderate small-medium stones $$. 0.10m deep.	✓	
1002	Natural	Firm mid orange grey sandy clay moderate small-medium stones , patches of pale grey clay and of fine gravel.	f \square	
1003	Pit	Irregular dimensions: min diameter 2.5m		
1004	Fill	Loose mid orange brown clay silt occasional small stones . Contained modern til and glass, (not kept).	e \Box	



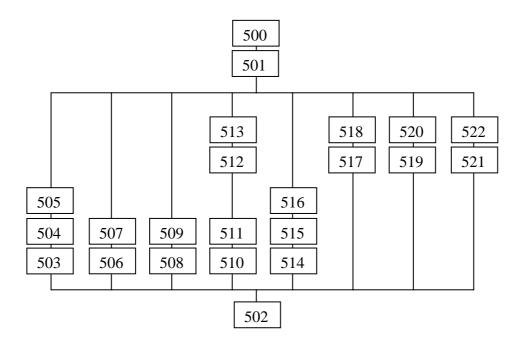
6 APPENDIX 2: TRENCH MATRICES

Trench 4 Matrix



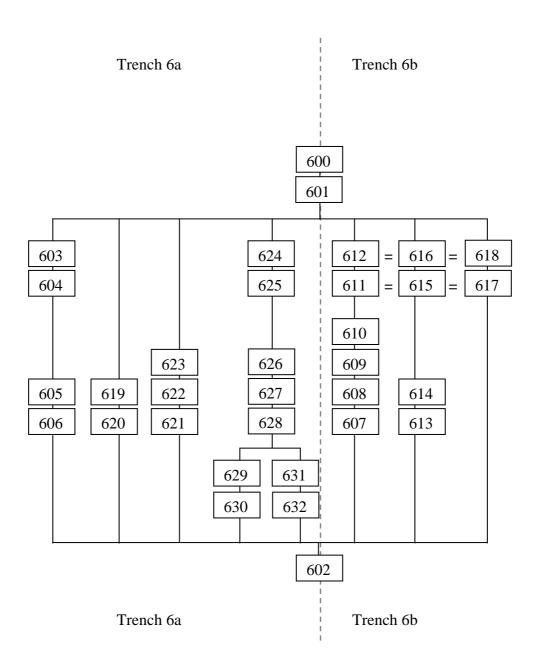


Trench 5 Matrix



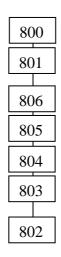


Trench 6 Matrix





Trench 8 Matrix



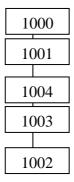


Trench 9 Matrix

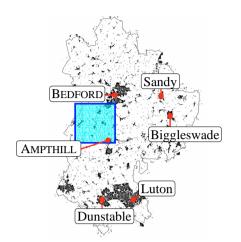


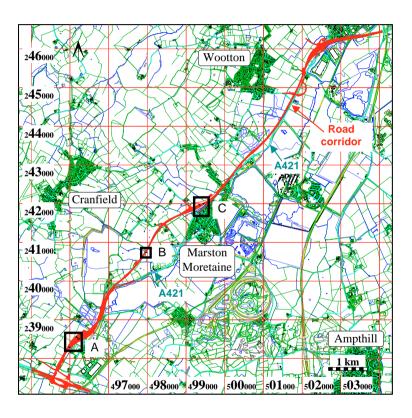


Trench 10 Matrix









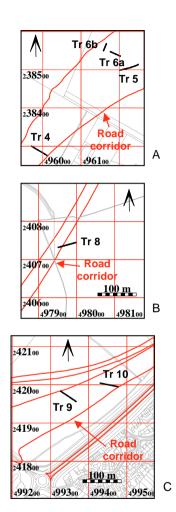
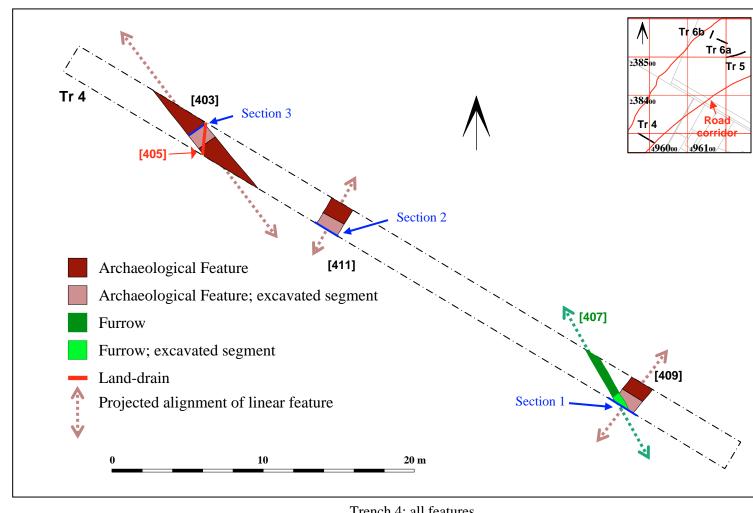


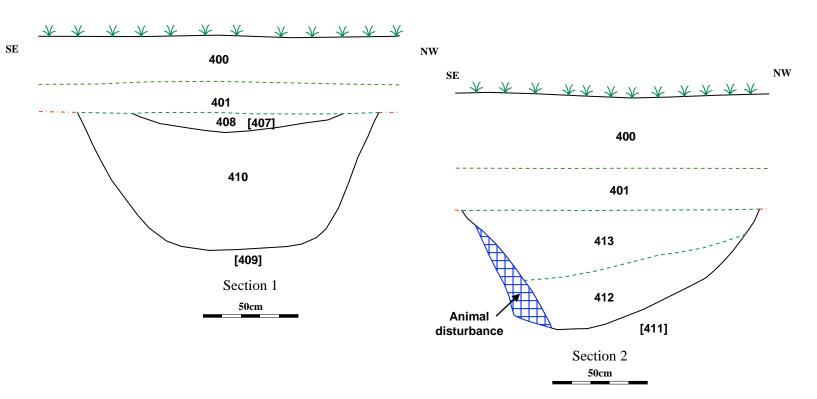
Figure 1: Site location map

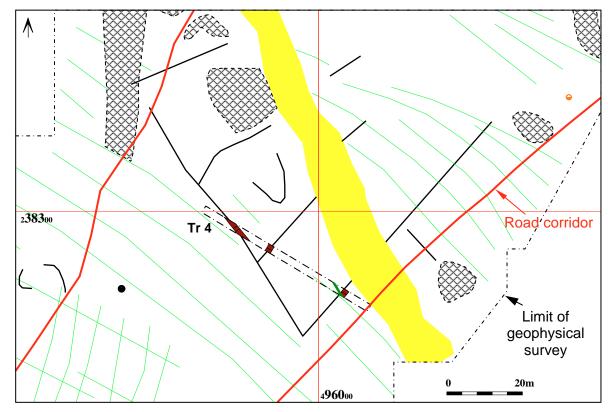
Base map reproduced from the Ordnance Survey Land-line Map (2004), with the permission of the Controller of Her Majesty's Stationery Office, by Bedfordshire County Council, County Hall, Bedford. OS Licence No. 076465(LA). © Crown Copyright. Road corridor taken from drawing number D109831-SK-ENV-001



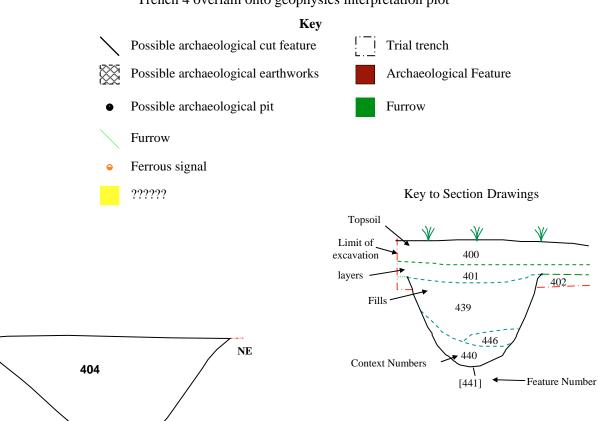


Trench 4: all features





Trench 4 overlain onto geophysics interpretation plot

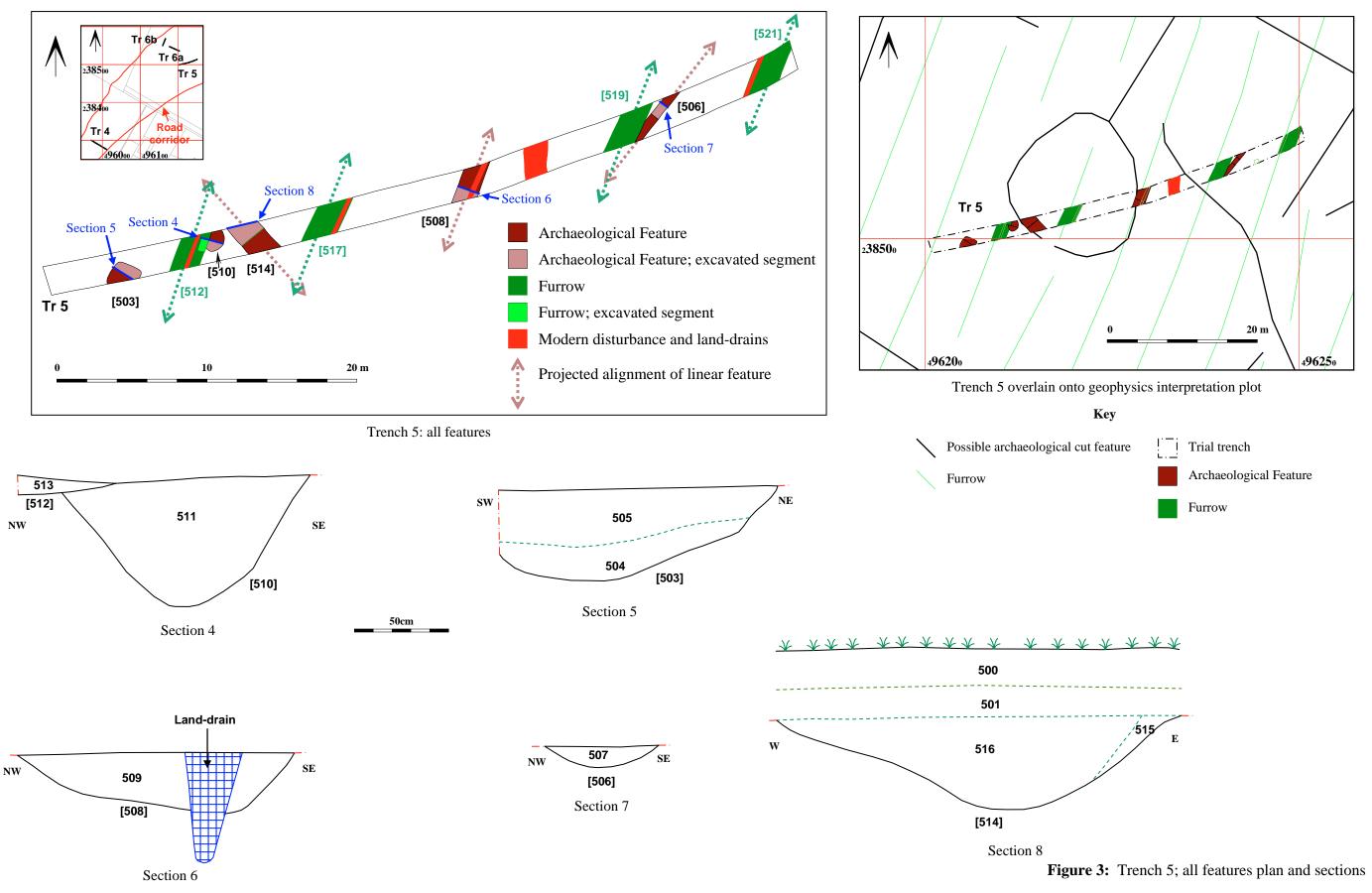


[403]

Section 3 50cm

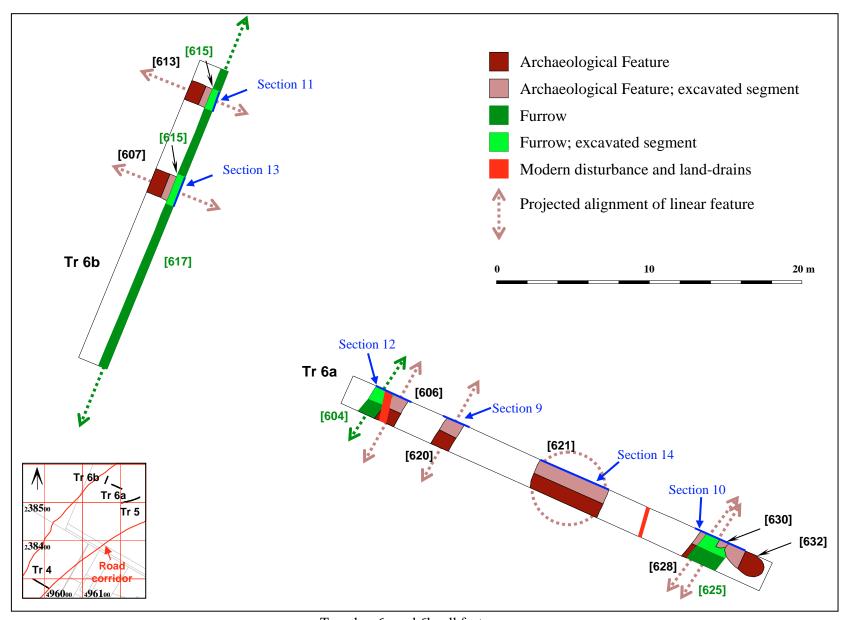
Figure 2: Trench 4; all features plan and sections



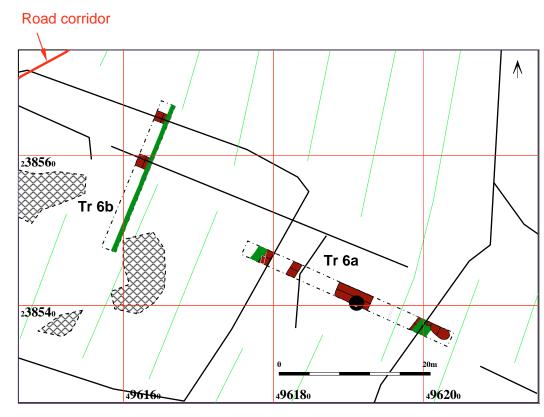


A421 Improvements: M1 Junction 13 to Bedford. Archaeological Trial Trenching





Trenches 6a and 6b: all features



Trenches 6a and 6b overlain onto geophysics interpretation plot

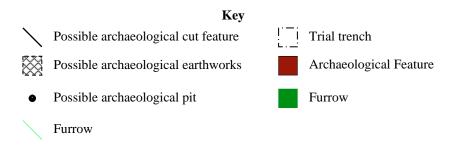


Figure 4: Trench 6; all features plan.



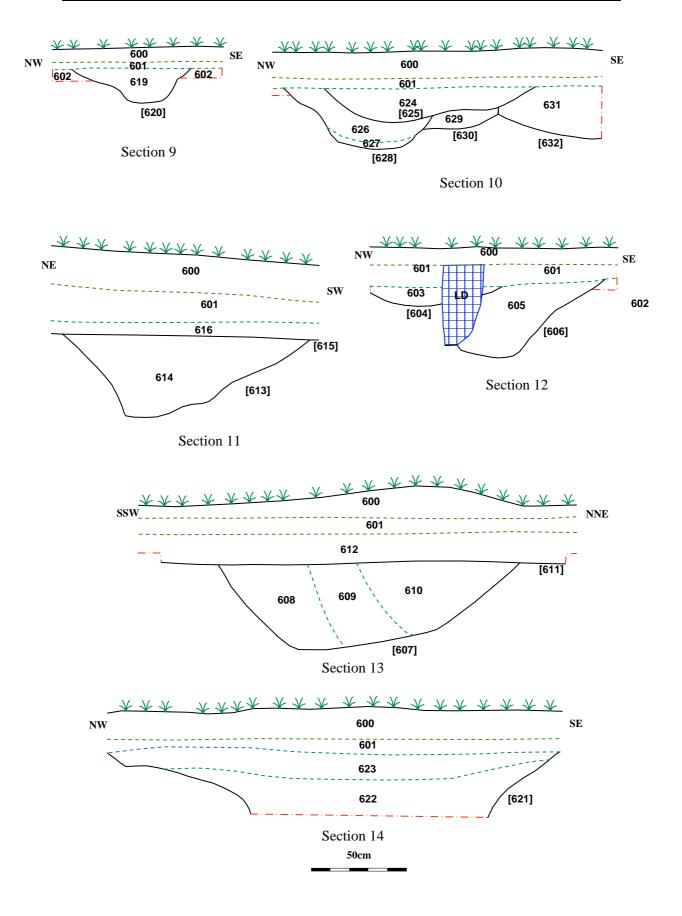
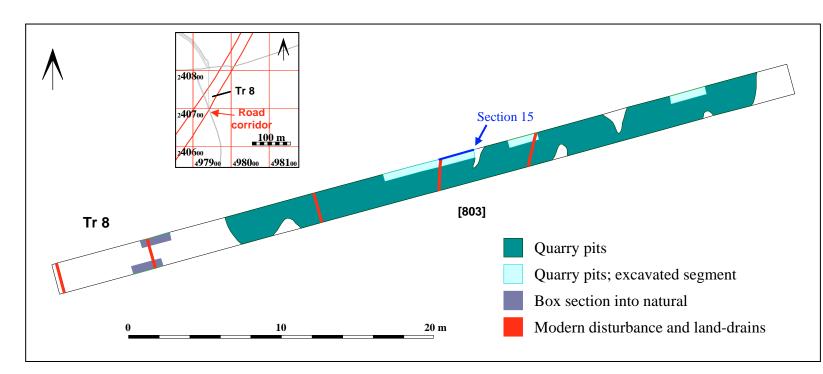
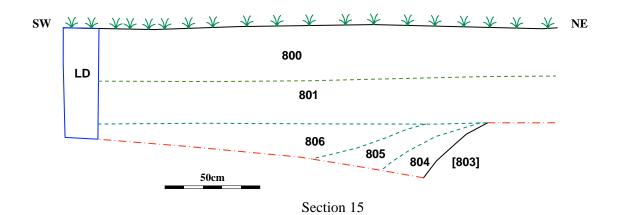


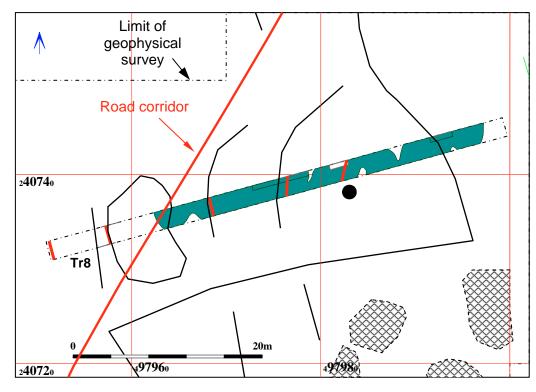
Figure 5: Trench 6; sections





Trench 8: all features





Trench 8 overlain onto geophysics interpretation plot

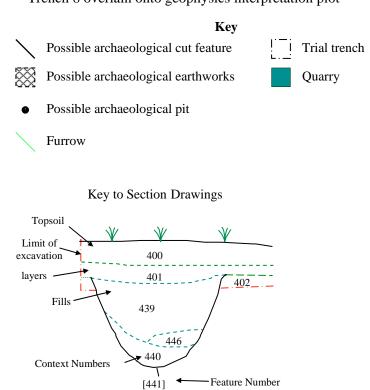
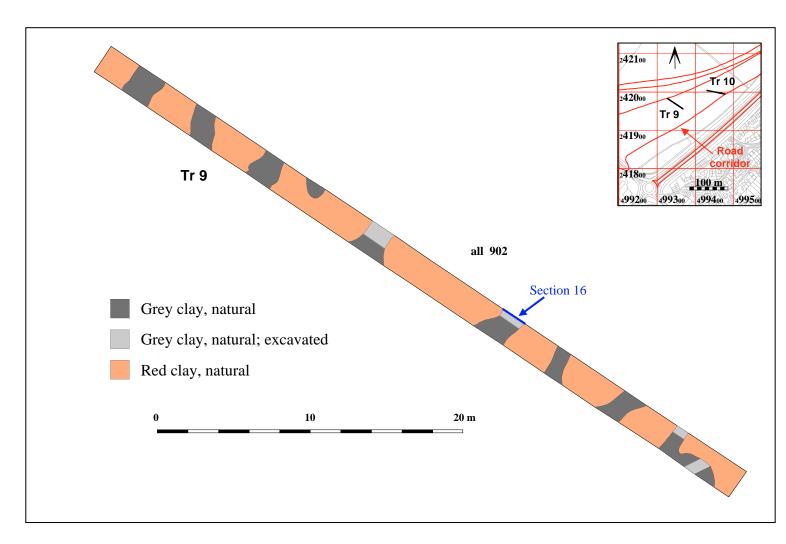
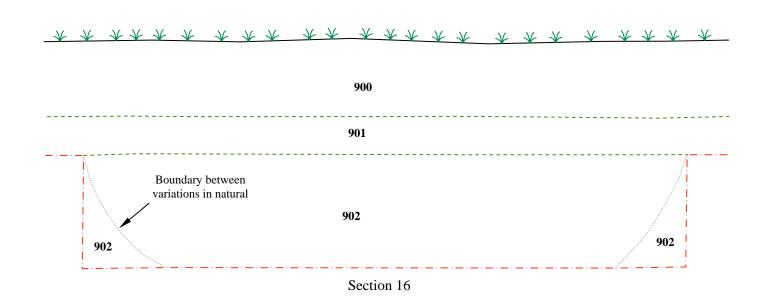


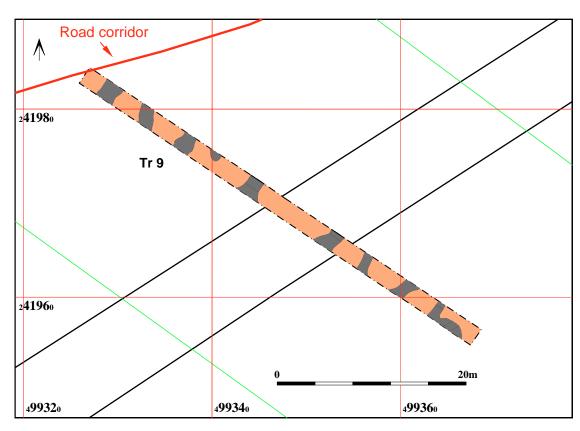
Figure 6: Trench 8 all features plan and sections





Trench 9: all features





Trench 9 overlain onto geophysics interpretation plot

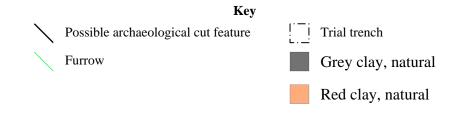
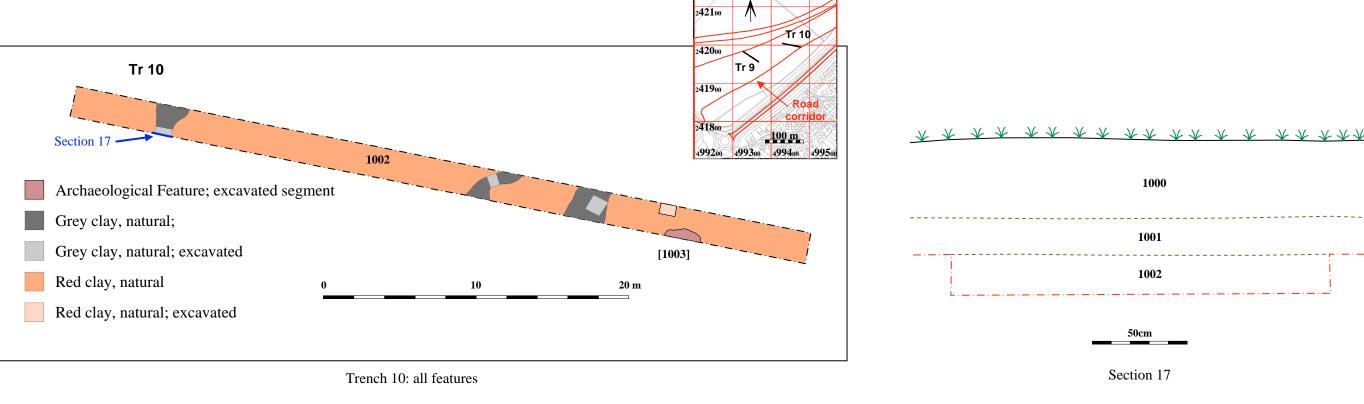
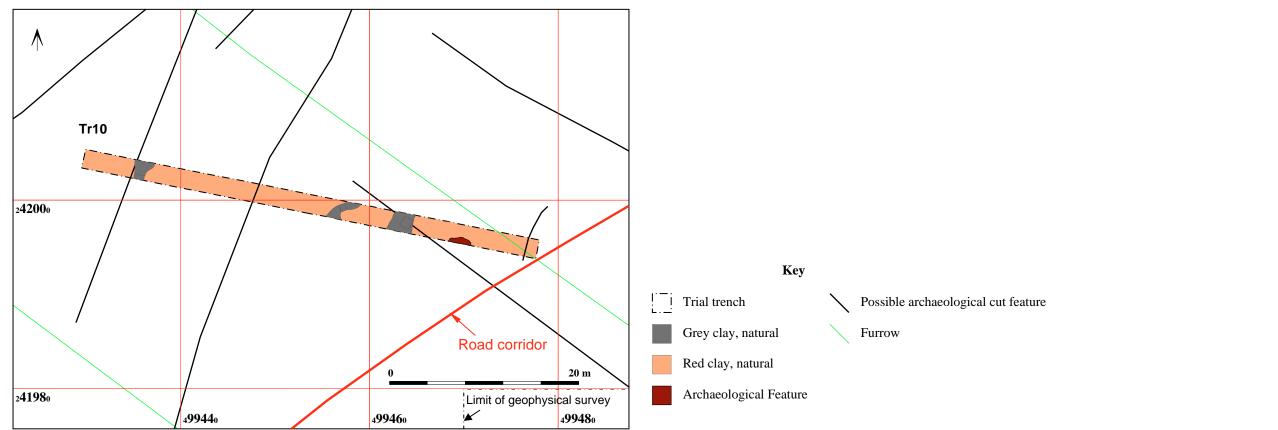


Figure 7: Trench 9; all features plan and sections







Trench 10 overlain onto geophysics interpretation plot

Figure 8: Trench 10; all features plan and sections



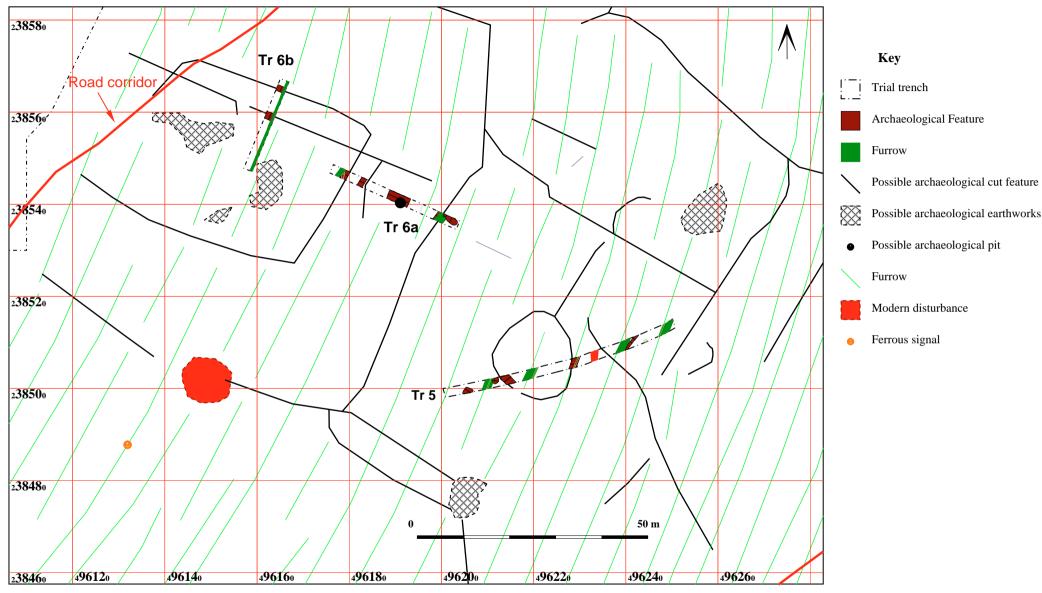


Figure 9: Trenches 5, 6a and 6b in relation to the wider geophysical survey