Channel Tunnel Rail Link Union Railways (South) Ltd

East of Boxley Road, Boxley, Kent

ARC EBR 99

Archaeological Evaluation Report

Environmental Statement Route Window No.21

Contract No. S/400/SP/0009 P482

Oxford Archaeological Unit

April 1999

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UNION RAILWAYS (SOUTH) LTD

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ARCHAEOLOGICAL EVALUATION

Environmental Statement Route Window No.21

OS GRID TQ 7740 5820

Contract No. S/400/SP/0009 P482

FINAL REPORT

Volume 1 of 1

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April 1999

EAST OF BOXLEY ROAD, BOXLEY, KENT

ARCHAEOLOGICAL EVALUATION

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EAST OF BOXLEY ROAD, BOXLEY, KENT

ARCHAEOLOGICAL EVALUATION

SUMMARY

The Oxford Archaeological Unit was commissioned by Union Railways (South) Ltd to conduct a field evaluation of land situated to the east of Boxley Road, Boxley, Kent (NGR TQ 7740 5820). The work was conducted between 16th and 26th March 1999.

Twenty evaluation trenches were excavated in an area of c. 13 hectares. The only archaeological features discovered comprised a small number of shallow ditches mostly concentrated toward the west end of the site and a linear-irregular feature of uncertain function. The only finds recovered consisted of small fragments of post-medieval tile, burnt flint and four sherds of redeposited later prehistoric pottery. A large majority, if not all, of the ditches appeared to be post-medieval in date, and their sterile fills suggested that they were most probably associated with drainage and field boundaries.

SECTION 1: FACTUAL STATEMENT

1 BACKGROUND

1.1 Introduction

- 1.1.1 The Oxford Archaeological Unit (OAU) carried out a field evaluation (Fig.1) on land situated east of Boxley Road, Boxley, Kent (URS Grid 57500 38250, NGR TQ 7740 5820). The work was conducted on behalf of Union Railways (South) Ltd (URS) between 16th and 26th March 1999 as part of a programme of archaeological investigation along the line of the Channel Tunnel Rail Link. The purpose of the investigation was to assess the impact of the rail link on the cultural heritage of the site. The site lies within Environmental Statement Route Window No. 21, and an environmental assessment has been prepared (URL 1994).
- 1.1.2 The site, which is *c* 13 ha in extent, is situated directly to the east of an area of evaluation carried out by the Oxford Archaeological Unit in July 1997 (URL 1997. Further evaluation has recently been carried out by the OAU on the eastern side of the site, to the west of Sittingbourne Road (URS forthcoming).
- 1.1.3 The evaluation was conducted in accordance with a Written Scheme of Investigation prepared by URS and agreed with the County Archaeologist and English Heritage.

1.2 Geology, topography and land-use

- 1.2.1 Boxley is one of a line of settlements located at the foot of the North Downs escarpment. The evaluation area lay on land to the south of Boxley village, immediately east of the Boxley Road (Fig. 1).
- 1.2.2 The western end of the site is low-lying, slightly marshy ground, which lies 40 m above Ordnance Datum (OD). From here the ground rises up northward and eastward to 52 m above OD at the eastern end of the site.
- 1.2.3 The solid geology consists of gault clay with gravel over most of the site, except for the lower-lying area at the western end of the site, where it consists of chalky marl.
- 1.2.4 Prior to the evaluation, the site was in use as pasture. Regular earthworks in the two most easterly fields appear to represent the remnants of either medieval or post-medieval ridge and furrow. A stream runs along the northern edge of the area of investigation.

1.3 Archaeological and historical background

- 1.3.1 No archaeological sites or find spots have previously been recorded within the site boundaries.
- 1.3.2 A field walking survey to the west of the Boxley Road recorded diffuse scatters of prehistoric worked flints, and well defined Iron Age (LIA) and Roman pottery

scatters were identified to the north west of the current area of investigation (URL 1995). However, the evaluation of this area in 1997 (URL 1997) identified only two features of Iron Age/Roman date and the generally poor level of preservation suggested that any other remains associated with this activity may have completely destroyed by later ploughing.

2 AIMS

- 2.1 The aims of the evaluation, as set out in the Written Scheme of Investigation, are as follows:
- 2.1.1 To determine the presence /absence, extent, condition, character, quality and date of any archaeological remains within the area of the evaluation.
- 2.1.2 To determine the presence and potential of environmental and economic indicators preserved in any archaeological features or deposits.
- 2.1.3 To establish the local, regional, national and international importance of such remains and the potential for further archaeological fieldwork to fulfil local, regional and national research objectives.

3 METHOD

3.1 General

3.1.1 A detailed Written Scheme of Investigation (WSI) for the evaluation was prepared by URS and agreed with the County Archaeologist and English Heritage. The following summarises the archaeological aspects of the methodology and notes any deviations from the originally agreed specification.

3.2 Survey

- 3.2.1 The trenches locations were surveyed by the OAU using the setting out functions of an total station theodolite, using URS survey control points. The trenches have been plotted from digital information using the AutoCAD graphics programme (Fig. 2).
- 3.2.2 All co-ordinates used in this report relate to the URS local project grid unless otherwise stated. A full list of Ordnance Survey National Grid trench co-ordinates, together with the conversion formula used to calculate them, is included in the site archive. Individual trenches were planned manually in the field at a scale of 1:50. Sections were drawn at a scale of 1:20 or 1:50 as appropriate.
- 3.2.3 The evaluation area falls within URL Environmental Statement Route Window No. 21.

3.3 Excavation

- 3.3.1 Twenty trenches were excavated to provide a c 1% sample of the evaluation area.
- 3.3.2 All trenches were 30 m long and 1.6 m wide. They were excavated using a JCB mechanical excavator with a toothless ditching bucket, under close archaeological supervision. Machine excavation was stopped at the top of the natural clay or chalk.
- 3.3.3 The trenches were hand-cleaned except where archaeological deposits were clearly absent. Sample sections were excavated through all archaeological features and possible features. Artefacts from archaeological features and buried soils were collected by context and submitted for specialist examination.

3.4 Recording

- 3.4.1 Recording followed the standard OAU single context recording system (Wilkinson ed. 1992). All site records were prefaced by the site code ARC EBR 99.
- 3.4.2 All trenches and archaeological features were photographed using colour slide and black and white print film.

4 RESULTS: GENERAL

4.1 Presentation of Results

4.1.1 Detailed trench descriptions are presented in Section 5. A summary of all contexts and finds is presented in the archaeological context inventory (Section 6). A report on the pottery and other finds is contained in Appendix 1.

4.2 General stratigraphy

- 4.2.1 The top of the undisturbed geology was located at an average depth of between 0.35 and 0.50 m below the present ground level.
- 4.2.2 With the exception of trench 3688TT, which revealed deposits associated with a former stream course, and the low-lying area at the western end of the site (see below), the soil sequence and depth of deposits was very similar throughout the area of investigation, comprising a buried ploughsoil overlain by the present topsoil. The buried ploughsoil varied between 0.15 to 0.25 m in depth. The topsoil was up to 0.30 m thick.
- 4.2.3 A ditch discovered in trench 3688TT cut through the buried ploughsoil, but another ditch found in trench 3661TT was sealed beneath this layer.
- 4.2.4 In the three trenches located at the far west end of the site (3655TT, 3686TT and 3687TT) an earlier buried soil horizon was present beneath the ploughsoil. Two

ditches and a linear-irregular feature discovered in trench 3687TT were sealed beneath the earlier soil horizon, but ditches found in trenches 3655TT and 3686TT were cut through this layer.

4.3 Summary of archaeology (Fig.6)

- 4.3.1 The only archaeological features discovered during the evaluation comprised a small number of shallow ditches mostly concentrated toward the western end of the site. The only finds recovered from these features consisted of two fragments of post-medieval tile and a redeposited sherd of late Bronze Age pottery from a ditch in trench 3687TT, and three pieces of burnt flint from a ditch in trench 3687TT.
- 4.3.2 Humic deposits associated with a former stream course were discovered in a trench located on the northern edge of the site (3688TT). A single piece of burnt flint was recovered from these deposits.
- 4.3.3 Two small sherds of late Bronze Age pottery were recovered from a buried soil horizon in trench 3867TT, and a single sherd of redeposited late Iron Age pottery was recovered from a post-medieval ploughsoil in the same trench.

4.4 Site archive

4.4.1 The site archive has been compiled in accordance with the specification prepared by URL and agreed with English Heritage and the County Archaeologist. It includes six electronic datasets for the Fieldwork Event, Contexts, Bulk Finds, Environmental, Graphical Output and Site data.

5 TRENCH DESCRIPTIONS

5.1 Trenches 3655TT and 3686 (Fig.3)

- 5.1.1 A similar sequence of deposits was seen in these two trenches. The natural chalky marl was overlain by a layer of grey brown silt which appeared to represent a buried soil horizon. This deposit was sealed beneath a post-medieval ploughsoil, which was directly overlain by the present topsoil.
- 5.1.2 A single ditch was discovered in each of these trenches, both cut the earlier buried soil horizon but were sealed beneath the later ploughsoil. The ditch in trench 3655TT (112) was aligned north-east south-west, and measured 1.2 m in width and 0.20 m in depth. The ditch in trench 3686TT (106) was aligned east west, and measured 1.2 m in width and 0.40 m in depth. No finds were recovered from either of the ditches but the character of their fills suggested that they were almost certainly post-medieval in date.

5.2 Trench 3661TT

5.2.1 The removal of the topsoil (113) and a buried ploughsoil (108) revealed a shallow (0.20 m), slightly irregular, north-west – south-east aligned ditch (116) cut into the top of the natural clay. No finds were recovered from this feature.

5.3 Trench 3687TT (Fig.4)

- 5.3.1 A shallow linear-irregular feature (123) was cut into the top of the natural subsoil toward the east end of the trench. The feature was aligned east west and measured approximately 4.5 m in length and 0.14 m in depth. Three fragments of burnt flint were recovered from its fill (122).
- 5.3.2 A north-west south-east aligned ditch (125) was exposed in the central area of the trench, and this was partly truncated by a second, slightly larger, ditch (127) which ran parallel along its western edge. No finds were recovered from either of these features.
- 5.3.3 A humic layer of dark grey silty clay overlay the natural subsoil in the western third of the trench, but petered out before it reached the ditches.
- 5.3.4 The ditches, humic layer and linear-irregular feature were all sealed beneath a buried soil horizon (120) similar in character to that seen in trenches 3655TT and 3686TT. Two sherds of late Bronze Age pottery were recovered from this deposit, but these were very small (4 g in total) and were almost certainly redeposited. The buried soil horizon was overlain by a post-medieval ploughsoil. A single sherd of redeposited late Iron Age pottery came from this later ploughsoil.

5.4 Trench 3688TT (Fig.5)

- 5.4.1 The top of the undisturbed geology (129/135) was reached at an average depth of 0.50 m beneath the present ground level.
- 5.4.2 A layer of grey-brown silt (139) overlay the natural clay, but only extended 3 m into the southern end of the trench. The character of this layer suggested that it was an alluvial deposit.
- 5.4.3 A broad, east west aligned, linear depression (138) which ran through the centre of the trench was filled with deposits of humic dark grey silt (130, 132). A single fragment of burnt flint was recovered from these deposits. This feature, which was approximately 5 m in width and 0.50 m in depth, appeared to be a former stream channel.
- 5.4.4 The former stream channel was sealed beneath a layer of brownish silty clay (137) which extended throughout the trench. This deposit was seen over much of the site and appeared to be a post-medieval ploughsoil.

5.4.5 A north-east – south-west aligned ditch (133), located in the central part of the trench, cut through the buried ploughsoil and also cut across the top of the former stream channel beneath. Two small fragments of post-medieval tile and a redeposited sherd of late Bronze Age pottery were recovered from the fill of the ditch (134). The ditch was directly overlain by the present topsoil (136).

6 ARCHAEOLOGICAL CONTEXT INVENTORY

Table 1:

Abbreviations:	
LBA LIA	Late Bronze Age Late Iron Age
Post-med	Post-medieval

ARC EBR 99: East of Boxley Road evaluation

Trench	Context	Description	Association	Finds	Number	Date
3655TT	107	Topsoil	Over 108			
3655TT	108	Buried ploughsoil	Under 107, over 109			
3655TT	109	Buried soil horizon	Under 108, over 110			
3655TT	110	Natural chalk/clay	Under 109			
3655TT	111	Ditch fill	Fill of 112			
3655TT	112	NE-SW ditch	Cuts 109, filled by 111			
3656TT	146	Topsoil	Over 147			
3656TT	147	Buried ploughsoil	Under 146, over 148			
3656TT	148	Natural chalk/clay	Under 147			
3657TT	149	Topsoil	Over 150			
3657TT	150	Buried ploughsoil	Under 149, over 151			
3657TT	151	Natural chalk/clay	Under 150			
3658TT	152	Topsoil	Over 153			
3658TT	153	Buried ploughsoil	Under 152, over 154			
3658TT	154	Natural chalk/clay	Under 153			
3659TT	155	Topsoil	Over 189			
3659TT	189	Buried ploughsoil	Under 155, over 190			
3659TT	190	Natural chalk/clay	Under 189			
3660TT	140	Topsoil	Over 141			
3660TT	141	Buried ploughsoil	Under 140, over 142			
3660TT	142	Natural chalk/clay	Under 141			
3661TT	113	Topsoil	Over 191			
3661TT	114	Buried ploughsoil	Under 191, over 115 and 117			
3661TT	115	Ditch fill	Fill of 116, under 114			
3661TT	116	NW-SE ditch	Cuts 117, filled by 115			
3661TT	117	Natural chalk/clay	Under 114			
3661TT	191	Recent buried soil	Under 113			
3662TT		Topsoil	Over 160			
3662TT	160	Buried ploughsoil	Under 159, over 161			
3662TT	161	Natural chalk/clay	Under 160			
3663TT		Topsoil	Over 163			
3663TT		Buried ploughsoil	Under 162, over 164			
3663TT	164	Natural chalk/clay	Under 163			
3664TT		Topsoil	Over 166			
3664TT		Buried ploughsoil	Under 165, over 167			
3664TT		Natural chalk/clay	Under 166			
3665TT		Topsoil	Over 169			
3665TT		Buried ploughsoil	Under 168, over 170			
3665TT	170	Natural chalk/clay	Under 169			

I sherd LIA
sherds LBA
ragments
ragments
ragments Post-med
I sherd LBA
ir

SECTION 2: STATEMENT OF IMPORTANCE

7 CONCLUSIONS

7.1 Extent of archaeological deposits (Fig. 6)

- 7.1.1 Post-medieval ditches were located in trenches 3655TT, 3661TT, 3686TT and 3688TT.
- 7.1.2 Two undated ditches and a linear-irregular feature were found sealed beneath a buried soil horizon in trench 3687TT.
- 7.1.3 Four sherds of redeposited later prehistoric pottery and 4 pieces of burnt flint were recovered from trenches 3687TT and 3688TT.
- 7.1.4 A former stream channel was exposed in trench 3688TT.

7.2 Date and character of archaeological deposits

- 7.2.1 The site is characterised by an uncomplicated sequence of one to two buried soil horizons and occasional deposits associated with fluvial activity. Very few archaeological features were discovered in this area, and very few finds were recovered. The buried ploughsoil which extended throughout much of the site appeared to be post-medieval in date. The date of the earlier soil horizon exposed in trenches 3655TT, 3686TT and 3688TT at the far west end of the site is less certain. Two sherds of late Bronze pottery recovered from this deposit were small and abraded and almost certainly redeposited.
- 7.2.2 At least four of the six ditches discovered appeared to be post-medieval in date, and their character and sterile fills suggest they were associated with drainage and field boundaries. The only features of potential interest are the two parallel ditches and the linear irregular feature found sealed beneath the buried soil horizon in trench 3687TT. However, none of these features produced any dating evidence and it remains possible that they are also post-medieval. The function of the linear-irregular feature is uncertain and it may in fact be a naturally formed feature, such as a root channel or tree-throw hole.
- 7.2.3 There is no evidence for occupation of any period on the site, although the finds indicate some activity in the vicinity in the later prehistoric period.

7.3 Environmental evidence

7.3.1 No deposits containing material suitable for paleo-environmental reconstruction were identified.

8 IMPORTANCE OF ARCHAEOLOGICAL DEPOSITS

8.1 Survival/condition

8.1.1 Although there was clear evidence of post-medieval ploughing in this area, the paucity of finds from the buried ploughsoils suggested that this had not truncated earlier features. The absence of archaeological features in this area therefore appears to be genuine and not merely a result of preservation.

8.2 Period

8.2.1 Most of the deposits discovered on the site were associated with post-medieval agricultural activity. Other features found toward the west end of the site were undated. The sherd of redeposited late Iron Age pottery recovered from trench 3687TT at the west end of the site may derive from the area of late Iron Age/Romano-British activity defined by the fieldwalking and subsequent evaluation to the west of the Boxley Road in 1997 (URL 1997).

8.3 Rarity

8.3.1 In addition to the post-medieval deposits, a small number of redeposited finds were discovered which indicated later prehistoric activity in the general area. Evidence for settlement, agriculture and ritual activity of many periods is common on the chalk at the foot of the North Downs escarpment, and this site provides little new information for the area.

8.4 Fragility/vulnerability

8.4.1 The archaeological features within the evaluation trenches were located between 0.35 m and 0.80 m beneath the present ground level. These deposits will be vulnerable to damage or destruction during the construction of the rail link.

8.5 Diversity

8.5.1 The few archaeological finds and features discovered provide little information on the nature and diversity of prehistoric and later activity in the area.

8.6 **Documentation**

- 8.6.1 There is little documentation relating directly to the site prior to the CTRL Assessment of Historic and Cultural Effects (URL 1994).
- 8.6.2 A report has been produced on the evaluation carried out by OAU in the area to the west of the Boxley Road in July 1997 (URL 1997).

8.7 Group value

8.7.1 Although the evaluation recovered little information of intrinsic interest, the results will contribute to the study of this part of the CTRL route, which has been the subject of intensive archaeological investigation.

8.8 Potential

8.8.1 Only a small number of archaeological features were located in this area and those that were discovered were mostly associated with post-medieval agricultural activity or were otherwise undated. The site therefore offers little potential for further study.

9 BIBLIOGRAPHY

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URL	1995	1994 Surface Collection Survey. Unpublished report prepared for URL by OAU, Channel Tunnel Rail Link.
URL	1997	West of Boxley Road ARC BXR 98, An Archaeological evaluation. Report for URL by OAU, Channel Tunnel Rail Link.
Wilkinson D (ed)	1992	Oxford Archaeological Unit Field Manual, (First edition, August 1992).

APPENDIX 1

POTTERY AND OTHER FINDS

by Kayt Brown, Oxford Archaeological Unit

1.1 Pottery

A total of four sherds of pottery were recovered, weighing 22 g. Of this material a single shoulder sherd in a grog-tempered fabric can be dated to the late Iron Age (LIA). The remaining three sherds are flint-tempered and dated to the late Bronze Age (LBA).

Table 2: Quantification of the pottery

Context	No.Sherds	Wt (g)	Date
119	1	16	LIA
120	2	4	LBA
134	1	2	LBA
Total	4	22	

1.2 Other finds

The only other finds recovered comprise four pieces of burnt flint and two unidentifiable fragments of ceramic building material.

Table 3: Quantification of the finds

Context	Material	No. Fragments	Wt (g)
122	Burnt flint	3	10
132	Burnt flint	1	4
134	CBM	2	41
Total		6	55