

**Channel Tunnel Rail Link
Union Railways (South) Limited**

Project Area 420

**WEST OF SITTINGBOURNE ROAD, BOXLEY, KENT
ARC 420/61-900 - 62+000/99**

**WATCHING BRIEF
ASSESSMENT REPORT
FINAL**

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Contract S/400/SP/0009 P482/4

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6th December 2000

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SUMMARY

As part of an extensive programme of archaeological investigation carried out in advance of the construction of the Channel Tunnel Rail Link (CTRL), the Oxford Archaeological Unit were commissioned by Union Railways (South) Limited to undertake a watching brief on earthmoving operations between Pilgrims Way and Lenham Heath in Kent. As part of this work a medieval sub-circular ditched enclosure was investigated at West of Sittingbourne Road. Although the features were heavily truncated by archaeologically unsupervised machine stripping in the south-west quadrant of the enclosure, the investigation revealed the remnants of an entrance and three pits, two within the enclosure and one without. All contained 11th-13th century pottery and small assemblages of animal bones and oyster shells. Subsoil stripping was rapidly halted and the remainder of the enclosure fenced to prevent further damage. The undamaged part of the site will be preserved outside the permanent railway fenceline.

No clear parallels for the site have been found and its function is not known. Although the pottery, animal bones and oysters indicate that it was at least temporarily occupied it does not appear to have been a settlement. It lay in marginal woodland away from contemporary centres of settlement. The most plausible hypothesis is that it was used for the semi-specialised exploitation and management of resources from the surrounding woodland. Early medieval villages centred in areas of higher agricultural potential sometimes also held rights in pockets of more marginal land some distance away. The enclosure may have been related to such rights.

As a unique discovery the site is of considerable interest. Although the uncertainty concerning its function vitiates its significance to some degree, the site nonetheless has the potential to address issues concerning the organisation of the landscape, the exploitation and management of natural resources, and settlement morphology and function in the early medieval period. More detailed artefactual, environmental and stratigraphic analysis will not contribute significantly to understanding of the site, but further research is needed to examine the topographical setting of the site in relation to early medieval patterns of settlement in the locality and exploitation of the landscape. This, together with a search for functional parallels in the archaeological or documentary record, may shed light on the function of the enclosure and associated features.

1. INTRODUCTION

1.1 Project Background

- 1.1.1 The Oxford Archaeological Unit (OAU) was commissioned by Union Railways (South) Limited (URS) to maintain a watching brief along Project Area 420 (from West of Boarley Farm to East of Lenham Heath) of the Channel Tunnel Rail Link (CTRL). Part of this watching brief involved the investigation of features discovered at West of Sittingbourne Road (ARC 420/61-900 - 62+000; Figure 1). The site had been extensively investigated during an evaluation (ARC WEA 99; URS 1999a) which had revealed an early medieval 11th-12th century sub-circular ditched enclosure and a number of associated ditches and pits of the same date. Following this evaluation it had been intended that the site should be preserved *in situ*, outside the CTRL fence-line. However, following unsupervised stripping of part of the site, in contravention of the preservation instruction, which severely truncated the archaeological features, it became necessary to investigate the affected south-western part of the enclosure. An area of *c* 12 m x 28 m (340 m²), centred at URS grid 58411 37880 (OS NGR TQ 5784 5788) was thus cleaned and recorded. The wider watching brief in Project Area 420 took place between 14th June 1999 and 7th October 1999, with most of the work on the site itself occurring between 2nd August 1999 and 17th September 1999. Also incorporated into this assessment are the results of a geophysical survey conducted west of the A249, Detling (ARC DTGW 95; URL 1996; Table 1). This work formed part of an extensive programme of archaeological investigations carried out on behalf of URS in advance of the construction of the CTRL.

Table 1: List of fieldwork events

Fieldwork event name	Fieldwork event code	Contractor	Dates of fieldwork
West of Sittingbourne Road	ARC 420/61+900-62+000	OAU	2/8/1999 - 17/9/1999
West of Sittingbourne Road	ARC WEA 99	OAU	5/3/1999 - 19/3/1999
West of A249 Detling geophysical survey	ARC DTGW 95	A. Bartlett and Associates	27/11/1995 - 4/12/1995

- 1.1.2 The archaeological Written Scheme of Investigation for the watching brief as a whole was prepared by Rail Link Engineering (RLE), agreed in consultation with English Heritage and Kent County Council (KCC), on behalf of the Local Planning Authority (URS 1999c).

1.2 Geology and Topography

- 1.2.1 The site lies on a narrow strip of Gault Clay, which is bordered to the north by the Lower Chalk, and to the south by the Folkestone Beds. This geological substrate is overlain by silty clay soils.
- 1.2.2 The site lies on sloping ground at *c* 70 m OD not far from the valley bottom. To the north the ground rises gently to the Pilgrim's Way, and then more sharply from the foot of the North Downs escarpment; to the south it drops gently towards the river Medway, *c* 3 km away.

1.2.3 Prior to work on the CTRL the land was arable.

1.3 Archaeological and Historical Background

1.3.1 Sites in the area of West of Sittingbourne Road predating the medieval period are predominantly Iron Age/Romano-British in date. Pits of this date were found immediately to the east of the site (URS 1994, no. 1060), and a Romano-British brooch to the south (URS 1994, no. 1059). A Romano-British trackway and late Iron Age-early Roman enclosure ditches associated with remains perhaps relating to structures were found around 1 km to the east of the site at Hockers Lane (URS 2000a). A further 0.5 km to the west lies Thurnham Villa (URS 1999d).

1.3.2 Few medieval sites are known in the vicinity of the excavation. The site lies to the south of the Pilgrim's Way, a trackway which may have Saxon origins (URS 1999b). The Cistercian Abbey at Boxley, founded in 1146, lies 2.5 km south-east of the site (URS 1994, no. 1061). Around 3 km to the west of the site a medieval corn drying kiln and other features of similar date were found in the Pilgrim's Way excavation near to Boarley Farm (URS 1999b). The earliest estate maps of Boxley Park (URS 1994, no. 2023) indicate that it extended as far as the eastern boundary of Beulah Wood, close to the site. This park is first mentioned in 1596, but the date at which it was established is unknown.

1.3.3 This paucity of medieval sites in the immediate vicinity of the site reflects the fact that it lies away from the main medieval settlement focii. The medieval strip parishes encompass a range of landscape zones, extending from the Downs onto the Wealden Greensand. The settlements were concentrated in a line at the foot of the Downs escarpment. Areas of ancient woodland, such as that in which the West of Sittingbourne Road site lies, occur predominantly in a band along the southern edge of the strip parishes. The site itself lies immediately adjacent to the Boxley-Detling parish boundary along which an undated ditch was found in the evaluation (URS 1999a).

1.3.4 The evaluation (URS 1999a) also uncovered traces of some post-medieval features, consisting of two ditches and a quarry pit.

2. ORIGINAL PRIORITIES, AIMS AND METHODOLOGY

2.1 Landscape Zone Priorities

2.1.1 The issues specified as Landscape Zone Priorities which are relevant to this site involve changing exploitation and management of the landscape - including the development of new forms of settlement - and their relationship to wider economic and social changes in the period c AD 1100-1700. They are:

- 1) changes in the organisation of the landscape through time
- 2) settlement morphology and function
- 3) exploitation and management of natural resources
- 4) changes arising from early industrial economies

2.2 Fieldwork Event Aims

2.2.1 The fieldwork aims of the watching brief were to record any significant archaeological structures, features or deposits, to retrieve environmental and economic evidence and artefacts from those archaeological contexts, as well as any other artefacts disturbed during building work.

2.2.2 The watching brief followed extensive evaluation trenching on the site, which produced the bulk of the archaeological evidence assessed here. The evaluation aims were:

- 1) to determine the presence/ absence, extent, condition, character, quality and date of any archaeological remains within the area of the evaluation
- 2) to determine the presence and potential of environmental and economic indicators preserved in any archaeological features or deposits
- 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

2.3 Fieldwork Methodology and Summary of Excavation Results

2.3.1 The site was first identified during an evaluation of land to the west of Sittingbourne Road (URS 1999a). The medieval enclosure was subject to additional trenching to clarify its shape and character, and most of the evidence considered in the assessment was recorded during this stage of the work.

2.3.2 During the watching brief on preparatory works for Project Area 420, the south-western quadrant of the site was stripped of topsoil and subsoil by machine without archaeological supervision, severely truncating the features in this area. Subsoil stripping over the rest of the site was rapidly halted but, as the topsoil had been removed to a level above the archaeological horizon, the full plan of the enclosure was not exposed. The undisturbed portion of the site, comprising c. 75% of the enclosure, was fenced to prevent further damage. It has been reinstated and will be preserved *in situ* outside the permanent railway fenceline.

2.3.3 The unsupervised stripping in the south-eastern quadrant of the ditched enclosure, exposed a previously unrecorded entrance through the enclosure ditch, defined by two squared terminals. Three pits, two within the enclosure and one without, were

also found. All of these features contained pottery dating them to the 11th to 13th centuries.

- 2.3.4 The pits truncated in the south-western part of the site were half sectioned by hand and sample sections were cut across ditches at appropriate points. Features were recorded using a single context recording system. All features were drawn in plan and section and were photographed. A daily record of all activity related to the watching brief was maintained.
- 2.3.5 The geophysical survey to the west of the A249 revealed little of significance: there were some disturbances which may have represented the remains of fences and one anomaly possibly representing a pit.

2.4 Assessment Methodology

- 2.4.1 This assessment report was commissioned by URS following the specification provided by RLE, as discussed with English Heritage and KCC (URS 2000b). This specification follows national guidelines prepared by English Heritage and provides additional information regarding the level of detail required and format. Stuart Foreman (project manager) and Chris Hayden (team leader) managed the production of the report. The specialist assessments were undertaken by appropriately qualified specialists. Since only small quantities of material were retrieved from the site, it has all been assessed.

3. FACTUAL DATA AND QUANTIFICATION

3.1 The Stratigraphic Record

The Features

- 3.1.1 The features discovered consist of two arms of the enclosure ditch ending at squared terminals which define an entrance 5 m wide, and three pits (Figure 2). No further traces of the ditches found within the enclosure during the evaluation were identified (OAU 1999a, 3710TT and 3712TT), although they may have been accidentally removed during the unsupervised stripping.
- 3.1.2 Two of the pits lie within the enclosure (one of which is adjacent to the entrance), whilst the third lies a short distance outside. Because they are so badly truncated it is difficult to compare the form of the pits, although pit or posthole 15 is notably smaller than the other two pits.
- 3.1.3 There is no clear indication in the pattern of filling revealed by the sections cut across the enclosure ditch of the existence of a bank, either external or internal, although possible indications of a bank were noted in the evaluation (URL 1999a).

Stratigraphy

- 3.1.4 There are no significant stratigraphic relationships between these features, nor any indication that the ditches or pits have been recut.

Phasing and Dating

- 3.1.5 As in the evaluation, early medieval pottery was recovered from all of the features which all appear to date from the same phase of activity. The ceramic dating evidence indicates an 11th-13th century date range, although the actual period of occupation may be much shorter.

Disturbance and Residuality

- 3.1.6 There is no clear indication from the stratigraphy or the chronologically consistent artefactual evidence that any of the features has suffered disturbance, or contains intrusive material. The only clearly residual artefacts are a fragment of Roman roof tile and a fragment of a Roman brick found in the topsoil. Further Roman tile and residual flint were found in the evaluation.

Truncation

- 3.1.7 As a result of the machine stripping of the site, all of the features within the south-west quadrant of the enclosure have been severely truncated. The enclosure ditch, for example, is preserved to a depth of 1.49 m in cut 12, but to only 0.48 m in cut 17. Similarly, the pits appear to have suffered from truncation of varying degrees of severity. Pit 9 survives to a depth of 0.96 m deep and appears to be the least affected (albeit still truncated to some degree) whilst pit or posthole 15, preserved to a depth of only 0.05 m, appears to have been substantially cut away. The severity of the truncation in the south-western part of the site is clearly revealed by the differences in the recorded width of the ditch in this area compared to that in the rest of the site (Figure 2).

Spatial Distributions

- 3.1.8 There is little indication from the artefactual and biological evidence (which consists of pottery, animal bone and oyster shells) of the function of the enclosure or the pits.

The greatest density of finds occurs in the northern arm of the enclosure ditch, cuts 22 and 6 containing notable quantities of pottery and cut 12 the largest assemblage of animal bone and oyster shell. Similar finds, albeit in smaller quantities, have been recovered from the pits and from cut 25 in the southern arm of the ditch. A similar, if slightly more diverse, range of finds were recovered during the evaluation.

3.2 The Artefactual Record

Medieval Pottery (Appendix 1)

- 3.2.1 The pottery assemblage comprises 301 sherds with a total weight of 3037 g. This compares with 194 sherds with a weight of 2169 g from the evaluation. The majority of the assemblage comprises early medieval East Kent shelly sandy ware, most of which derives from two related contexts which probably date to the later 11th or earlier 12th century, along with small quantities of potentially slightly later medieval wares. The chronology and physical state of the assemblage suggest that the main period of medieval activity at the site began at that time, and that it was all but abandoned by the mid-13th century.

Ceramic Building Material (Appendix 1)

- 3.2.2 Two fragments of Roman tile were found in the topsoil.

Unworked Stone (Appendix 2)

- 3.2.3 One small fragment of sandstone is all that was recovered during the excavations. It was unworked.

3.3 The Environmental Record

Animal Bone (Appendix 3)

- 3.3.1 A total of 19 fragments of bone (168 g) have been retrieved from the site. Of this number over 70% are identifiable to species. The majority are cattle bones from the upper fill of the enclosure ditch. Three pig bones and two sheep bones are also present in this context. Part of a bird carpo-metacarpus, also found in the enclosure ditch, was not identified to species. The bones are in reasonable condition with a small amount of attritional damage. A larger quantity of soil, sieved as part of the evaluation, produced fish, bird and small mammal bones.

Shell (Appendix 3)

- 3.3.2 Only small quantities of oyster and other marine mollusc shells are present. Generally their state of preservation is fair but the numbers of measurable and recordable shells are too few to permit statistical comparisons of their characteristics on either an intrasite or intersite basis.

3.4 Archive Storage and Curation

- 3.4.1 The material recovered from the site has been stored according to the United Kingdom Institute for Conservation guidelines. They require no special conservation measures.
- 3.4.2 The small assemblages of oyster shells, ceramic building material and stone have no further potential for analysis and need not be retained.
- 3.4.3 The archive index has been updated and is shown below (Table 2).

Table 2: Archive index table

ITEM	NUMBER OF ITEMS OR BOXES OR OTHER FRAGMENTS	NUMBER OF FRAGMENTS/ LITRES	CONDITION (No. of items) (W=washed; UW=unwashed; M=marked; P=processed; UP=unprocessed; D=digitised; I=indexed)
Contexts records	-	26	I
A1 plans	-	1	I, D
A4 plans	-	8	I, D
A4 sections	-	7	I
Films (monochrome) S=slide; PR=print	-	*23	I
Films (Colour) S=slide; PR=print	-	*43	I
Pottery	1 size 2	301	W, M
CBM	See Misc.	2	W, M
Stone	See Misc.	1	W, M
Misc.	1 size 3	-	-
Animal Bone	See Misc.	19	W, M
Shell	See Misc.	44	W, M

* Total number of films for watching brief

Key to box sizes

Size 2 = Half box 391mm x 238mm x 100mm (0.0093m³)
 Size 3 = Quarter box 386mm x 108 mm x 100mm (0.052m³)

4. STATEMENT OF POTENTIAL

4.1 The Stratigraphic Record

4.1.1 The present section reviews the success of the fieldwork events and post-excavation assessment in providing stratigraphic data to address the Fieldwork Event Aims and Landscape Zone Priorities for the sites, which are set out in section 2, above. Consideration is given to the potential they offer for further analysis.

4.1.2 It should be noted that the preservation of most of the site *in situ* has limited the need for investigation, leaving the fieldwork aims only partially addressed. This clearly limits the potential of the site for further stratigraphic analysis. However, the extensive evaluation trenching has recovered a relatively clear plan of the enclosure, and while its internal arrangements and the distribution of external features remain unclear, the spatial structure of the site is straightforward, consisting of the sub-circular ditched enclosure and a small number of pits and other features. It should be noted that pits containing medieval pottery of similar date have also been found at some distance from the enclosure (URS 1999a).

4.1.3 The stratigraphy and phasing of the site are simple and have been adequately examined as part of the assessment: There are few significant stratigraphic relationships, and the enclosure appears to have been utilised in only one phase. More detailed stratigraphic analysis is unlikely therefore to contribute further to understanding of the site. There is no clear indication of spatial patterning in the distribution of artefactual or environmental evidence. It is unlikely, given the incomplete exposure of the site, that more detailed consideration of the distribution of finds and environmental evidence would identify patterns of activity within the enclosure.

4.1.4 The form of the enclosure is important for understanding its function. It implies the need for an enclosed space, defined by a substantial boundary, such as might be needed to control animals, or perhaps to make a clear claim to ownership and thus protection of material which may have been collected and stored within the enclosure. The ditch may have excavated with primary aim of constructing a bank or mound. Some of the features found within the enclosure in the evaluation may have formed parts of structures related to these activities but their function is unclear. Further archaeological and documentary research is required to identify parallels for the enclosure in the archaeological record or documentary sources.

4.2 Topographical setting

4.2.1 The local landscape setting of the enclosure suggests that it can contribute to a wider understanding of the organisation of the landscape, the exploitation and management of natural resources, and settlement morphology and function in the early medieval period. This could be achieved by topographical analysis, based on cartographic and documentary research, designed to relate the enclosure to local patterns of medieval settlement and landscape exploitation.

4.3 The Artefactual Record

Medieval Pottery (Appendix 1)

4.3.1 Pottery of this date is poorly known in Kent. The limited scale of investigation has resulted in a relatively small assemblage of pottery which can contribute little to the interpretation of the site beyond indicating its date. It is nonetheless of some significance in terms of the ceramic chronology of the area and, while further

analysis would not contribute to addressing the fieldwork aims, the assemblage should be published and retained for museum storage.

Ceramic Building Material (Appendix 1)

- 4.3.2 The two fragments of Roman building material were found in the topsoil. Although they indicate Roman activity somewhere in the vicinity of the site, they have no potential to address any of the CTRL research aims. No further work on this material is required, and the material may be discarded.

Unworked Stone (Appendix 2)

- 4.3.3 The single stone recovered on the site was unworked. It has no potential to address any of the CTRL research aims and no further work is required. The material may be discarded.

4.4 The Environmental Record

Animal Bone (Appendix 3)

- 4.4.1 The number of identifiable bones retrieved from the site is very small because of the limited scale of investigation. The assemblage cannot therefore provide much information regarding the economy of the site other than indicating the presence of the species identified. Further analysis of the material has little intrinsic potential for examining the exploitation and management of natural resources. However, more detailed study of the material recovered during the evaluation, including identification of the single bird bone to species, may aid in interpreting the function of the site and thereby contribute to understanding of early medieval settlement morphology and function. It is recommended that the assemblage be retained.

Shell (Appendix 3)

- 4.4.2 Due to the small size of the sample of marine molluscs recovered there is no potential for the data derivable from this assemblage to address the original Landscape Zone Priorities. The material may be discarded.

4.5 Overall Potential

- 4.5.1 No clear parallels for this ditched enclosure have been found and, as a unique discovery, it is significant for understanding early medieval settlement morphology and function, and the exploitation and management of natural resources. Its potential to contribute to the research aims set out in the CTRL Research Strategy is, however, partly vitiated by the paucity of clear evidence for its function.
- 4.5.2 Although the artefactual evidence - pottery, animal (including bird and fish) bones and shells - suggests that the enclosure was occupied, albeit not necessarily permanently, it does not appear to have been a settlement in the usual sense of that term.
- 4.5.3 The location and form of the site, and in particular the features extending into the landscape away from the enclosure, suggest that it was used to exploit and manage the surrounding landscape which may have been marginal woodland. The enclosure ditch may have allowed animals or other resources from the wider area to have been controlled and accumulated in a protected area. It thus seems most likely that the site was related to the specialised exploitation of woodland resources, such as managing the woodland or raising pigs. The investigations have, however, provided little support for the suggestion that the site was used to raise rabbits or pigs (URL 1999a). No rabbit bones and very few pig bones were found. Such bones are, however, unlikely to have been well preserved and, if the animals were taken from the site live, would not necessarily be expected. These interpretations cannot, therefore, be completely excluded.
- 4.5.4 Such specialisation, and the possible concentration of resources within the enclosure may be related to the new economic possibilities and requirements that arose with the growing concentration of population in towns and villages. Such concentrations of population may have provided markets of sufficient size to support relatively specialised exploitation of a particular kind of environment. The presence of imported pottery and marine resources on a site at some distance from the sea provides evidence also of the trade in which the 'occupants' of the enclosure were involved.
- 4.5.5 It is, however, perhaps more likely that the site's form and location is related to the exploitation of resources in an area which lay at some distance from the settlement

to which it was related. Early medieval villages, centred in areas of higher agricultural potential, sometimes also held rights to separate pockets of more marginal land, including woodland, at some distance (*cf* Blair 1991). The enclosure may have been related to such rights, providing a partially protected area in land, perhaps only seasonally occupied, some distance from the main focus of settlement.

4.5.6 More detailed examination of the stratigraphy, finds and environmental evidence from the site itself is unlikely to shed further light on the specific function of the enclosure, although a connection with the exploitation and management of woodland on the margins of settlement seems likely. Further research into possible parallels and the character of early medieval woodland exploitation may allow a more specific identification. A study of the local topography from cartographic and documentary sources, including consideration of the medieval settlement pattern and agricultural potential of the land, particularly within Detling and Boxley parishes, would place the site within its landscape context. Such a study would also provide a useful focus for publication of CTRL survey work on historic woodland in Project Area 420 (Horish Wood, Honeyhills Wood and Longham Wood) (URL 1994). This level of analysis would contribute to several of the research objectives concerning the exploitation and organisation of the rural landscape outlined in the CTRL Archaeological Research Strategy for the period 100 BC - AD 1700 ('Towns and their rural landscapes'):

- how did population increase and concentration affect natural resource exploitation?
- how was the rural landscape organised and how did it function?
- how did the organisation of the landscape change through time?

4.6 Popular Presentation

4.6.1 Although the site is not visually impressive, nor obviously of major archaeological importance, as a unique site within the CTRL project, the function of which is far from certain it may provide an archaeological 'enigma' which would be of some interest in a popular presentation.

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APPENDIX 1 - CERAMICS

1.1 Medieval Pottery

by Paul Blinkhorn

Introduction

1.1.1 A small assemblage of early medieval (11th to 13th century) pottery was recovered by hand excavation primarily to provide dating evidence for the site. The small size of the assemblage is due largely to the fact that most of the site has been preserved *in situ*, thus limiting the need for intrusive investigation.

1.1.2 Methodology

1.1.3 The sherds were counted and weighed by context. Minimum numbers of vessels (MNV) were measured by rimsherd length. The sherds were recorded using the codes and chronologies of the Canterbury Archaeological Trust Fabric series for the county of Kent (Cotter forthcoming a and b), with the following types noted:

- EM3A, E Kent shelly-sandy ware, 1075/1100-1200/25. 294 sherds, 3002 g, MNV = 1.86
- M38B, N or W Kent fine sandy ware, 1225/50 – 1400. 1 sherd, 9 g, MNV = 0.06.
- M40B. Ashford/Wealden sandy ware, ?1200/25 - 1400. 5 sherds, 24 g, MNV = 0.
- M53, ?Wealden white/cream/buff sandy ware, ?1250-1400/1500. 1 sherd, 2g, MNV = 0.

Quantification and Provenance

- 1.1.4 The pottery assemblage comprised 301 sherds with a total weight of 3037 g. The minimum number of vessels was 1.92. This compares with 194 sherds with a weight of 2169 g from the evaluation (OAU 1999a). The pottery occurrence by number and weight of sherds per context by fabric type is shown in Table 1 below.
- 1.1.5 The majority of the assemblage comprised early medieval East Kent shelly sandy ware, most of which was noted in two related contexts which probably date to the later 11th or earlier 12th century, along with small quantities of slightly later medieval wares. The chronology and physical state of the assemblage suggest that the main period of medieval activity at the site began at that time, and that it was all but abandoned by the mid 13th century.
- 1.1.6 The majority of this assemblage (242 sherds, 2520 g) came from two contexts, 8 and 24, both upper fills in the enclosure ditch, with several cross-fits noted. This appears to be a primary dump of domestic pottery. The mean sherd weight of the group, 10.4g, does not entirely reflect this, due to the somewhat friable nature of most of the pottery, but the mean rim sherd size, 28.6% complete, is a better indicator, reflecting the presence of large fragments of a small number of vessels, with the bulk of the assemblage comprising no more than five vessels. The assemblage consisted entirely of jars, with large fragments of a very few vessels represented, and all were scorched and/or sooted to a greater or lesser degree. All were undecorated, apart from a single vessel with a thumb applied strip. There appears little doubt that they were deposited very near to their point of breakage.
- 1.1.7 The assemblage from these two contexts comprised entirely East Kent shelly-sandy ware, suggesting that it had been deposited before AD 1200, as it appears that if such a large assemblage were later than this, it would have yielded contemporary pottery, such as that noted in other, smaller groups (Table 1). As the data in Table 1 show, 13th century wares were extremely rare on the site in general, indicating that activity had all but ceased by that time.

Conservation

- 1.1.8 As evidence for the date of the pits in which they were found, and as a relatively rare assemblage of pottery of this date from this area, all of the medieval pottery should be retained.

Comparative material

- 1.1.9 Pottery of this date is poorly known in this area, and there is thus little material with which this assemblage could be usefully compared. Further material may become available from other excavations along the CTRL.

Potential for further work

- 1.1.10 The pottery can contribute little to the CTRL fieldwork aims, or to the interpretation of the site beyond its chronology. However, it is of some significance in terms of the relatively poorly known chronology of pottery in Kent in this period. This relatively small assemblage should, therefore, be published in full. No further analysis is required although it will be necessary to rework the text for publication.

Bibliography

Cotter, J, forthcoming a, The pottery, in K Parfitt, B Corke and J Cotter *Excavations at Townall Street, Dover, 1996*, Canterbury Archaeological Trust

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1.2 Ceramic Building Material

by Leigh Allen

- 1.2.1 Two fragments of Roman tile with a total weight of 378 g were recovered from context 1, the topsoil (Table 2) . The fragments are very abraded and neither has a surviving complete dimension. One is a fragment from a 'tegula' with a low flange and an angled cut away at the base of the flange where it would have overlapped with the tile below. The second fragment is from a large tile or brick which had a surviving thickness (not the complete thickness) of 47 mm.
- 1.2.2 Beyond indicating some Roman activity in the general area of the site, the finds are of little significance. The assemblage is very small and apparently residual and cannot contribute usefully to discussion of the landscape zone priorities. It is recommended that the material is discarded without further work.

Table 1: Summary of medieval pottery

Context	No	Wt (g)	Date	Comments
1	18	98	E13thC	Fabrics EM3A and M40B
8	174	2039	L11th-E13thC	Fabric EM3A
10	1	2	L11th-E13thC	Fabric EM3A
11	6	41	L11th-E13thC	Fabric EM3A
13	6	42	E13thC	Fabrics EM3A and M38B
14	21	287	L11th-E13thC	Fabric EM3A
16	3	25	M13th-M15thC	Fabric EM3A and M53
21	3	18	L11th-E13thC	Fabric EM3A
24	68	481	L11th-E13thC	Fabric EM3A
26	1	4	L11th-E13thC	Fabric EM3A
Total	301	3037		

Table 2: Summary of ceramic building material

Context	Count	Weight (g)	Type	Period	Comments
1	2	378	Tile	Roman	1 tegula, 1 fragment

APPENDIX 2 - LITHICS

2.1 Unworked Stone

by Ruth Shaffrey

One small fragment of ironstone is all that was recovered by hand excavation (Table 3). It was unworked. The ironstone would have been available locally. It requires no conservation and could be discarded. No further work is recommended.

Table 3: Summary of unworked stone

Context	Count	Material	Comments
11	1	Ironstone	Small fragment

APPENDIX 3 - ANIMAL BONE

3.1 Animal Bone

by Bethan Charles

Introduction

- 3.1.1 Nineteen fragments of bone (168 g) were retrieved by hand during the watching brief at West of Sittingbourne Road. Over 70% of these bones were identified (Table 4). It was hoped that these bones would provide evidence for the economy and function of the enclosure. The small size of the assemblage is due largely to the fact that most of the site has been preserved *in situ*, thus limiting the need for intrusive investigation.

Methodology

- 3.1.2 The assemblage was recorded through the use of a simple recording sheet. This enabled a quick calculation of totals to be made along with a rough estimation of the number of individuals in each context. All fragments of bone were counted including elements from the vertebral centrum, ribs and long bone shafts. Ages were estimated by measuring the rate of epiphyseal fusion of the bones using Silver's (1969) tables.

Quantification

- 3.1.3 The majority of the bones identified to species were cattle bones, the greater number of which were found in the upper fill of the enclosure ditch. At least one of the cattle was younger than 3 to 3.5 years of age (Silver 1969). Other bones included pig teeth and vertebrae from the enclosure ditch along with part of a sheep metatarsal and rib fragment also from the enclosure ditch. A single bird carpo-metacarpus was found in the upper fill of the enclosure ditch.

Provenance

- 3.1.4 The bones were in reasonable condition with a small amount of attritional damage. It is possible that the cattle bones may have been over represented due to their being larger and more robust, and more likely to survive than those of smaller species. There did not appear to be any significant dumps of bone at the site and none of the bones displayed obvious signs of butchery marks.

Conservation

- 3.1.5 The bone does not require any special conservation measures. As evidence for the economy and perhaps function of the enclosure it should be retained.

Comparative material

- 3.1.6 The quantities of bone recovered were too small to allow reliable comparisons with other assemblages to be made.

Potential for further work

- 3.1.7 The small numbers of bone retrieved from the site do not provide much information regarding the economy of the site other than the presence of particular species. It is unlikely that further analysis of the material will provide any further information. However, it may be of value to identify the single bird bone to species and to undertake a more detailed study of the material from the evaluation.

Bibliography

Silver, I.A., 1969, The ageing of domestic animals, in D. Brothwell & E. Higgs (eds) *Science in Archaeology*, London, 283-302

Table 4: Summary of animal bones

Context	Interpretation	Period	% of identified fragments				Count	Weight
			Cattle	Sheep	Pig	Bird		
8	Enclosure ditch	11-12th C	-	-	100	-	1	13
13	Enclosure ditch	11-12th C	33	-	66	-	3	13
14	Enclosure ditch	11-12th C	75	12.5	-	12.5	8	104
21	Pit	11-12th C	100	-	-	-	1	17
24	Enclosure ditch	11-12th C	-	100	-	-	1	1

APPENDIX 4 - OYSTERS AND OTHER MARINE MOLLUSCS

4.1 Oysters and Other Marine Molluscs

by Jessica M. Winder

Introduction

- 4.1.1 Shells of the common flat oyster *Ostrea edulis* L. together with a single specimen of common whelk (*Buccinum undatum* L.) were recovered during the watching brief. Shells were recovered by hand retrieval and sieving of bulk samples. It was hoped that the study of marine molluscs would assist in the understanding of the manipulation and consumption by humans of natural resources and the way in which population increase and concentration might have affected natural resource exploitation and accelerated environmental change.

Methodology

- 4.1.2 The shells from each context were identified, where possible, and counted. Oyster valves were separated into left and right valves, and further divided into shells suitable or unsuitable for measuring and detailed recording of features. A sub-sample of contexts containing at least thirty measurable left or right valves would be selected as suitable for use in statistical comparisons of size or comparisons of evidence for epibiont infestation (Winder 1993) were it available.

Quantification

- 4.1.3 Table 5 presents the numbers of shells from each context with comments on their condition. Thirty-four oyster valves and eleven fragments were recovered from four contexts together with a single whelk. The number of shells and shell fragments in each context is therefore very small.

Provenance

- 4.1.4 The provenance of the marine mollusc material cannot be determined. The state of preservation of the shells is generally fair with robust and thick shells that are

broken but have not been etched or worn. The quantity of the shell material is insufficient to allow any further investigation by means of statistical comparisons.

Conservation

- 4.1.5 Long term storage, should it be deemed necessary or desirable, would require the shells to be kept dry, in sealed polythene bags, with minimisation of mechanical damage. Regarding retention/discard policy, it is suggested that there is little merit in retaining this assemblage of material.

Comparative material

- 4.1.6 This assemblage of material is too small and poorly preserved to be of value for comparison with material from elsewhere, whether within or from outside the CTRL project.

Potential for further work

- 4.1.7 There is no potential for this assemblage of marine molluscan material to address the original Landscape Zone Aims or the Fieldwork Event Aims.

Bibliography

Winder, J M, 1993, A study of the variation in oyster shells from archaeological sites and a discussion of oyster exploitation, unpublished PhD thesis, University of Southampton

Table 6: Summary of marine molluscs

Context number	Left valve (LV) oyster	Unmeasurable LV oyster	Right valve (RV) oyster	Unmeasurable RV oyster	Total valves oyster (P = present)	Other species	Comments on oysters
8	2	3	-	4	9	-	Plus 1 fragment each of LV and RV. Thick, robust, broken but not etched, eroded or worn. Irregularities. Triangular shape to 1.
11	-	2	-	2	4	-	Plus approx. 10 minute fragments.
						-	
13	2	2	2	F	6	-	1 LV exceptionally large and thick with massive hinge scar.
14	2	2	10	1	15	1 <i>Buccinum undatum</i> intact	Mixture thin & thick and various sizes. 1 v. thick & heavy. RV. Broken but not worn or eroded. Glossy interiors ?organic content