

**RECYCLING AND COMPOSTING FACILITY
RIVENHALL AIRFIELD
WOODHOUSE LANE
RIVENHALL
ESSEX**

**ARCHAEOLOGICAL EVALUATION
BY TRIAL TRENCHING**



**Essex County Council
Field Archaeology Unit**

NOVEMBER 2006

RECYCLING AND COMPOSTING FACILITY
RIVENHALL AIRFIELD
WOODHOUSE LANE
RIVENHALL
ESSEX

ARCHAEOLOGICAL EVALUATION
BY TRIAL TRENCHING

Prepared By: Trevor Ennis Position: Project Officer	Signature: Date:
Approved By: Mark Atkinson Position: Unit Manager	Signature: Date:

Document Ref.:	1559 Rep1
Report Issue Date:	November 2006
Circulation:	Golder Associates (UK) Ltd ECC Historic Environment Management Essex Historic Environment Record

As part of our desire to provide a quality service, we would welcome any comments you may have on the content or the presentation of this report.

Please contact the Archaeological Fieldwork Manager, at the
Field Archaeology Unit,
Fairfield Court, Fairfield Road, Braintree, Essex CM7 3YQ.
fieldarch@essexcc.gov.uk
Tel: 01376 331470
Fax: 01376 331428

CONTENTS

	Page No.
SUMMARY	1
1.0 INTRODUCTION	2
2.0 BACKGROUND	2
2.1 Topography and Geology	
2.2 Archaeological and Historical Background	
3.0 AIMS AND OBJECTIVES	4
3.1 General aims	
3.2 Research objectives	
4.0 METHOD	4
5.0 FIELDWORK RESULTS	5
5.1 Trenches with significant archaeological remains	
5.2 Trenches containing post-medieval or modern remains	
6.0 FINDS AND ENVIRONMENTAL MATERIAL	12
6.1 Introduction	
6.2 Prehistoric pottery	
6.3 Late Iron Age and Roman pottery	
6.4 Medieval and later pottery	
6.5 Brick and tile	
6.6 Baked clay	
6.7 Worked and burnt flints	
6.8 Animal bone	
6.9 Shell	
6.10 Other finds	
6.11 Environmental material	
6.12 Comments on the assemblage	
7.0 DISCUSSION	17
7.1 Prehistoric	
7.2 Late Iron Age and Roman	
7.3 Medieval	
7.4 Post-medieval	
7.5 Modern	
8.0 ASSESSMENT OF RESULTS	19

ACKNOWLEDGEMENTS

21

BIBLIOGRAPHY

21

APPENDICES

APPENDIX 1 Trench Data

APPENDIX 2 Context Data

APPENDIX 3 Finds Data

APPENDIX 4 Medieval and Later Pottery Data

APPENDIX 5 Worked and Burnt Flint Data

APPENDIX 6 Contents of Archive

APPENDIX 7 EHER Summary

FIGURES

Fig. 1 Site location and trench plan with all features

Fig. 2 Areas of previous excavation within Bradwell Quarry

Fig. 3 Trenches 3, 52 and 53

Fig. 4 Trench 18

Fig. 5 Trench 27

Fig. 6 Trench 24

Fig. 7 Trench 25

Fig. 8 Trench 34

Fig. 9 Trench 36

Fig. 10 Trench 35

Fig. 11 Sections

Fig. 12 The site overlaid on the 3rd edition OS map

PLATES

Plate 1. Pit 30, Trench 27

Plate 2. Pit 44, Trench 18

Cover Photo: Trench 2, looking south

**RECYCLING AND COMPOSTING FACILITY
RIVENHALL AIRFIELD, WOODHOUSE LANE
RIVENHALL, ESSEX**

ARCHAEOLOGICAL EVALUATION BY TRIAL TRENCHING

Client: Golder Associates (UK) Ltd
NGR: TL 822 207
Planning App. No.: ESS/0038/06/BTE
Site Code: RHWM06
Oasis No.: essexcou1-19865
Dates of Fieldwork: 18th September to 17th October 2006

SUMMARY

An archaeological evaluation was carried out on the site of a proposed Recycling and Composting Facility at the former Rivenhall Airfield, during September and October 2006. Fifty-three evaluation trenches were excavated across 10.3ha of the 25.3ha proposal area.

A variety of features and deposits dating to the prehistoric, medieval and post-medieval to modern periods were excavated and recorded. A single large pit, dated to the Middle Iron Age and containing a high quantity of deliberately buried charcoal and burnt flint, was investigated. No other prehistoric features were identified.

More archaeologically significant was the identification of remains of a possible medieval enclosure system, dating to the late 12th or early 13th century, identified in the west of the site. Deposits and post-holes within the system of ditches may be evidence of agricultural or settlement activity. A second area containing possible later medieval remains was identified in the north-east of the site, close to the former route of Woodhouse Lane.

A possible quarry pit and a ditch were excavated that had probably been backfilled in the 19th century or earlier. Further post-medieval features, depicted on early editions of the Ordnance Survey maps, including field boundary ditches, a pond and a possible hollow marking the former route of Woodhouse Lane were all backfilled with modern brick and rubble, probably as an initial stage of airfield construction during WWII.

Numerous drainage and service trenches constructed for the WWII airfield were recorded. The back wall of the demolished Control Tower was also identified. Disturbance and truncation associated with the airfield was more apparent beneath and to the east of the secondary runway. In comparison, the western half of the evaluation area seemed little disturbed which may at least in part explain the greater incidence of archaeological remains in this area of the site.

1.0 INTRODUCTION

This report describes the results of archaeological evaluation by trial trenching on the site of a proposed recycling and composting facility at Rivenhall Airfield, Essex. The fieldwork was carried out by the Essex County Council Field Archaeology Unit (ECC FAU) on behalf of Golder Associates (UK) Ltd, in accordance with an archaeological brief prepared by the ECC Historic Environment Management team (ECC HEM 2006) and a written scheme of investigation prepared by ECC FAU (2006). The fieldwork was undertaken to allow an informed decision to be made on the planning application (ESS/0038/06/BTE) and was monitored by ECC HEM.

Within the overall proposal area of 25.3ha, a total of 10.3ha that will potentially be subject to below-ground impacts resulting from the intended development, was currently available for evaluation.

The site archive will be deposited in Braintree Museum. A digital version of this report will be submitted, along with a project summary, to the Online Access to the Index of Archaeological Investigations (OASIS) (<http://ads.ahds.ac.uk/project/oasis>).

2.0 BACKGROUND (Fig. 1)

2.1 Topography and Geology

The 25.3ha proposal area is located within the southern half of the former Rivenhall Airfield site (NGR TL 822 207). The proposal area consists largely of two blocks of arable farmland separated by the remains of a secondary runway. However, eastern parts of the proposal area also include comprise of grassland and woodland interspersed with WWII airfield structures including a large hangar, service roads and taxiways.

The site generally slopes very gently from north to south. The geology consists of chalky boulder clay over Kesgrave sands and gravels.

2.2 Archaeological and Historical Background

Much archaeological work has taken place in recent years in connection with the active gravel quarry at Rivenhall Airfield (now known as Bradwell Quarry), immediately to the north of the site. This, and other archaeological information from the vicinity, has already been described and discussed in detail in the cultural heritage chapter of an EIA prepared for this proposal by Howland Consultants (Hadley 2006), and in an earlier statement on cultural

heritage prepared for the quarry site (Oxford Archaeological Associates 1997). In view of this, only a brief summary of the most pertinent information is presented here.

Fieldwalking survey over the former airfield in 1989 and 1991 did not identify any significant concentrations of artefacts (Medlycott 1991), and geophysical survey in 1991-2 (Johnson 1992) failed to identify any anomalies that could be interpreted as archaeological features. It was considered that there had been extensive disturbance by construction of the airfield in World War II, and subsequently by deep ploughing.

Between 2000 and 2006 archaeological monitoring has been carried out in advance of quarrying of a large area of the north end of the former airfield, between Sheepcotes Farm to the west and Woodhouse Farm to the east. To date an area measuring up to 0.5km north-south by 1.2km east-west has been monitored and recorded. Survival of archaeological features has for the most part been sparse, with only limited archaeological recording and excavation required as part of the monitoring. However, more intensive archaeological excavation has been carried out in localised areas where significant archaeological remains have survived. The results of all phases of archaeological work in the quarry to date have been described in a series of interim reports (Peachey 2003; Allen and Roy 2006; Germany 2006).

Archaeological remains of Middle Bronze Age, Middle/Late Iron Age, Roman, early Saxon, medieval and post-medieval date have been recorded during archaeological work in the quarry. In most cases these remains have consisted of single or small groups of features, but significant concentrations of features have survived along the southern edge of the quarry (Fig. 2). These include three Bronze Age pits and the ditches of a Middle Iron Age trackway immediately to the north-west of the evaluation area (Germany 2006). A possible area of Middle Iron Age settlement, including a probable roundhouse, was located 320m to the north-west of the evaluation (Peachey 2003). Other significant archaeological remains include an early Saxon urned cremation burial, and a sequence of medieval enclosures, again probably representing a small settlement (Allen and Roy 2006), located 200m north-west of the evaluation. By contrast, the area to the immediate north-east of the site, adjacent to Woodhouse Farm, was found to be extensively disturbed (Germany 2006).

The remains of large post-medieval field boundary ditches have been found to survive in the quarry area, in some cases originating in the late medieval period. All were finally filled with rubble during construction of the World War II airfield in 1943. The airfield was

decommissioned in 1946, after which the site reverted to arable land in between the runways.

Overall, the archaeological evidence across the quarry suggests multi-period landscape activity that may once have been extensive, but which survives very patchily as a result of differing degrees of disturbance from airfield construction.

3.0 AIMS AND OBJECTIVES

3.1 General aims

The aim of the work was to record the location, extent, date and character of any surviving archaeological remains within the proposed development area.

More specifically, the investigation aimed to:

- Assess the survival of archaeological remains of all dates
- Establish whether remains previously identified to the north-west continued into the development area
- Assess the ecofactual and environmental potential of any archaeological deposits encountered
- Inform any future excavation strategy

3.2 Research objectives

The research objectives for the project were undertaken with reference to those laid out in *Research and Archaeology: a Framework for the Eastern Counties, 2. research agenda and strategy* (Brown and Glazebrook 2000).

Specific research objectives were to further investigate the location, extent, date, character and function of past activity in this landscape, particularly for the prehistoric and medieval periods.

4.0 METHOD

Fifty-one archaeological trial trenches (1-51) were opened under archaeological supervision, using a 360° tracked mechanical excavator fitted with a toothless ditching bucket. The trenches were designed to provide a representative 4% sample of the land available for evaluation and were set-out according to a location plan approved by ECC HEM. All

trenches measured 40m by 1.8m apart from Trench 46, which was 30m in length and Trench 47, which was 32m.

After the completion of the initial machining, two contingency trenches (52 and 53) were opened, at the request of the monitoring officer, to assist the interpretation of an area of concentrated archaeological features in Trench 3. Trench 52 measured 54m by 1.8m and Trench 53 measured 40m by 1.8m. In addition, a 25 sq m area was opened around Trench 18 to clarify the nature of the archaeological remains located within it.

All areas of archaeological potential were cleaned and hand-excavated wherever safe and practicable to do so. All work was carried out in accordance with IFA (Institute of Field Archaeologists) by-laws and guidelines and complied with Standards for Field Archaeology in the East of England (Gurney 2003). Standard ECC FAU excavation, artefact collection and recording methodologies were employed throughout.

5.0 FIELDWORK RESULTS

The topsoil across most of the evaluation area was a dark grey-brown clay silt that was usually between 0.2m to 0.3m deep. In most trenches this sealed brown clay-silt subsoil which varied in depth from 0.1m to 0.3m and overlay natural deposits of light yellow chalky clay, brown clay and gravel. Re-deposited soils, up to 1m deep in places, were encountered immediately below the topsoil in some of the trenches in the north-east of the evaluation area (e.g. 22, 25).

Archaeological remains chiefly dating to the Middle Iron Age and medieval periods were identified. There was also a small number of residual Iron Age and Roman finds. Further features could be linked with backfilled 19th and 20th century field boundaries depicted on the 1st to 4th edition Ordnance Survey maps (c.1861-1936) and others were clearly associated with the wartime airfield. A few features were found to be of natural origin. Modern field drains were occasionally encountered and plough disturbance was noted in some of the shallower western trenches.

The results of the fieldwork are described below, with trench location data presented in Appendix 1 and more detailed context information in Appendix 2. The results are presented in trench order and are divided between those with significant archaeological remains (5.1) and those which contained post-medieval or 20th-century remains (5.2). Context numbers are given in brackets. No context numbers were given to clearly modern (19th century and

later) features such as recently backfilled field boundary ditches and airfield service trenches, which were generally left unexcavated.

As no archaeological remains were identified in Trenches 1, 5-7, 11, 16, 17, 19-21, 23, 31-33, 39, 41, 42 and 46-49 these trenches are not discussed further.

5.1 Trenches with significant archaeological remains (Fig. 1)

Trench 2

The only significant archaeology excavated feature in Trench 2 was a north-west/south-east orientated ditch (13) (Section 3, Fig. 11). Two tiny fragments of prehistoric pottery (that may be residual) were recovered from its fill (12). A modern ditch crossed the northern end of the trench (see 5.2 below).

Trench 3 and contingency trenches 52 and 53 (Fig. 3)

Two shallow post-holes (contexts 2 and 4), possibly part of a fence-line, were excavated in the southern half of Trench 3. Medieval pottery, baked clay, oyster shell and animal bone were recovered from their fills. A third possible post-hole (15) was located close-by. This contained no finds, was poorly-defined and was disturbed by a plough scar. All three features were sealed beneath a layer of charcoal-flecked, dark greyish brown, silty clay (1). Medieval pottery was recovered from this layer and the initial cleaning of its surface (6).

Medieval pottery and animal bone was also recovered from a shallow north-west/south-east orientated ditch (11) in Trench 3. This ditch continued through Trench 53, but was not visible in Trench 52 – presumably turning or terminating before this.

Two inter-cutting linear features (9 and 25), orientated north-east/south-west, were excavated toward the northern end of Trench 52; both contained medieval pottery. The earlier feature was gully 25. This appeared to form a rounded terminal within the trench and had near-vertical sides (Section 2, Fig. 11) that may possibly have supported a timber fence. This was later replaced by a more conventionally-shaped boundary ditch (9). Located to the south, and on a parallel alignment, was a shallow, poorly-defined, interrupted gully (35 and 37). Three small pieces of medieval pottery were recovered that may be intrusive from field drain disturbance.

Further contemporary medieval pottery was recovered from a wide pit (40) in Trench 53 and an adjacent poorly-defined layer (39). To the immediate north of pit 40, and with an uncertain relationship with it, was a small undated gully (42). The latest feature within the

three trenches was a large, 0.83m-deep ditch (7) (Section 1, Fig. 11), aligned north-east/south-west, that was excavated in Trench 3 and continued for over 45m through Trenches 52 and 53. The fill of this ditch (8) produced post-medieval roof tile and flower pot along with residual medieval pottery. A field boundary in a similar position to ditch 7 is depicted on the Petchye Map of 1634 (ERO T/M 460) (not illustrated). However, it is not shown on the Ordnance Survey 1st edition map (1861-1876) indicating that it was probably backfilled prior to the 1860s.

Trench 4

Two north-east/south-west aligned ditches (18 and 28) containing medieval pottery were excavated in Trench 4. Neither ditch was positively identified further west in Trenches 3 or 53 and it is possible that one or both may have formed a right-angled junction with medieval ditch 11 to the east of Trench 53. Ditch 28 was also broadly aligned with the undated ditch (20) in Trenches 9 and 14 and could conceivably be part of the same feature.

Trench 9

Two, shallow, undated features (20 and 22) were excavated in the centre of Trench 9. Ditch 20 was orientated north-east/south-west and continued through Trench 14. Feature 22 continued beyond the edge of the trench and may have been the terminus of a north-west/south-east aligned ditch or the end of an elongated pit. A third feature at the western end of the trench appeared to be of natural glacial origin.

Trench 12

A large fragmented rock (34) in Trench 12 appeared to be entirely of natural origin.

Trench 14

North-east/south-west aligned ditch 20 continued from Trench 9 through Trench 14. It was recorded, but not investigated further within this trench.

Trench 18 (Fig. 4)

A large heart-shaped pit (44), 1.05m deep, was excavated in Trench 18. This pit had two fills (33 and 45) that produced medieval pottery, along with residual prehistoric and Roman material. The upper fill (33) included a small localised deposit of dumped ash on the southern edge of the pit. The shape of 44 in both outline plan (Fig. 4) (Plate 2) and section (Section 4, Fig. 11) might suggest the presence of two intercutting features, although there were no discernable differences in its fill.

Trench 24 (Fig. 6)

In the centre of Trench 24 was part of a large elongated pit or ditch (62) whose fill (61) produced four fragments of medieval/post-medieval roof tile and one sherd of late medieval pottery. Fill 61 was truncated by three modern linear features (see 5.2 below).

Trench 25 (Fig. 7)

In the centre of Trench 25 was a large feature (78) in excess of 0.48m deep and filled with dark grey silty clay (77) that contained oyster shell, roof tile fragments and medieval pottery. Feature 78 was most probably an east-west orientated ditch, although it did appear to broaden out to the east and could alternatively be the edge of a large pit or pond, or perhaps represent two inter-cutting features. Feature 78 was not bottomed for safety reasons as it was sealed beneath 1.2m of overburden, the lower part of which was comprised of a layer of dark brownish grey clay-silt (79), 0.8m thick. To the immediate north of deposit 79 was a pit (76) (Section 6, Fig.11) that also contained medieval pottery in its fill. An east-west orientated modern boundary ditch and an area of modern disturbance were found in the north of the trench; further described in Section 5.2.

Trench 27 (Fig. 5)

A large pit (30), 0.28m wide by 0.5m deep, was excavated in Trench 27 (Plate 1). This had two main fills (Section 5, fig. 11). The lower fill of dark charcoally silt (32) contained nearly 4kg of burnt flint and 199 sherds of Middle Iron Age pottery. No evidence of in-situ burning was present, suggesting that fill 32 had been gathered from elsewhere and deliberately deposited in the bottom of the pit. The upper fill (31) contained only a few sherds of Middle Iron Age pottery and may have resulted from natural silting. An indentation (84) in the south of the pit, visible in Section 5 (Fig.11), was poorly-defined and may have been caused by animal or root disturbance.

Trench 28

The corner of a possible ditch (55), 1m wide by 0.35m deep and aligned north west/south-east and north-east/south-west, was excavated in Trench 28. No finds were recovered from its fill.

Trench 34 (Fig. 8)

Three undated ditches and a gully were excavated in Trench 34. Seemingly parallel ditches 52 and 58, were aligned north-east/south-west and located some 10m apart. Ditch 52 was shallower and poorly-defined and ditch 58 was deeper, with a V-shaped profile. Both had slightly mixed mid-light greyish brown fills. Neither ditch continued northwards into Trenches

29 or 30. The third ditch (60), was aligned north-west/south-east and had a similar fill. Adjacent and parallel to ditch 60, with an uncertain relationship, was a better-defined gully (83) (Section 7, Fig. 11). This had a more uniform grey-brown fill and contained one tiny piece of very-abraded red brick (not retained). The lack of finds and mixed nature of the fills of these features may suggest a more modern origin. All remains in this trench were located beneath the course of the old runway.

Trench 35 (Fig. 10)

A solitary, small, oval post-hole (80) was excavated in Trench 35. The fill (63) contained animal bone, oyster shell and two pieces of medieval pottery.

Trench 36 (Fig. 9)

Two possible, east-west aligned, ditches (66 and 72) were excavated toward the end of Trench 36. Both had fills only slightly greyer and siltier than the surrounding natural clay. No finds were recovered from either.

Trench 37

A silt-filled linear feature (64) crossed the eastern half of the trench and appeared to be of natural (glacial) origin. A modern feature (Section 5.2) crossed the western end of the trench.

Trench 38

Two possible, broadly parallel, north-east/south-west aligned ditches (68 and 70) were excavated in Trench 38. Both had fills (69 and 71) which were only slightly siltier than the surrounding natural clay. No dateable finds were recovered. Neither ditch appeared to continue into the surrounding trenches.

Trench 43

A north-east/south-west aligned ditch (53) was excavated in Trench 43. The ditch is undated, but its fill yielded one piece of oyster shell. Ditch 53 could possibly intersect with ditch 78 in Trench 25 and might account for the perceived broadening of that feature.

Trench 45

A large depression over 22m long and over 1.25m deep, with three fills (46-48), was investigated by machine in Trench 45. Brick and tile fragments were recovered from the 0.9m thick upper fill (46) suggesting that the feature had been backfilled in the post-medieval period. It was deepest along the south-west edge of the trench and clearly continued beyond

it. The purpose of such a large depression is unclear. It may have been a quarry hollow, or a large pond. Several ponds are depicted in the area on the Petchye Map of 1634 (ERO T/M 460) (not illustrated) but none in this exact position.

5.2 Trenches containing post-medieval or modern remains (Fig. 1)

Trench 2

A large ditch, 2.8m-wide, backfilled with sand, gravel and rubble, was recorded at the north end of this trench. The position of this ditch corresponds with that of a field boundary depicted on the first four editions of the Ordnance Survey map (Fig. 12).

Trench 8

At the east end of the trench was a well-defined linear feature, cut from directly below the topsoil and filled with light grey chalky clay. It was located close to the edge of the runway, ran on a parallel alignment, and was almost certainly a 20th-century service trench associated with the airfield.

Trench 10

A 2.2m-wide ditch, aligned north-east/south-west, was recorded in the south of the trench. It was filled with grey silt and abundant rounded pebbles. The position of this ditch corresponds with that of a field boundary depicted on the 3rd edition Ordnance Survey map (Fig. 12). The clean gravel fill suggests that it was backfilled in the modern period – perhaps during airfield construction.

Trench 13

The service trench recorded in Trench 8 continued through Trench 13, just west of and parallel to the old runway. It was not, however, discerned in Trench 20.

Trench 15

The ditch identified in Trench 10 continued through the west end of Trench 15. It was investigated by machine bucket and found to be approximately 1m deep. It was filled with loose ash and silt, broken ceramic drain pipe and frogged bricks, confirming its modern date of backfilling.

Trench 22

Over three quarters of Trench 22 was heavily disturbed, with brick rubble in excess of 1m deep. In the centre of the trench was an east-west aligned brick drainage channel with a manhole covered by three concrete slabs. The brick rubble at the eastern end of the trench

was sealed by 1m of re-deposited clay and silt. It is probable that most of the brick rubble was used to infill a pond shown on the first four editions of the Ordnance Survey map (Fig. 12).

Trench 24

In the centre of the trench was a north-east/south-west aligned, c.0.5m-wide, former drainage channel in-filled with brick rubble. This channel would have been located under the eastern edge of the original runway and complemented a matching drain, still in-situ, running under the western edge. To the east of the brick-filled drain was a parallel service trench with a light grey silty fill. This was very similar to the service trench identified to the west of the runway in Trenches 8 and 13.

Trench 25

The north-end of Trench 25 had been in-filled with brick rubble. This rubble might have been used to level a hollow formed by the former Woodhouse Lane or be a continuation of the pond infill from Trench 22. To the south of the rubble was an east-west aligned ditch containing large amounts of decomposed wood. This ditch may have been a boundary marking the south side of the former course of Woodhouse Lane, prior to the construction of the airfield (Fig. 12).

Trench 26

The brick-filled drain identified in Trench 24 continued through the east end of Trench 26. In the eastern half of Trench 26 a number of brick fragments had been pressed into the top of the underlying natural clay.

Trench 29

The continuation of the brick-filled drain from Trenches 24 and 26 was noted at the east end of the trench. Some compaction/disturbance of the natural was noted in the area closest to the drain and large fragments of brick were noted in the trench section.

Trench 30

Two 20th century drainage features were recorded in Trench 30. In the north of the trench was a further part of the drain running between Trenches 24, 26 and 29, and in the centre of the trench was a north-east/south-west aligned brick drainage channel and three concrete slabs (one with 'FRIDAY' inscribed upon it) covering a manhole.

Trench 34

Brick rubble present in the trench section in the south-east corner of Trench 34 probably represents a further continuation of the former runway-edge drain from Trenches 24, 26, 29 and 30.

Trench 37

A brick-rubble filled ditch was noted at the west end of Trench 37. The position of this ditch corresponds with that of a field boundary depicted on the 3rd edition Ordnance Survey map (Fig. 12). Again, this appears to have been backfilled in modern times.

Trench 40

A 3m-wide brick-and-gravel filled ditch was recorded in Trench 40. This was a continuation of the ditch in Trench 37 and is depicted as a boundary on the 3rd edition Ordnance Survey map (Fig. 12).

Trench 44

The western half of Trench 44 was in-filled with brick rubble which respected a solid brick wall foundation, 0.46m wide. The foundation was orientated north-east/south-west and matches closely with the recorded position of the rear wall of the demolished airfield control tower (see Fig. 1). Two electric cable runs were noted in the eastern half of the trench.

Trench 50

Two 20th century brick and concrete in-filled service/drainage trenches were recorded in Trench 50. These were presumably associated with the various airfield buildings present in this part of the site.

Trench 51

A 1m-wide 20th century service trench, filled with concrete and pebbles and a narrow pebble-filled cable trench, cut from directly below the topsoil, were noted crossing Trench 51. Again, these are presumably associated with the near-by airfield buildings.

6.0 FINDS AND ENVIRONMENTAL MATERIAL by Joyce Compton

6.1 Introduction

Small groups of finds were recovered from twenty-six contexts, across thirteen of the excavated trenches. All of the material has been recorded by count and weight, in grams, by context. Full details can be found in Appendix 3. The major component is pottery,

amounting to 358 sherds, weighing 2373g, recovered from twenty-three contexts. The largest proportion (147 sherds, 1218g) is medieval in date; this, and the prehistoric pottery, is reported on separately. The flint assemblage also forms the subject of a separate report. The finds are described by category below.

6.2 Prehistoric pottery by Nick Lavender

A total of 212 sherds (1104g) was recovered. This has been recorded according to a system devised for prehistoric pottery in Essex (Brown 1988; details in archive). The pottery was recorded by fabric, class (after Barrett 1980), form, decoration, surface treatment and condition; full details can be found in the archive. The assemblage was quantified by sherd count and weight.

Nearly all of the pottery (98.1% by sherd count, 99.1% by weight) was recovered from fill 32 of pit 30 (Trench 27) and is generally abraded, though not heavily so. The average sherd weight of 6g is misleading and results from the assemblage including many tiny sherds retrieved from the soil sample. There are many others weighing 30 to 40g. Most of the material is flint or flint-and-sand-tempered and, in the absence of diagnostic sherds, cannot be closely dated. However, several sherds from a fine flint-and-sand vessel have a concave neck and slightly angular shoulder. A small plain rounded rim sherd in the same fabric (recovered from the soil sample and now heavily abraded) may belong to the same vessel. An Iron Age date, probably Middle Iron Age, seems likely for this vessel.

6.3 Late Iron Age and Roman pottery

Seven sherds, total weight 42g, of LIA/Roman pottery were found residually in Trenches 3, 4 and 18. These comprise rim and body sherds in coarse fabrics, none of which can be closely dated within the Late Iron Age and Roman periods. Both of the Late Iron Age grog-tempered sherds (one from the fill of ditch 11 (Trench 3), the other from the fill of pit 44 (Trench 18)) are abraded.

6.4 Medieval and later pottery by Helen Walker

A small amount of pottery, 147 sherds weighing 1218g, was excavated from twenty contexts (Appendix 4). Much of the pottery came from a series of ditches, two post-holes and a pit at the western edge of the site (Trenches 3, 4, 52 and 53). The pottery mainly consists of shell-and-sand-tempered ware and early medieval ware spanning the 10th and 13th centuries. Featured sherds comprise cooking pot fragments with everted rims that could be 11th or 12th century, and a 12th-century type beaded rim from layer 39 (Trench 53). The addition of sherds of medieval coarse ware in two of the ditch fills, and in pit 40, would suggest a 12th to

early 13th century date for these features. Post-hole 2 (Trench 3) produced a B4 cooking pot rim datable to c.1200 and a fragment of medieval coarse ware cooking pot with a flat topped rim, which could easily be 13th century. The unstratified finds from Trench 3 (context 6) included three rim fragments that could be from bowls (one, a flanged rim in medieval coarse ware), which could indicate specialised activity in the area. Much of the pottery at this western edge is datable to the 11th/12th centuries, but the presence of more developed rims and sherds of medieval coarse ware in several contexts would suggest a date of c.1200 is more likely. The very small amounts of pottery from these trenches, and the fact that ditches 11 and 18 also produced Late Iron Age/ Roman sherds, may well indicate high residuality.

Isolated pit 44 (Trench 18), to the south of the western cluster produced further examples of shell-and-sand-tempered ware and shell-tempered ware. Featured sherds in the latter comprise a large fragment of everted cooking pot rim with an incipient bead (A4B) datable to the 11th/12th centuries and a very unusual inflected rim with a groove around the top. Isolated post-hole 80 (Trench 35) produced two abraded sherds of early medieval ware. Two sherds of fine ware were retrieved from Trenches 24 and 25, in the eastern half of the site, comprising a sherd of Hedingham ware from the lower part of a jug, dating to the 13th century (from pit 76), and a sherd of sandy orange ware with a mottled green glaze dating to the 13th to 14th centuries (from ditch 78). Also present in these features are sherds of early medieval ware, medieval coarse ware, and a single sherd of buff ware dating from the 13th to 15th centuries (in ditch 78). Ditch 62 (Trench 24) produced a thick-walled unglazed sandy orange ware sherd dating anywhere between the 13th and 16th centuries.

Medieval pottery was also excavated from a nearby site (Allen and Roy 2006) in advance of quarrying. Here, early medieval pottery was present, although very little shelly ware was found. Pottery from the Allen and Roy site differs because there is much evidence of occupation continuing into the late medieval period, with the bulk of the assemblage dating to the 13th to 14th centuries.

6.5 Brick and tile

Four contexts produced relatively small brick and tile fragments, amounting to twelve pieces, weighing 342g. Most of the pieces are likely to be post-medieval, although those from ditches 62 (Trench 24) and 78 (Trench 25) are associated with medieval pottery and may also be of medieval date.

6.6 Baked clay

Small quantities of baked clay (total weight 164g), all associated with medieval pottery, came from five contexts. Most pieces have a buff, chalky fabric with no diagnostic features. It is not possible to ascertain whether the pieces represent the remains of daub or are the residue from domestic hearths. Two more-substantial pieces (weight 156g) were found in prehistoric pit 30 (Trench 27). These are joining fragments, with one flat surface extant, and most likely derive from an object such as a triangular loom weight.

6.7 Worked and burnt flints by Hazel Martingell

A total of 26 worked flints were studied (Appendix 5); two of these were burnt pieces from fill 32 of pit 30 (Trench 27). There were no retouched artefacts. The collection consists of waste material alone; four cores (two burnt), eleven flakes, one irregular blade and ten chippings and small fragments. Pit 30 provided the most interesting pieces, with three good quality flint flakes coming from fill 31. The flint material is not local gravel and may have been imported. The squat flake from fill 33 of pit 44 (Trench 18) is the only artefact for which a date can be offered – Late Iron Age.

A large quantity of burnt flints was recorded, of which more than 96% by weight came from fill 32 of pit 30. During most excavations, variable amounts of burnt flint are recovered, either in the form of light scatters across sites, or as concentrations within features. Prehistoric activities that result in the creation of burnt flint are cremation, pottery production and domestic cooking. It is not always evident which activity is represented.

6.8 Animal bone

Eight contexts produced animal bone, amounting to 195 pieces weighing 407g. Nearly all of the assemblage comes from contexts of medieval date, and most is fragmented and in poor condition. Because of this, very little of the animal bone could be identified to species, but mainly comprises cattle and sheep/goat molars and mandible fragments. More than half of the animal bone by weight came from the fill of medieval ditch 11 (Trench 3). Prehistoric pit 30 (Trench 27) produced a number of cattle tooth enamel fragments and a small amount of burnt bone.

6.9 Shell

Shell was recovered from eleven contexts, all of which are medieval except for the fill of ditch 53 (Trench 43) which is undated. Two garden snails were found in the fill of ditch 11 (Trench 3), but all of the remainder are oyster. Sixteen oyster valves were noted, representing a

minimum of eight individuals, and several large examples were recorded. It is worth noting that more than three-quarters of the shell assemblage came from features in Trench 3.

6.10 Other finds

An iron staple was recovered from the fill of post-hole 80 (Trench 35). The staple cannot be dated empirically, but was associated with two sherds of medieval pottery. A number of small lava quern fragments came from the fill of pit 44 (Trench 18). There are no diagnostic features, but the fragments were found with several sherds of medieval pottery and the quern fragments are probably of the same date.

6.11 Environmental material

A single 30 litre soil sample was taken from fill 32 of pit 30 (Trench 30). This was processed by wet-sieving with flotation using a 0.5mm mesh and collecting the flotation fraction (flot) on a 0.5mm sieve. The residue was then dried and separated into coarse and fine fractions using 2mm and 4mm sieves. The material in the coarse fraction (>4mm) was sorted by eye and artefacts were extracted and bagged separately. Quantification details have been added to the table in Appendix 3. The fine fractions were saved but not sorted. The flot was also dried and bagged by context. The dried residue produced further fragments of cattle tooth enamel, along with a small amount of burnt bone. Charcoal fragments, weighing 14g, were added to the flot.

The flot was submitted to Val Fryer for examination, who reports:

“The dried flot was scanned under a binocular microscope at magnifications up to x16; the plant macrofossils and other remains noted are listed in the archive. All plant remains were charred. Modern contaminants within the assemblage included fibrous roots, seeds, arthropods and cereal chaff. The assemblage is small (<0.1 litres in volume) and was largely composed of charcoal/charred wood fragments. It may be noted that a large proportion of these fragments appeared to be very rounded and abraded.

A barley (*Hordeum* sp.) grain and rachis node were also recorded along with a single indeterminate legume (Fabaceae) seed. Other remains included small fragments of burnt or fired clay, pieces of black tarry material (possibly a residue of the combustion of organic remains at very high temperatures), and a minute fragment of coal, which is almost certainly intrusive within the context. Insufficient material is recorded to reliably interpret this assemblage, and it would appear most likely that the few remains noted are present as accidental inclusions within the pit fill.

Although inconclusive, this assemblage shows that charred organic remains are preserved within the archaeological horizon at Rivenhall Airfield. Because of this, it is strongly recommended that additional plant macrofossil samples are taken from all well-dated contexts encountered during future archaeological interventions.”

6.12 Comments on the Assemblage

There is a thin scatter of material across the excavated area, although two main areas of interest can be identified. The first consists of a pit (in Trench 27) containing quantities of prehistoric pottery and burnt flints, along with charcoal and baked clay. The second comprises medieval activity in Trenches 3, 4, 52 and 53. In particular, more than three-quarters of the finds assemblages of medieval date were recovered from Trenches 3 and 52. The fragmentary nature of most of the finds should be noted, however. For instance, the average sherd weight for all of the pottery is 7.2g, and there is little difference in the average sherd weights for the prehistoric element, which is usually more friable, and that of medieval date. There are very few post-medieval or modern finds.

Due to the small quantities involved, very little of the material requires further work at this stage. All of the finds should be retained, except for those of post-medieval date and the burnt flints.

7.0 DISCUSSION

A variety of archaeological remains have been recorded across the evaluation area. These range in date from the Middle Iron Age to the 20th century. One clear concentration of features dating to the medieval period is located in the west of the area, centred upon Trenches 3, 4, 52 and 53. A second, multi-period, concentration is visible in the east of the area around Trenches 24, 25 and 27. These remains are further discussed by period, below.

7.1 Prehistoric

Although a few Bronze Age pits have been previously excavated within the quarry to the north (Fig. 2) no remains of this date have been identified within the evaluation area. In all, only one prehistoric feature, a pit dating to the Middle Iron Age, was identified. This contained burnt material that may have originated from a near-by source of heat such as a hearth or kiln, perhaps associated with an occupation site.

7.2 Later Iron Age and Roman

A small amount of Late Iron Age and Roman material, residual in later features, was recovered. This indicates a small-scale presence in the landscape in these periods which has left no tangible evidence. No remains of this date have been recorded in previous archaeological work in the quarry to the immediate north of the evaluation area. This would therefore appear to be a true reflection of the incidence/survival of such sites in the general vicinity.

7.3 Medieval

Two concentrations of medieval remains have been identified in the west and north-east of the evaluation area. Those to the west (Trench 3 *et al*) consist of a small concentration of features that date broadly to the late 12th or early 13th century. Within this concentration, two perpendicular ditch alignments were noted that may constitute parts of a system of land enclosure. These ditches are on similar alignments with those that enclose the area of probable medieval settlement previously excavated in the quarry 200m to the north-west (Fig. 2) and it is possible that the newly-exposed ditches enclose a separate, but perhaps contemporary or even related, enclosure.

In the north-east is a small concentration of slightly later medieval features (Trenches 24 and 25) broadly dating to the 13th to 15th centuries. These are located close to the original (pre-airfield) route of Woodhouse Lane (Fig. 12) and may indicate the presence of lane-side settlement or agriculture remains. Woodhouse Lane is recorded on an estate map of 1634 by T. Petchye (ERO T/M 460) (not illustrated) and may have earlier origins. Near-by Woodhouse Farm, located to the east of the lane, has a moated enclosure which is believed to date to the medieval period. However, given the small amounts of pottery involved, the dating of these eastern features is by no means certain and they may in reality be of post-medieval date.

7.4 Post-medieval

Cartographic evidence indicates that Ditch 7 (Trenches 3, 52 and 53) was in existence in the first half of the 17th century and had probably been backfilled prior to the middle of the 19th century. Possible quarry hollow 49 (Trench 45) may also be of post-medieval date and been backfilled in the 18th or 19th century.

A number of back-filled ditches (Trenches 2, 10, 15, 25, 37 and 40) can clearly be identified as boundaries in existence during the 19th and 20th centuries, as depicted on early editions

of the Ordnance Survey (Fig. 12). However, they could be earlier post-medieval in origin. These ditches were all back-filled with modern material (brick rubble, sand, pebbles etc) in the early 1940s, during levelling works for the new airfield.

Trench 22 was located in the area of a former pond (Fig. 12) and Trench 25 partly crossed the original route of Woodhouse Lane. It is probable that most of the brick-rubble found in these two trenches was used to deliberately infill deep features during levelling works associated with airfield construction. The brick rubble in the eastern part of Trench 22 was buried beneath 1m of re-deposited soils indicating deliberate levelling of the ground surface, either during airfield construction or post-airfield reinstatement to agriculture.

7.5 Modern

In addition to the post-medieval field boundaries and other features backfilled as part of airfield construction, many linear features clearly relate to drainage and other services associated with airfield activity. Some cable trenches may have been laid during the latter part of the 20th century when the site was used as a research establishment by Marconi. The brick wall and rubble exposed in Trench 44 matched almost exactly with the position of the now-demolished control tower as shown on Air Ministry drawing 4648/45 (Fig. 1). There was a notable amount of brick rubble in the field to the eastern side of the runway, which was probably deposited when the greater part of the adjacent secondary runway was removed. Trenches 23, 26, 29 and 34 were located entirely beneath the former runway but showed little sign of truncation and disturbance, other than some bricks pressed into the natural clay and a drain beneath the former runway edge. Overall, there appears far less disturbance from airfield construction than anticipated and virtually none at all in the field to the west of the runway, hence the survival of a more tangible concentration of archaeological remains in this vicinity.

8.0 ASSESSMENT OF RESULTS

The evaluation of the proposed Recycling and Composting Facility at Rivenhall Airfield has revealed archaeological features and deposits dating to the Middle Iron Age, medieval and post-medieval to modern periods. Previous work in Bradwell Quarry had suggested a fairly disparate scattering of archaeological features of varying dates over the landscape with one or two archaeological 'hotspots'. This appears to be reflected in the results of the evaluation which also indicate a broad scattering of archaeological features with two clusters in the west and north-east of the area.

Perhaps of greatest significance is the concentration of medieval ditches in the west of the area, around Trenches 3, 4, 52 and 53. These may form an enclosure similar to that excavated 200m to the north-west within Bradwell Quarry (Fig. 2) and the excavated layers and post-holes within the enclosure might indicate settlement or agricultural activity. A second area of possible medieval agriculture or settlement was located in the north-east, close to the former route of Woodhouse Lane. The increased understanding of medieval “rural settlement diversity and field systems” has been highlighted as an issue by the regional research agenda for the eastern counties (Wade 2000, 24).

Remains of prehistoric activity are restricted to one isolated Middle Iron Age in the east of the site. A probable Middle Iron Age dwelling was excavated 320m to the north-west, within the quarry, but this is probably located too distant to be directly associated. It is unlikely that more significant concentrations of prehistoric remains are present within the evaluation area, beyond the incidence of other such isolated features.

Most of the post-medieval ditch remains correspond with the positions of field boundaries and other features depicted on the Petchye Map of 1634 and on early editions of the Ordnance Survey. The value of these features is therefore limited as they are already well-documented and understood and in most cases appear to have been deliberately in-filled with 20th century material.

The airfield-related remains are similarly well-documented and are unlikely to be worthy of further archaeological investigation. However, it is noted that some WWII period-structures do survive adjacent to the evaluation area and may require recording, if intended for demolition as part of this scheme.

It is anticipated that ECC HEM will recommend to the Local Planning Authority that further coordinated and controlled archaeological works should be carried out at the site if the scheme proceeds. The sequence, programme and scope of these works will need to be agreed with ECC HEM. However, from the evaluation works completed to date, it is proposed that any further archaeological remains within the development area are investigated by means of a ‘Monitoring and Recording’ brief, under which any such remains would be appropriately dealt with. These works could be carried out during the initial stages of construction, coincidental to the phased stripping of the site. As such it is suggested that they should be undertaken to a similar standard and scope to those that have been applied at the adjacent Bradwell Quarry, to ensure that significant remains are preserved by record.

ACKNOWLEDGEMENTS

Thanks are due to Steven Smith for commissioning the fieldwork and supplying information on behalf of Golder Associates (UK) Ltd and to the landowners, the Smith family, for facilitating access. The archaeological monitoring was undertaken by Trevor Ennis with the assistance of Tony Blowers, Chris Down, John Hewitt, Dave Smith, Billie Springer and Adrian Turner of the Essex County Council Field Archaeology Unit. The project was managed by Mark Atkinson of ECC FAU and monitored by Vanessa Clarke of ECC HEM.

BIBLIOGRAPHY

- | | | |
|------------------------------------|------|---|
| Allen, P. and Roy, M. | 2006 | <i>Bradwell Quarry, former Rivenhall Airfield, Rivenhall Essex. Archaeological observation and excavation. Phase 1.4 interim report.</i> ECC FAU report 1368, February 2006 (revised) |
| Barrett, J.C. | 1980 | 'The pottery of the later Bronze Age in lowland England', <i>Proc. Prehist. Soc.</i> 46 , 297-319 |
| Brown, N. | 1988 | 'A Late Bronze Age enclosure at Lofts Farm, Essex', <i>Proc. Prehist. Soc.</i> 54 , 249-302 |
| Brown, N. and Glazebrook, J. (eds) | 2000 | <i>Research and Archaeology: a Framework for the Eastern Counties, 2. research agenda and strategy</i> , E. Anglian Archaeol. Occ. Pap. 8 |
| ECC FAU | 2006 | <i>Written Scheme of Investigation for Archaeological Evaluation by Trial Trenching on a proposed Recycling and Composing Facility at Rivenhall Airfield, Essex.</i> ECC FAU internal publication |
| ECC HEM | 2006 | <i>Brief for Archaeological Evaluation on a proposed Recycling and Composing Facility at Rivenhall Airfield, Essex.</i> ECC HEM internal publication |
| Germany, M. | 2006 | <i>Bradwell Quarry (formerly Rivenhall Airfield), Rivenhall, Essex. Archaeological monitoring and excavation. Interim report, phases 2.1 to 2.3.</i> ECC FAU report 1422, April 2006 |
| Gurney, D. | 2003 | <i>Standards for Field Archaeology in the East of England</i> , E. Anglian Archaeol. Occ. Pap. 14 |
| Hadley, A. | 2006 | <i>An archaeological assessment for a proposed development at Rivenhall Airfield, Essex.</i> Howlands, May 2006 |
| Institute of Field Archaeologists | 1999 | <i>Standard and Guidance for Archaeological Evaluation</i> (revised) |

- Johnson, A.E. 1992 *Woodhouse Farm, Rivenhall Airfield, Essex. Magnetic susceptibility, magnetometer and augur survey.* Oxford Archaeotechnics report
- Medlycott, M. 1991 *An archaeological fieldwalking evaluation at Rivenhall Airfield, Rivenhall, Essex.* ECC report
- Oxford Archaeological Associates 1997 *Rivenhall Airfield, Essex – Cultural Heritage (Archaeology) Statement.* OAA report
- Peachey, M.J. 2003 *Rivenhall Airfield, Rivenhall, Essex. Continuous archaeological observation, phases 1.1 to 1.3 and 3.1 (west).* ECC FAU report 807
- Wade, K. 2000 'Anglo-Saxon and Medieval (Rural)', in Brown & Glazebrook (eds) 2000, 23-26

APPENDIX 1: Trench Data

Trench	Measurements	Co-ordinates
1	40m x 1.8m x 0.30m deep, orientated E/W	W - 581911.1/220680.5 E - 581951.1/220680.5
2	40m x 1.8m x 0.35m deep, orientation N/S	N - 581977.6/220700.5 S - 581977.6/220660.5
3	40m x 1.8m x 0.46m deep, orientation N/S	N - 581931.1/220654.0 S - 581931.1/220614.
4	40m x 1.8m x 0.45m deep, orientation E/W	W – 581957.6/220634.0 E– 581997.6/220634.0
5	40m x 1.8m x 0.4m deep, orientation N/S	N - 582024.1 / 220634.4 S - 582024.1 / 220594.4
6	40m x 1.8m x 0.54m deep, orientation E/W	W - 582050.6/220634.0 E - 582090.6/220634.0
7	40m x 1.8m x 0.68m deep, orientation N/S	N - 582117.1/220642.0 S - 582117.1/220602.0
8	40m x 1.8m x 1m deep, orientation E/W	W - 582122.3/220634.0 E - 582162.3/220634.0
9	40m x 1.8m x 0.5m deep, orientation E/W	W - 581911.1/220587.5 E - 581951.1/220587.5
10	40m x 1.8m x 0.45m deep, orientation N/S	N - 581977.6/220607.5 S - 581977.6/220567.5
11	40m x 1.8m x 0.4m deep, orientation E/W	W - 582004.1/220587.5 E - 582044.1/220587.5
12	40m x 1.8m x 0.53m deep, orientation N/S	N – 582070.6/220607.5 S - 582070.6/220587.5
13	40m x 1.8m x 0.6m deep, orientation E/W	W – 582097.1/220587.5 E – 582137.1/220587.5
14	40m x 1.8m x 0.4m deep, orientation N/S	N – 581931.1/220583.8 S – 581931.1/220543.8
15	40m x 1.8m x 0.5m deep, orientation E/W	W – 581957.6/220543.0 E – 581997.6/220543.0
16	40m x 1.8m x 0.45m deep, orientation N/S	N – 582024.1/220563.0 S – 582024.1/220523.0
17	40m x 1.8m x 0.5 m deep, orientation E/W	W - 582050.6/220543.0 E – 582090.6/220543.0
18	40m x 1.8m x 0.56m deep (max), orientation N/S	N - 581977.6/220525.8 S - 581977.6/220485.8

19	40m x 1.8m x 0.55m deep, orientation E/W	W - 582004.1/220496.5 E - 582044.1/220496.5
20	40m x 1.8m x 0.5m deep, orientation N/S	N - 582070.6/220516.5 S - 582070.6/220476.5
21	40m x 1.8m x 0.5m deep, orientation N/S	N - 582024.1/220490.8 S - 582024.1/220450.8
22	40m x 1.8m x 1m deep, orientation E/W	W - 582224.2/220668.4 E - 582264.2/220668.4
23	40m x 1.8m x 0.4m deep, orientation N/S	N - 582189.7/220641.0 S - 582189.7/220601.0
24	40m x 1.8m x 0.65m deep, orientation E/W	W - 582203.4/220641.0 E - 582243.4/220635.9
25	40m x 1.8m x 0.55m deep, orientation N/S	N - 582269.9/220655.9 S - 582269.9/220615.9
26	40m x 1.8m x 0.38m deep, orientation E/W	W - 582156.9/220589.4 E - 582196.9/220589.4
27	40m x 1.8m x 0.5m deep, orientation N/S	N - 582223.4/220609.4 S - 582223.4/220569.4
28	40m x 1.8m x 0.65m deep, orientation E/W	W - 582249.9/220589.4 E - 582289.9/220589.4
29	40m x 1.8m x 0.38m deep, orientation E/W	W - 582129.6/220542.9 E - 582169.6/220542.9
30	40m x 1.8m x 0.48m deep, orientation N/S	N - 582176.9/220562.9 S - 582176.9/220522.9
31	40m x 1.8m x 0.5m deep, orientation E/W	W - 582203.4/220542.9 E - 582243.4/220542.9
32	40m x 1.8m x 0.6m deep, orientation N/S	N - 582269.9/220562.9 S - 582269.9/220522.9
33	40m x 1.8m x 0.55m deep, orientation NE/SW	NE - 582335.1/220531.9 SW - 582360.7/2205662.6
34	40m x 1.8m x 0.45m deep, orientation N/S	N - 582130.4/220516.4 S - 582130.4/220476.4
35	40m x 1.8m x 0.4m deep, orientation E/W	W - 582156.9/220496.4 E - 582196.9/220476.4
36	40m x 1.8m x 0.55m deep, orientation N/S	N - 582223.4/220516.4 S - 582223.4/220476.4
37	40m x 1.8m x 0.45m deep, orientation E/W	W - 582249.9/220496.4 E - 582289.9/220496.4
38	40m x 1.8m x 0.61m deep, orientation N/S	N - 582316.4/220529.2 S - 582316.4/220489.2
39	40m x 1.8m x 0.4m deep, orientation N/S	N - 582176.9/220469.9 S - 582176.9/220429.9

40	40m x 1.8m x 0.48m deep, orientation E/W	W – 582203.4/220449.9 E – 582243.4/220449.9
41	40m x 1.8m x 0.56m deep, orientation N/S	N – 582269.9/220449.9 S – 582269.9/220435.2
42	40m x 1.8m x 0.54m deep, orientation N/S	N – 582223.4/220423.4 S – 582223.4/220383.4
43	40m x 1.8m x 0.8m deep, orientation N/S	N – 582309.5/220685.9 S – 582309.5/220645.9
44	40m x 1.8m x 0.75m deep, orientation E/W	W – 582315.1/220636 E – 582355.1/220636.4
45	40m x 1.8m x 1.8m deep, orientation NW/SE	NW – 552358.5/220615.6 SE – 582388.1/220588.8
46	30m x 1.8m x 0.7m deep, orientation NW/SE	NW -582400.4/220546.4 SE – 582420.9/220525.5
47	32m x 1.8m x 0.6m deep, orientation E/W	W – 582367.8/220489.3 E - 582399.8/220489.3
48	40m x 1.8m x 0.5m deep, orientation N/S	N – 582355.8/220495.9 S – 582355.8/220455.9
49	40m x 1.8m x 0.5m deep, orientation E/W	W – 582331.3/220447.3 E – 582369.7/220435.9
50	40m x 1.8m x 0.75m deep, orientation NE/SW	NE – 582461.5/220479.1 SW - 582436.1/220448.2
51	40m x 1.8m x 0.65m deep, orientation NE/SW	NE – 582410.9/220420.9 SW –582388.1/220389.5

Contingency Trenches

Trench	Description	Co-ordinates
52	57m x 1.8m x 0.36m deep, orientation N/S	N – 581917.9/220660.0 S – 581917.3/220605.4
53	40.5m x 1.8m x 0.4m deep, orientation N/S	N – 581942.8/220647.8 S – 581942.0/220607.3

APPENDIX 2: CONTEXT DATA

All dimensions given in metres.

Context	Location	Type	Description	Period
1	TR 3	Layer	Dark greyish brown silty clay, 5.0m x 0.90m+ x 0.08m	Medieval
2	TR 3	Post-hole	0.7m x 0.7m x 0.05m deep	Medieval
3	TR 3	Fill of 2	Mid brown silty clay	Medieval
4	TR 3	Post-hole	0.4m x 0.40m x 0.08m deep	Medieval
5	TR 3	Fill of 4	Dark greyish brown silty clay	Medieval
6	TR 3	Finds	Unstratified finds from above layer 1	Medieval
7	TR 3, 52, 53	Ditch	45m+ x 2.40m x 0.83m deep, aligned NE/SW	Post-med.
8	TR 3	Fill of 7	Mid Brown Chalky clay	Post-med.
9	TR 52	Ditch	2m+ x 1m x 0.4m deep, aligned NE/SW	Medieval
10	TR 52	Fill of 9	Greyish dark brown silty clay	Medieval
11	TR 3, 53	Ditch	22m+ x 1.1m x 0.3m deep, aligned NW/SE	Medieval
12	TR 3	Fill of 11	Mid brown chalky clay	Medieval
13	TR 2	Ditch	1.8m+ x 1.8m x 0.67m deep, aligned NW/SE	Undated
14	TR 2	Fill of 13	Orangey brown silty clay	Undated
15	TR 3	Post-hole	0.4m x 0.38m x 0.11m deep	Undated
16	TR 3	Fill of 15	Mid brown silty clay	Undated
17	TR 4	Fill of 18	Greyish brown silty clay	Medieval
18	TR 4	Ditch	3.3m+ x 1.2m x 0.32m deep, aligned NE/SW	Medieval
19	TR 9	Fill of 20	Mid/light brownish silty clay	Undated
20	TR 9	Ditch	2m+ x 0.66m x 0.14m deep, aligned NE/SW	Undated
21	TR 9	Fill of 22	Light/mid brownish grey	Undated
22	TR 9	Ditch	0.7m+ x 0.55m x 0.05m deep, NW/SE, poss. terminal	Undated
23	TR 9	Fill of 24	Brown and light grey clay and sandy silt clay	Natural
24	TR 9	Nat. Feature	2m+ x 1.7m x 0.7m	Natural
25	TR 52	Gully	0.9m+ x 0.4m x 0.25m deep, aligned NE/SW	Medieval
26	TR 52	Fill of 25	Greyish dark brown silty clay	Medieval
27	TR 52	Layer	Mid brown silty clay	Natural
28	TR 4	Ditch	2.5m+ x 0.9m x 0.28m, aligned NE/SW	Medieval
29	TR 4	Fill of 28	Greyish brown silty clay	Medieval
30	TR 27	Pit	2.8m x 1.8m+ x 0.5m deep	Middle Iron Age
31	TR 27	Fill of 30	Mid brown silt (top), 0.38m thick	Middle Iron Age
32	TR 27	Fill of 30	Burnt debris and black silt (Bottom), 0.14m thick	Middle Iron Age
33	TR 18	Fill of 44	Greyish brown silty clay	Medieval
34	TR 12	Stone	Fragmented, natural origin	Natural
35	TR 52	Gully	1.4m+ x 0.38m x 0.15m	?Medieval
36	TR 52	Fill of 35	Greyish mid brown silty clay	?Medieval
37	TR 52	Gully	0.7m+ x 0.33m x 0.08m	?Medieval
38	TR 52	Fill of 37	Greyish mid brown silty clay	?Medieval
39	TR 53	Layer	Greyish mid brown silty clay, 0.06m thick	Medieval
40	TR 53	Pit	1.8m+ x 3m x 0.38m	Medieval
41	TR 53	Fill of 40	Greyish mid brown silty clay	Medieval
42	TR 53	Gully	1.80m+ x 0.48m x 0.15m, aligned NE/SW	Undated
43	TR 53	Fill of 42	Greyish mid brown	Undated
44	TR 18	Pit	3.7m x 3.3m x 1.05m deep	Medieval

Context	Location	Type	Description	Period
45	TR 18	Fill of 44	Orangey brown with black flecks clay	Medieval
46	TR 45	Fill of 49	Light greyish brown silty clay (Top fill), 0.9m thick	Post-med
47	TR 45	Fill of 49	Brown- yellow mottles silty clay, 0.15m thick	Post-med
48	TR 45	Fill of 49	Mid greyish brown silty clay (bottom fill), 0.15m thick	Post-med
49	TR 45	Quarry?	1.8m+ x 22m x 1.25m+ deep	Post-med
50	TR 4	Finds	Unstratified finds from Trench 4	Medieval
51	TR 34	Fill of 52	Mid greyish brown clay silt	Undated
52	TR 34	Ditch	3m+ x 1.7m x 0.21m deep, aligned NE/SW	Undated
53	TR 43	Ditch	1.80m+ x 1.32m x 0.29m deep, aligned NE/SW	Undated
54	TR 43	Fill of 53	Greyish brown silty clay	Undated
55	TR 28	Ditch	1m+ x 1m x 0.35m deep, aligned NW/SE	Undated
56	TR 28	Fill of 55	Greyish mid brown silty clay	Undated
57	TR 34	Fill of 58	Light/mid greyish brown clay silt	Undated
58	TR 34	Ditch	3.5m+ x 1.15m x 0.53m deep, aligned NE/SW	Undated
59	TR 34	Fill of 60	Mixed greyish brown light – mid some yellow clay silt	Undated
60	TR 34	Ditch	2m+ x 1.2m x 0.37m deep, aligned NW/SE	Undated
61	TR 24	Fill of 62	Mid greyish brown/chocolate brown	Late med.
62	TR 24	Ditch	2m+ x 3m x 0.7m deep	Late med.
63	TR 35	Fill of 80	Dark grey clay silt	Medieval
64	TR 37	Ditch/Natural	1.8m+ x 1.9m x 0.7m deep	Natural
65	TR 37	Fill of 64	Greyish brown silty clay	Natural
66	TR 36	Ditch	1.8m+ x 1.1m x 0.42m deep, aligned E/W	Undated
67	TR 36	Fill of 67	Greyish mid brown silty clay	Undated
68	TR 38	Ditch	1.8m+ x 1.27m x 0.42m deep, aligned NE/SW	Undated
69	TR 38	Fill of 68	Greyish brown silty clay	Undated
70	TR 38	Ditch	1.8m+ x 1.55m x 0.7m deep, aligned NE/SW	Undated
71	TR 38	Fill of 70	Orangey brown silty clay	Undated
72	TR 36	Ditch	1.8m+ x 2.10m x 0.60m deep, aligned E/W	Undated
73	TR 36	Fill of 72	Greyish mid brown	Undated
74	TR 36	Fill of 72	Greenish pale grey silty clay	Undated
75	TR 25	Fill of 76	Dark grey clay silt	Medieval
76	TR 25	Pit	1.14m+ x 1.18m x 0.64m deep	Medieval
77	TR 25	Fill of 78	Dark grey silty clay	Medieval
78	TR 25	Ditch	1.8m+ x 5m+ wide x 0.48m+ deep, aligned E/W	Medieval
79	TR 25	Layer	Dark brownish grey clay silt, 0.8m thick	?post-med
80	TR 35	Post-hole	Oval, 0.45m x 0.28m x 0.12m deep	Medieval
81	TR 34	Natural?	Brown to brown/grey clay, 0.16m thick	Natural
82	TR 34	Fill of 83	Mid greyish brown clay silt	Undated
83	TR 34	Gully	2m+ x 0.59m x 0.15m deep	Undated
84	TR27	Fill of 30	Disturbed greyish brown clay silt (above indent)	Middle Iron Age

APPENDIX 3: FINDS DATA

All weights in grams

Context	Feature	Count	Weight	Description	Date
1	Layer	4	122	Shell; oyster, four large valves	-
		8	64	Baked clay fragments, chalky fabric	-
		13	192	Pottery; rim and body sherds	Medieval
3	2	2	52	Shell; oyster, large valve and fragment	-
		1	4	Baked clay, chalky fabric	-
		5	38	Pottery; rim and body sherds	Medieval
5	4	1	4	Animal bone; fragment, poor condition	-
		5	14	Baked clay fragments, chalky fabric	-
		8	32	Pottery; rim and body sherds	Medieval
6	Finds Tr.3	9	14	Animal bone; fragments, poor condition	-
		12	112	Shell; oyster, three valves and fragments	-
		8	140	Burnt flints	-
		8	72	Baked clay fragments, chalky fabric	-
		43	426	Pottery; rim, base and body sherds	Medieval
8	7	1	4	Animal bone fragment, weathered/stained	-
		2	4	Shell; oyster fragments (Discarded)	-
		5	26	Flint flakes	-
		3	72	Burnt flints	-
		3	60	Joining roof tile fragments	Post med.
		9	58	Pottery; body sherds	Med/post med.
10	9	1	4	Burnt flint	-
		2	16	Pottery; body sherds	Medieval
12	11	12	226	Animal bone; sheep/goat molars x 4 and mandible fragments; cattle metacarpus; cattle humerus, proximal end; fragments	-
		3	18	Shell; oyster one valve, garden snail x 2	-
		1	10	Pottery; body sherd	Medieval
		1	12	Pottery; body sherd with cordons, grog-tempered	LIA
14	13	4	4	Flint flakes	-
		3	1	Pottery; crumbs, one is not pot, another may not be either	Prehistoric
17	18	1	12	Shell; oyster fragment	-
		3	34	Pottery; base and body sherds	Medieval
		2	14	Pottery; jar and beaker rim sherds, black-surfaced ware	Roman
26	25	2	8	Pottery; body sherds	Medieval
29	28	3	14	Pottery; body sherds	Medieval
31	30	4	52	Flint flakes	-
		1	1	Pottery; body sherd	Prehistoric
32	30	131	13	Animal bone; cattle tooth enamel fragments, inc 40/1g from sample 1; 76/2g burnt bone fragments from sample 1	-
		6	22	Flint flakes and blade, inc 3/2g from sample 1	-
		379	3835	Burnt flints, inc 322/2045g from sample 1	-
		2	230	Stone samples	-
		25	174	Baked clay, two joining fragments, one flat surface, plus 23/18g small pieces from sample 1	-
		199	1110	Pottery; rim and body sherds, inc 43/100g rim, body sherds and crumbs from sample 1	Prehistoric

Context	Feature	Count	Weight	Description	Date
33	44	- 5 8 1	18 34 34 2	Charcoal Flint flakes Pottery; rim and body sherds Pottery; body sherd, sandy grey ware	- - Medieval Roman
38	37	1 3	8 4	Burnt flint Pottery; body sherds	- Medieval
39	Layer	31 11	112 108	Animal bone; skull and mandible fragments; cattle molars (all same animal?) Pottery; rim and body sherds, all same vessel?	- Medieval
41	40	1 14	10 40	Shell; oyster, one valve Pottery; body sherds	- Medieval
45	44	9 50 6 3 1	14 184 60 14 1	Animal bone; fragments, decayed Lava quern fragments Pottery; rim and body sherds Pottery; body sherd, abraded, grog-tempered; tiny body sherds, sandy grey ware Pottery; body sherd	- ?Medieval Medieval LIA/Roman Prehistoric
46	49	3	10	Brick and tile fragments, one with mortar attached	Post med.
50	u/s Tr.4	1 1 2	2 4 4	Natural flint Burnt flint Pottery; body sherds	- - Medieval
54	53	1	4	Shell; oyster, one valve	-
61	62	4 1	84 10	Roof tile fragments Pottery; body sherd	Med/post med. Medieval
63	80	1 1 1 2	12 20 6 16	Iron staple Animal bone; fragment Shell; oyster fragment Pottery; body sherds	- - - Medieval
71	70	1	<1	Flint chipping (Discarded)	-
75	76	3 1 5	34 10 96	Shell; oyster, three valves Baked clay, chalky fabric Pottery; rim, base and body sherds	- - Medieval
77	78	5 2 6	34 188 18	Shell; oyster, two valves and fragments Roof tile fragments, one with peg hole Pottery; body sherds	- Med/post med. Medieval

APPENDIX 4: MEDIEVAL AND LATER POTTERY DATA

All weights in grams

Context	Feature	Count	Weight	Description	Date
1	Layer	1	17	Shell-and-sand-tempered ware, abraded	10th to 13th C
		12	175	Early medieval ware thickened everted cooking pot rim, and body sherds, abraded	11th to 12th C
3	2	4	33	Early medieval ware including joining sherds from B4 cooking pot rim, abraded	c.1200
		1	5	Medieval coarse ware fragment of ?flat-topped cooking pot rim, abraded	?13th C
5	4	6	22	Early medieval ware, body sherds and tiny fragment of simple everted rim	11th to 12th C
		2	10	Shell-and-sand-tempered ware, abraded	10th to 13th C
6	Finds Tr.3	2	16	Shell-and-sand-tempered ware thickened everted rim, perhaps from a bowl and body sherd	11th to 12th C
		39	385	Early medieval ware B2 rim, perhaps from a bowl and body sherds, some abraded, some unabraded	c.1200
		2	25	Medieval coarse ware flanged rim perhaps from a bowl, and body sherd	13th to 14th C
8	7	1	2	Shell-and-sand-tempered ware	10th to 13th C
		7	34	Early medieval ware, misc. abraded sherds	10th to 13th C
		1	22	Flowerpot fragment	19th to 20th C
10	9	1	6	Shell-and-sand-tempered ware, abraded	10th to 13th C
		1	10	Early medieval ware, abraded	10th to 13th C
12	11	1	10	Early medieval ware, abraded	10th to 13th C
17	18	1	12	Shell-and-sand-tempered ware	10th to 13th C
		1	4	Early medieval ware	10th to 13th C
		1	18	Medieval coarse ware sagging base sherd	12th to 14th C
26	25	2	8	Shell-and-sand-tempered ware	10th to 13th C
29	28	2	9	Early medieval ware	10th to 13th C
		1	5	Medieval coarse ware	12th to 14th C
33	44	4	11	Shell-tempered ware, two sherds join	10th to 13th C
		4	23	Shell-and-sand-tempered ware inflected flanged rim, flat-topped grooved rim, fire-blackened inside neck and below neck, would be worth drawing if more complete, plus body sherds	10th to 13th C
38	37	3	4	Shell-and-sand-tempered ware, sherd family	10th to 13th C
39	Layer	11	108	Early medieval ware sherd family from beaded cooking pot rim, unabraded	12th to early 13th C
41	40	4	10	Shell-and-sand-tempered ware	10th to 13th C
		2	7	Early medieval ware	10th to 13th C
		8	23	Medieval coarse ware sherd family, abraded sherds	12th to 14th C
45	44	6	60	Shell-tempered ware including large fragment of everted cooking pot rim with incipient bead,	11th to 12th C
50	u/s Tr.4	1	1	Early medieval ware tiny fragment	10th to 13th C
		1	3	Medieval coarse ware	12th to 14th C
61	62	1	10	Sandy orange ware thick-walled body sherd externally abraded	13th to 16th C
63	80	2	16	Early medieval ware, abraded	10th to 13th C
75	76	3	43	Early medieval ware including sagging base sherd	10th to 13th C
		1	21	Medieval coarse ware cooking pot rim with broken edge, probably type H1	?13th C
		1	32	Hedingham ware, sherd from lower part of jug showing splashes of glaze	?13th C
77	78	2	6	Early medieval ware	10th to 13th C
		1	3	Medieval coarse ware	12th to 14th C
		2	3	Sandy orange ware, one plain sherd, one with external mottled green glaze	13th to 14th C
		1	6	Buff ware	13th to 15th C
		147	1218		

APPENDIX 5: WORKED AND BURNT FLINT DATA

All weights in grams

Context	Feature	Count	Weight	Description	Date
6	Finds	8	140	Burnt natural pieces	
8	Ditch 7	5	26	Core fragment, small Two flakes, secondary Two fragments, secondary	Later prehist?
8	Ditch 7	3	72	Burnt natural pieces	
10	Ditch 9	1	4	Burnt natural	
14	Ditch 13	4	4	Flake on thermal piece, secondary Converging flake, rough, secondary Two chippings	
31	Pit 30	4	52	Core, single platform, core preparation along one distal edge Flake off blade core, one edge has remains of 'cresting', tertiary Flake waste, secondary Flake, secondary	
32	Pit 30	8	142	Two burnt cores Flake, primary Flake, secondary Blade, irregular, tertiary Three chippings, one secondary, two tertiary	
32	Pit 30	377	3715	Burnt natural pieces	
33	Pit 44	5	34	Natural piece Flake, rough Flake, squat, secondary Flake, secondary Chipping	Later prehist?
38	Gully 37	1	8	Burnt natural	
50	u/s	1	2	Naturally fractured piece	
50	u/s	1	4	Burnt natural	
71	Ditch 70	1	<1	Flint chipping (Discarded)	
		417	4203		

APPENDIX 6: CONTENTS OF ARCHIVE

SITE NAME: Recycling and Composting Facility at Rivenhall Airfield, Essex

SITE CODE: RHWM06

Index to Archive:

1. Introduction

- 1.1 ECC HEM Brief
- 1.2 ECC FAU WSI

2. Research Archive

- 2.1 Client Report
- 2.2 Finds Reports

3. Site Archive

- 3.1 Context Record Register
- 3.2 Context Records (1 to 84)
- 3.3 1 Environmental sample sheet
- 3.4 Plan Register
- 3.5 Section Register
- 3.6 27x A4 plan/section sheets
- 3.7 1 Trench location plan
- 3.8 Photographic Registers
- 3.9 Site Photographic Record (1 set of Colour and Black & White prints, 1 Set of digital images on disk)
- 3.10 Miscellaneous notes/plans

Not in File

3 large section drawings, 1 plan

Finds

The finds occupy one box.

APPENDIX 7: EHER SUMMARY SHEET

EHER SUMMARY SHEET

Site name/Address: Recycling and Composting Facility, Rivenhall Airfield, Essex	
Parishes: Rivenhall	District: Braintree
NGR: TL 822 207	Site Code: RHWM06
Type of Work: Archaeological Evaluation by Trial Trenching	Site Director/Group: T. Ennis, ECC Field Archaeology Unit
Date of Work: 18th September to 17th October 2006	Size of Area Investigated: c. 10.3ha
Location of Finds/Curating Museum: Braintree	Funding source: Golder Associates (UK)
Further Seasons Anticipated?:	Related HER Nos.:
Final Report: EAH round-up	
Periods Represented: prehistoric, medieval, post-medieval, modern	
SUMMARY OF FIELDWORK RESULTS:	
<p>An archaeological evaluation was carried out on the site of a proposed Recycling and Composting Facility at Rivenhall Airfield, during September and October 2006. Fifty-three evaluation trenches were opened by machine. Features dating to the prehistoric, medieval, post-medieval and modern periods were excavated and recorded.</p>	
Prehistoric	
<p>One large pit, dated to the Middle Iron Age and containing a high quantity of deliberately buried charcoal and burnt flint, was excavated. No other prehistoric features were identified.</p>	
Medieval	
<p>Possible medieval enclosure ditches dating to the late 12th or early 13th century, were identified in the north-west of the site. Deposits and post-holes within the enclosures may indicate evidence of agricultural or settlement activity. A large heart-shaped pit of similar date was located to the south and an area of later medieval activity found close to the former route of Woodhouse Lane in the north-east of the site.</p>	
Post-medieval	
<p>A possible quarry pit and a ditch were excavated that had been backfilled in the post-medieval period probably prior to the mid 19th century. Further post-medieval features, depicted on early editions of the Ordnance Survey maps, including field boundary ditches, a pond and a possible hollow marking the former route of Woodhouse Lane were all backfilled with modern brick and rubble prior to the construction of the airfield.</p>	
Modern	
<p>Drainage and service trenches constructed for the WWII airfield were recorded. The back wall of the demolished Control Tower was identified. Disturbance and truncation associated with the airfield was more apparent beneath and to the east of the secondary runway. In comparison, the western part of the evaluation area seemed little disturbed hence greater incidence/survival of archaeological remains here.</p>	
Previous Summaries/Reports:	
Author of Summary: T. Ennis	Date of Summary: November 2006

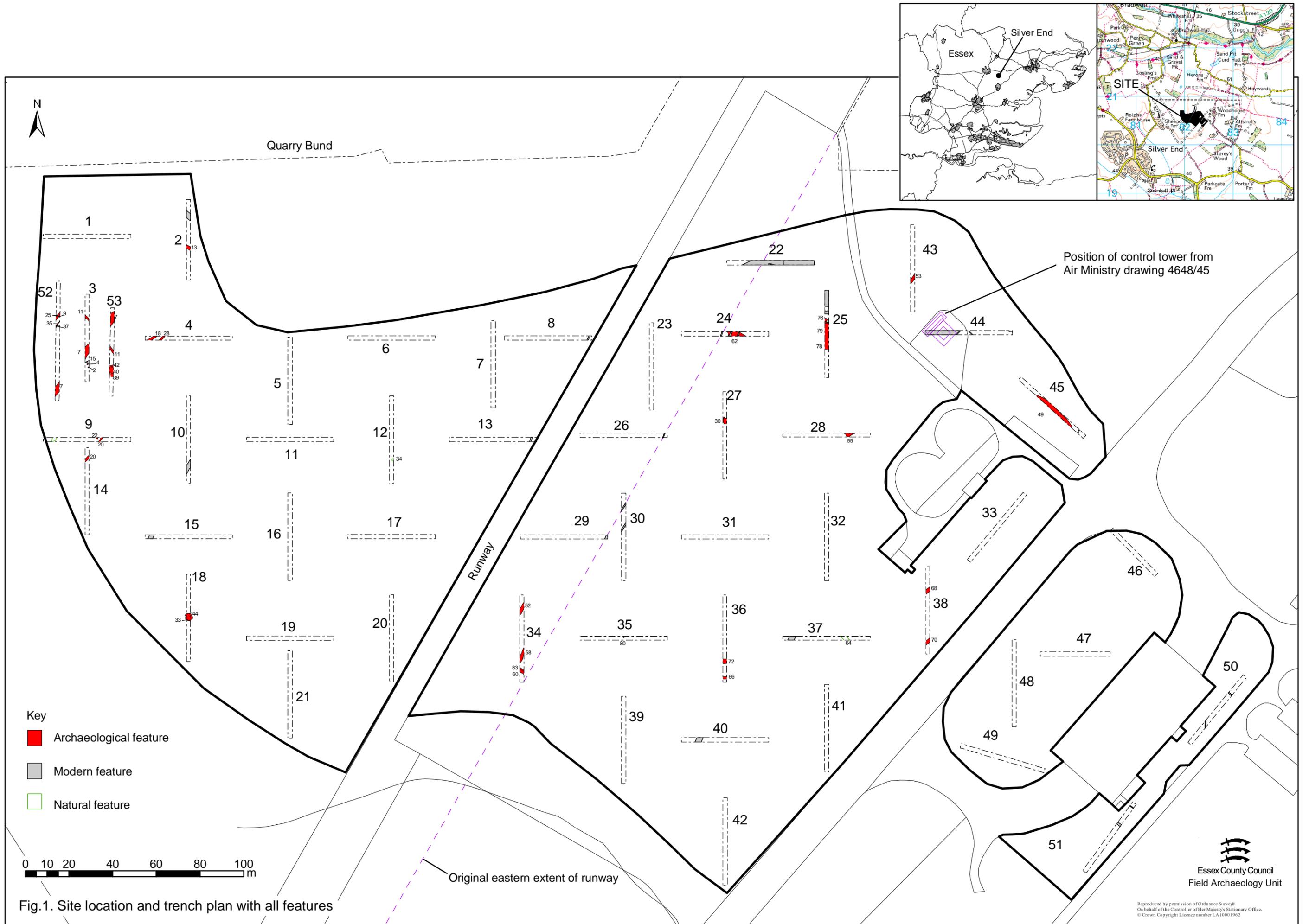


Fig.1. Site location and trench plan with all features

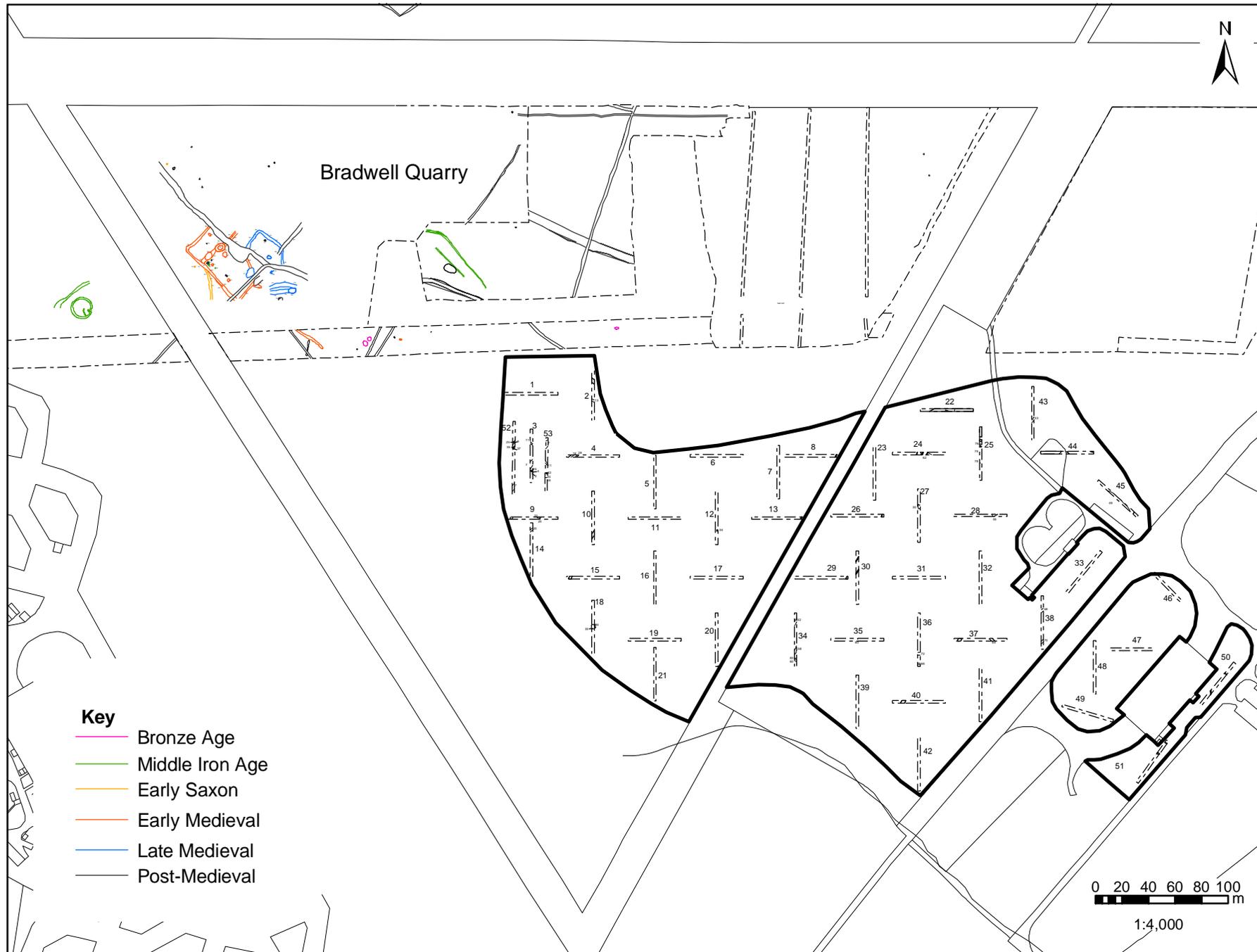


Fig.2. Areas of previous excavation within Bradwell Quarry

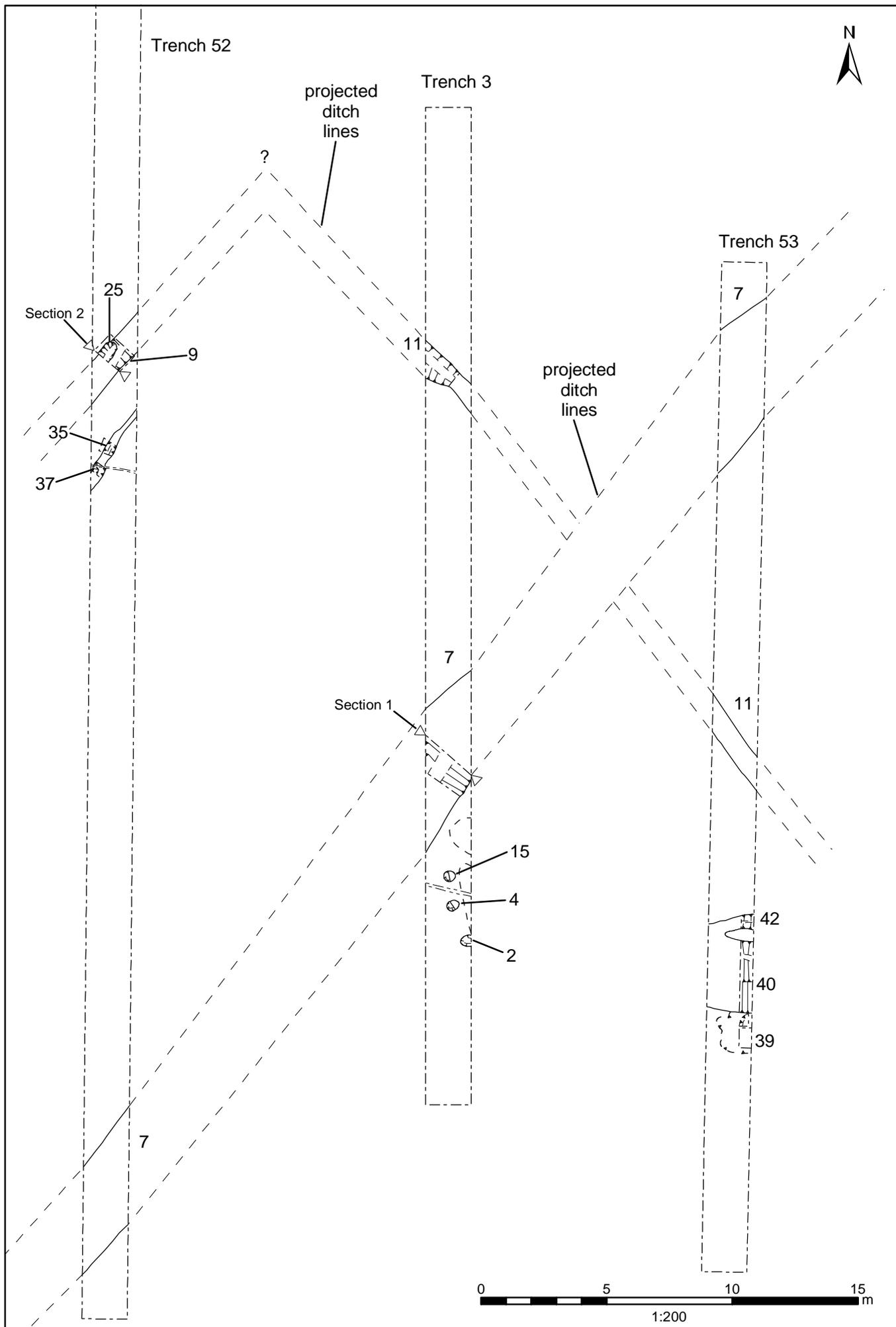


Fig.3. Trenches 3, 52 and 53

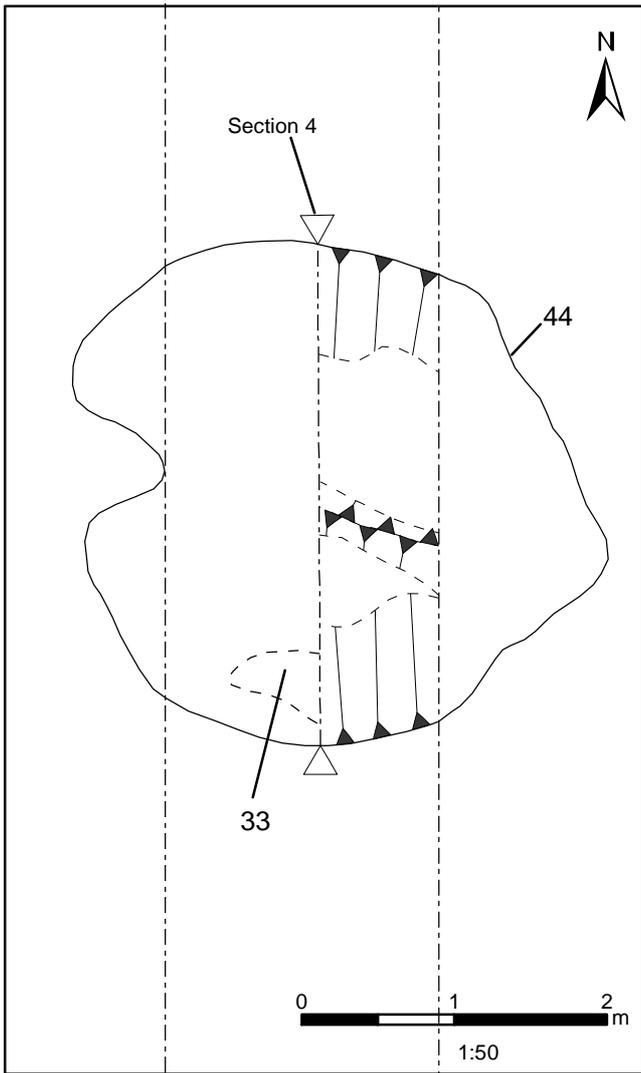


Fig.4. Trench 18

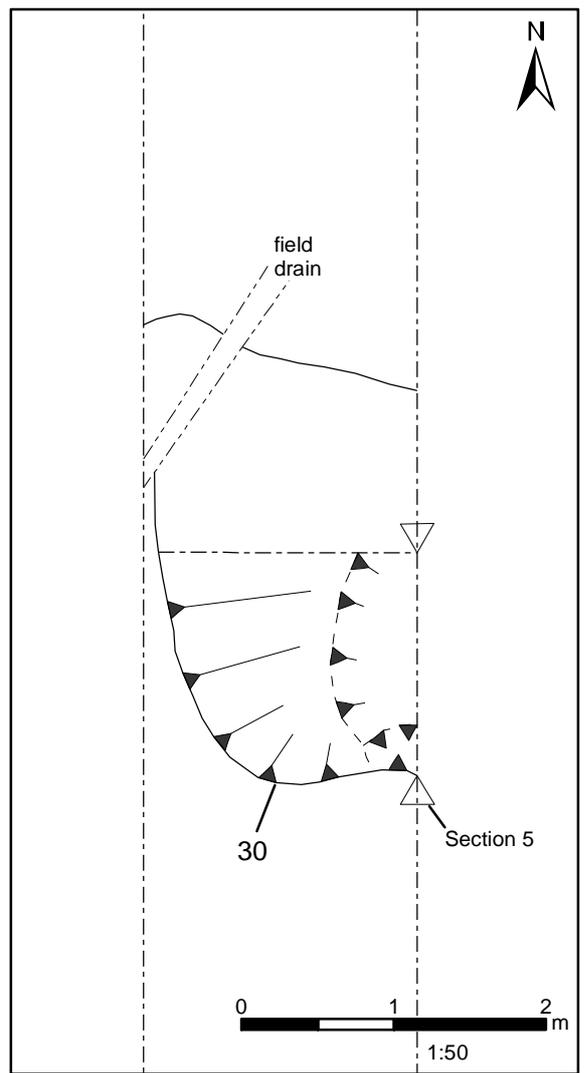


Fig.5. Trench 27

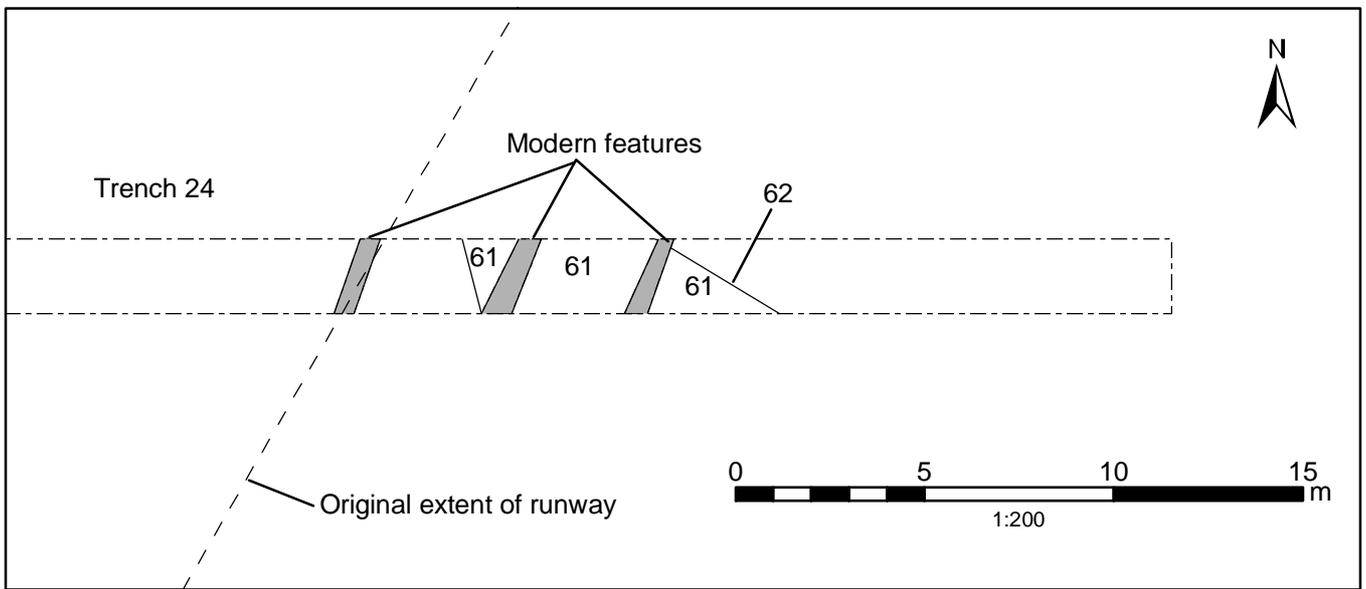


Fig.6. Trench 24

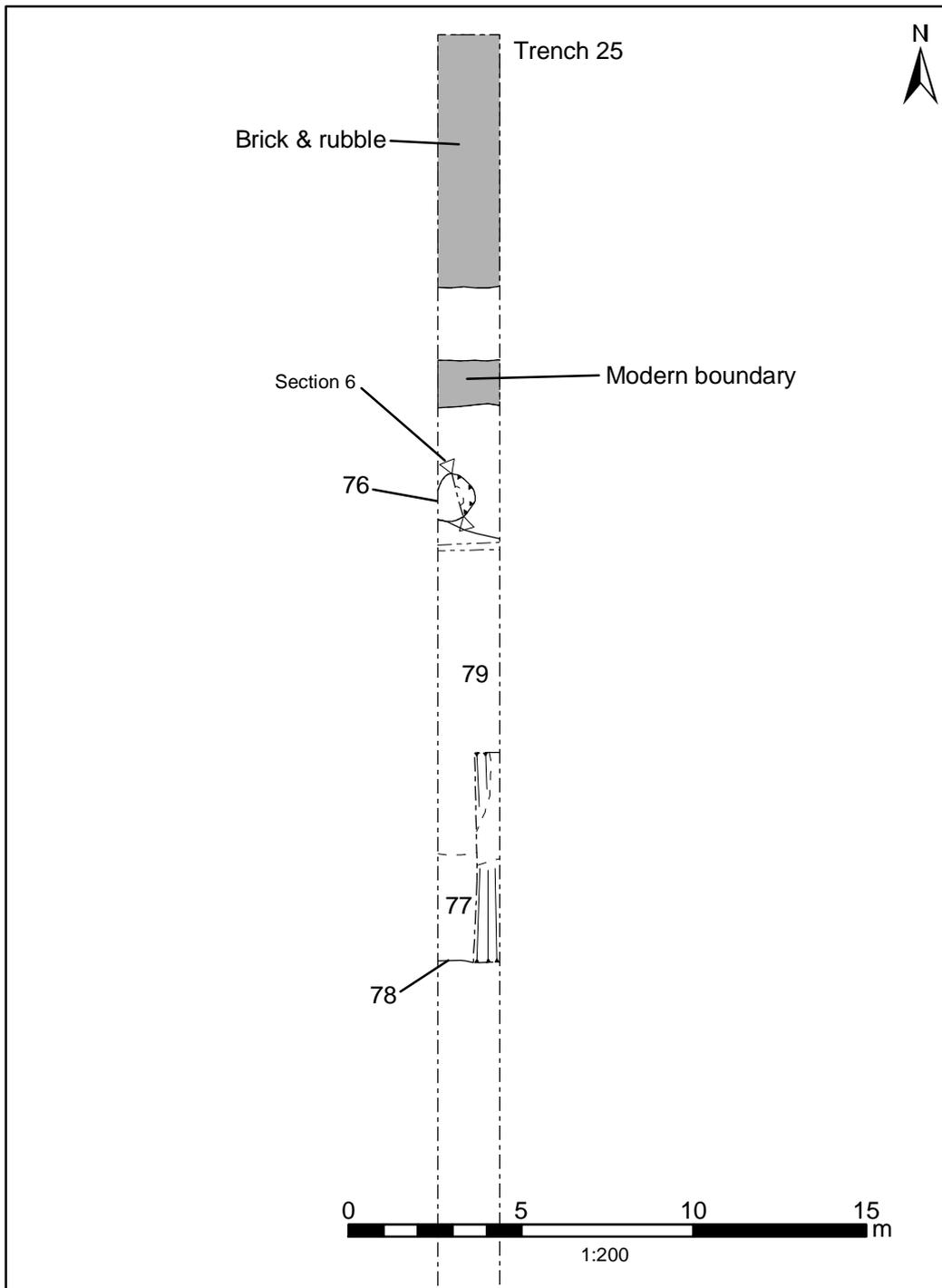


Fig.7. Trench 25

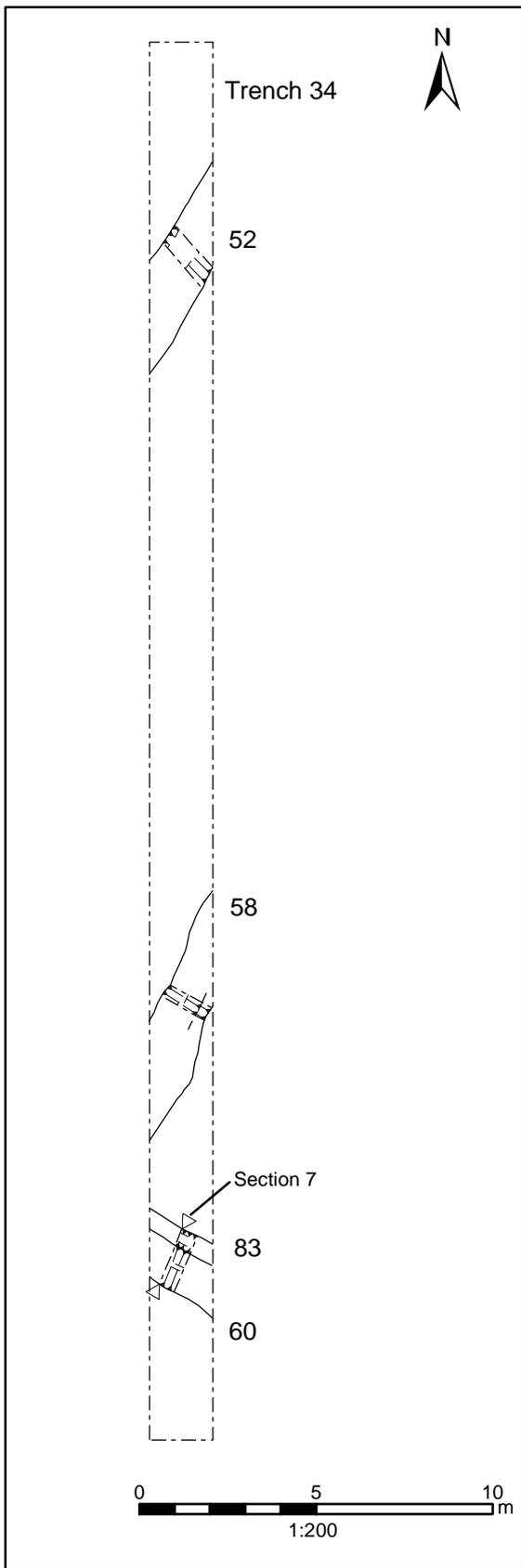


Fig.8. Trench 34

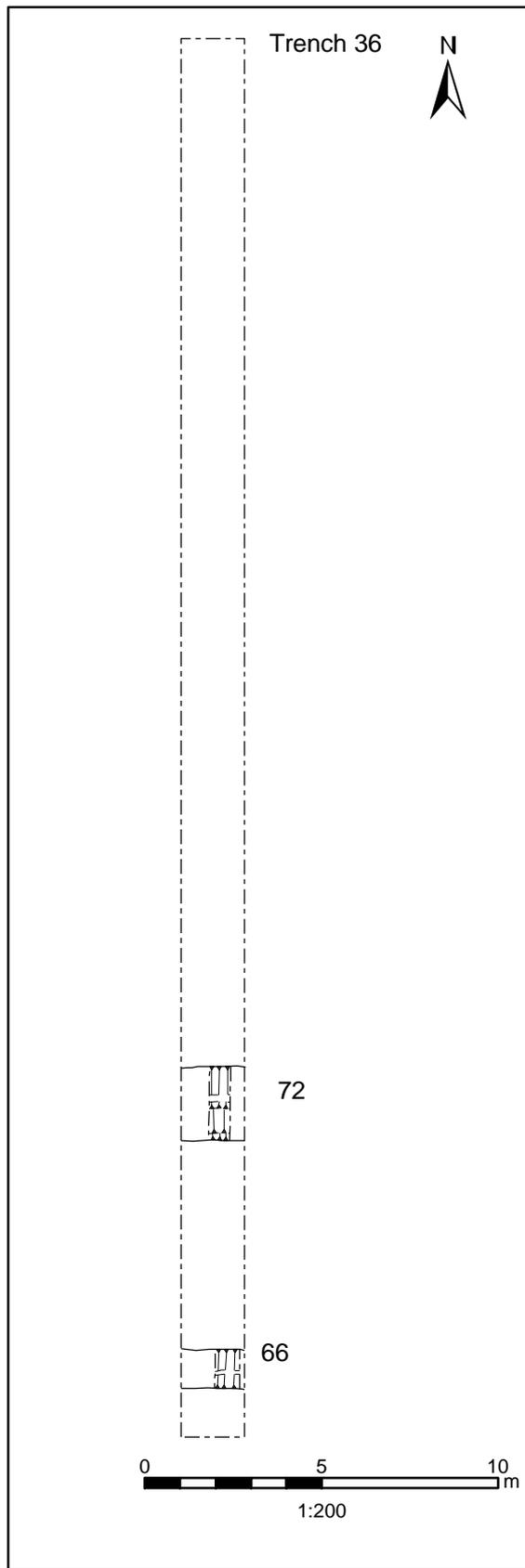


Fig.9. Trench 36

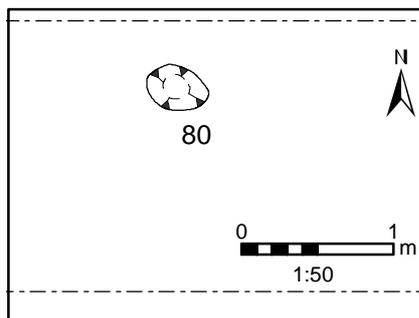


Fig.10. Trench 35

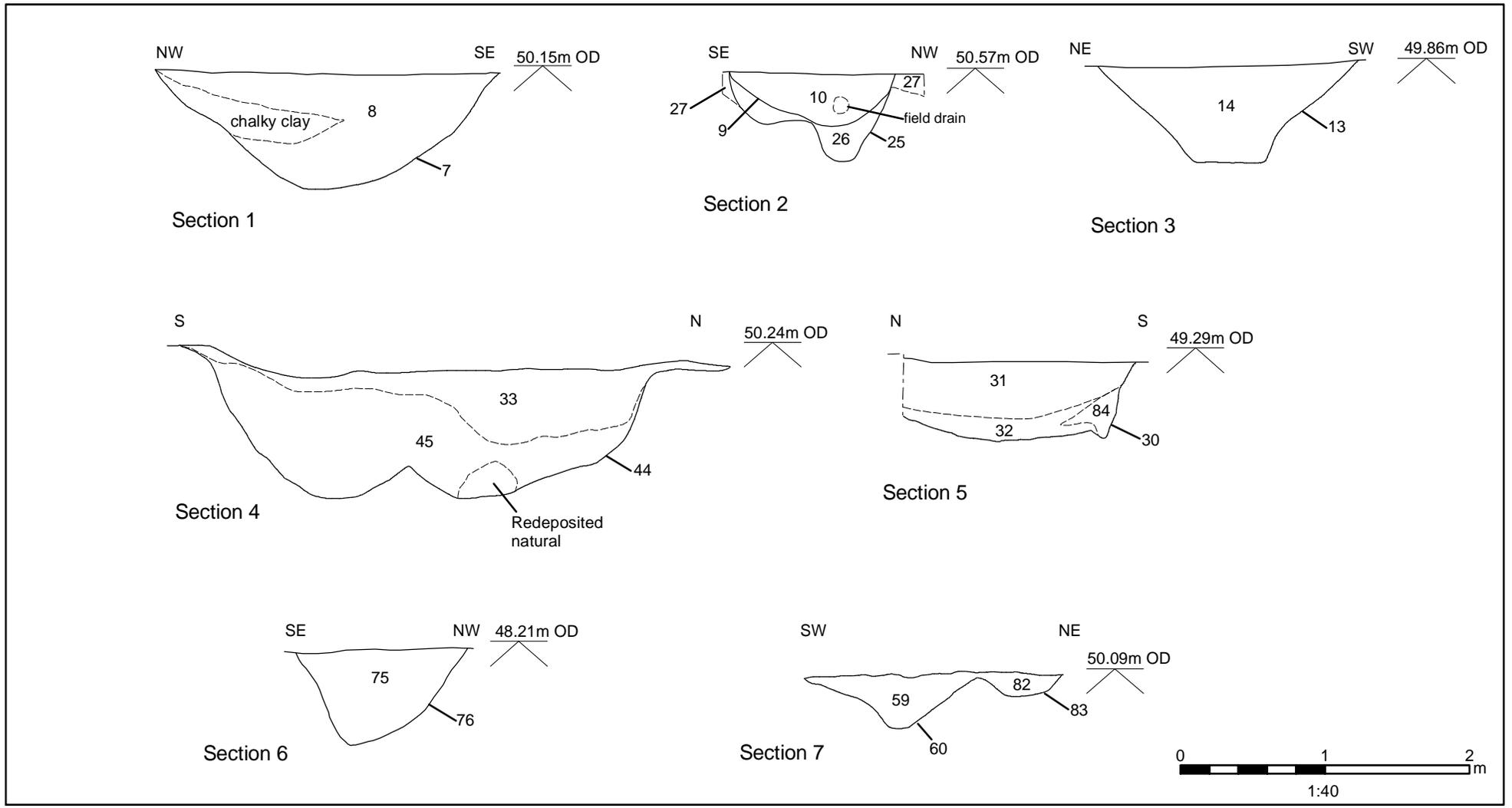


Fig.11. Sections

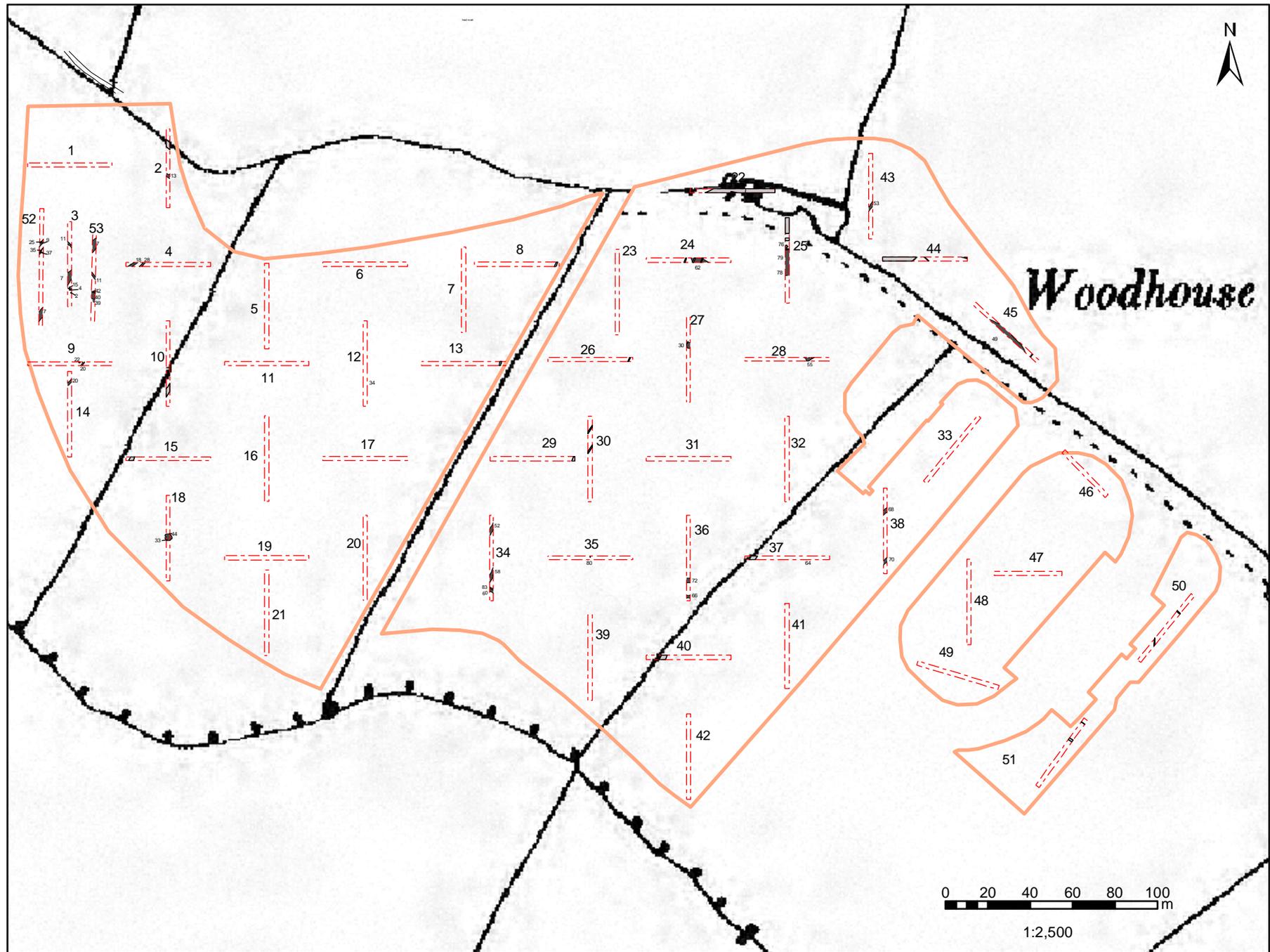


Fig.12. The site overlaid on the 3rd ed. OS map (1915-1924)



PLATE 1. Pit 30, Trench 27



PLATE 2. Pit 44, Trench 18