Channel Tunnel Rail Link

London and Continental Railways

Oxford Wessex Archaeology Joint Venture

The Roman settlement at Bower Road, Smeeth, Kent

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LIST OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF PLATES

ABSTRACT

As part of an extensive programme of archaeological investigation carried out in advance of the construction of the Channel Tunnel Rail Link (CTRL), Oxford Archaeology (formerly Oxford Archaeological Unit) was commissioned to undertake a watching brief between Mersham and Barrowhill in Kent. In the course of the watching brief, a concentration of archaeological features was exposed during construction earthworks, near Bower Road, Smeeth (OS NGR 605946 138812), and subjected to detailed excavation. The excavation was carried out between July 1999 and September 1999, under the project management of Rail Link Engineering, on behalf of Union Railways (South) Limited (a subsidiary of London and Continental Railways).

The features recorded were principally of Roman date. However, a small assemblage of redeposited worked flint, ranging in date from the Mesolithic to early Bronze Age, was also recovered, suggesting some prehistoric activity in the area. Late pre-Roman Iron Age activity was indicated by a small quantity of pottery, recovered from a pond and a series of drainage ditches. Evidence for early Roman activity was limited, comprising part of a field system. By the first half of the 2nd century AD, a rural agricultural settlement seems to have been established, represented by the severely truncated remains of a timber structure, with large postholes and associated slight, ragstone wall footings. There were also ditched enclosures, fence lines, a waterhole and several pits. It is possible that the establishment of this settlement represents a shift from the nearby later prehistoric settlement at Little Stock Farm, which lies only 400m away, to the south-east, and appears to have been continuously occupied from the later Bronze Age until the late Iron Age. Ample evidence of crop processing activity and animal husbandry was found in the 2nd-century features. The ditched enclosure boundaries seem to have fallen into disuse in the late 2nd century AD, to be replaced by a large rectangular enclosure and a substantial 20-post timber building. A cremation burial was identified just outside the enclosure. This agricultural complex seems to have been in use until the late 3rd century, and may have continued into the 4th century, although at a much reduced level. Evidence of occupation continuing into the 4th century AD comprised three pits, including one pit with evidence of ritual deposition, and a small amount of pottery and coins deposited in the upper fills of earlier features.

There was limited evidence of post-Roman agricultural activity, including two field boundary ditches running across the main site, a group of slight, ragstone wallfootings interpreted as animal pens and a field boundary of medieval or post-medieval date. The latter were discovered during stripping to the south-east of the main excavation area.

RÉSUMÉ

L'Oxford Archaeology fut chargé d'entreprendre une surveillance archéologique entre Mersham et Barrowhill, dans le Kent, dans le cadre d'un programme de recherches archéologiques préventives de grande envergure, exécuté en avance de la construction de la ligne ferroviaire du Tunnel sous la Manche (CTRL). Au cours de la surveillance archéologique, une concentration de structures archéologiques fut exposée lors d'opérations de terrassement, près de Bower Road, Smeeth (coordonnées géographiques OS NGR 605946 138812), et firent l'objet de fouilles approfondies. Les fouilles furent menées entre juillet et septembre 1999, sous la direction du maître d'oeuvre, Rail Link Engineering, pour le compte de Union Railways (South) Limited (une filiale de London and Continental Railways).

Les structures enregistrées étaient essentiellement d'époque romaine. Cependant, un ensemble limité de silex taillés hors contexte, datant du Mésolithique au début de l'âge du Bronze, fut découvert, suggérant une occupation préhistorique dans le secteur. L'occupation de la fin de l'âge du Fer est représentée par une marre et une série de fossés de drainage, contenant une petite quantité de mobilier céramique. L'occupation du début de l'époque romaine se limitait également à un fragment de parcellaire agricole. A partir de la première moitié du 2ème siècle de notre ère, il semble qu'un site rural d'exploitation agricole se soit implanté, sous la forme de vestiges sévèrement tronqués d'une structure en bois, aux larges trous de poteaux, associés avec des fondations de murs fragiles. Des enclos délimités de fossés, des palissades, un point d'eau et plusieurs fosses furent également mis en évidence. L'établissement de ce site d'occupation représente peut-être un déplacement d'habitat établi précédemment au site d'occupation avoisinant de Little Stock Farm, datant de la fin de l'époque préhistorique. Ce dernier se situe seulement à 400 m au sud-est, et semble avoir été occupé sans interruption depuis la fin de l'âge du Bronze jusqu'à la fin de l'âge du Fer. Des indices solides d'exploitation agricole et pastorale furent mises en évidence par des structures datant du 2ème siècle de notre ère. Les fossés de délimitation des enclos semblent avoir cessé d'être utilisés vers la fin du 2ème siècle, pour être remplacés par une large enceinte rectangulaire et un bâtiment substantiel en bois, comprenant 20 trous de poteaux. Une sépulture à incinération fut mise au jour juste en dehors de l'enceinte. Ce complexe agricole semble avoir été utilisé jusqu'à la fin du 3ème siècle ap. JC, et a peut-être continué à être occupé au cours du 4ème siècle, de manière plus sporadique. Les preuves d'occupation datant du 4ème siècle ap. JC se composent de trois fosses, y compris une fosse comprenant des dépôts de nature rituelle, et d'un ensemble limité de mobilier céramique et numéraire mises au jour dans les remplissages finaux de structures de date antérieure.

Quelques indices d'activité agricole postérieure à l'époque romaine furent misent au jour, y compris deux fossés de délimitation traversant la longueur du site principal. Un

décapage au sud-est de l'aire principale de fouille mis en évidence un groupe de fondations légères de murs, interprété comme étant des enclos pastoraux et une limite parcellaire datant de l'époque médiévale ou moderne.

ZUSAMMENFASSUNG

Im Rahmen umfangreicher archäologischer Untersuchungen im Vorfeld des Baus der Bahnstrecke durch den Kanaltunnel (Channel Tunnel Rail Link, CTRL) wurde die Oxford Archaeology mit der Baustellenbeobachtung im Bereich zwischen Mersham und Barrowhill in Kent beauftragt. Im Verlauf dieser Beobachtung wurde beim Bau des Eisenbahnunterbaus in der Nähe der Bower Road in Smeeth (Kartenverweis: OS NGR 605946 138812) eine Häufung archäologischer Strukturen freigelegt, die einer detaillierten Grabung unterzogen wurden. Die Grabung fand zwischen Juli und September 1999 im Auftrag von Union Railways (South) Limited (einer Tochtergesellschaft von London and Continental Railways) unter der Projektleitung von Rail Link Engineering statt.

Die Funde stammten vornehmlich aus der Römerzeit. Es wurde jedoch auch eine kleine Sammlung umgelagerter bearbeiteter Feuersteine gefunden, die vom Mesolithikum bis in die frühe Bronzezeit reichten und auf prähistorische Aktivitäten in dem Gebiet hindeuteten. Einige wenige Tonwaren, die aus einem Teich und einer Reihe von Entwässerungsgräben geborgen wurden, wiesen auf Aktivitäten in der späten vorrömischen Eisenzeit hin. Dagegen gab es nur begrenzte Hinweise auf eine Nutzung in der frühen Römerzeit; sie beschränkten sich auf ein partielles Flursystem. Spätestens in der ersten Hälfte des 2. Jahrhunderts n. Chr. war offenbar eine agrarische Siedlung etabliert, erkennbar an den spärlichen Resten eines Holzgebäudes mit großen Pfostenlöchern und zugehörigen leichten Mauerfundamenten aus Kieselsandstein. Außerdem wurden Grabenwerke, Zaunspuren, ein Wasserloch und mehrere Gruben ausgemacht. Möglicherweise resultierte der Aufbau dieser Siedlung aus einer südöstlichen Verlagerung der nur 400 m entfernt gelegenen spätprähistorischen Siedlung bei der Little Stock Farm, die offenbar von der jüngeren Bronzezeit bis zur späten Eisenzeit durchgängig bewohnt war. Die aus dem 2. Jahrhundert stammenden Funde enthielten zahlreiche Hinweise auf Getreideverarbeitung und Tierzucht. Die Grenzlinien der Grabenanlage verloren gegen Ende des 2. Jahrhunderts n. Chr. offenbar ihre Funktion. An ihre Stelle trat eine große rechteckige Einhegung mit einem mächtigen, auf 20 Pfosten gestützten Holzhaus. Unmittelbar außerhalb des eingehegten Geländes wurde ein Brandgrab gefunden. Dieser landwirtschaftliche Komplex wurde offenbar bis ins späte 3. Jahrhundert und – in stark reduzierter Form – vielleicht sogar bis ins 4. Jahrhundert hinein betrieben. Hinweise auf eine Besiedlung bis ins 4. Jahrhundert ergaben sich durch drei Gruben, von

denen eine Belege für eine rituelle Deponierung enthielt, und einige Tonwaren und Münzen, die in den oberen Füllschichten der älteren Strukturen eingelagert waren.

Zu den begrenzten Hinweisen auf eine landwirtschaftliche Nutzung in nachrömischer Zeit zählten zwei quer über die Fundstelle verlaufende Begrenzungsgräben, eine Gruppe leichter Mauerfundamente aus Kieselsandstein, die als Pferch gedeutet wurden, und eine Flurgrenze aus dem Mittel- oder Nachmittelalter. Letztere wurden beim Abtragen des Mutterbodens südöstlich des Hauptgrabungsareals entdeckt.

ABSTRACTO

Como parte de un largo programa de investigación arqueológica previo a la construcción del Channel Tunnel Rail Link, Oxford Archaeology fue el encargado de realizar el seguimiento de obra entre Mersham y Barrowhill en Kent. En el curso de dicho seguimiento y durante los trabajos de construcción, se identificó un grupo de estructuras arqueológicas cerca de Bower Road, Smeeth (coordenadas geográficas en OS NGR 605946 138812), al que siguió una excavación en detalle. Dicha excavación se desarrolló durante los meses de Julio y Septiembre de 1999, bajo la dirección de Rail Link Enginenring para Union Railways (South) Limited (parte de London and Continental Railways).

Las estructuras documentadas fueron principalmente de época romana. Sin embargo, una concentración reducida de sílex trabajado fue recuperada, con datación del Mesolítico a la Edad de Bronce, sugiriendo por tanto cierta actividad prehistórica en la zona. Asimismo, se evidenció actividad prerromana de la Edad del Hierro a partir de una modesta cantidad de cerámicas recuperadas en un estanque y en varias zanjas de drenaje. La actividad romana fue escasa, consistiendo básicamente en un sistema agrícola. Hacia la mitad del siglo II d.C., parecen haberse establecido asentamientos agrícolas representados en los restos truncados de una estructura de madera con grandes huellas de postes y un muro fundacional de piedra calcárea. También se localizaron zanjas de cerramiento, líneas de vallado, un pozo y varias fosas. Es posible que la localización de este asentamiento represente un cambio del cercano yacimiento de la prehistoria reciente en Little Stock Farm, a sólo 400 metros al sur-este, ocupado continuadamente desde el final de la Edad del Bronce hasta el final de la Edad del Hierro. Evidencias de actividad agrícola y cuidado de animales fueron encontradas en estructuras del siglo II d.C; los límites del cercado parecen haber caído en desuso a finales del siglo II d.C., para ser reemplazados por un encerramiento rectangular y un edificio con 20 grandes postes de madera. Un enterramiento de cremación fue identificado fuera del cercado. Este complejo agrícola parece haber estado en uso hasta el final del siglo III d.C. y podría haber continuado hasta el siglo IV d.C., aunque a un nivel más reducido. La ocupación en el

siglo IV d.C. queda evidenciado en tres hoyos, incluyendo una fosa con un depósito votivo y escasas cerámicas y monedas depositadas en las capas superiores de estructuras tempranas.

Escasa evidencia de actividad agrícola post-romana, incluyendo dos zanjas de limitación a lo largo del yacimiento principal, escasos muros fundacionales de piedra calcárea intrepretados como cercados de animales y zanjas limítrofes de fecha medieval o post-medieval. Estas últimas fueron descubiertas durante el levantamiento de la capa vegetal al sureste del yacimiento principal.

ACKNOWLEDGEMENTS

The investigations at Bower Road were undertaken principally by staff from Oxford Archaeology (OA), with support and overall management framework during the post-excavation phase provided by the Oxford Wessex Archaeology Joint Venture (OWA). The work was supervised by an archaeological team from Rail Link Engineering (RLE), on behalf of the Employer, London and Continental Railways.

Management of the fieldwork and post-excavation assessment was undertaken by Stuart Foreman. Andrew Parkinson supervised the fieldwork and Valerie Diez prepared the post-excavation assessment report. Fieldworkers and specialist contributors to the assessment report are credited in the main project acknowledgements in the digital archive (ADS 2006).

The following specialists contributed to this publication report: Lisa Brown (Roman pottery), Paul Booth (coins), Hilary Cool (glass), Terence Paul Smith (building material and fired clay), Lorraine Mepham (medieval pottery), Jennifer Kitch (animal bones), Annsofie Witkin (human remains), Chris Stevens (charred plant remains) and Simon Skittrell (CAD draughtsman). All illustrations were prepared by Anne Stewardson. The abstract was translated by Mercedes Planas (Spanish), Gerlinde Krug (German) and Valerie Diez (French).

This report was edited by Paul Booth (Roman period team leader). The project senior editor was Julie Gardiner.

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1 INTRODUCTION

1.1 Project Background

The site at Bower Road, Smeeth, Kent (OS NGR 605946 138812) was discovered and excavated as part of an extensive programme of archaeological investigation carried out in advance of the construction of the Channel Tunnel Rail Link (CTRL). CTRL was built by London & Continental Railways Limited in association with Railtrack Group plc. The project was authorised by Parliament with the passage of the CTRL Act, 1996. The high-speed line runs for 109 km (68 miles) between St Pancras station in London and the Channel Tunnel and was built in two sections. Section 1 lies entirely within Kent and runs from Fawkham Junction (Gravesham) to Folkestone. The work was project managed by Rail Link Engineering (RLE).

Oxford Archaeology (OA), formerly Oxford Archaeological Unit (OAU), was commissioned to monitor all earthworks within CTRL Project Area 440, which extended for 15.5 km from North of Sevington Railhead to Frogholt.. Following the discovery of extensive significant remains *c* 4.5 km south-east of Ashford, the Bower Road site was subject to detailed investigation. The location of the site is shown on Figure 1 and the details of the archaeological works are given in Table 1.

Table 1: Fieldwork Events

Fieldwork Event Name	Type	Fieldwork Event Code	Contractor	Dates of Fieldwork
Bower Road	Watching Brief Significant Discovery Individual	ARC 440 99/95+900-97+100	OA	06/07/1999-15/09/1999

The total area investigated in which archaeological features were visible was *c* 0.25 ha. The adjacent sections of the CTRL trace were stripped under variable watching brief conditions, but with a high degree of confidence that significant concentrations of late Iron Age or Roman features would have been identified, if present. Excavation of the site was undertaken over a period of 3 months, from July 1999 to September 1999.

1.2 Geology and Topography

The Bower Road site falls within the Wealden Greensand landscape zone (Fig. 1). The local drift geology comprises Atherfield Clay, overlain by the Cretaceous Lower Greensand Hythe Beds to the north. The geological substrate is overlain by silty clay soils. The site is located *c* 2 km north of the East Stour river, on the upper edge of the valley. The ground slopes down gradually from north to south, towards the river. The site was under arable cultivation before the CTRL works started. Very little historic woodland is present in this area, and in places

intensive agricultural land-use has resulted in significant loss of historical field boundaries, leaving very open areas.

1.3 Archaeological and Historical Background

The site is located in a geological zone, the Lower Greensand, which appears from past studies to have been relatively sparsely populated in the Roman period compared to other parts of Kent. However, recent excavations, including the CTRL, have shown this to reflect rather a lack of research than a genuine absence.

The site of Bower Road is well situated in regard to the communication network of known roads and trackways. Situated only *c* 10 km from the channel coast, the site must have had access to two main roads in the Roman period, the first one, to the west of the site, connecting Canterbury to the ironworking sites of the Weald, and the second one, coming from Lympne, running NW-SE to the south of the site (Drewett *et al.* 1988). At the point where these two roads met was the centre of the recently discovered small town at Westhawk Farm (Booth *et al*. forthcoming), which lies roughly 5 km west of the present site. This site revealed important evidence for iron production, both smelting and smithing, but also agricultural activities and a small cemetery area. Occupation of the excavated part of the settlement was confined almost entirely to the period *c* AD 50-250, with only minimal evidence of late Roman activity. Westhawk Farm is the largest known Roman settlement in the vicinity of Bower Road. To the north-west of Ashford, Leda Cottages (Diez 2006) and Beechbrook Wood (Brady 2006), respectively situated *c* 7 km and *c* 4 km from Westhawk Farm, both revealed evidence of late Iron Age and Roman occupation.

A third main road, connecting Canterbury to Lympne, runs *c* 6 km east of the site. Canterbury (*Durovernum Cantiacorum*), situated *c* 20 km to the north, was the cantonal capital, an already existing Belgic settlement which developed into a Roman town. Other significant sites in the vicinity include Lympne (*Portus Lemanis*), only *c* 7 km south-west. Lympne was probably a base of the *Classis Britannica* from the early 2nd century AD with an as yet unlocated associated port. The well-known 'Saxon-shore' fort was constructed during the 3rd century AD (Cunliffe 1980).

The immediate vicinity of the site has revealed small pockets of late Iron Age and Roman activity, all of which were excavated in advance of the CTRL. Boys Hall Balancing Pond, 3.5 km to the north-west of Bower Road, revealed a late Iron Age and early Roman field system and cremation burials (URS 2000a). Similar evidence was found at the West of Blind Lane site (URS 2000b), 2 km to the north-west, where part of a field system seems to have fallen into disuse in the early 2nd century AD. At Little Stock Farm (Ritchie 2006), *c* 400 m to the east, excavations identified a multi-phase settlement, occupied from the late

Bronze Age probably through to the late Iron Age including subrectangular enclosures, ring-ditches, field systems, pits, postholes and hearths. The layout of the settlement was altered and remodelled on several occasions during this period of continuous occupation. The excavations at East of Station Road (URS 2000c), 2.5 km east of Bower Road, revealed a field system composed of roughly rectilinear fields established in the late Iron Age and falling into disuse early in the 2nd century AD. Little or no evidence has been found in the area for Roman occupation after *c* AD 200.

Little Stock Farm also revealed some evidence of medieval activity, in the form of a stone quarry with associated enclosure and a field system predominantly aligned east to west and north to south. The village of Mersham represents, however, the principal medieval site in the vicinity. Its church is documented as early as 1040. The recent CTRL excavations recorded a metalworking site to the south of the church (Helm 2006), principally dated AD 1050-1200 although probably originating in the late Saxon period.

2 AIMS

The aim of this report is to present synthesised data at an interpretative level that can be assimilated into complementary studies. This synthetic report is supported by the fieldwork and research archive which is freely available as a web-based digital archive.

In support of the CTRL Project Monograph (Booth *et a*l. 2007), the Bower Road report integrates key assemblages and stratigraphic data into a site sequence secured on key dating evidence from artefact groups. The report includes a discursive narrative describing the sequence of activity and reasoning evidence (URS 2003, 15-16).

The updated research aim specific to Bower Road focuses on its status as a possible villa settlement, looking at the function of the posthole building as a possible subsidiary building within an estate centre (URS 2003, 34).

Other site aims include refining the chronology and the understanding of the site's structures and economic base, but also characterising the status of its inhabitants and considering the evidence for Roman ritual practice (URS 2002, 21).

3 METHODS

The site was discovered during the scheme-wide watching brief. No archaeological evidence had previously been identified by the desk-based assessment (URL 1994). The main area chosen for excavation (Fig. 2) was stripped by a 360-degree excavator in two distinct phases. A smaller excavation was undertaken 35 m south-east of the main one. In a second stage of work, a further 32 x 10 m strip was investigated in the northern corner of the main area. The north-west corner of the site was entirely truncated by construction activity. All fieldwork, from site stripping to recording and sampling, was conducted by Oxford Archaeology (OA) in

accordance with the Written Scheme of Investigation (URS 1999) prepared by the Project Manager, Rail Link Engineering (RLE).

The MAP2 assessment report was produced by OA in accordance with the specification produced by RLE (URS 2000d). All method statements followed national guidelines and were agreed in consultation with English Heritage and Kent County Council (KCC) on behalf of the Local Planning Authority.

The post-excavation analysis and report were carried out by Oxford Wessex Archaeology Joint Venture (OWAJV) following the methodology set out by the Updated Project design for archaeological analysis and publication (URS 2003). All project design documents are available in the digital archive (ADS, 2006).

4 RESULTS

4.1 Phase Summary

The overall phase plan is shown on Figure 2. The sequenced phases on the site are based initially on the stratigraphic record, and their dating depends almost entirely upon ceramic evidence. In some cases pottery evidence alone was used as the basis for assigning discrete features to specific phases. The fills of all archaeological features were of a similar nature, mainly clayey silt, and in most cases did not help in phasing the site. For this reason they are discussed in the narrative only when needed for the understanding of the site sequence. In addition to the presence of residual earlier flintwork, the following phases were recorded on site:

- Late Pre-Roman Iron Age (50 BC-AD 43): There was limited evidence of activity for this period, including one pond fed by three drainage ditches. A further three ditches were also attributed to this phase.

- Early Roman (AD 43-130): This phase was represented by four ditches and one sump, probably part of a field system.

- Middle Roman (AD 130-200): This was the main phase of development of the site. A new, more complex enclosure system of six ditches was established. Several associated discrete features were also dated to this phase, including a building, two possible fence-lines, several pits and a cremation burial.

- Middle to late Roman (AD 180-300): A new rectangular enclosure was laid out. The main activity is represented by a 20-post building, probably a barn..

- Late Roman (AD 270-400): Only four discrete features were securely dated to this phase. Late material was also found in the top fill of earlier features.

- Post-Roman: Two ditches of post-Roman date were identified on the main site. A group of four walls of medieval or post-medieval date was recorded in the small area south-east of the main excavation.

The following table provides quantities and percentages of pottery per phase.

Table 2: General quantification of pottery by phase

Phase	Count	Weight (g)	Count %	Weight %
Unphased	550	4174	13.2	10.7
Late Pre-Roman Iron Age	26	165	0.6	0.4
Early Roman	280	2884	6.7	7.4
Middle Roman	1712	19891	41.2	50.8
Middle to late Roman	1271	10214	30.6	26.1
Late Roman	223	1246	5.4	3.2
Post-Roman	229	1851	2.2	1.4
Total	***4291***	***40425***		

4.2 Hunter-gatherers and early Agriculturalists- Mesolithic to late pre-Roman Iron Age (*c* 13,000 uncal bc - *c* 300 BC)

No features of earlier prehistoric date were identified at Bower Road, but a small assemblage of redeposited worked flint was retrieved in the course of the excavation. This material, comprising a total of 120 pieces, is dated from the late Mesolithic to the early Bronze Age. A group of 35 flints found in the area of medieval/post-medieval sheep pens, to the south-east of the main excavation area, was in fairly good condition, suggesting the proximity of their point of deposition.

No trace of middle Bronze Age to late Iron Age activity was identified.

4.3 Towns and their Rural Landscapes I - The later pre-Roman Iron Age and Romano-British Landscapes II (*c* 300 BC to *c* AD500)

4.3.1 Late Pre-Roman Iron Age (50 BC to AD 43)

Evidence for late pre-Roman Iron Age activity was fairly limited at Bower Road (Fig. 3). It consisted of two main parallel ditches (198 and 176), aligned NNE-SSW feeding into a large pond or waterhole (253) situated downslope in a natural run-off area. A series of small meandering drainage ditches (204, 206, 208), apparently contemporary with these features, was attributed to the same phase. A small segment of ditch (202) on the northern edge of the site is very likely to be part of this phase; it looks like the continuation of ditch 176, although the latter appears to be terminating below later ditch 742.

The largest group of late Iron Age pottery (28 sherds) was retrieved from ditch 176. Some residual late Iron Age pottery was also found in various features of later date. Most of ditches from this period were dated through alignment and stratigraphic relationships because of the paucity of dating evidence. They appear to be cut by all Roman ditches and are

obscured by colluvium in some parts of the site. Colluvial layer 620 was observed in the form of patches, mainly in the centre of the site and to the south-west. It seems to have been washed down the slope subsequent to the late Iron Age phase but prior to the middle Roman period whose features are cut through it. On the basis of this observation and physical alignment, ditches such as 203 and 198 have been attributed to the late Iron Age.

The nature of the activity during this early phase is unclear but likely to represent part of a more extensive field system, with some of the ditches, if not all, dug for drainage purposes. An Iron Age settlement was discovered on the site of Little Stock Farm, situated *c* 400 m to the south-east of Bower Road, and the ditches at Bower Road were probably related to this settlement activity.

4.3.2 Early Roman (AD 43 to AD 130)

Only four ditches, roughly aligned NE-SW, and a sump could be attributed to the early post-Conquest period (Fig. 3). Two ditches (173 and 183), located on a continuous alignment, fed into a sump (382). A further two ditches (174 and 209) ran roughly parallel to 173 on either side of this group. Two small re-cuts (200 and 201) through the late Iron Age ditch 176 have been attributed to this phase on the basis of the stratigraphic evidence. Another linear feature, 195, situated along the eastern edge of the site, was possibly present in the early Roman period. It contained 5 sherds of early Roman pottery from its primary fill and was truncated by a middle Roman ditch. Its function remains unclear although it was interpreted on site as a possible palaeochannel based mainly on its irregular shape in plan.

The nature of the activity during this phase is consequently difficult to characterise, other than being part of a probably more extensive field system. The site of Little Stock Farm has revealed a very reduced level of activity in the early Roman period, consisting of only two features identified to the east of the main Iron Age settlement area (near the existing Park Wood Cottage). This evidence suggests that most of that site had gone out of use by that time and that the focus of occupation had moved elsewhere. Neither evidence from Little Stock Farm nor Bower Road gives any indication of the location of a possible early Roman settlement, to which the features identified on the Bower Road site could be related.

The small group of early Roman features at Bower Road, however, produced significant ceramic assemblages (Fig. 4), in particular ditch 173 and contemporary sump 382. Ditch 173 yielded a total of 117 sherds (1573 g) of pottery, including grog-tempered bead-rim jars and necked jars and a single fragment of South Gaulish samian. The rim fragment of a glass jar was also retrieved from the same ditch. Sump 382 contained 76 sherds (923 g). A further 37 sherds of pottery (354 g) were retrieved from ditches 174, 183 and 209. A regular sestertius of Claudius (AD 41-50+) was also recovered from ditch 174. This coin is a relatively unusual find, as bronze coins of this period were usually copies (Booth and Cool

2006). The presence of a substantial amount of finds suggests that the main focus of activity for this period may not be far from the site. The range of pottery is fairly restricted and reflects the pattern observed for the late Iron Age (Brown 2006), suggesting the site was largely unaffected by the imposition of Roman authority in the immediate aftermath of the Conquest.

4.3.3 Middle Roman (AD 130 to AD 200)

The first significant phase of development of the site took place during the period AD 130 - 200 (Fig. 5). Although the dating evidence for this phase is fairly abundant and the range of features quite varied, the nature of the occupation is rather difficult to interpret. This difficulty mainly results from the high level of truncation in the northern area of the site (the differentially stripped area) where some of the most potentially significant features may have been located. The depth of archaeological features in this part of the site typically was between 0.10 and 0.15 m with a maximum of 0.30 m. This not only made it difficult to ascertain individual feature types, but also prevented the recovery of securely stratified environmental data that might have yielded evidence of agricultural activity, for example.

The enclosure system

A new field system was established around AD 130, composed of five main ditches running on a NW/SE and NE/SW alignment. No distinctive pattern of enclosure is visible from the plan although the ditches do seem to have been utilised as boundaries, delimiting at least two areas.

The larger area in the northern half of the site (northern enclosure on Fig. 5) seems to have been bounded by ditch 742 as its northern edge, with ditches 169 and 178 forming the southern and western edges respectively. This created a visible enclosed area of 35 m by 97.5 m. Ditch 169 is the only ditch visible in its entirety for this phase. It was the re-cut of an earlier ditch (629) of unknown date. The southern area (southern enclosure on Fig. 5) was delineated by ditches 180 and 169 to the north, 178 to the west and ditch 172 to the south, enclosing a visible area of 23 m by 97.5 m. Excavations of sections at ditch intersections (between ditches 172, 178 and 180) showed that they were probably contemporaneous. All of the ditches from this phase had a similar profile with a V-shape with a flat or concave bottom and a depth varying from 0.22 to 0.56 m (Fig. 5).

The five ditches produced sizeable assemblages of 2nd-century pottery. Ditch 169 produced the largest group with 865 sherds (10341 g) including a Black-burnished ware 2 triangular rimmed bowl, a ‘London ware’ imitation of a Dragendorf 37 bowl, a stamped mortarium from Verulamium, Gaulish and southern Spanish amphora sherds, an Upchurch ware ovoid beaker and a large group of grog-tempered jars and storage jars. Many fragments

were of substantial size, of mostly average condition, possibly representing a dump of material originating from a domestic context (Fig. 6). This could suggest the presence of domestic structures, which did not survive, in the immediate vicinity of ditch 169. In contrast, ditches 172 to the south and 742 to the north produced fragmentary and abraded groups of pottery, suggesting that the main domestic area was not situated on the excavated site.

The number of discrete features located to the north of ditch 169 seems to suggest that the main focus of habitation lay to the north, either just outside the excavated site or partly within it. The excavated area could have been located just on the edge of the settlement itself with some domestic activities carried out in the northern enclosure, explaining the large amount of pottery from ditch 169.

The northern enclosure: building 686 and associated features

The remnants of a post building were visible in the NW corner of the site. Structure 686 comprised eight postholes in two parallel rows, five to the south and three to the north. The surviving extent of this post structure, measured from the centre of the post-pipes, is 6.40 m by 1.80 m (Fig. 7). Although situated in a very truncated area, most of the postholes yielded evidence of post-pipes. Details of the postholes are presented in the table below (Table 3).

Table 3: Building 686, details of postholes

Cut Number	Diameter	Depth	Comment
659	0.8	0.22	Post-pipe 660
666	0.62	0.19	No visible post-pipe
668	0.72	0.20	Post-pipe 669
670	0.80	0.24	Post-pipe 671
672	0.70	0.39	No visible post-pipe
661	0.90	0.60	Post-pipe 662/665
676	0.70	0.26	No visible post-pipe
674	0.80	0.31	Post-pipe 675

Two of the postholes produced a total of 5 sherds dated AD 43 to 200. Remnants of ragstone footings (Plate 2) were identified in the vicinity of the building, parallel to its southern side (611), to the east (688) and to the north (617 and 730) perpendicular to the two rows of postholes. The visible lengths of these footings were respectively 14.5 m, 0.40 m, 4.5 m and 5 m. They seem to represent robbed out dry stone walls, which are likely to have been associated with building 686. The dating evidence associated with these structures is very slight. Footing 730 produced 13 sherds (98 g) dated mainly to the period AD 70 to 130, therefore pointing towards the previous phase. However the pottery is relatively abraded and the spatial alignment of this group of features corresponds perfectly with the more securely dated middle Roman ditches.

The morphology of building 686 is difficult to interpret because of the level of truncation in this part of the site and the low level of preservation of associated structures. The post-structure in itself seems incomplete if considered as a free-standing structure. The layout of the surviving postholes (five on one side and three on the other) does not make much sense from a structural point of view and the surviving width (1.80 m) is very narrow.

The remnants of ragstone footings 611, 730 and 617 were suggestive of robbed out walls, leaving at most one course of stone. It was suggested that these could be the truncated remains of an aisled type building (URS 2002) comparable to the ones found at Thurnham or Keston villas (Lawrence 2006; Philp *et al*. 1991). This would imply that only the southern postholes survived and that the timber building extended further to the north. The depth and morphology of the surviving postholes do not, however, support this hypothesis. The depths of the eight postholes, although quite varied, do not suggest that the rest of the timber building could have been entirely truncated without leaving traces. Most of them contained packing material which made them more obvious in the ground, and unlikely not to have been spotted in the course of the machine stripping. If considered as one building, the extent of the surviving stone remains would make it a very large one (20 by 20 m), bigger than any known example. Considering the character of the site, this is highly unlikely and other hypotheses have to be considered.

If not truncated, structure 686 is likely to have been directly associated with footing 611, possibly as a timber structure lining against the wall, the three postholes at the front representing a kind of entrance space. Such a layout would have doubled the surface area of the timber structure, as it would also have encompassed the gap between the postholes and wall 611. The remnants of structure 730/617 and 611, if projected, are on a perpendicular alignment and could have formed a courtyard wall, enclosing the timber building and an area of undetermined size. Courtyard walls with lean-to buildings ranged along the interior have been attested on sites such as Northfleet Villa (pers. com. Stuart Foreman). This boundary, for example, could have prevented the movement of livestock in or out of this enclosure. If this interpretation is correct, then walls 617 and 730 are likely to represent two different phases of use, one possibly replacing the other.

The function of the post-building and associated walls remains unclear and no evidence was recovered to shed light on it. However the paucity of finds from the building itself and the surrounding area indicates that it was probably not domestic, in which case it may have been used for storage or as a small stable or byre.

Two further lines of truncated postholes, probably representing fence-lines, were identified to the south of the building (Fig. 5). Structure 185, composed of three postholes, was situated near the western terminus of ditch 169 and could have been associated with a possible entrance into the northern enclosure. The diameter of the postholes varied from 0.40

to 0.75 m with a typical depth of *c* 0.21 m. Ditch 180 was parallel to ditch 169 and, although it was obscured by the later truncation from ditch 170 (Fig. 12), did not extend beyond the line of modern truncation, so had to terminate not far from the end of ditch 169, the two possibly forming a channelled entranceway. Group 185 produced 14 sherds of pottery (66 g) dated AD 43-200. Another line of six postholes (Sub-group 188) was phased on the basis of its alignment rather than upon the very slight artefactual evidence. It was traced for 15 m; the diameter of individual cuts varied from 0.24 to 0.37 m with a typical depth of 0.15 m and no visible post-pipes or packing material.

Further discrete features in this area included the bases of two truncated small ditches (175 and 612) and three pits (147, 163 and 733), all of indeterminate function.

Curvilinear ditch 175 had a visible length of 6 m, gradually sloping sides with a flat base and an average depth of 0.09 m. It contained a sizeable assemblage of 200 sherds (2943 g) of pottery dated to *c* AD 120-200, including a copy of a Verulamium face pot, a central Gaulish samian Dragendorf 37 bowl and a fragment of a poppy-head beaker in fine grey ware along with a number of grog-tempered ware jars and storage jars. Its function is unclear although it could possibly have been associated with a circular building.

Small ditch 612, situated a few metres west of ditch 175, was no more than 4.80 m long and 0.14 m deep; 89 sherds of pottery (820 g), mostly coarse ware fabrics, 6 nail fragments and 2 fragments of animal bones were recovered from its single fill.

Feature 147, which produced a further 79 sherds (1209 g), had an unusual square shape and could have been either a pit or a posthole, with a width of 0.78 m and a depth of 0.14 m.

The southern enclosure

The area to the south of ditch 169 produced another four features belonging to this phase (Fig. 5); two pits (123, 886), a posthole (340) and a waterhole (372), all dated through pottery evidence. Waterhole 372 (Fig. 10 and plate 1) was a large circular feature with a possible access from the west, 3.80 m in diameter, and with a maximum depth of 1.1 m. This feature produced a substantial assemblage (232 sherds; 2503 g) of 2nd-century pottery along with residual 1st-century sherds and a fragment of blue/green prismatic bottle from its lower fills. The presence of this waterhole in the southern enclosure indicates the need for water supply. Therefore it is possible that this part of the site represented a stock enclosure. If so, the narrow channelled entrance way between the northern and southern areas could have been a means of controlling animal movement via this restricted access. The northern enclosure could possibly represent an intermediary area between the livestock enclosure and the settlement, where some farming activities were carried out.

Two further pits (886 and 123) contained 2nd-century pottery. The former was an oval pit, situated directly to the south of the southern enclosure, with steep sides and a slightly

concave base, 1.26 m in diameter and 0.53 m deep and the latter had a sub-rectangular shape, with steep sides and a flat base, a diameter of 1.06 m and a depth of 0.78 m. A collection of sandy wares and a central Gaulish samian Dragendorf 37 bowl were recovered from pit 123.

Both were filled with a quantity of burnt material, possibly indicating the dumping of hearth or oven contents, and yielded rich samples of charred plant remains. The presence of a higher proportion of glumes rather than grains suggests that the charred material was waste from processing of crops taken from storage rather than representing the burning of cleaned grains. The waste seemed to be a mixture of crops, with spelt wheat dominating the assemblage and oats, emmer wheat, barley (hulled variety) and free-threshing cereal present in smaller proportions. The presence of burnt material in both pits, associated with the charred plant remains, suggests that these were not storage pits. If this is the case, then the storage area for the cereals brought from the harvested fields does not appear to have been identified on the site. The location of pits 123 and 886, in the south-east of the site, may suggest that the storage area could be situated just outside the eastern boundary of the excavation. The majority of seeds of wild species identified in the charred plant remains assemblage are representative of field weeds so can reveal some aspects of past cultivation practices. The relatively high proportion of perennial species in comparison with annual species recorded in the sample from pit 886 suggests relatively little soil disturbance, more in keeping with shallow ard cultivation than with intensive ploughing (Stevens 2006).

Feature 195, discussed in the previous section, may still have been active at least at the start of the middle Roman phase. Pit 123 was just on its western edge and ditch 169 terminated only 4 m from it, suggesting that both features respected it. Furthermore, 21 sherds of 2nd-century pottery (165 g) were retrieved from the secondary fill of 195. It could have served originally as an eastern boundary to the southern enclosure. However stratigraphic relationships indicate that it was truncated by ditch 172 so it must have mostly silted up by the time the southern boundary ditch was dug.

Nature of the occupation: discussion

Evidence for activity in the middle Roman period is rather fragmentary. The analysis of the finds and environmental samples sheds some light on activities and on the status of the site and its inhabitants.

The only coin found in a secure context, dated 1st/2nd-century, was retrieved from ditch 742 and was in extremely poor condition. Another 2nd-century coin (AD 146-175) was a residual find in a post-Roman feature. The metalwork assemblage is entirely composed of structural objects, mainly nails without any noticeable spatial distribution pattern.

The ceramic building material is fragmentary and does not seem to represent primary destruction of buildings but rather material re-used in a domestic or agricultural context

(Smith 2006). There is no visible pattern or concentration in the distribution of the building material.

The animal bones from this phase suggest a producer site with evidence of a mixed farming strategy, where animals were reared for consumption, secondary products and traction (Kitch 2006). Cattle, used for both milk and traction, dominated the assemblage, followed by pig, primarily raised for meat, and then sheep/goat, mainly bred for wool. Supporting evidence for these observations includes the age of death and butchery marks observed on some of the fragments. Several equine bones were recovered from ditches 172 and 169, possibly indicating the use of horses as working animals as there was no evidence for butchery. The presence of bones of wild land animals suggests that some hunting took place although on a limited scale. Some marine molluscs, mainly oyster, were found in small quantities and may have been part of the inhabitants' diet.

Only the pottery analysis and identification of supply sources provide some evidence of status. Whilst the ceramic assemblages from the late Iron Age and early Roman periods are composed entirely of locally produced wares, the 2nd-century activity introduces a broader range of pottery supply. Although grog-tempered wares in the native tradition still dominate the assemblage, a number of imports appear, including Kentish sandy ware bowls, flagons from the Canterbury area, a wide range of Upchurch fine ware vessels, imports from the north of the London area and a handful of Continental imports, mostly from East and Central Gaulish centres. This changing pattern indicates that settlement development occurred in the 2nd century; it is also a reflection of regional trends including developments in transport, economic and social infrastructures in the Roman period.

The evidence available for this phase suggests Bower Road was a farmstead centre and that most of the features identified were associated with agricultural activities, such as animal husbandry and crop processing. The site lacks the structural evidence and associated finds (such as quern stones) to suggest the domestic area was situated in the excavated portion of the site. However the amount of pottery retrieved indicates the proximity of the dwellings. Considering the spatial distribution and density of features, it is likely that the bulk of the habitation area lay just to the north of the excavated site.

Whatever might have been the full extent of this settlement, the evidence uncovered at Bower Road has shown that a new agriculture-based settlement developed in the early 2nd-century in an area which was previously occupied by fields, controlled from elsewhere. This pattern contrasts strongly with observations made on other sites in the area. Evidence of activity found on the neighbouring sites of Little Stock Farm, Boys Hall Balancing Pond, West of Blind Lane and East of Station Road indicates that they had all gone out of use by the end of the early Roman period when Bower Road started to develop. Investigations at the nearby site of Little Stock Farm have identified a multi-phase settlement with continuous

occupation from the late Bronze Age probably through to the late Iron Age. It is possible that the site at Bower Road represents a shift of occupation after the Roman Conquest, but this cannot be considered as a continuous sequence because of the paucity of evidence in the early Roman period.

There are several possible explanations for the establishment of a new settlement, such as re-location in search of more fertile, less exploited soils, improved communications offered by the Roman road network or the attraction of the new small town at Westhawk Farm, which was very likely the local market centre for the farmstead at Bower Road. Recent excavations at Westhawk Farm suggested that ironworking formed an important part of its economic base (Booth *et al.* forthcoming). The sites of West of Leda Cottages and Beechbrook Wood, situated a few kilometres to the west of Westhawk Farm, have also produced evidence of iron smelting and smithing. Both sites appear to be of comparable size and status to Bower Road, but the latter did not reveal any ironworking-related activities, hence contrasting with the type of settlements identified on the edge of the Weald.

4.3.4 Middle to late Roman: the building and its enclosure (c AD 180 to c AD 300)

The enclosure

In the late 2nd century, the layout of the site was modified once more (Fig. 8). A new enclosure (171) was established, probably around *c* AD 180-200, on a parallel alignment to the previous ditch system. Only the southern half of this large rectangular enclosure was exposed by the excavations. It was 100 m long and at least 42 m wide. The northern extent of the enclosed area lay beyond the boundary of the excavation. No possible entrance was identified. Ditch 171 had a V-shaped profile and its depth varied between 0.40 and 0.88 m (Fig. 8). Stratigraphic relationships suggest that most of the ditches of the previous phase had silted up when ditch 171 was excavated.

Sections through this boundary ditch produced 412 sherds (3592 g), largely composed of abraded and residual pottery but also including mid 2nd-century and later types which indicate a date range of *c* AD 150-250. This dating evidence, considered with the evidence from the ditches of the previous phase, suggests a date towards the end of the 2nd century for the establishment of enclosure 171 and associated features. Other artefacts include several iron nails and two copper alloy objects, a fragment of chain link and a fitting, possibly a mount or strap end. A small quantity of ceramic building material was also present.

Building 550 and associated features

On the eastern side of this enclosure, was a substantial rectangular building (550). The building was composed of 20 regularly spaced postholes (Fig. 9 and plate 3). Posts were

arranged as eight pairs down the long sides with two posts between on the short sides. Posthole dimensions are presented Table 4 (Table 4).

Table 4: Building 550, details of postholes

Cut Number	Width	Depth	Comment
541	0.74	0.51	Post-pipe 407/408
543	0.90	-	Unexcavated
422	1.00	0.50	Post-pipe 423
577	0.43	0.48	Post-pipe 417
442	1.40	0.50	No visible post-pipe
450	0.90	0.56	Post-pipe 452
444	0.75	0.50	Post-pipe 447
192	-	-	Unexcavated
522	1.10	0.55	No visible post-pipe
520	1.10	0.45	No visible post-pipe
518	1.10	0.45	No visible post-pipe
513	1.10	0.50	No visible post-pipe
517	0.64	0.52	Evidence of post removal
533	0.38	-	Unexcavated
535	1.00	-	Unexcavated
595	0.50	0.45	Post-pipe 597
537	0.90	0.42	Post-pipe 538
539	1.00	0.50	Same as 402; Post-pipe 405
189	0.85	-	Unexcavated
190	0.95	-	Unexcavated

The overall dimensions of the building, measured between the post-pipe centres, were 19.50 m in length (NW-SE) and 7.20 m in width (NE-SW) representing an area of *c* 140 sq. m. The gaps between the postholes indicate that the entrance was possibly on the northern side of the building. The structure was surrounded by a rectangular drainage ditch (181). Ditch 181 had a V-shape profile with a flat base and a consistent depth of 0.40 m. A section dug at the intersection with enclosure ditch 171 showed that the fills of both features were contemporaneous. Considering the respective alignment and position of the postholes, it is assumed that the building is also contemporary with these two ditches. Neither ditch had time to start silting up before the other was dug.

The dating evidence produced by both ditch 181 and the postholes of building 550 was fairly tenuous. Most of the assemblage was composed of residual 1st- and 2nd-century sherds. The dating of the building is therefore essentially based on its association with enclosure 171. Only one artefact appears to corroborate a late 2nd-century *terminus post quem*, a segmented bead fragment in translucent mid-green glass, found in a posthole of building 550 and dated AD 200-499 (Booth and Cool 2006). There is a slight possibility that building 550 might have been earlier than the late 2nd century but this would imply that it was built several decades before enclosure ditch 171, which does seem rather unlikely considering the perfect alignment of both structures.

A short gully (182) was identified within the building, running for 3.40 m and into ditch 171. This feature, interpreted as a possible internal drainage gully, was also possibly contemporary with ditch 171 and dated on this basis. A rectangular pit (554), interpreted as a water tank, was situated on the southern side of the building immediately adjacent to ditch 181 (Fig. 8). It was steep-sided with a flat base, measuring 2.5 by 2 m, with a depth of 0.48 m. The presence of clay lining and the very close proximity to the building suggest it may have been intended to collect water from the roof. A partially articulated adult dog skeleton was recovered from this pit. It is likely to have been complete when deposited. Its size would have been relatively small (shoulder height of 300-350 mm), suggesting a pet. The nature of this deposition, accidental or deliberate is difficult to ascertain. Pit 554 also produced a 1st-century deep blue body fragment from a glass vessel.

The nature of the pottery (small, abraded residual sherds) retrieved from the building and associated features suggests that it was not a domestic unit. No artefactual or environmental data from the building itself provide any evidence regarding its function. However, two samples taken in the immediate vicinity, from the fills of ditch 171 and 181, revealed a rich assemblage of charred plant remains (see Fig. 9 for sample locations). The analysis of the two samples provided results comparable to those obtained from pits 123 and 886, from the previous phase. It suggests that crop processing was conducted on the site and that cereals were at least stored there in spikelet form. The crops had probably been threshed, winnowed and undergone preliminary sieving before they were stored. The crops identified were a mixed assemblage, similar to those from pits 123 and 886, and included barley, oats, hulled wheats and free threshing cereals. The range of wild species is also indicative of varying soil conditions which might suggest that the crops came from a number of widely spread fields situated within varying hydrological and geological regions. It is, however, possible to find such changes in ecology within a single field, especially where this crosses both geological and topographical boundaries. In view of this evidence, building 550 is likely to have been a barn, used to store partly processed grain. The area of the building might also have been used to carry out the last stages of crop processing. Although the layout of the site had changed through the middle Roman period, the activities undertaken and the nature of the occupation appear to have remained constant throughout this phase.

Similar types of building have been identified elsewhere in Kent. They have in common comparable shape, morphology and dimensions and perhaps a similar function as agricultural buildings predominantly used for grain processing and storage. Excavations at Westhawk Farm revealed a comparable rectangular 14-post structure, although slightly smaller, measuring 13 m by 6.60 m (85.8 sq. metres) surrounded by a drainage gully. Another similar type was found at Thurnham Roman Villa, further to the north-west. That building, dated to the mid-late 2nd century and measuring 15.40 m by 6.80 m (105 sq. metres), also

comprised 14 posts with six pairs down the length and a single post on the short sides; perimeter drainage gullies and a central drainage channel were also identified. It was interpreted as an ancillary agricultural building to the villa.

Modifications to the building

During a later phase of use, the building underwent some modifications. Drainage ditch 181 appears to have gone out of use, and a line of five postholes (group 184) was cut into its fills on the south side of the building. On the north side, stone deposit 516 was laid on the top fill of the ditch, possibly to provide a crossing over it. A further four postholes, which did not appear in line with the original main building 550, have been attributed to this phase, although the two small postholes situated inside the building may have formed an internal structure or partition contemporary with its primary use. A short slot (187) was also possibly associated with the alterations to the building; it was cut through one of the original post-pipes on the southern side of the building, and was probably a structural beam slot.

Although the plan of the building during this second phase of use is not very clear, the modifications represented by posthole group 184 would not have radically changed the layout of the structure and are likely to represent a phase of repair.

Unfortunately, the dating evidence is not sufficient to define when these changes took place. The artefactual evidence has the same problems as the material associated with the main phase of the building: the few sherds of pottery recovered from posthole group 184 are all of a residual nature and do not provide any indication of the dating of the repairs. The same uncertainty occurs with material from beam slot 187. A section through ditch 181 provided one sherd of pottery (12 g) dated to AD 240-400, from the fill underlying stone deposit 516 (504). However slim this piece of evidence might be, it provides a *terminus post quem* around the mid-3rd century.

It seems plausible to suppose that repairs would not have been needed for some time after the construction of what appears to be a substantial building. On this assumption and the available evidence, it is likely that these alterations occurred towards the end of this phase, possibly in the period AD 250-300.

The enclosed area: nature of the occupation?

The rest of the area defined by enclosure 171 contained fairly sparse archaeological features of 3rd-century date (Fig. 8). Feature 731, a shallow, elongated oval pit, was the only feature in the north of the site. Pit 731 had a slightly concave base and steep sides, measuring 1.70 by 0.55 m with a depth of 0.18 m, and contained 4 sherds of pottery (83 g) dated to AD 120-300. Waterhole 372, first seen in the previous phase, appears to have remained in use in the 3rd century (Fig. 10). Its upper fills produced an assemblage of 64 sherds (351 g), mostly dated to

the period AD 270-300 and including Black burnished 1 wares, an Oxfordshire white ware mortarium and rare sherds of south Essex/north-west Kent shelly fabrics. The later fill consisted of a sub-circular deposit of ragstone, possibly representing a final episode of backfill, likely to have occurred at the end of the 3rd or beginning of the 4th century.

No other features originating in this phase were identified, but several sherds of 3rd-century pottery were retrieved from the upper fills of ditches 169 and 180. One intervention through ditch 180, directly adjacent to the western terminus of ditch 169, produced 26 sherds (184 g) dated to AD 130-275. Two interventions through ditch 169, situated towards the central part of the enclosure, contained 13 sherds (104 g), dated AD 120-300 and AD 150-250 respectively. This evidence, although tenuous, suggests that at least parts of these ditches were not entirely silted up by the beginning of the 3rd century. However, stratigraphic relationships showed that enclosure ditch 171 cut both ditches, which implies they were mostly silted up by the time the enclosure was established.

The function of this large enclosure, which appears rather empty, is not clear. No further environmental evidence was found. The animal bone analysis indicates that the pattern of species representation remains relatively constant from the previous phase. Therefore this suggests that, in tandem with consistency in crop production, animal husbandry practices also remained the same in the 2nd and 3rd century. Animals were still bred and utilised on site and cattle still dominated the assemblage, followed by pig and sheep/goat. The number of wild animal bones, red and roe deer, increased. Several fragments of partially worked red deer antler and two cattle horncores with cut marks imply that some form of antler and horn working were taking place on site during this phase.

All comparable parallels to the 20-post agricultural building at Bower Road appear to occur on much larger sites such as villas or small towns. It is possible that the site of Bower Road is more than a peasant farmstead and that the excavated area is part of a larger estate centre. It has been suggested that it could be part of a villa estate (URS 2002). However there is no clear structural or artefactual evidence to support the presence of a villa at Bower Road and this hypothesis appears to have been based solely on the presence and characteristics of the buildings 550 and 686. The only stone foundations recorded on site were those around structure 686 in the previous phase, unfortunately very truncated and damaged and unlikely to have been part of a much larger building as discussed in the previous section. The 20-post timber building did not yield the evidence expected from a domestic building and in any case, lacked the features such as internal subdivisions and corridors which generally characterise villa dwellings.

The distribution of villa sites in Kent clearly shows a concentration to the north of the North Downs (Black 1987, 82). Very few villa estates are known around Canterbury and in the south of the county, where Bower Road is located. This appears to be a genuine pattern

rather than a lack of excavations, which makes the existence of a villa at Bower Road rather unlikely.

The finds assemblage retrieved from the site indicates it was neither a very low status site nor a very high status one. Some foreign imports and fine wares were present in the pottery assemblage but not in substantial quantities. A few fragments of glass objects and vessels were also found but only represented a total of 8 artefacts ranging from the early Roman to the late Roman phase. Other small finds were exclusively structural metalwork. The paucity of the metalwork assemblage in particular, often relatively abundant and diversified on villa sites, does not support the 'villa theory'. The degree of fragmentation and disparity in the ceramic building material between a single imbrex and eighteen tegula fragments suggest that the assemblage does not represent primary demolition debris but rather pieces selected for secondary use (since tegulae and imbrices would occur in approximately equal numbers on a roof).

If building 550 had a purely agricultural function, as the evidence seems to imply, then the main domestic building(s) was located outside the excavated area and is likely to have been architecturally as imposing (or more) as building 550. The shape and morphology of the building are definitely indicative of Roman influence, as other examples of similar building type indicate. This suggests that Bower Road was part of an estate centre but not necessarily a villa estate. The general lack of excavations of non-villa rural settlements, attested by so many authors for the Roman period (Drewett *et al*. 1988, 204-205), has resulted in a poor understanding of the patterns of settlement of this type, their relationships with larger sites such as villas and small towns and the effect of Romanisation on rural communities.

The overall picture, based on the archaeological evidence, is suggestive of a large farmstead of moderate status, which has experienced some of the ideas and products of Roman culture such as imported building techniques and goods. The presence of a barn suggests centralised crop processing and storage, rather than subsistence production for a single household. Considering the wider landscape context, the abandonment of farmsteads and field systems of late Iron Age and early Roman date in the 2nd century may indicate a reorganisation of the landscape into larger agricultural units based around non-villa estate centres, of which Bower Road may be one.

Cremation burial

One last feature belonged to this phase. It was an isolated cremation burial (107) located outside the enclosure to the south-west (Fig. 8 and 11). The urned burial appears to have suffered some disturbance by plough damage, the grave surviving to a depth of 0.20 m, but the vessel, although fragmented, was complete. The cinerary urn is a large necked jar in grog-

tempered ware dated AD 170-300, which contained both the cremated human remains and two smaller vessels.

Bone was not visible in the uppermost fill of the urn which suggests that no bone was removed through disturbance, although it may have resulted in increased bone fragmentation (Witkin 2006). The quantity of cremated bone was relatively small (361 g) and the fragments were generally of small size, probably due to soil acidity. There was no apparent preference in skeletal elements included in the burial. The remains were those of an adult (> 25 years) of undetermined sex. Three iron nail fragments were recovered with the bone. They may have derived from pyre goods, mortuary furniture or the fuel used to built the pyre.

The accompanying vessels are somewhat intriguing in that they are early to mid 2nd-century types. The first (Fig. 11 No. 60) was a complete carinated, rouletted cup dating to AD 100-150. The second (Fig 11 No. 59) was a funnel-necked beaker in Upchurch grey ware, in a very fragmentary state and possibly of slightly later date. The presence of a fairly wide range of dating evidence within a single group undoubtedly deposited at the same time, may indicate that the pottery was used or at least kept over a fairly long period, either for its original function or for another purpose which cannot be demonstrated. If this is the case, this may explain the amount of residual pottery found in later features, although the evidence provided by cremation burial 107 has to be treated with caution as it may reflect ritual or religious practices rather than domestic common usage.

Burial practices on rural settlements during this period are varied and poorly understood. Burial types include from isolated burial, small groups and formal cemeteries in discrete areas (Esmonde Cleary 2000). In the case of the cremation burial at Bower Road, it seems to represent an isolated burial, unless the cemetery area extended beyond the western boundary of the excavated area, to the south.

4.3.5 Late Roman (AD 270 to AD 400)

Only sparse evidence of late Roman activity was uncovered (Fig. 12). Four features, all situated towards the north-east of the site, were dated to the late 3rd/4th century.

Pit 727, near the northern limit of the excavation area, was a rectangular pit with a flat base and steep sides, a maximum diameter of 1.20 m and a depth of 0.35 m. This pit, of unknown function, produced 2 nails and 7 sherds of pottery (57 g), including a Black burnished type ware flanged dish dated to *c* AD 240-350.

Pit 229, towards the centre of the site, was a circular pit with a flat base, moderately sloping sides, a diameter of 0.98 m and a depth of 0.22 m. It contained a cattle scapula and 3 sherds (54 g) of pottery, among them an Alice Holt sherd, dated *c* AD 270-400.

A sub circular feature (434), interpreted as a possible tree bowl or animal burrow because of its irregular sides and base, contained 2 fragments of animal bones and 5 sherds of

pottery (32 g) including a flanged bowl in Oxford colour-coated ware dated to *c* AD 240-400. These three features contained very small quantities of late 3rd- and 4th-century pottery and it is possible that some of this material is intrusive and they, in fact, belong to the previous phase. However no earlier material was found associated with the later types.

The largest group of late Roman artefacts came from pit 242 (Fig. 12). This was a circular pit with a concave base and steep sides, a diameter of 1.6 m and 0.96 m deep. The two fills produced a total of 209 sherds (1106 g) including a large grog-tempered flanged bowl, Alice Holt wares and Oxfordshire colour-coated types. In addition to the pottery, the lower fill contained fragments of a blue/green glass conical beaker of 4th-century date (Fig. 12 Small find 96) and a fragment of a bead or ring in opaque deep blue glass with an opaque yellow zig-zag (Fig. 12, small find 28). Other small finds from both fills consist of 5 nails, 2 unidentified iron fragments, 2 flint flakes, 1 flint blade, 2 fragments of fired clay, 2 fragments of tiles of unspecified type and 1 fragment of tegula.

A large animal bone assemblage was recovered from this pit (103 fragments) with several skulls and partial articulated skeletons of juvenile animals. A wide range of skeletal elements and species was present, including cattle, sheep/goat, pig, horse, red deer and domestic fowl. Some fragments had butchery marks. This unusual assemblage is suggestive of ritual deposition. This supposition is sustained by the presence of a fragment of burnt human bone from the upper fill and an unburnt fragment of a human mandible from the lower fill. The mandible is that of an adult male and did not appear weathered or abraded, suggesting that it was not redeposited. A cut mark was observed on the left angle of the ramus. The colour of the bone at the site of the cut suggests that it was made to green, not dry bone, but it is not possible to ascertain whether it was made before or after death. Such cuts have been observed in cases of decapitation, for which there is relatively common evidence from rural Romano-British cemeteries. In the absence of the whole mandible and further corroborative evidence, the suggested cause of the cut can only be viewed as tentative.

Finally a sample from the upper fill was analysed for waterlogged and mineralised material. Along with a few cereal grains were numerous fragments of straw, a few mineralised weed seeds and numerous seeds of bramble. Calcium-phosphate mineralisation is usually indicative of the presence of cess or cess-like material. While the material may be derived from human cess, the presence of three whole goat droppings indicates that the material, including the straw, is representative of compost, stabling or manure type waste. The deposits within this pit are suggestive of deliberate, ritual deposition.

The presence of ritual deposition of human remains along with animal bones, pottery, ceramic building material and various artefacts has been attested on many sites, usually occurring in pits, wells and shafts (Esmonde Cleary 2000). Such ritual deposition also seems to be encountered more often in 4th-century contexts. The pit was dated to AD 370-400,

which makes it the latest Roman feature on the site. This pit could possibly represent the terminal deposit upon the final abandonment of the site.

Another fragment of unburnt human bone, a femoral head from an adult individual, was recovered from a layer (214) overlying waterhole 372. The bone was in good condition which suggests it was not subject to extensive exposure or repeated disturbance and redeposition. It may have derived from the same individual as the mandible found in pit 242. As no other material was found to accompany it in this case, it is not possible to be certain of its significance.

Some late 3rd- and 4th-century material was also recovered from the uppermost fills of earlier features. Enclosure ditch 171 revealed 2 sherds (129 g) of pottery dated to AD 260-400, while waterhole 372 contained 9 sherds (93 g) of pottery dated to AD 270-300. Another three coins of 4th-century date were also retrieved from the top fill of ditches 181, 612 and 187 (Fig. 12). The presence of 4th-century finds on site suggests that some activity took place in the late Roman period although its nature remains obscure.

The settlement appears to have fallen into decline, probably towards the middle or late 3rd century. Subsequent occupation seems sporadic and could possibly be of a seasonal nature. There is no evidence of the destruction of the timber building, which suggests that it may have been abandoned progressively to be finally left to decay. The concentration of late Roman artefacts around the building suggests that it may still have been of some use, possibly as an occasional shelter.

The period of development and decline of the site at Bower Road is strikingly similar to the pattern observed at the neighbouring small town of Westhawk Farm, which dates from the mid 1st to the mid 3rd century AD, with a very reduced level of activity thereafter into the 4th-century. Considering that Westhawk Farm was probably the local market centre for the farmstead at Bower Road, it is difficult not to consider that the fate of both sites was linked and that Bower Road may not have survived the decline of its local market.

4.4 Towns and their Rural Landscapes II - The post-Roman and Anglo-Saxon Landscape (*c* AD 410 to *c* AD 1000)

There is no evidence at Bower Road related to this period.

4.5 The medieval and recent Landscape - *c* AD 1000 to the modern day

Very limited evidence of post-Roman activity has been identified (Fig. 13). In the main area of excavation, two ditches (170 and 179) were stratigraphically the latest features on site, cutting all Roman ditches. Ditch 170 produced 15 sherds of medieval pottery (125 g) dated to

1175-1325 (Mepham 2006), along with a number of redeposited sherds of Roman pottery. Ditch 179 contained only redeposited Roman pottery. Both ditches are likely to be either of medieval or post-medieval date.

Within the subsidiary watching brief area to the south-east of the main site, three shallow unmortared ragstone wall footings (613, 614 and 615) are probably the remains of sheep pens, and a curving wall to the south (616) seems likely to represent the remains of a field boundary. No dating evidence was retrieved from these walls, but layer 459, which underlay the walls, contained 9 sherds (53 g) of medieval pottery dated 1125-1250. This implies that the walls are likely to be of medieval or later date. The present farmhouse at Little Stock Farm is an unlisted building of 16th- or 17th-century date, and it is possible that the remains uncovered by the watching brief represent part of the farm complex.

4.6 Unphased features

A number of features in the main area of excavations remain undated (Fig. 12). Most of them were recorded only in plan and not investigated further, which is the case with most features in the south-east corner of the site. The nature of these features is consequently unknown and for this reason, although some of them appear to have stratigraphic relationships with dated features, they were not attributed to any phase.

Discrete features 177, 266, 389 and 754 were excavated but did not provide any dating evidence, although they are likely to have been of Roman date.

Finally, ditches 196, 197 and 747 might be of late Iron Age date. Ditch 196 terminated against ditch 176 and ditch 197 was cut by the early Roman re-cut 200. It is curious that the continuation of ditch 196 was not visible towards the south of the site. Due to the shallow nature of these ditches and the lack of any dating evidence, it was decided to leave them as unphased.

5 GUIDE TO THE ARCHIVE

The site has been analysed and published as part of the Channel Tunnel Rail Link Section 1 Post-excavation Project. This Integrated Site Report is one of 20 publication level site reports available to download from the Archaeology Data Service website:

http://ads.ahds.ac.uk/catalogue/projArch/ctrl/.

These present synthesised data from key site sequences at an interpretative scale that can be assimilated into complementary studies. The ADS site also includes six schemewide specialist reports, which provide synthetic overviews of the specialist data from CTRL Section 1 in its regional context. Underpinning the site reports and overviews, is a comprehensive archive of individual specialist reports and databases, which are also available to download. The CTRL reports and data can be accessed through the 'Project Archives' section of the ADS website.

Hard copy publication of the CTRL Section 1 results comprises a single volume synthetic overview of the excavated results in their regional context, which includes a complete site gazetteer and guide to the archive (Booth et al 2007).

Table 5 below details all available digital data for the Bower Road site. The Post-excavation assessment report is included in the digital archive, but assessment databases have only been included for categories of material which were not subsequently subject to full analysis. All reports and accompanying figures are presented as downloadable, print-ready Adobe Acrobat files (.pdf). ADS also maintain archivally stable versions of report image pages (.tiff), sometimes available at higher resolution than the pdf versions. Report texts and databases are also available as text files (.rtf and .csv respectively). The digitised site plan is available as an Arcview shapefile (.shp) and in drawing exchange format (.dxf).

Table 5: Digital archives

Description	Filename root	Principal authors and organisation
Integrated site report		
Integrated site report	BOW_ISR	Diez V (OWA JV)
Integrated site report figures	BOW_ISR	Diez V (OWA JV)
Site research database		
Site database	BOW	Diez V (OWA JV)
CAD/ GIS drawings		
CAD drawing	BOW_CAD	Bradley M and Diez V (OWA JV)
ESRI ArcMAP GIS project	BOW_GIS	Bradley M and Diez V (OWA JV)
GIS limit of excavation shapefile	BOW_GIS	Bradley M and Diez V (OWA JV)
GIS feature plan	BOW_GIS	Bradley M and Diez V (OWA JV)
Specialist research reports		
Ceramic building material	CER_CBM_BOW	Smith TP
Ceramics (late Iron Age and Roman)	CER_ROM_BOW	Brown L (OWA JV)
Ceramics (post-Roman)	CER_MED_BOW	Mepham L (OWA JV)
Small finds	SFS_BOW	Booth P (OWA JV) and Cool H (Barbican Research Associates, York)
Charred plant remains	ENV_Charredplants_BOW	Stevens C (OWA JV)
Faunal remains	ENV_Fauna_BOW	Kitch J (OWA JV)
Human remains	HUM_BOW	Witkin A (OWA JV)
Specialist datasets		
Ceramic building material	CER_CBM_BOW	Smith TP
Ceramics (late Iron Age and Roman)	CER_ROM_BOW	Brown L (OWA JV)
Small finds	SFS_BOW	Booth P (OWA JV)
Charred plant remains	ENV_Charredplants_BOW	Stevens C (OWA JV)
Faunal remains	ENV_Fauna_BOW	Kitch J (OWA JV)
Human remains	HUM_BOW	Witkin A (OWA JV)
Post-excavation assessment		
	BOW_PXA	OWA JV

Table 6: Artefactual and environmental archive index

Item	Number of fragments	Weight (g) if appropriate	Number of boxes
Flint (total)	133	-	1 size 3
Pottery (total)	4291	40425	4 size 1 1 size 2
Late Iron Age and Roman pottery (hand collected)	3893	38226	
Sieved Roman pottery	260	909	
Medieval pottery	135	1225	
Post-medieval pottery	3	65	
Ceramic Building material (total)	88	6875	2 size 2
Metalwork Small Finds (total)	204	-	1 size 4 3 size 8
Iron	194	-	
Copper Alloy	2	-	
Coins	8	-	
Glass Small Finds (total)	8	-	1 size 4
Fired Clay (total)	202	818	1 size 3
Slag (total)	15	-	1 size 4
Unburnt Human Bone (total)	2 (from 2 contexts)	-	Re-buried
Cremation burial (total)	-	361	Re-buried
Cremated Human bones (total)	-	*c* 6 (from 4 contexts)	Re-buried

Cardboard boxes

Size 1 = Bulk box	391mm x 238mm x 210mm	0.020 m3
Size 2 = Half box	391mm x 238mm x 100mm	0.009 m3
Size 3 = Quarter box	386mm x 108 mm x 100mm	0.004 m3
Size 4 = Eighth box	213 mm x 102 mm x 80 mm	0.002 m3
Plastic boxes		
Size 8 = Medium	260mm x 184mm x 108mm	0.005 m3

Table 7: Fieldwork and research paper archive

Item	Number of items
Final report	
Site Diary	
Daily journal	2 sheets
Daily summaries	7 sheets
Weekly summaries	5 sheets
Primary Context records	
Note on levels	1 sheet
Levels registers	13 sheets
Context checklists	26 sheets
Context record sheets	674
Synthesised context records	
Matrices	3 A4
	2 A3 sheets (folded)
	1 A1 sheet
Survey Reports	
Printout of survey data	2 sheets
Survey request sheets and data	8 sheets
Catalogue of drawings	
Plan record sheets	4 sheets
Section record sheets	6 sheets
List of A1 plans	1 sheet
List of sections	1 sheet
Primary drawings	
Plans	20 A1 sheets
	17 A4 sheets
Sections	41 A4 sheets
Synthesised drawings	
Colluvium layers and truncation plan	2 A2 sheets
Environmental sample plan	1 A3 sheet
Finds distribution plan	1 A2 sheet
Group number plan	1 A2 sheet
Phase plans	1 folded sheet 2 A2 sheets 1 A3 sheet
Primary finds data	
Small finds record sheets	10 sheets
Finds context checklist	1 sheet
Finds Box and bag lists	
Finds compendium	1 sheet
Box contents sheets	29 sheets
Catalogue of photographs	
Black & white photo record sheets	22 sheets
Colour photo record sheets	28 sheets
Black & White contact sheets and negative	42 sleeves
Colour slides films	48 sleeves
Primary environmental records	
Sample collecting sheets	6 sheets

6 CATALOGUE OF ILLUSTRATED FINDS

Figure 4

2 Jar, Romanised grog-tempered native coarse ware, AD 50-120. Ditch 173.
3 Plate, Romanised grog-tempered native coarse ware, AD 43-65. Ditch 173.
4 Bowl, Canterbury coarse grey sandy ware, AD 55-100. Ditch 173.
5 Jar, Romanised grog-tempered native coarse ware, AD 43-70. Ditch 183.
6 Jar, Romanised grog-tempered native coarse ware, AD 43-200. Ditch 173.
7 Jar, Romanised grog-tempered native coarse ware, AD 50-100. Ditch 173.
8 Plate, Romanised grog-tempered native coarse ware, AD 43-100. Ditch 173.
9 Bowl, Canterbury coarse grey sandy ware, AD 43-200. Ditch 173.
10 Beaker, Canterbury coarse grey sandy ware, AD 70-120. Ditch 173.
11 Jar, Romanised grog-tempered native coarse ware, AD 43-150. Ditch 173.
12 Jar, Romanised grog-tempered native coarse ware, AD 43-100. Ditch 173.

Figure 6

13 Mortaria, Verulanium fabric 8 mortaria, AD 100-150. Ditch 169.
14 Jar, Romanised grog-tempered native coarse ware, AD 100-150. Ditch 169.
15 Jar, 'Belgic' fine grog tempered, AD 80-150. Ditch 169.
17 Lid, ?Canterbury coarse orange sandy, AD 43-400. Ditch 169.
18 Beaker, Colchester colour-coated , AD 120-300. Ditch 169.
20 Jar, Romanised grog-tempered native coarse ware, AD 43-200. Ditch 169.
21 Jar, Romanised grog-tempered native coarse ware, AD 43-200. Ditch 169.
26 Jar, Romanised grog-tempered native coarse ware, AD 100-200. Ditch 169.
27 Jar, Early Thameside medium sandy grey ware, AD 100-200. Ditch 169.
28 Bowl, Romanised grog-tempered native coarse ware, AD 43-400. Ditch 169.
29 Jar, Early Thameside medium sandy grey ware, AD 100-150. Ditch 169.
32 Beaker, Fine grey 'Upchurch'-type fabrics I and II, AD 50-100. Ditch 169.
33 Jar?, Fine grey 'Upchurch'-type fabrics I and II, AD 43-400. Ditch 169.

Figure 10

48 Jar, Romanised grog-tempered native coarse ware, AD 43-400. Waterhole 372.
49 Jar, 'Belgic' fine grog tempered, AD 43-400. Waterhole 372.
50 Beaker, Black Burnished 2, AD 150-250. Waterhole 372.
51 Jar, Romanised grog-tempered native coarse ware, AD 70-200. Waterhole 372.
52 Jar, Fine buff 'Upchurch'-type, AD 70-150. Waterhole 372.
53 Flagon, Verulanium ware; 'Brockley Hill', AD 50-200. Waterhole 372.
54 Bowl, Black Burnished 1, AD 250-350. Waterhole 372.

Figure 11

59 Beaker, Fine grey 'Upchurch'-type fabrics I and II, AD 50-130. Burial 107.
60 Cup, Fine grey 'Upchurch'-type fabrics I and II, AD 90-130. Burial 107.
61 Jar, Romanised grog-tempered native coarse ware, AD 170-300. Burial 107.

Figure 12

Small Find 28 Glass bead or ring fragment, opaque deep blue glass with opaque yellow zig-zag decoration, AD 100-299. Pit 242
Small Find 96 Conical beaker, blue/green glass, AD 300-399. Pit 242

56 Bowl, Alice Holt, AD 270-400. Pit 242.
57 Bowl, Oxfordshire red/brown colour-coated, AD 300-400. Pit 242.
58 Bowl, ?Local coarse grog-tempered, AD 370-400. Pit 242.

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