Chapter 7

The Late Medieval and Modern landscape

by Julian Munby

Introduction

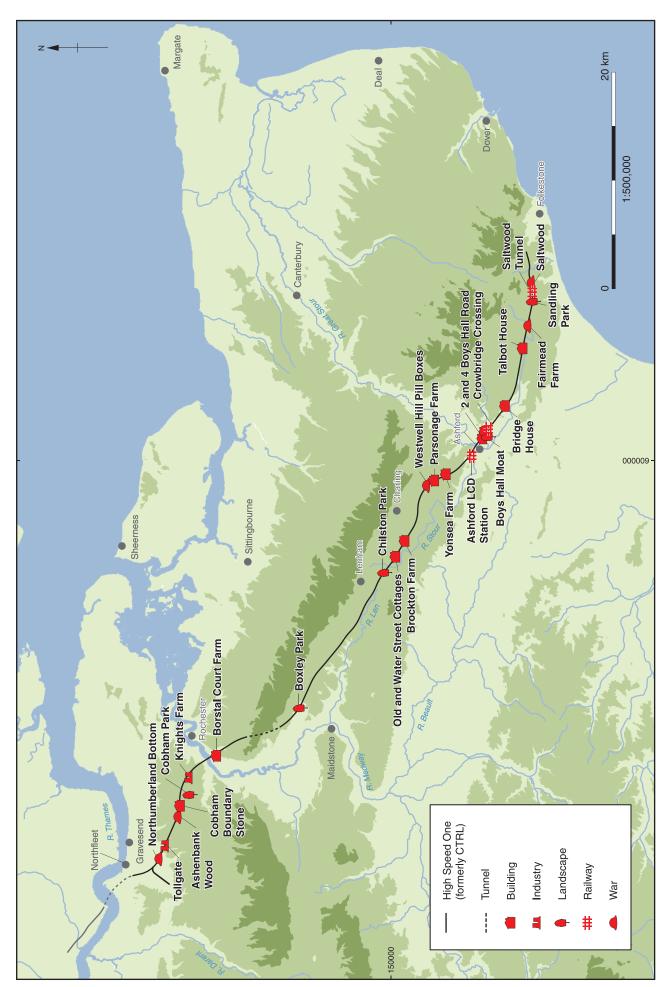
While consideration of the later medieval, post-medieval and modern archaeology was almost incidental as a research aim of the High Speed 1 (HS1) project, the results of fieldwork have nonetheless provided interest and information along the whole route. Often the later eras are thought to be better understood from historical and topographical sources, and so the possibility of making discoveries on the scale of interest for earlier periods were in some respects limited. However, the unusual opportunity to examine archaeologically a small group of buildings before and during their removal was an important part of the project aims, and has proved fruitful. There was one major difference in the study of these sites in that the design and engineering of the rail link involved finding an effective transport route that avoided houses, historic buildings and gardens, so the subjects for investigation were known in advance once the adopted route was chosen, and only a couple of additions were made for practical purposes. The late-medieval and post-medieval buildings in Kent thus form the principal subject matter of this chapter, together with aspects of landscape (and railway) history that emerged from excavated sites along the route (Fig. 7.1). Even more so than in the preceding chapter the results cannot add up to a coherent account of the later landscape history of Kent, although some key aspects are touched upon in considering the results.

To a greater extent than for buried archaeology, historic buildings were available to be investigated at a general level in advance, and carefully considered during the development of the project. All structures could be summarily assessed, checked on estate and Ordnance Survey maps, and where necessary subject to internal investigation. A valuable baseline assessment was provided by John Thorpe and Jo Cox of Keystone, to which the experience and profound local knowledge of Ken Gravett was a necessary and delightful addition to field excursions, and added weight to negotiations deciding the fate of historic buildings. The concurrent study of Kent vernacular buildings by Sarah Pearson of the Royal Commission for Historical Monuments allowed some exchange of data and interesting discussions, while the publication of their research has been an important addition to the long tradition of building studies in Kent (Pearson 1994).

The earlier work of the Canterbury Archaeological Trust on the buildings of the Channel Tunnel Terminal at Folkestone had demonstrated the importance of considering buildings as up-standing archaeology, to be investigated, carefully dismantled and excavated (CAT 1990). Building archaeology, first demonstrated in its modern form by Professor Willis in Canterbury in 1844, has had a variable application in the following century and a half, but it is now generally recognised that both standing and buried archaeology are a continuum, to which the documentary sources (if they exist) may be complimentary; it remains difficult to put into practice this understanding, and successfully link the various strands. In the event some buildings on the HS1 route were rebuilt without a full investigation, and one (being moved whole) was not even dismantled, but in general the programme of investigation was chosen to direct attention to the most significant aspects where results would be worthwhile. One of the most interesting results of the approach was the dichotomy between excavation and fabric examination, and the often disappointing results of excavating beneath an inhabited building whose archaeology had been greatly disturbed by the effects of continual habitation and modern building works. The application of tree-ring dating by dendrochronology has now become an essential part of calibrating what are fundamentally stylistic considerations, and was used in one instance (Talbot House).

The Environmental Assessment of HS1 was a pioneering effort that from the first sought to follow an integrated approach to Cultural Heritage, by looking at landscape, archaeology, and buildings together (twenty years on we would now add intangible heritage as a subject). The historic landscape was much considered (and reported in the EIA), but the archaeological programme was less directed to landscape. A comparative study of field, woodland and parish boundaries might have been instructive, as indeed would the archaeological recovery of the vegetation history of woodland and hedgerows. In the event several sites encountered roads, ditches, banks (and especially field drains), which are described in the site reports, but not addressed as a general theme. Much remains to be done on the seemingly intractable history of the Kent landscape, with its resolutely regional flavour derived from distinctive soils and geology.

Although the Environmental Assessment was begun before the days of planning guidance on historic buildings (PPG15) it was realised that it was necessary to consider fully the significance of listed and other historic





buildings, and their setting and historic landscape context. In one sense this arose from existing best practice in English landscape and building studies, but also drew upon the principles of the Burra Charter 1979 (*The Australia ICOMOS Charter for the Conservation* of Places of Cultural Significance). The charter specifically dealt with conditions for removal and reconstruction of historic structures. It was thus in the context of a careful consideration of significance (including rarity value) that the decisions were made about the reuse of buildings.

Nature of sites found

The ingenuity of railway engineers could not avoid a small number of properties (mostly near existing railway lines) that were removed because they were on the route or so close as to make them unviable for habitation.

The buildings removed were Old and Water Street Cottages (Lenham), Brockton Farm (Charing Heath), Yonsea Farm (Westwell), No. 4 Boys Hall Road and No. 2 'Crowbridge Cottage' (Sevington), Bridge House (Mersham), and Talbot House (Sellindge) (see Fig. 7.1).

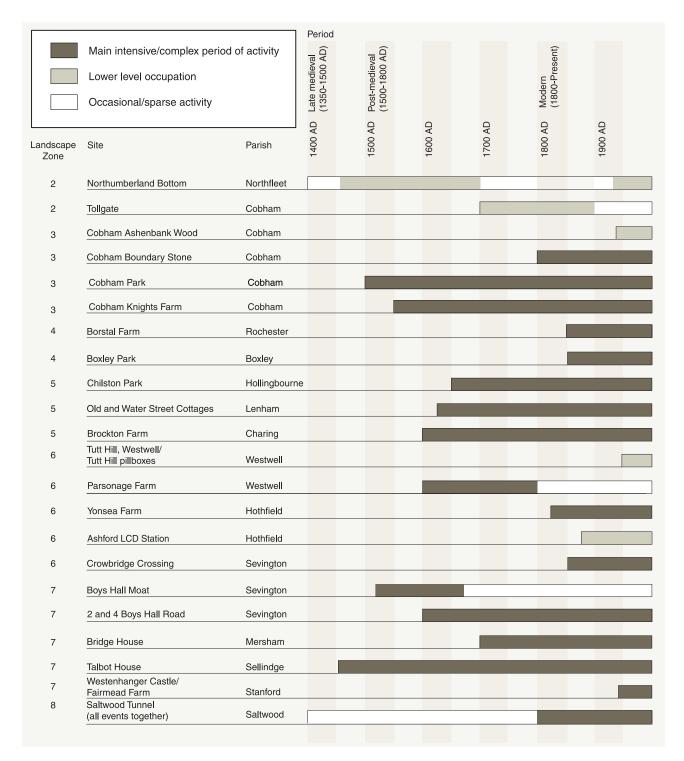


Figure 7.2 Late medieval and modern activity along the HSI route by site and period

Between them (and their outbuildings) these do provide a cross-section of large and small farms and cottages dating from the 15th to the 19th century (Fig. 7.2). Other structures included a crossing box at Crowbridge/Boys Hall Road, and a WWII Pill Box at Westwell.

Historic buildings that were retained but left in close proximity to the rail link include Borstal Court Farm (Borstal/Rochester), Boarley Oast (Boxley), Workhouse Cottage (Detling), Brockton Oast (Charing), Parsonage Farm (Westwell), Yew Tree Cottage (Lenham Heath), and Orchard, Maytree and Bridge Cottages (Sevington), and the Cobham Boundary Stone. Major sites to be avoided in proximity to the railway included Boxley Abbey precinct, Ashford Railway Works, and Westenhanger Castle, while Cobham Hall and Leeds Castle were further away. Historic village centres at Eyhorne, Harrietsham and Mersham with their Conservation Areas were variously tunnelled or screened to reduce impacts.

Building re-use and investigation

Absolute numbers of historic buildings lost were few, owing to their removal to museums or their re-use. Old and Water Street were rebuilt as 'Lenham Cottages' at Cobtree Museum of Kent Life (which also has Petts Farm from Burham, close to another prospective route that was not built). Brockton Barn was removed to Ratsbury (Tenterden) and rebuilt for use as a barn within a farm complex of equivalent date (and is now a wedding venue), and some elements of Yonsea Farm have been rebuilt on a site adjacent to the Rare Breeds Centre, Woodchurch, Kent, while other parts await reconstruction there. Talbot House has been carefully rebuilt as house in Sellindge and successfully offered for sale as a private house; while Crowbridge Cottage was rebuilt as subsidiary domestic building in Romden Road Smarden (with the Romden Hall house dating from the 15th/16th century).

These buildings were variously investigated at a general level or in detail at the time of their dismantling, and where it was thought appropriate their sites were excavated. This can be summarised in Table 7.1

Parks and gardens

The historic landscapes encountered range from big formal landscapes to smaller and less ambitious places.

Table 7.1: Buildings investigated as part of the HSI project

These were modified rather than being 'destroyed': the wide corner taken round Cobham Park with the loss of the park fringe was partly offset by the Cobham Ashenbank Management scheme and contributions to the restoration of the badly damaged Darnley Mausoleum. Little could be done for Chilston Park in Boughton Malherbe which was already clipped by the M20 motorway and lost another strip, though the remaining outer part (with the ice pond) is now a country park. The earthworks of a 'lost' garden at Boys Hall moat (Sevington) on the south side of the railway were barely affected by a minimal landtake. Lesser parkland landscapes of the 19th-century were crossed at Boxley Park and Sandling Park (Saltwood) with more or less intrusion.

Industrial sites

One of the more interesting aspects of the chance archaeological discoveries of post-medieval material was the occurrence of industrial features such as brick-working sites that might not have been anticipated in a rural setting, but of course were a natural concomitant of the great age of rebuilding.

Railway features

Railway features occurred between Ashford and Folkestone where the HS1 was running next to the main line. At Ashford the former terminus of the London Chatham and Dover line from Maidstone was lost to other development, while the site of the South Eastern Railway works were left undisturbed to the south of Ashford International Station. Just to the east of Ashford the Crowbridge crossing in Willesborough had a minor lineside structure, and further east railway bridges were rebuilt to accommodate European gauge. The historically interesting Saltwood railway tunnel was undisturbed.

Modern military

Military features from the two world wars were encountered at various places, including a WWII battery at Northumberland Bottom (Cobham), a magazine disguised as a barn at Fairmead Farm (Westenhanger),

Building	Place	Investigated	Excavated	Rebuilt
Old and Water Street Cottage	Lenham	CAT	Previous evaluation	Cobtree Museum
Brockton Farm	Charing	OA	OA	Not
Brockton Barn	Charing	OA	OA	Tenterden
Yonsea Farm	Westwell	OA	MoLA	Woodchurch
4 Boys Hall	Sevington	OA	OA	Not
3 Boys Hall Crowbridge Cottage	Sevington	Not	OA	Smarden
Bridge House	Mersham	Not	OA	Mersham
Talbot House	Sellindge	OA	OA	Sellindge

and a pair of pill boxes on the railway at Westwell. Remains of army encampments of WWI were found at Saltwood, and of WWII in Ashenbank Wood (Cobham).

The Late Medieval Landscape

The general structure of the Kent landscape has been better explained than its detailed workings, and perhaps little can be added from the disparate archaeological discoveries beyond what has been said in the previous chapter. The underlying grain of the Kent countryside remained the same from the medieval period until the 20th century: east-west bands of varied soils and geology crossed by larger parishes that covered more than one soil type, and the whole transected by long north-south tracks that linked the areas of ancient wealden pastures with the periphery. While the HS1 passes on a slow diagonal across the principal landscape zones of Kent (across chalks and heaths and clays, from the top of the Downland west of Rochester, down to the Holmsdale east of Maidstone, and then onto the Chartland nearer Ashford), the parishes it traverses usually comprise more than one landscape zone (Everitt 1986).

The 'normal' Midland pattern of nucleated villages and regular field systems is rarely to be found (nearest perhaps in the scarpfoot parishes), and most villages are rather notable for having disparate elements of 'street' and 'forstal', and any number of scattered farmsteads. In its need to avoid village centres, the HS1 sample of the countryside was necessarily biased towards edges and periphery of settlements. By the late medieval period the general disposition of fields woods and commons was well established, and its general character remained unchanged down to the 20th century (less marked than other parts of the country by enclosure, for example).

The built environment – 15th to 17th century

Change in the rural economy may be marked by the frequency of well-built oak framed farmhouses of 'Wealden' type, and these may be found on village streets and on the edge of commons and heaths, or in remote countryside, alongside other buildings of more modest pretension. Changes in the late medieval and early modern economy resulted in phases of wealth that could be transferred into rural building as much as urban expansion (Pearson 1994; Quiney 1993; Zell 1994). Talbot House was a good example of a substantial late medieval house, whose origins and development could be studied in detail during dismantling.

Talbot House, Sellindge – c. 1450 (Figs 7.3–9)

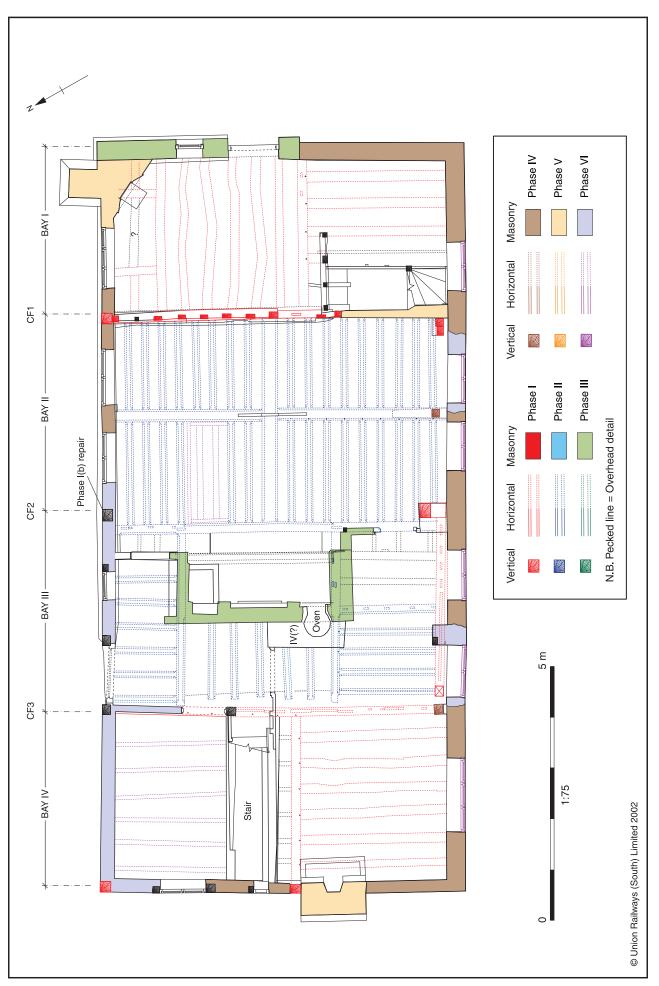
Talbot House, a 15th-century Wealden House, was investigated by Ric Tyler for OA during controlled dismantling in January to March 2000, and excavation took place after that. The evidence of excavations suggests that there may have been an earlier, (possibly 14thcentury) building on the site before the construction of the Wealden house, but the remains were so scant as to make any reconstruction impossible.

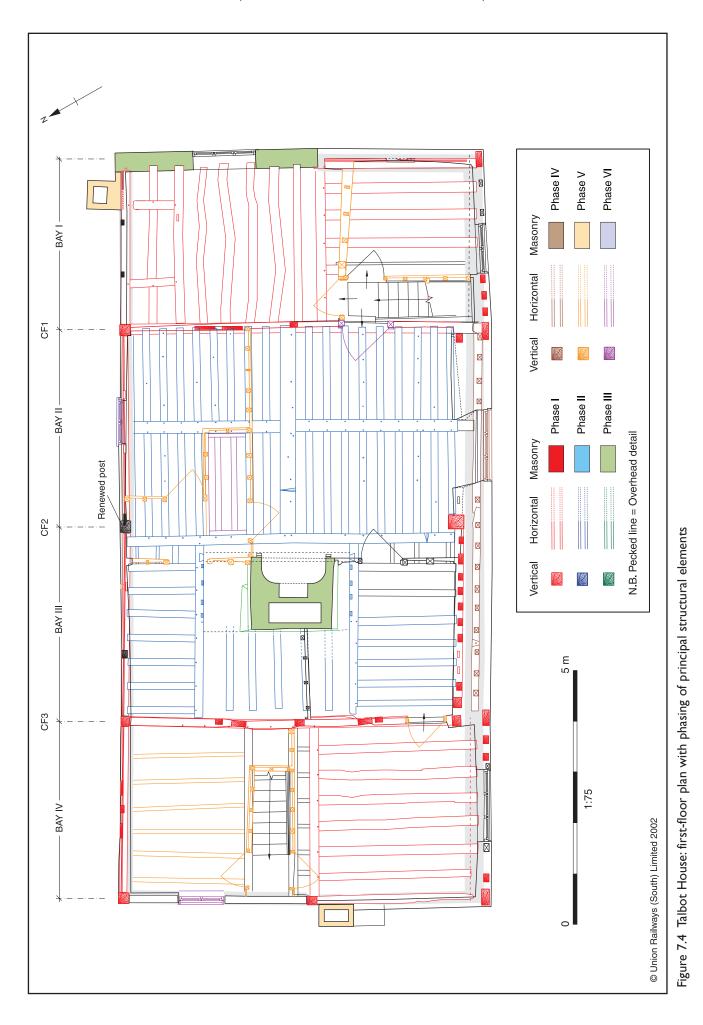
Phase I: Talbot House originated, in the mid-late 15th century, as a four-bay timber-framed house of classic 'Wealden' form. The Wealden house combined a recessed, open hall and storeyed, jettied end bays beneath a single unitary roof, and gave apparent status with a relatively simple construction. It was constructed on an east-west alignment and comprised a two-bay open hall, recessed to the south, flanked by storeyed, jettied bays to east and west below a single, fully hipped roof. The open hall was central to the plan, occupying bays II and III. The high end of the hall, with parlour and chamber beyond, was located to the east while to the west, two service rooms with a further chamber over formed the lower end. Access was via opposing doors in the north and south walls at the west of Bay III, leading into the hall. The maximum dimensions of the ground floor building footprint were 14.8m (E/W) by 6.35m (N/S). The upper storeys of the end bays were jettied to the south by *c* 40cm.

Talbot House represents an interesting, though unremarkable, example of a traditional 'Wealden' farmhouse of the mid 15th century, the most common single type of medieval house to be found in Kent. With its low walls and total ground floor area of 90m², Talbot House is in the mid-range of the 127 examples of Wealden house recorded during the RCHME study of medieval houses in Kent (Pearson 1994, 71, table 67).

The structure as recorded during dismantling retained a relatively high proportion of its original fabric (including some re-used timbers), despite having undergone several phases of adaptation and modification. This high survival allows for a fairly confident reconstruction of the original appearance of the house to be made, though certain elements, such as the central open truss, remain subject to speculation. The house displays a standard range of structural features and decorative details, though it also includes a number of less common structural details (eg the detail at the junction of the hall and the storeyed end bays). The framing was infilled with close studding only in the front elevation and in the lower section of the dais partition, reflecting its use as a signifier of status, by representing a relatively extravagant use of timber resources. Interestingly, and somewhat unusually, the close-studwork throughout most of the elevation was substantial (160 x 75mm heartwood) and was pegged top and bottom, with no apparent use of additional bracing.

The discovery of a series of five 'combed' daub panels revealed below the dais beam of the hall during the dismantling of the house represents a feature of particular, intrinsic interest (Fig. 7.8). The panels were removed for conservation and are currently housed at the Weald and Downland Open Air Museum, Singleton, West Sussex. The survival of this type of decorative surface









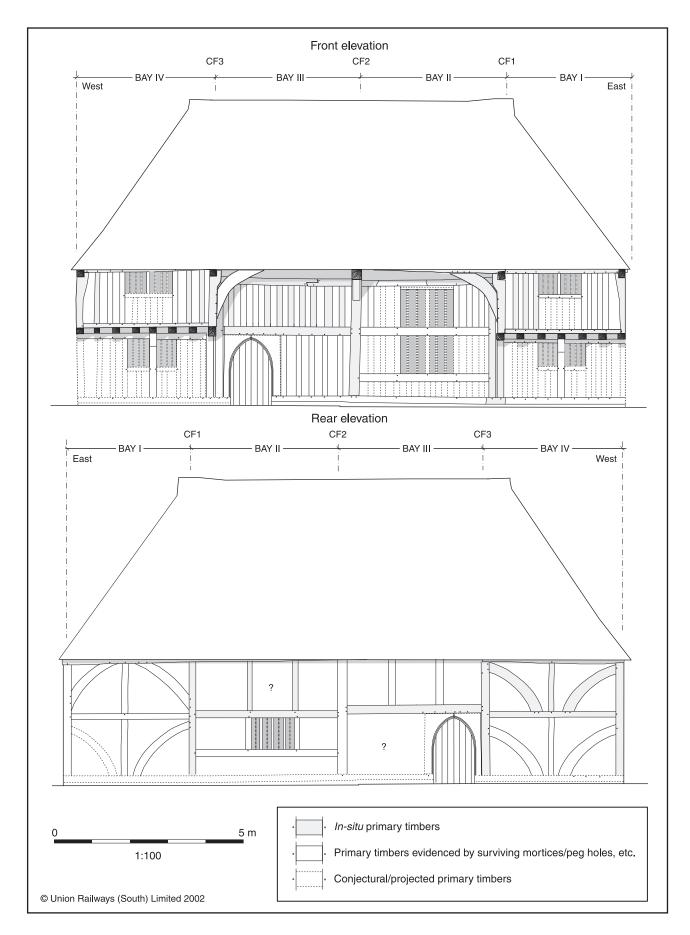


Figure 7.6 Talbot House: reconstructed principal elevations in Phase I

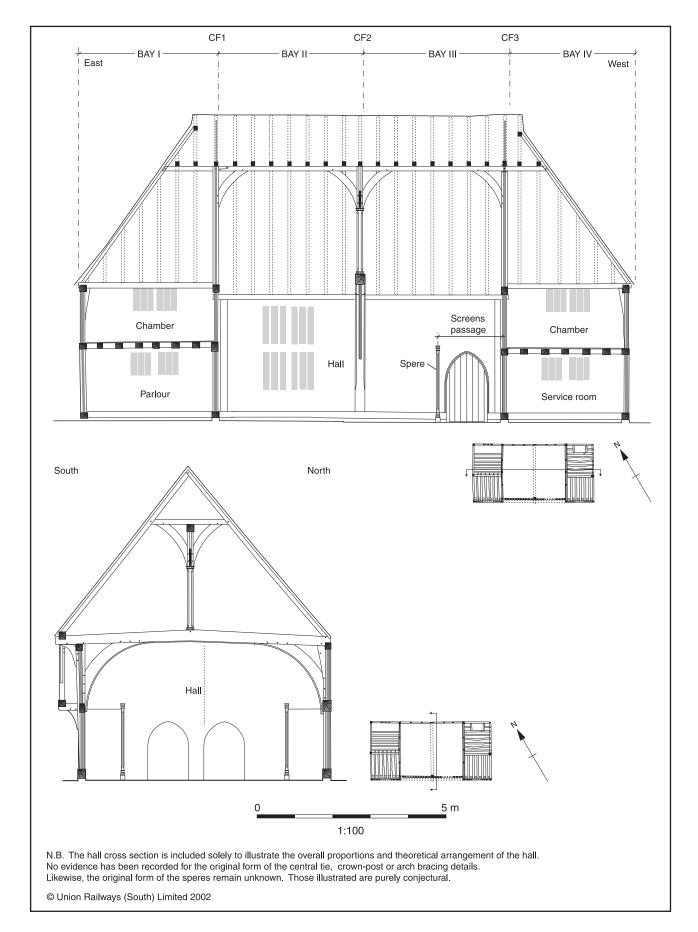


Figure 7.7 Talbot House: reconstructed longitudinal and hall cross sections in Phase I

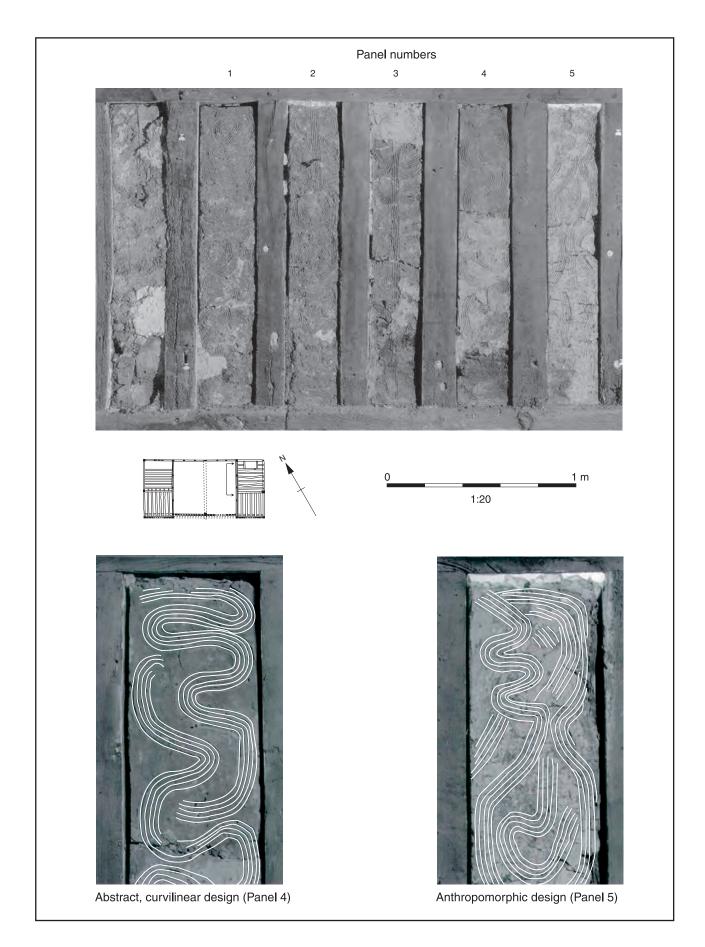


Figure 7.8 Talbot House: daub panels on hall dais

treatment, though not unknown, is by no means common (Barnwell and Adams 1994, 123). Pearson identifies only one certain example of plaster with incised decoration at ground floor level in her discussion of c 450 medieval houses in Kent (1994, 93), and thus the Talbot House panels can be seen to represent a particularly significant find. The inclusion here of a vernacular, representational human figure would appear, at this stage, to be unique and unparalleled feature and it is unfortunate in this respect that the timbers of the primary building were unsuitable for dendrochronological sampling, as the feature remains dated only on stylistic grounds.

With the exception of possible traces of an early hearth, archaeological evidence from below ground about occupation of the medieval house has been disappointing, principally as a result of the recent introduction of concrete flooring throughout the building which has served to remove, almost completely, traces of earlier occupation.

Phase II (c 1550-60): The first identifiable phase of alteration to the structure occurred in the middle years of the 16th century and comprised the insertion of a floor into the open hall of the house including an integral timber-framed stack backing onto the cross-passage of the primary house, replacing the former open hearth in the centre of the hall (Fig. 7.9). The insertion of an upper floor within the hall of the house and the enclosure of the fireplace in the mid 16th century represents an almost universal and widely acknowledged development of the traditional medieval open hall. Such improvements reflect a fundamental change in attitudes toward comfort and privacy, and were fuelled by a significant contemporary redistribution of wealth in favour of the landed, food-producing classes, of the middle stratum of society, the lesser gentry and Yeomen. The chronology and the physical processes by which this adaptation from open hall to storeyed house took place are, however, by no means uniform and while certain modifications to preexisting timber houses are apparent as early as the second half of the 15th century, open halls continued to be built anew until well into the 16th century and the fullystoreyed house with brick stack did not become the norm until the 17th century (Pearson 1994, 108).

The inserted floor at Talbot House of c 1550–60, though relatively plain in its detailing, is remarkable in its almost complete survival and in several unusual features. The completeness and detailing allow for a fairly full understanding of the functioning of the house following this significant change. The integral single flue, timber-framed stack and the stair located adjacent to the stack, serving the new hall chamber, are features of interest. The complete separation of the hall and entrance passage served to significantly improve the comfort and privacy of the principal room of the house.

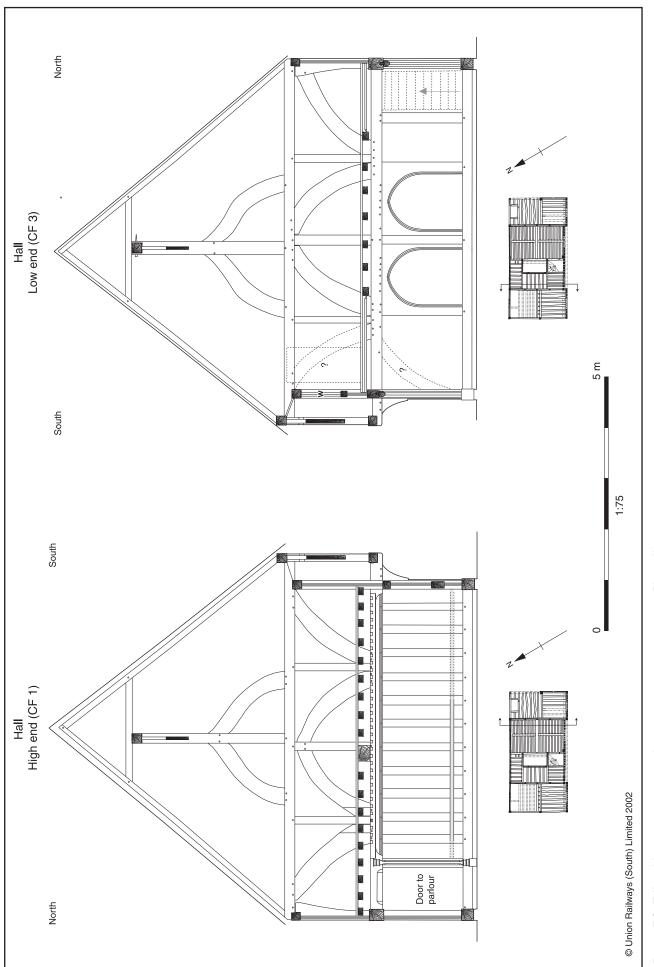
Phase III (late 17th–early 18th century): In the mid–late 17th century, the phase II timber stack was removed and replaced by a double-flue, brick-built stack serving fireplaces at ground and first floor level (hall and hall

chamber) (see Figs 7.3-5). Contemporary with this work, the roof underwent a major rebuild, the first floor chambers were ceiled for the first time and the parlour was subdivided. The replacement of the simple, singleflue timber stack by the double-flue brick stack represents the conclusion of the process of conversion begun in Phase II. The hall continued to function as before while the quality and comfort of the hall chamber was improved by the provision of an additional upper fireplace. Associated with these changes, a radical reordering of the roof structure was required, comprising the rebuilding of the western hip and the substantial conversion of the medieval crown-post roof to a post-medieval staggered butt-purlin form, though reusing a high proportion of the medieval rafters. The upper chambers were, for the first time, closed by the insertion of ceilings. The combination of a brick stack with a ceiled and fully plastered interior would have served to greatly reduce draughts and would thus have significantly increased the domestic comfort of the property.

Phase IV: In the 18th or early 19th century, a radical change was made to the external appearance of the house (if not to its internal arrangements) when the recessed front (S) wall of the hall and ground floor end bays were underbuilt in brick to create a flush elevation (see Figs 7.3–5). The underbuilding of the jettied front elevation in stone or brick represents a common modification of medieval buildings in the post-medieval period (Barnwell and Adams 1994, 40). The effective gain in usable floor area resulting from this modification was negligible (3.65m² or c 4%) and it is more probable that the aesthetic desire to create a flush elevation was the deciding factor in undertaking such a significant programme of building works.

Phase V (c 1840): Following the passing of the South Eastern Railways Act of 1836, the main line rail connection from London to Ashford was opened in 1842 and was through to the south coast at Folkestone in the following year. Construction of the railway had a negative impact upon the location and setting of Talbot House since the line passed immediately south of Talbot House upon a substantial embankment. It was thus perhaps inevitable that the property should move into the ownership of the railway (first to the South Eastern Railway Company and eventually to the British Rail Properties Board). The property was divided into three separate dwellings ('Railway Cottages') and was used as accommodation for rail employees, plate layers and track maintenance workers and be used as accommodation for railway employees; the division of the house into three separate cottages (with additional fireplaces and stacks) reflects this relative downgrading of its social status.

Phase VI (1985): In 1984, 'Railway Cottages' were sold into private hands and a programme of building works undertaken to revert the house to a single dwelling. The





works comprised both external refurbishment (eg reroofing) and internal re-ordering related to the new arrangements (creation of through access/blocking of superfluous doors, stairs, and concrete floor). This sympathetic restoration saved the building from destruction and paved the way for its eventual rebuilding.

Archaeological investigation and rebuilding

The results of archaeological excavations following the dismantling of the building proved to be somewhat disappointing, the paucity of evidence being the inevitable result of the periodical programmes of refurbishment and modification of the structure over its extended history, in particular the lowering of the internal floor levels and the laying of concrete floor slabs in the recent past. The archaeological investigation of the building during dismantling did, however, produce valuable information about its original form and the various phases of its development and alteration. While the more recent restoration activities have reduced the amount of information that could be obtained about the stratigraphy of decorative schemes, or under-floor deposits, the current study was nonetheless a worthwhile activity.

Talbot House has now been rebuilt within Sellindge parish at a new site in Swan Lane (NGR: 611446 18950). On the basis of its interest, and with the agreement of the Local Authority, it was rebuilt, not as the multi-period house that was dismantled, but as a partially restored Wealden house. The rebuilding project has sought to restore the original exterior appearance of the medieval structure with its distinctive recessed hall and jettied end-bay arrangement, while internally the central truss and crown-post have been reintroduced for structural reasons. The purpose of the restoration was not, however, to create a historically correct, single-phase reconstruction, and the rebuilt house also reflects its subsequent stages of development by retention of later features of significant interest, in particular the 16th-century inserted floor and 17thcentury brick stack.

Old Parsonage Farm, Westwell – 16th century

The Old Parsonage Farmhouse in Westwell lies just south of the LCD railway line from Maidstone to Ashford, and was retained by taking the HS1 through Yonsea Farm. Instead, the diverted line encountered the (unexpected) moated site across the road, whose excavation has been described in the previous chapter; this was abandoned in the late medieval period and seems to have been replaced by the existing Parsonage Farm. The excavation of the moated site has been described in Chapter 6. The existing Parsonage Farm is an important fragment of a highstatus 16th-century house, the surviving timber framing representing the parlour wing at one end of the house and part of the main return. There was also a small contemporary framed barn (now collapsed) to the south, and a barn dated 1850 to the north-east.

No. 2 Boys Hall Road (Crowbridge Cottage) – c. 1600 (Figs 7.10–12)

In Willesborough to the east of the SER railway works the village had a dispersed plan extending from the church along Boys Hall Road round Crowbridge Road, Bentley Road and back to the church. This had been severed by the building of the original SER railway, leaving houses on both sides of the line, leaving Nos 2 and 4 Boys Hall road close to the railway (see below for No. 4). Crowbridge Cottage (No. 2 Boys Hall Road) was a two-bay house, thought to have been constructed around 1600 and with some reused medieval timbers. Its size was uncertain until the site was excavated, from which it was clear that the building had not lost a third bay; the modest two-bay plan is of interest as an unusual small version of the new post-medieval plan type of lobby-entrance house. The normal floor plan in England/Kent would have had three rooms rather than two as here (when translated to New England in the 17th-18th centuries the plan-type occurs in greater variety). It had rubble stone walling in the ground floor and gable ends with clay tile hanging over timber framing in the first floor facing the south (towards the railway). On the north side was a modern rendered brick outshot giving this the appearance of the back side of the house, but which actually concealed an earlier timber-framed jetty with original wattle and daub panels, ie the original front wall. The roof is pitched, clad in clay peg tiles with two hipped dormers, and a simple roof construction of collars clasping purlins. The two-room plan included a central brick chimney stack; no original windows were visible, but their location became apparent after dismantling the front and end walls.

The excavations of the building footprint revealed five development phases. Evidence of early activity (Phase I) was very slight, consisting of clay floor levels with some medieval pottery (?12th century), domestic debris and traces of early walls; the length of time between the demolition or abandonment of the medieval structures and the construction of the cottage (Phase II) is uncertain. The ground was levelled for the new building, and stone foundations were laid in a trench; features (pits and postholes) related to the construction of the cottage contained pottery of early-mid 16th century date. There was also evidence for an external hearth or oven. The next phase (III), perhaps later in the 16th century, involved modifications to the sill walls (and possibly an external stair). There were few internal occupation layers in the main room, except in the vicinity of the hearth, but more activity was recorded in the back room where a series of floor levels (some cobbled) were uncovered. To the rear of the house an extension or ancillary structure was added in the early modern period (Phase IV), a fireplace was inserted in the late 18th or beginning of the 19th century in the back room (Fig. 7.12), and the floor raised in the front room in the 19th century. In the modern period (Phase V) the house was extended at the rear over existing cobbled areas, removing the earlier outbuilding and replacing it with a lean-to extension covering the whole of

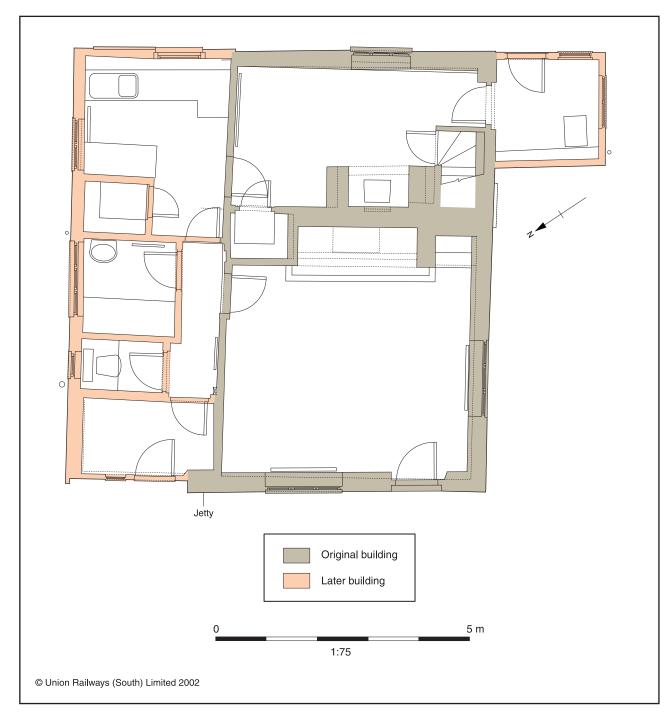


Figure 7.10 2 Boys Hall Road: ground floor plan

the back wall. This provided a bathroom and kitchen, and was accompanied by a general relaying of floors in concrete, and a landscaping of the cottage garden.

In addition to the main excavations two test trenches were opened to evaluate the archaeological context of the building and to assess whether any archaeological deposits survived. These mainly revealed modern deposits although a second trench also contained features associated with earlier phases. Finds included a range of 16th and 18th-century pottery (but not a continuous series), including an unusual sherd of an Anglo-Netherlands tin-glazed Albarello (drug jar). Amongst the keys, nails, pins, buttons and thimble was a part of a late medieval brass candleholder.

Old and Water Street Cottage, Lenham Heath – 17th century (Figs. 7.13–19)

A historic property at Lenham Heath was expected to be retained but was found to be too close to the line, and was removed to the Museum of Kent Life, Maidstone, being investigated during dismantling by the Canterbury Archaeological Trust in 1999, whose report forms the basis of this section (Austin 2001). A preliminary survey had also been undertaken by David and Barbara Martin of Archaeology South East (Martin 1999), and historical research undertaken by Jeanette French (2000).

The building was comprehensively recorded, including brick-by-brick drawings of the lower walls,

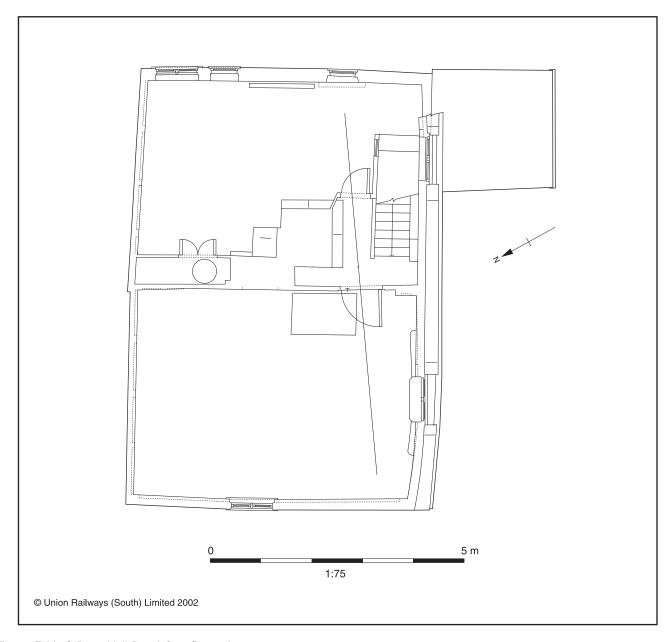


Figure 7.11 2 Boys Hall Road: first floor plan

since it was to be rebuilt using the same bricks, and preserving its authentic irregularity. As with many of the HS1 buildings, Old and Water Street Cottages are typical of a modest building of the period and locality, and the opportunities afforded by the dismantling process to understand both its architectural development and social history, and the chance to present this as an exhibit to the public, have considerably enhanced its interest.

The house had belonged to the Chilston Estate, and appears from the documentary sources to have been used as accommodation for estate workers (eg carpenters, rope-makers, labourers, and more recently carpenters, bricklayers, stonemasons and wheelwrights). The house was built in the early 17th century (between 1605 and 1625 according to dendro-dating), and in the earliest property record of 1649 a carpenter from Lenham bought the house and garden with 1½ acres. By 1666 it had been divided between two carpenters as separate dwellings.

In origin this was a modest three bay timber-framed building, surrounded by later work of the 19th and 20th centuries. The 17th-century building is a relatively late example of a 'transitional' house, one built after the demise of the open-hall, but before the introduction of the early modern house (Figs 7.14-15). A good part of this structure, which is an interesting but unremarkable example of its type, survived within the property. Many changes to the original building occurred during the 17th and 18th centuries, including the addition of singlestorey outshots against the north and south ends of the property. The introduction of glazed windows, and the application of decorative pargetting are two more examples of the many other improvements undertaken. The outshots and other features were, however, swept away in the following centuries by the construction of



A









Figure 7.12 2 Boys Hall Road: photographs of (A) west elevation of the house, (B) internal view, jettied front to north, and (C) west room main fireplace

modern extensions, the most notable a brick and softwood-framed two-cell cottage. This was built against the south end of the building in the second half of the 19th century, its construction resulting in the loss of the southern bay of the timber-framed building.

The primary frame was built round a large central chimney which had two ground-floor hearths, and with



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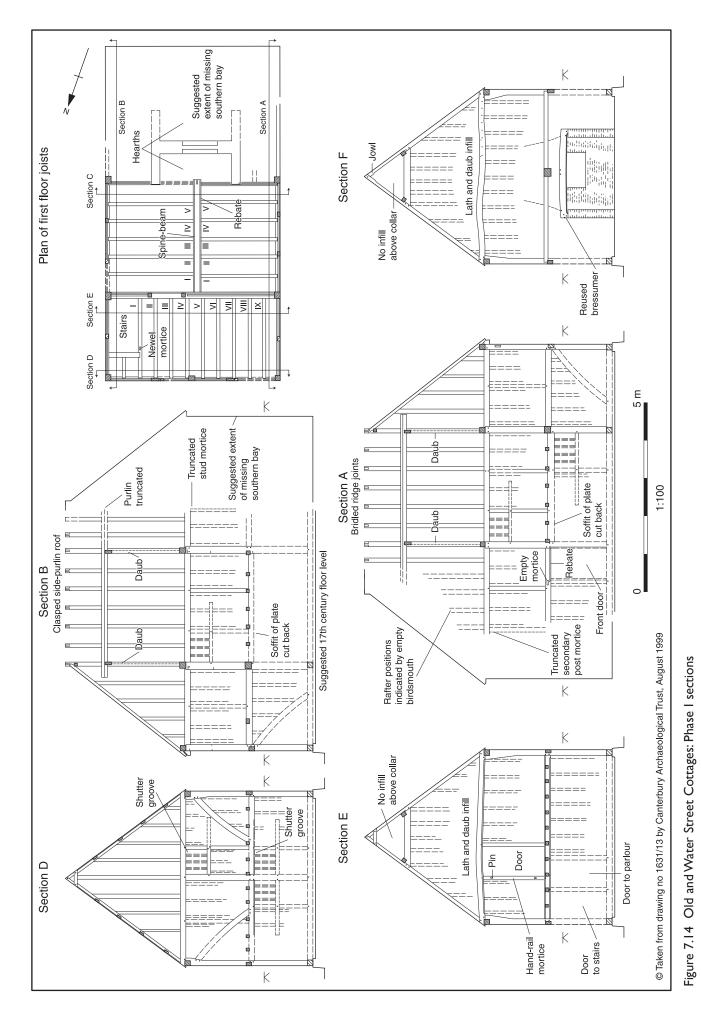


Figure 7.13 Old and Water Street Cottages: photographs of cottages looking (A) north-east and (B) south-west

the 'baffle-entry' front door to one side (Figs. 7.14-16). The hall/living room on the north side has the original fireplace with the initials GM, presumably George Miller, one of the owners in 1666. The ceiling was neatly formed of chamfered and stopped joists, giving the room a certain status. Two doors in the north partition led to the stairs, and a smaller unheated room (later the pantry with adjoining dairy); it has more plain ceiling joists. The south end of the first building has been lost to later reconstruction, but the main room had a large hearth and may have been the kitchen.

On the first floor there was a better room over the hall (although unheated and open to the roof), with a lower status room at the north end, (these did not connect with the rooms at the south end) (Fig. 7.17). The first-floor ceilings were introduced in the later 17th or 18th century, and another aspect of upgrading the quality of this modest house was the introduction of glazed windows, while some pargetted decoration was applied to the north exterior (later buried within an extension).

In the 18th century the chimney was rebuilt (but still without first-floor hearths), and outshots were added at either end of the building (pottery below the foundations suggested that this was of mid-18th century date); these were linked by a passage, and a porch was added to the



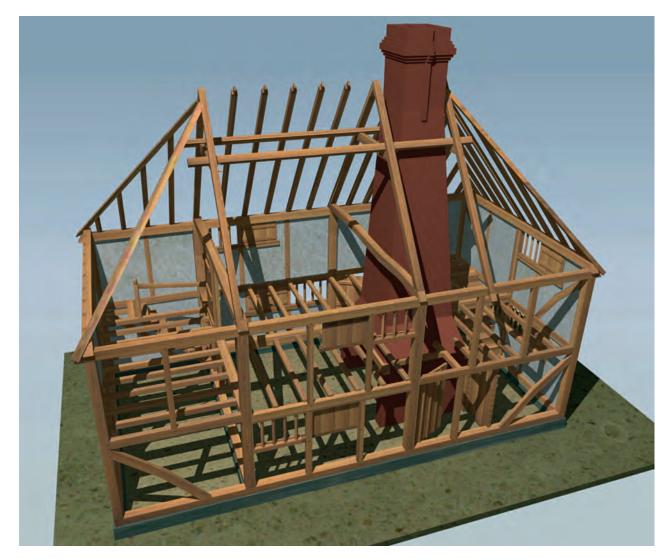


Figure 7.15 Old and Water Street Cottages: Phase I (model)

front (Fig. 7.18). At various times the framing was underpinned with brick walling, no doubt as separate section failed, and the western wall was rebuilt in the mid 19th century.

The informal division of Old Cottage into two dwellings that had existed since the 17th century was made permanent in the 19th century following the construction of Water Street Cottage. This substantial two-unit, two-storey extension was built against the south end of the 17th-century building in the second half of the 19th century. Its construction resulted in the demolition of the southern bay of the original house. The property now comprised a pair of independent two-cell cottages beneath one roof (Figs 7.18-19). Examination of the early Ordnance Survey maps suggests the extension was built between 1867 and 1898. The new cottage seems, however, to post-date a title deed of the 12th May 1842, which records the sale of the building to James Douglas Stoddart of Chilston Park for £185 (with occupants Mathew Chapman and Burgess widow) "...now and for some time past occupied as two dwellings with the barn stable garden and orchard and piece or parcel of land called or commonly known by the name of West Croft...'.

The new building was brick- and timber-framed (well executed in softwood), with casement windows. In plan the new cottage comprises two ground and first floor rooms divided by a central stairwell. The main living room occupied the larger ground floor room, that to the south, the kitchen the northern room, and two bedrooms were present on the first floor. The main entrance to the property led into a small lobby and is centrally located along the frontage. From the entrance lobby one could turn right into the living room or ascend the straight flight of stairs to the first floor. To gain access to the kitchen one had to cross the living room to a second door at the rear. From here one passed behind the stairs before entering the kitchen. The width and height of Water Street Cottage exactly match those of the 17th-century building. The floor within its northern half continues at the same height, but within the southern half it has been raised to improve the headroom at ground level. All that remained of the missing bay of the 17th-century building, within the 19th-century range, were the truncated east and west eaves-plates, which extend a metre or so into the new structure. Later modifications saw the exteriors tile-hung to create a consistent appearance between the two cottages, and this was accompanied by further

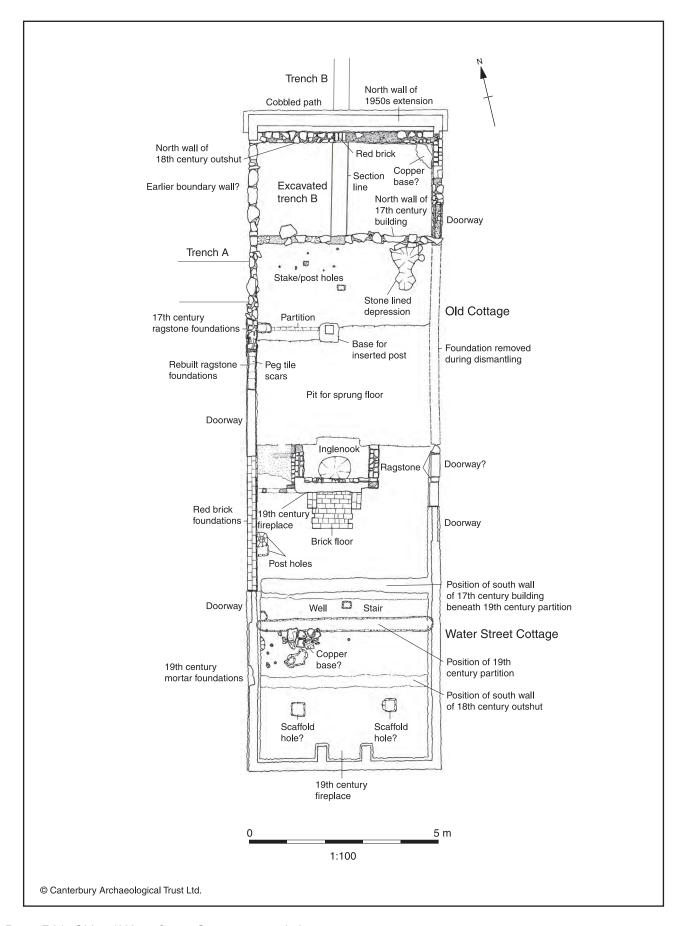


Figure 7.16 Old and Water Street Cottages: ground plan

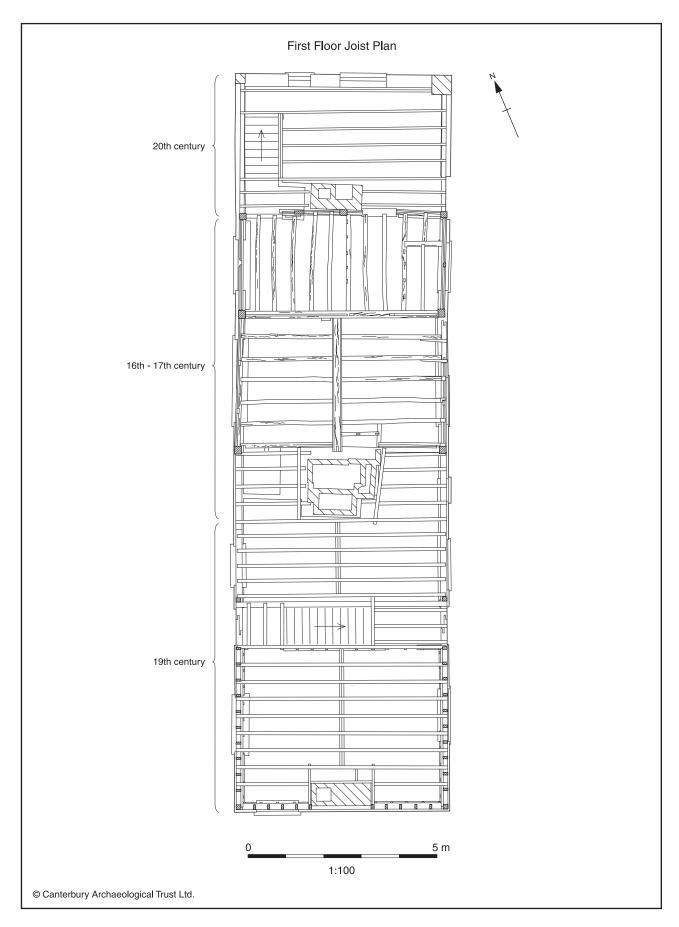


Figure 7.17 Old and Water Street Cottages: first floor joist plan

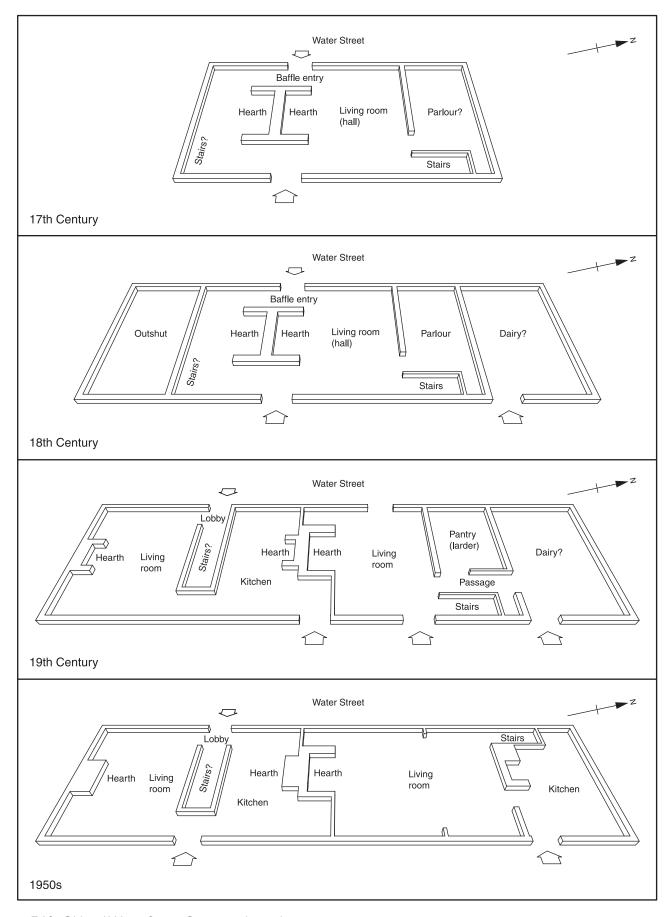


Figure 7.18 Old and Water Street Cottages: phase plans









Figure 7.19 Old and Water Street Cottages: photographs of (A) internalised hip of 17th-century roof, and (B) 17th-century joists and beams during dismantling

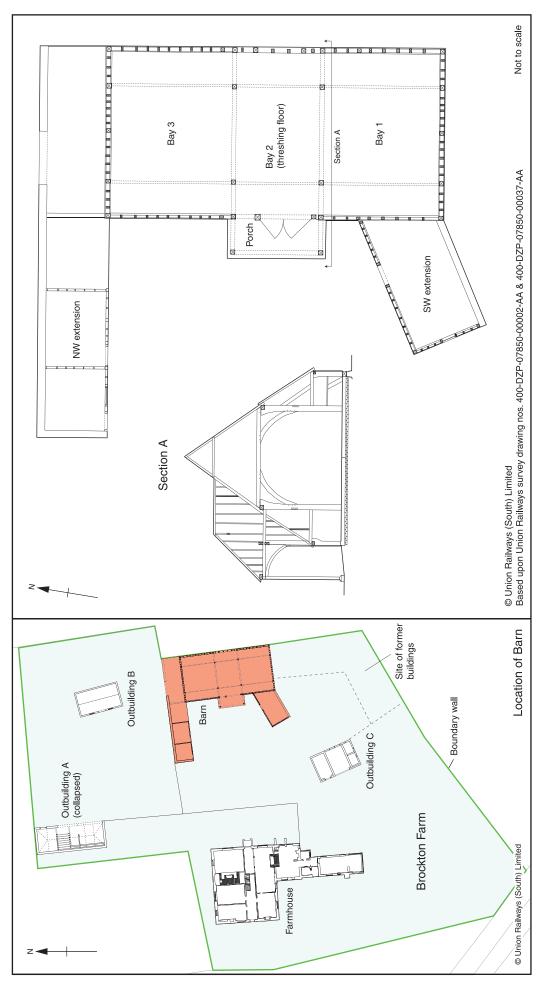
rebuilding of the walls. A series of alterations was undertaken in the 20th century, which modernised the interior facilities (and reunified the pair of cottages), and included the addition of one more extension at the north end. The archaeological investigation of these later phases is a not unimportant part of the story (and an interesting mixture of observation and oral testimony), but need not be reported at length here.

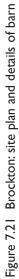
Brockton Farm, Charing Heath – 17th century (Figs 7.20-8)

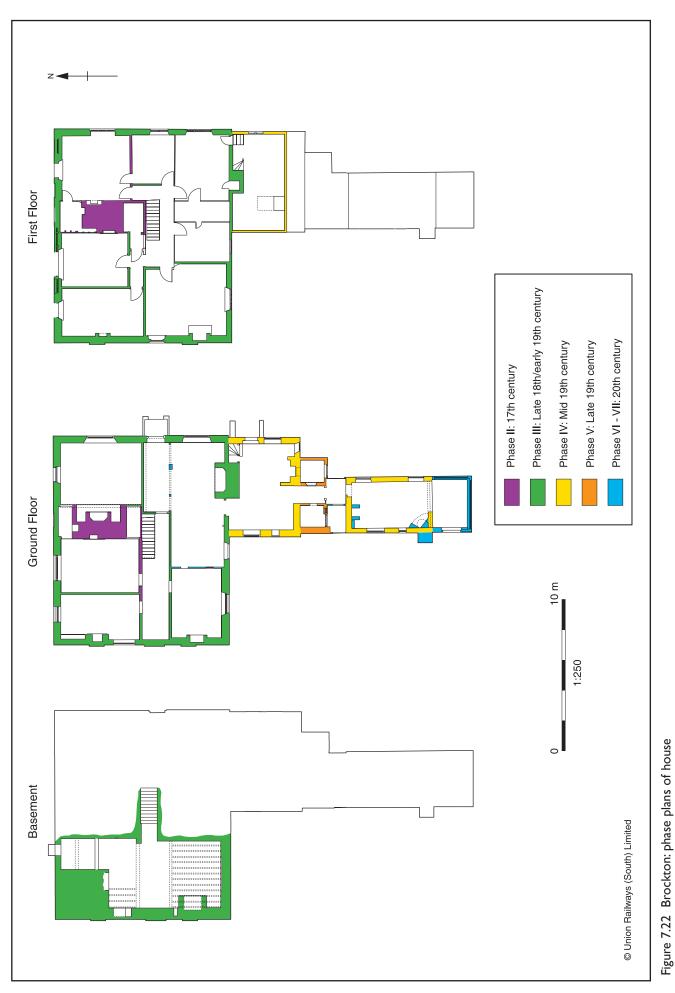
Brockton Farm is situated south-west of Charing village and on the south-east corner of Charing Heath, a large triangular area of former common surrounded by a number of farms and cottages. Brockton Farm was always problematic in that its age and sequence of



Figure 7.20 Brockton: photograph of farmhouse







development was not readily apparent on superficial inspection. Even its history was somewhat obscure (in the absence of its title deeds), though analysis of early village records (eg Hearth Tax) suggest that this (and not the nearby 'Brockton Manor') was more likely to have been the manorial centre. In 1840 the Tithe Map shows the present buildings (with no oast house) and a farm of over 120 acres, with hops, orchard and 62 acres of arable; in c 1860 the first edition Ordnance Survey 25" map showed all the present buildings except the small stable. The evidence uncovered in the dismantling revealed the extent to which the farm had been altered and modified into a Georgian farmhouse while retaining substantial elements of the primary 17th-century timber framing.

The barn was separately dismantled and removed, and the stables had been recorded previously after storm damage in 1992, but the farmhouse was carefully investigated and recorded during dismantling, and the site was partially excavated. Salvage items of historic interest were recovered for the Weald and Downland Museum at Singleton, West Sussex, and the Brooking Collection of Architectural Detail, University of Greenwich.

Investigation of the farmhouse quickly revealed the extent to which its historic fabric was obscured by dry lining of the walls, behind which more evidence survived, while the floors also contained a substantial part of the story. The farmhouse consists of two parallel ranges, an older one on the north and later one of the south (Fig. 7.22). The earliest elements identified were four timbers which were interpreted as the fragmentary remains of a pre-17th century gabled cross wing at the east end of the north range, which was perhaps one element of a larger building for which no other evidence was found above or below ground (Fig. 7.23).

The second construction phase was demonstrated by a detailed examination of the roof carpentry of the house, which revealed extensive remains of a 17th-century structure within the north range, while small areas of the southern wall framing survive within the south ground-floor wall (GF03), and in the cross frames on either side of the principal brick chimney stack (Fig. 7.24).

In the roof, the northern wall plate had survived complete from the 17th-century building. This had evidence of two projecting gables, also indicated by gaps in the rafters. Substantial amounts of the contemporary floor and ceiling frame survived on the first floor on either side of the central brick chimney stack, which also belonged to this phase, while a section of original wall framing including a full height wall post and sections of daub panelled walls survived, encased in the south wall by the later corridor. Other sections of framing also survived within the cross walls around the principal stack, and some evidence in the roof and framing suggested that a south range was built or intended. All other framing elements had been removed in the next phase of work, when the north range had been underbuilt in brick.

From this evidence it was possible to reconstruct the northern elevation of the building with some degree of certainty (Fig. 7.24), though it remains unclear whether there was a western cross-wing, and the archaeological evaluation (Trench 13) to the west of the extant building has, unfortunately, proved inconclusive in this respect. The detailing of the fireplaces and the carpentry techniques suggests an early 17th-century date for the primary structure of Phase II. Closer dating of the frame by dendrochronology was considered post-dismantling, but the timbers had too few growth rings to make this feasible. The quality of the chamfer detailing to floor beams and joists within the surviving framework would appear to suggest rooms of a domestic nature, probably ground floor hall and parlour with chambers over, though the scale of the eastern fireplace may suggest that it was a kitchen. Overall, the framing, brick stack, and the presence of original paired fireplaces at each level indicated a building of relatively high status, and thus was likely to have been provided with additional service accommodation (either attached in the form of outshots or as detached structures). The presence of a series of four redundant mortices in the girth of the south wall of the surviving range at the level of the first floor was clearly suggestive of additional, attached accommodation, and a watching brief on the breaking out of the basement rooms of the farmhouse revealed the remains of a former cellar on the south side, probably related to the 17th-century rear wing (being smaller than the 18thcentury rooms above it).

In the third construction phase (Phase III), during the late 18th or early 19th century, the farmhouse was again substantially remodelled, by the construction of an additional range to the south of the Phase II structure and the underbuilding of the north range walls in brick thus producing a building of approximately square plan (Fig. 7.25). An additional stack was raised in the eastern part of south wall serving a large fireplace at ground floor level only, probable for a new kitchen. The extensive survival of the 17th-century roof suggests that the roof structure of the Phase II house was simply shored up during this programme of work and the walls underbuilt in brick (with the removal of much of the Phase II wall framing). The construction of the southern range was in brick in single Flemish bond. Many of the extant internal partitions can be assigned to this phase of work, during which a corridor was formed linking the two ranges. All were of studwork construction with applied lath and lime plaster render. Joinery details contemporary with this phase, including the series of sash windows (and shutters) recorded throughout the main block, suggested an early 19th-century date for the extension of the building.

In the mid 19th-century, the fourth phase was represented by the addition of a lean-to extension on the south containing a service room with accommodation over, built of rubble stone with brick plinth, quoins and window detailing. The use of identical materials for the construction of a small, detached possible stable block suggests that it represents a contemporary addition (and likewise the northern part of outbuilding C). This addition is clearly indicated in its present form at the southern end of the Farmhouse range on the Ordnance Survey First Edition map of c 1860. The evidence of the Tithe Map of 1840 is a little more ambiguous, indicating

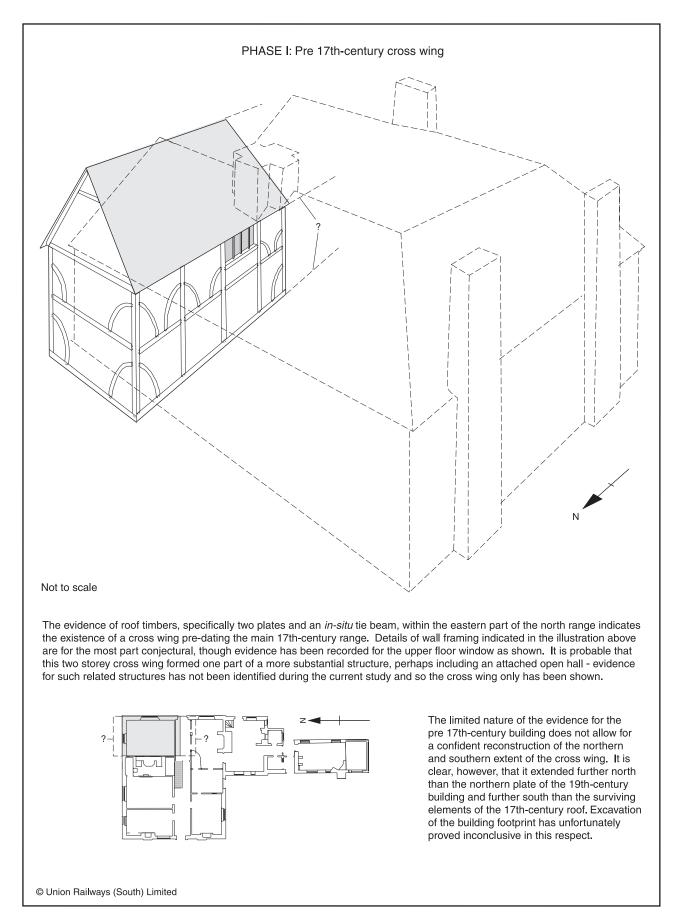
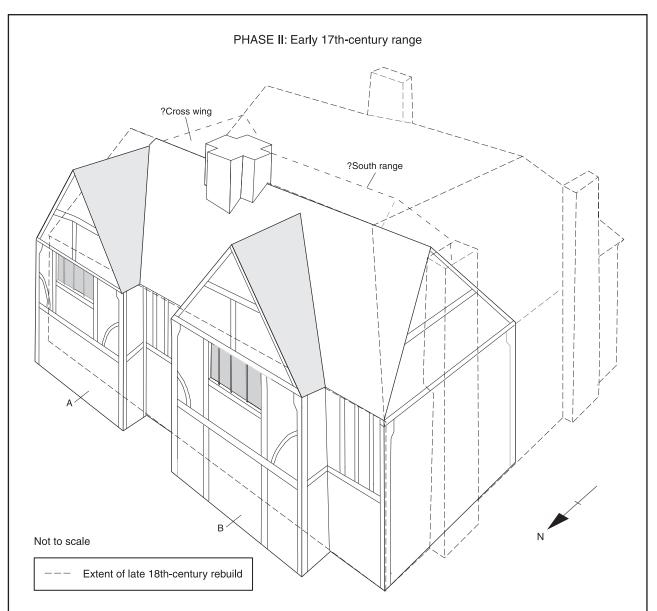
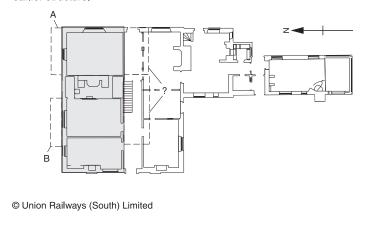


Figure 7.23 Brockton: Phase I reconstruction



The study has revealed a well preserved 17th-century roof above the north range of the farmhouse, maintained and adapted during the late 18th/early 19th-century rebuilding. An analysis of the roof details has allowed for the reconstruction of two projecting gables (A and B) to the north elevation of the house, the eastern gable (A) probably representing the retention of the pre-17th-century wing within the frame of the 17th-century house which was thus, in effect, built up against the earlier structure.



In plan, the 17th-century range occupied the area of the northern part of the 19th-century farmhouse (left). The evidence of a fragment of the original southern wall of this range, surviving as the north wall of the corridor, indicated the former existance of a further southern range. It has not been possible, from the surviving evidence, to attempt an informed reconstruction of the southern range. Again, no evidence has been recovered from excavations to indicate the extent of the southern range.

Figure 7.24 Brockton: Phase II reconstruction

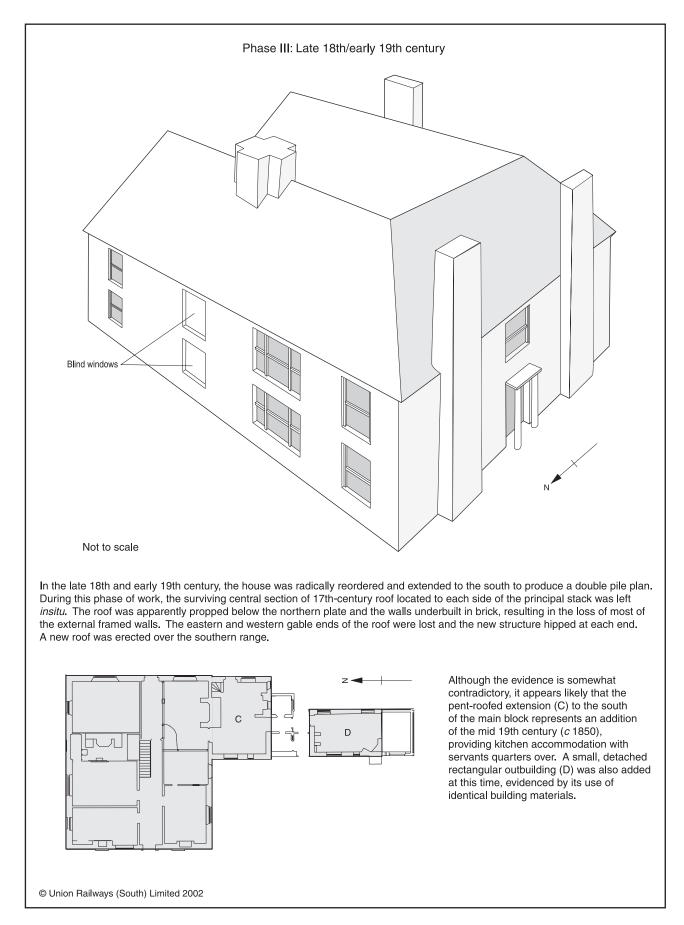


Figure 7.25 Brockton: Phase III reconstruction

a southern extension to the farmhouse, and a possible structure to the west (not otherwise evidenced).

The next phase was represented by the building of a small store and larder adjoining the south wall of the previous extension, probably towards the end of the 19th century or in the early years of the 20th century. In Phase VI, at some point probably in the middle years of the 20th century, the access passage between the main farmhouse and the formerly detached block to the south was enclosed with a series of ephemeral stud partitions thus creating a covered connection between the main house and the former stables. Probably at the same time the block was converted to domestic use, by converting doors to windows and inserting a stack in the south-west corner. In the final construction phase, a lean-to glass house or conservatory to the extreme south end of range represents a modification of the later 20th century.

The excavation was disappointing as far as the archaeology of the development or occupation of the building was concerned; in the case of the farmhouse itself, this is the inevitable result of the periodical refurbishment and modification of the structure—the underbuilding of the north range walls in brick, the creation of the basement to the Phase III house and the laying of new floors internally—which have served to remove archaeological traces of earlier arrangements. However, the discovery of the infilled cellar, noted above, was a useful and unexpected addition to the information gained from the structural analysis. Externally, little more was revealed than the foundation trenches of the barn and other buildings, and a series of yard surfaces.

The most interesting single find was during the watching brief on the removal of a brick-lined circular well, located 4.30m east of the farmhouse (Fig. 7.26). At a depth of c 9m a circular timber object was retrieved which has been interpreted as a wooden cutting shoe associated with the digging of the well that had been preserved in the waterlogged conditions at the base of the well, having been abandoned when the construction was completed.

The complete object had an internal diameter of 92cm and an external diameter of 1.15m, formed of four quadrant sections, or felloes of triangular profile, further strengthened by a series of four curved plank sections nailed to their upper face, offset by 45° relative to the lower timbers. The upper planks were uniquely identified by paired numbers at each end corresponding to the adjacent timbers in their original arrangement. Thus the individual sections were numbered I-II, II-III, III-IIII, IIII-I, and the lower felloes were correspondingly marked I, II, III, and IIII on their outer face. The felloes were cut from the oak heartwood with only a little of their sapwood remaining, and the joints were free-tenons of elm single pegged to each felloe. The upper face of the plank sections retained traces of brick and mortar indicating their primary orientation, and their mode of use. The available

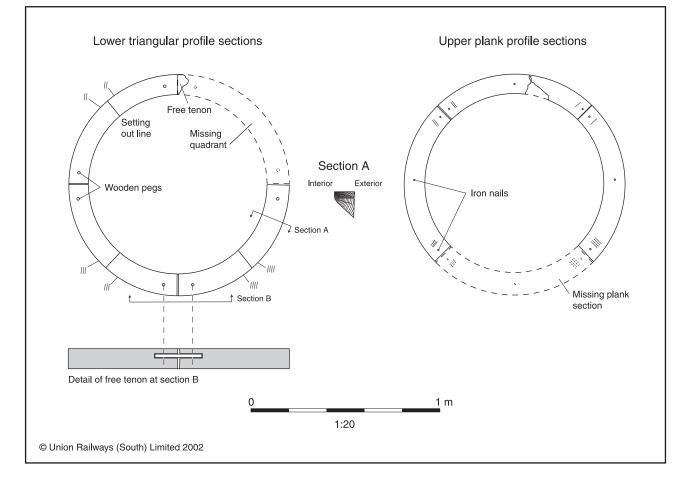
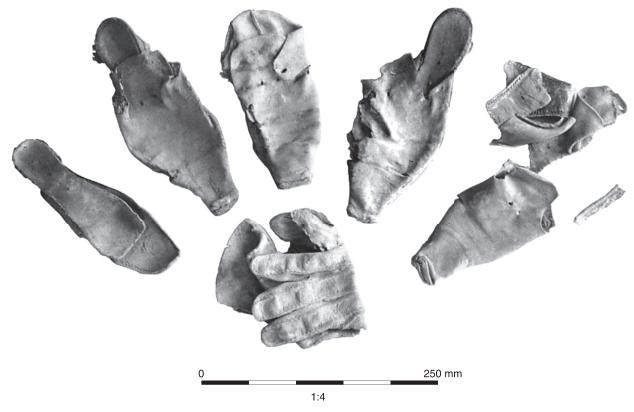


Figure 7.26 Brockton: details of timber well base



Selection of early 18th-century shoes and leather glove from 'spiritual midden' deposit



Three 'mummified' cats from 'spiritual midden' deposit

Figure 7.27 Brockton: photograph of contents of 'spiritual midden'

Sample Number	r Description	Material
1	Bottle neck	Glass
2	Bottle base	Glass
3	Window glass	Glass + lead
4	Window glass	Glass + lead
5	Window glass x 5 frags	Glass
6	Clay pipe	Fired clay
7	Turned wooden object	Wood
8	?Spinning top	Wood + Fe
9	?Tuning key	Wood
10	Glove	Leather
11	?Corset	Textile
12	Strap with fittings (x 2)	Leather
13	Misc. leather (x 1 bag)	Leather
14	Shoe	Leather
15	Shoe	Leather
16	Shoe	Leather
17	Shoe	Leather
18	Shoe	Leather
19	Boot heel	Leather
20	?Chair leg	Wood
21	Glove (part)	Leather
22	Strap	Leather
23	Oyster shell (x7)	
24	Architectural fragments	Wood
25	Horn	
26	Twisted Cord	
27	Pin	Worked wood
28	Bottle Base	Glass
29	Glove	Leather
30	Strap	Leather
31	Oyster shell (x14)	
32	Garment (?Jerkin)	Textile
33	'Mummified' Cat	
34	'Mummified' Cat	
35	'Mummified' Cat	

Table 7.2: Finds from a deposit of organic material within a void behind the stud wall at Brockton Farm

evidence suggests an original use as a cutting shoe for the brick well shaft, which would have functioned somewhat in the form of a caisson, a technique familiar from bridge pier construction. The shaft of the well would have been progressively built up from the shoe, excavation of the well being undertaken from within. The progressive 'undermining' of the timber shoe would allow the controlled sinking of the well, under pressure of the overlying brickwork, to the level of the water table. Upon completion of the well, the shoe was left *in situ*.

A number of other intriguing finds were revealed from a deposit of organic material within the void behind the stud wall to the south-east of the principal stack at first floor level. These finds are presented in Table 7.2.

The objects were presumably deposited from within the roofspace where the void was accessible to the south of the stack. The placement of selected objects and/or animal remains (especially mummified cats) in certain concealed parts of buildings, particularly around openings to houses (doors/windows/chimney stacks) is known throughout Europe from late prehistoric times and was particularly common during the 16th and 17th centuries (Easton 1995). Objects commonly encountered include articles of clothing (shoes in particular), household equipment, pieces of furniture and other articles reflecting the everyday life of a household. The function of such deposits, known as 'spiritual middens', has been discussed at some length (Merrifield 1987, 128–36) and is believed to be of a symbolic nature, probably a deterrent against malevolent spirits entering the building.

The selection of objects recovered from the wall void at Brockton would appear to represent a fairly standard assemblage for such 'spiritual midden' deposits (Fig. 7.27). Spot-dating of the shoes and other clothing items indicate an early-mid 18th-century date for the major part of this deposit. The poor condition of many of the items precludes a more precise dating.

Other buildings at Brockton (see Fig. 7.21)

A range of other buildings lay within the vicinity of Brockton Farm. Brockton barn, directly to the east of the farmhouse and is aligned north-south, likely to be of 17th-century date. The barn was of double aisled form, timber-framed of three bays and aligned north-south with a projecting porch within the central bay to the west. The overall dimensions were 18m long (N/S) x 9.20m wide (E/W). The exterior walls were of regular studwork upon ragstone plinths and were clad with feather-edged weatherboarding, while the roof is halfhipped and thatched (save for the junction with the porch roof where it is clad in plain peg tiles). Internally, long braces extended between splay-headed aisle posts and ties/aisle-plates. The arcade plates employed edge-halved and bridled scarfs, and the ties were jointed with double dovetails. The roof was of plain A-frame type, with high collars lapped and single pegged onto the principal rafters. A central threshing floor in Bay 2 was delimited by partially surviving, low boarded partitions.

Projecting extensions located at the northern and southern ends of the west elevation partly enclosed a yard of which the farmhouse formed the western limit. The 'external' elevations of the extensions were in brick (north) and stone (south), the elevations facing onto the yard were again clad with feather-edged weatherboarding. The extensions had pitched roofs with claspedpurlins and were clad with plain peg-tiles. The southern extension was gabled to the west; that to the north was hipped. A small set of brick-built stables (14 x 5m) lying north-east of the farmhouse were probably of 18thcentury date, with a hipped and butt-purlin roof and traditional fittings in the stalls.

Other buildings comprised a pair of brick oast-houses lying north-west of the farmhouse, built between 1840 and 1860 and visible today outside the railway, and a late 19th-century brick-built shed (9m x 5m) north-east of the farmhouse.

Bridge House, Mersham – late 17th century (Figs 7.28–9)

Bridge House, Mersham was a listed building next to the existing railway bridge that was thought possible to retain *in situ* by the building of a revetment wall, but was

subsequently found to be too near to the proposed works. Rather than removing or dismantling the house, its integrity was preserved by the decision to mount and slide it sideways to its present position some 50m to the west of its historic site (and thus remaining as a listed building). Consequently the building was not dismantled (or recorded in detail), but excavations took place in and around it to cast the underpinning beams on which it was to be moved. This rather unusual excavation did not produce much evidence of the occupation of the building, but was helpful in suggesting its date of construction.

Bridge House is a two-storey house with a central brick stack and walls of ragstone with brick, a front wall with plat band, and a timber-framed interior. It is a lobby-entrance plan, with the front door facing the chimney stack, and an added outshot at the rear. The roof is tiled, and half-hipped at each end. The brick porch has a sloping roof with a small dormer window set into it. There are wooden casement windows, those on the ground floor having segmental heads. Internally there

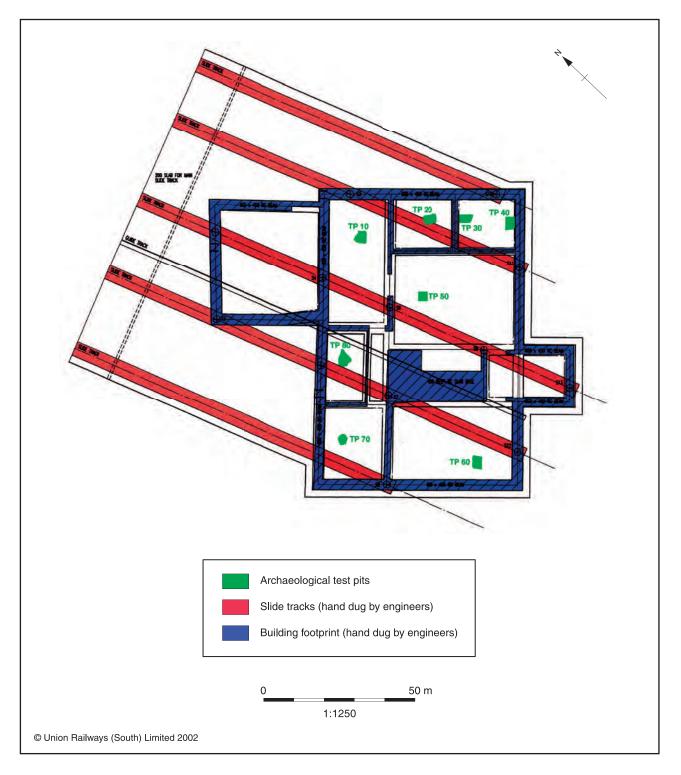


Figure 7.28 Bridge House: ground plan showing excavated areas



A. I



Β.

Figure 7.29 Bridge House: photographs of house (A) prior to relocation, and (B) during relocation

were no special features of note, with large brick fireplaces on either side of the stack, some visible ceiling beams and a brick paved kitchen at the rear with a water pump in it. On the basis of the visible evidence, it was considered that the building was probably a timberframed building of 17th-century date, to which a brick front had been added in the early 18th century. The investigation by Oxford Archaeology consisted of several test pits excavated within the house to determine the existence of early floor levels, and also a watching brief on the trenches dug by hand by the engineers (Abbey Pynford) along the slide route and on the ring beam trenches under wall foundations. Overall, the results of the below-ground archaeological investigations added little to the understanding gleaned from the survey of the structure itself, but provided information on earlier activity on the site. The seven test pits excavated within the building aimed at establishing potential historical

floor levels, revealed evidence of two former floor levels. In Test Pit 70 a possible clay floor was identified, and in Test Pit 80 a brick floor was revealed, although neither produced dating evidence. The archaeological watching brief revealed archaeological evidence suggesting a possible late 14th century occupation including postholes, pits and a gully (Phase I). In particular, rooms 2 and 3 contained pottery from the 14th and 12th century. However, the few sherds from the latter period are likely to be redeposited and there is no substantial evidence for activity prior to the late 12th century.

Archaeological evidence from the late 17th century (Phase II) included clay pipes in levelling deposits, and suggests Bridge House was built towards the end of the 17th century. Phase 3 (dated stylistically and by finds to the 18th century) was a period of major change to the building, the main one was represented by a repair to the facade of the building with squared ragstone overlain by red brick; a south-west facing chimney and fireplace were also inserted. During the early 20th century an extension was added to the house (Phase IV), a porch added in the later half of the 20th century (Phase V) and in the late 20th century a lean-to out-building was constructed to the rear of the house.

Post-medieval to modern landscape

The rural landscape of Kent, like everywhere in England, experienced a long continuity of rural culture, broken finally by the Great War and the replacement of the horse by machines. The special conditions of Kent's field systems (in lacking extensive areas of open-field farming) meant that in some ways Kent experienced less change, without the disruption caused by inclosure and the subsequent re-ordering of the countryside. Change was of course taking place, and was apparent in new crops and rural industries (see below), and in the re-ordering of the landscape of aristocratic leisure, partly expressed in gardens and parks (Thirsk 1967; Short 1984).

Landscapes

Boys Hall Moat

The Scheduled Monument of Boys Hall Moat lies immediately adjacent to the SER London–Folkestone railway line on the south side. It is the presumed site of Sevington manor, abandoned in about 1632 when Thomas Boys built Boys Hall on a new site 500m away to the north-west. The old site, which will have had a principal mansion surrounded by a moat, has extensive earthworks that were surveyed by the RCHME, and shown to have remains of the terraces and water features of a formal garden. Many excavations have been conducted in the vicinity of the site, while avoiding the central part of the moat and earthworks. An examination of the strip alongside the railway by Oxford Archaeology in 1993 uncovered a linear feature that may have been a feeder stream for the water supply (Russell 1993).



Figure 7.30 Cobham boundary stone

Cobham/Shorne Boundary Stone (1808) (Fig. 7.30)

On the edge of Cobham park, by the side of the road, was the boundary stone between Cobham and Shorne parishes, made of Portland stone, 9 ins square, inscribed 'SP/CP / 1808'. This had the distinction of being a Grade II listed building, even if being a less obvious one in an overgrown road verge, and was placed there to mark the limits of responsibility for road repair following disputes between the parishes. The line of the London to Dover road (the Roman Watling Street) had at one time bypassed Cobham to take in Gravesend, leaving the old road as a byway, but the old route came back into use in the 20th century as the A2 trunk road.

Cobham Park – Park Pale and Brewer's Gate (Fig. 7.31) Cobham Park was eventually a beneficiary of the railway, since the badly vandalised Darnley Mausoleum of 1786, a vast pyramidal structure in the park designed by James Wyatt, has benefitted from the Cobham Ashenbank Management Scheme (supported by the Rail Link), allowing for its repair and restoration. This spectacular monument, now part of the Cobham Wood property of the National Trust, is once more publicly accessible. The HS1, in avoiding the A2, clipped part of the northern perimeter of the park, a large medieval hunting park with the Tudor buildings of Cobham Hall as its centrepiece. Humphry Repton produced one of his 'Red Book' designs for the park in 1790, as a result of which the pleasure grounds were laid out north of the hall. These comprise a circuit of walks around artificial mounds, forming a controlled picturesque garden in which to circulate, with set views out across the park. At the north end are ponds that supplied the house from a small waterworks, along with a long-lost park gate (Brewer's Gate Lodge), and subsidiary buildings shown on estate maps such as dog kennels.

The northern edge of the park was truncated by the railway, and the foundations of the Brewer's Gate Lodge

were uncovered in excavation. The lodge was brick built with a large bow-fronted room towards the drive, a heated room at the rear and a smaller third room, over an infilled cellar; the remains clearly belonged to a rebuilding after 1909, and it had been demolished in the 1960s. Remains of other features shown on estate maps were not recovered, but the earth bank of the medieval park pale was sectioned near the eastern side of Ashenbank Wood, clearly showing that an earlier bank and ditch had been recut with a larger bank and ditch, perhaps as part of Repton's landscaping.

Chilston Park in Boughton Malherbe

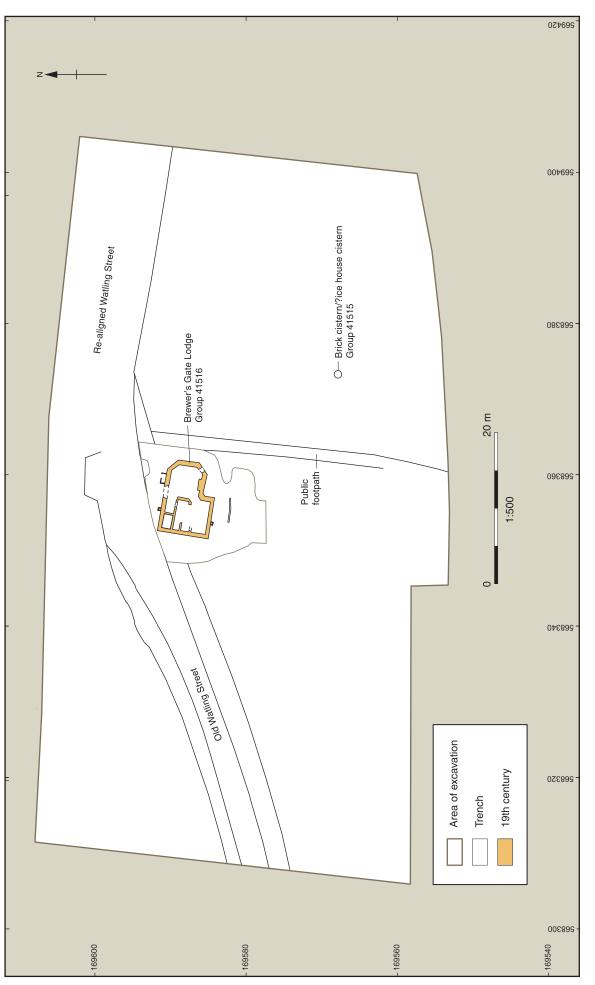
Chilston Park is an 18th-century house with a small park visited by the diarist John Evelyn in 1666, who described it as a 'sweetly watered place'. A formal park was illustrated by Baddelslade in 1709, but this was extended and modified in a more naturalistic style after the rebuilding of the house in the early 18th century, and its acquisition by Thomas Best in 1736. The park rises above the house to the north, and ended with a low ridge on which pines had been planted. Towards the west end of this was an ice house with its pond. The M20 truncated the upper end of the park, leaving a strip of land with its pine trees and ice pond, and then the HS1 took a further slice, leaving a 10 ha strip along the northern edge, now part of the 'Heaths Countryside Corridor'. An evaluation found little trace of any significant remains, but a more recent historical and field investigation by Archaeology South-East has located the precise site of the ice house, which now survives alongside a handful of storm-proof pines (James 2007). It was found that the ice house was probably built in the latter half of the 18th century, but that the available evidence was not sufficient to refine this date or to confidently assess the full character of the structure.

Later parkland was encountered at Boxley Park, where an informal area of parkland around a house (where the poet Tennyson stayed) is traversed by the partially screened route, and at Sandling Park in Hythe where a tunnel preserved the approach to the Grade II registered park, designed by Henry Milner in 1897 for the Hardy family.

Agricultural change

Kent developed some specialisms such as cherry orchards and hop-growing, the latter making its mark in the hundreds of oast houses across the Kent landscape that were used for drying the harvest. The distribution of the now-vanished crop is shown in the tithe returns of the 1840s, though no distribution of oasts seems to have been attempted (Kain, 1986; Cordle 2011).

Oasts at Brockton have survived the loss of the remainder of the farm, and in Boxley the converted oast houses at Boarley Farm were avoided; the oast houses at Yonsea were dismantled and investigated (see below). Possible traces of hop poles were found at the Hurst Wood site, while numerous post-medieval ditches, banks



and field drains on many other sites testify to minor aspects of agricultural improvement.

Industrial activity

Evidence for rural industrial activity was recovered from several sites, perhaps not surprising, if unexpected. As brick replaced timber as the predominant building material there must have been many local production sites, which with available brickearth and firewood could almost have been made for individual buildings. At Northumberland Bottom in Gravesend (on Thanet beds) a brick clamp was found just north of Hazells Farm, in an area of burnt and blackened ground measuring 16m by 5m. This overlay a layer of clay and charcoal on scorched clay with brick wasters and a base layer of under-fired green bricks containing parallel slots for the fire channels. Scattered brick wasters lay around, though these were too fragmentary to give a full series of dimensions. However, the sizes in general suggested a date bracket of 1450-1700 for the bricks from the last firing, and indeed the brick clamp may have been used to provide materials for Hazells Farm, which contains comparable bricks.

Near Tollgate to the south of Gravesend, a brick-built kiln was found near Singlewell Feeder Station (some 80m south of Watling Street), comprising several walled flues fed by a stokehole, dug in the chalk bedrock. The brick walling was identified as being late 18th–19th century in character, and the kiln had evidently seen frequent use its location near the road network would have allowed easy access to Singlewell or Cobham, if not farther afield. At Parsonage Farm, Westwell, remains of 19th-century smithing were found outside the moated area, and at Knights Farm, Cobham, a series of pits and 'ovens' was traced across fields that may be remains of lime or charcoal burning and were thought likely to be of late medieval or post-medieval date.

Model farms

Kent is perhaps not the great county for model farms, and its old farms often had centuries of building investment to work out their time. Nevertheless, at Yonsea Farm in Hothfield there was a complete group of farm buildings constructed in a short period by the Earl of Thanet, and which included oast houses. These were completely removed by the HS1 (caused by the railway geometry that was determined by the retention of Parsonage Farm, Westwell) and were carefully dismantled for reconstruction. Model farms became popular in the late 18th and early 19th centuries and are part of the ideal of agricultural improvement. The farm buildings were to be of good quality and planned on the ideal of efficiency to minimise labour and promote the production of manure (Barnwell and Giles 1997, 5). Model farming was based on integrated farming with barn buildings, animal shelters and even the farmhouse based around enclosed yards. The underlying philosophy was that livestock needed to be looked after in order to produce manure to fertilise the fields and so increase cereal yields. In conjunction with this, crop rotation schemes were followed with root crops being used to feed the cattle and over winter increasing numbers of beasts. With the cow shed in the centre of the enclosed yard, all the manure was contained and available for use (Robinson, 1983, 63). The buildings making up the Yonsea complex clearly demonstrate this philosophy and manner of farming and put to full use the new theories of agricultural improvement. It represents a 'rare example in Kent of a Georgian planned model farm' (Robinson, 1998, 1).

Yonsea Farm, Hothfield, c 1820 (Figs. 7.32-8)

The farmstead at Yonsea Farm, Hothfield (NGR TQ 9850 4505) was an early 19th century model farm comprising a number of Grade II listed buildings and other non-listed structures, including the farmhouse, oasts, loose boxes, toll cottage, granary and cart sheds, cowsheds and stables, and barn (Fig. 7.32). The buildings were to be dismantled for re-erection on a site adjacent to the South of England Rare Breeds Centre, Woodchurch by the Traditional Buildings Preservation Trust. Both prior to and during the dismantling, Rail Link Engineering (RLE) and the Trust commissioned and carried out substantial recording including measured surveys, rectified photography, historical research, oral history, video footage and general photography. The buildings mostly belonged to a single phase, so an extensive archaeological record was not required, but OA carried out a detailed survey of the farmhouse kitchen which had surviving features including a bread oven, range and double copper. In addition to this, a watching brief was carried out during the controlled dismantling of the other buildings, and after clearance the site was further investigated by means of an archaeological evaluation.

The name Yonsea Farm was first recorded in the 13th century and this has led to suggestions that the new farm was built on the site of a pre-existing farm, and that the pond and linear depression to the rear of the oast was possibly the corner of a moated enclosure. An archaeological evaluation in July 1997 found in six trenches no material earlier than the 19th-20th century, and led to the conclusion that an earlier farm on the site was unlikely, and that the pond may have been a garden feature. Yonsea Farm was developed by the 9th Earl of Thanet (1769–1825), between 1816 and 1819, as part of the Tufton family's Hothfield Estate. Although no architect is known for the house Robinson suggests that it may be attributed to George Stanley Repton working in the office of John Nash, who is known to have designed to similar briefs for the Earl elsewhere. The more functional buildings could have been provided by the Earl's normal estate work force. Yonsea was developed after the purchase in 1814 of 30 acres of land also known as Yonsea Farm from John Barlow; this additional land was added to the Earl's existing holding,

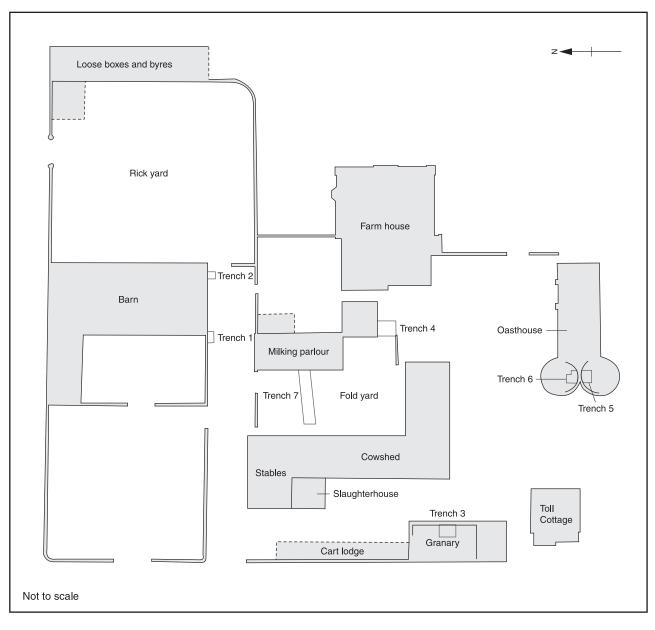


Figure 7.32 Yonsea Farm: overall plan

and rearranged to create the model farm. An economic context may be suggested in the variable prices of hops, and it is interesting to note that there was a great increase in hop production in the first decades of the 19th century, so with Yonsea being built with a single (later double) oast house, this may have been a motivating force in the farm's development. Once built the farm was leased out to long-term gentry tenants, and during most of the 19th century the Strouts family was the occupant, very much the desired 'Gentlemen Farmers' for whom the farmhouse was designed.

The majority of buildings making up the farmstead appeared to be of a one-phase development of 1816–19 with few alterations after this date. However, some evolution and adaptation within the buildings was seen during the process of dismantling. Evidence of this limited evolution is seen in the Hothfield tithe map of 1840, the Daniel Smith and Son report on the estate of 1850, and the 1872 estate survey and map. These sources show the 'bungalow' to be of a later date than the rest of the complex and it was reputed to be a toll cottage associated with the toll road from Ashford to Maidstone, though this has not been established with certainty.

The farm complex was made up of a number of buildings, many of which were individually Grade II listed, the remainder being curtilage buildings. The single phase of building in 1816–19 was represented in a degree of uniformity in building style, construction details and materials. The materials seen throughout the farmstead were brick laid in single Flemish bond (ie takes the appearance of Flemish bond where the wall was to be visible and English bond where the walling was to be hidden). To emphasise the decorative nature of the Flemish bonding many walls used salt-glazed headers, although this was not universal. Timber framing was another common component of the farm buildings with weatherboarded finish and often vertical butt-edged boarding. Jowled knee bracing was also a common characteristic throughout the

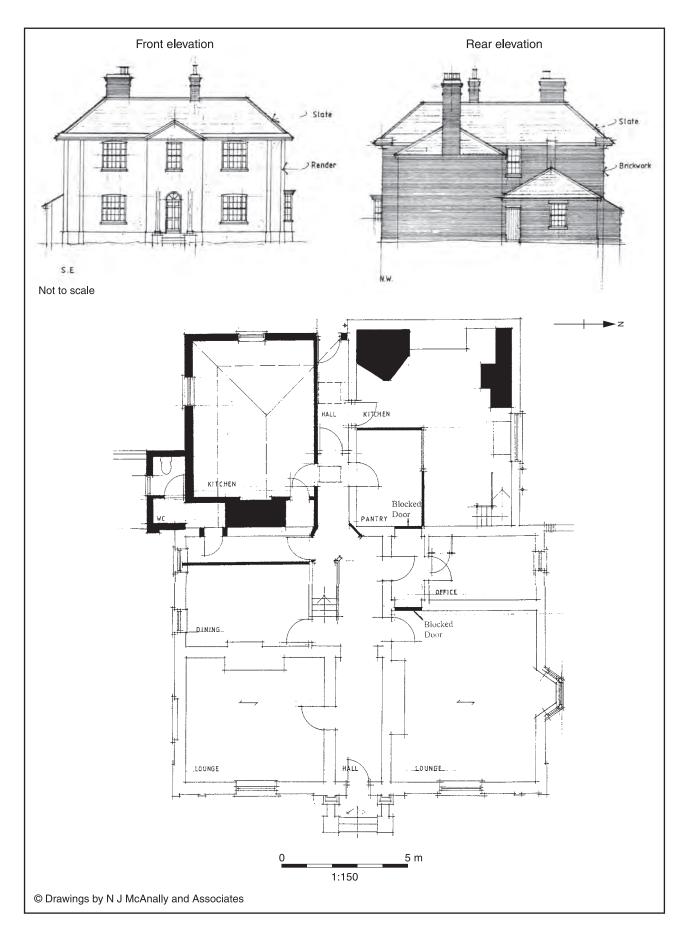


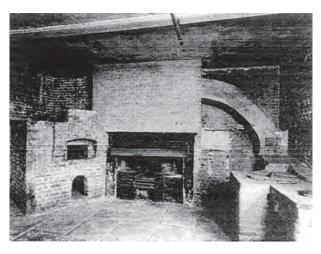
Figure 7.33 Yonsea Farm: farmhouse plan and elevations

buildings, giving a vernacular character. The roof structures of the various buildings were rather more sophisticated, and also displayed some common features, many of the roofs having tapering king-post trusses with raking struts and ridge boards. The trusses had wrought iron structural components at the foot of king-posts and ends of tie beams. Purlins were not structurally linked to the trusses but instead were bolted to the underside of rafters in a manner so consistent as to appear an original rather than secondary feature. Roofs were commonly of hipped construction with lead flashings to ridge and ridge hips with coverings of slate commonly on boarding (and the later buildings using batons instead).

The spatial arrangement of the buildings was designed to promote efficiency and be logical within the farm's working practice. The buildings formed three main working areas. The barn and the loose boxes framed one yard—possibly used as a rick yard where harvested crops could be temporarily stored before processing in the barn. The farmhouse, although within the farm complex, was to some extent detached with its front elevation facing east, away from the working buildings and its approach also to the east. Both the



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Figure 7.34 Yonsea Farm: photographs of (A) the front elevation of the farmstead and (B) internal view of the original farmhouse kitchen

house and its approach were screened from the working farm with Flemish brick walls and ornamental planting including yews and box, and the garden had a ha-ha on the east side of the house. The track from the farmhouse led to a further area of the complex with the oast houses to the south, with walled garden and orchard behind, the toll cottage to the south-west and granary with cart lodge below and adjacent implement shed along the western boundary wall. In the centre of the farmstead, another range of buildings divides the space and is thought to have been used as stables, bullock feeding stalls and slaughter house.

The farmhouse

The main farmhouse was gentrified in its appearance and dimensions, with a principal pedimented facade to the east (Figs 7.33–4). The double-pile house was brick built with a stuccoed front range of two storeys, with basements (used as pantry and dairy), covered by a series of slated hipped roofs and with sash windows. Adjoining the main house to the rear (west) were two kitchen areas, that to the north was contemporary with the main house and was the original kitchen with remarkable surviving features of bread oven, double copper, stone sink and range. The service use of this part of the original build was demonstrated externally with the block slightly set back from the line of the main house and with its Flemish bond walls left unrendered. The single storey kitchen to the south, with adjoining lavatory was a later addition.

The 1850 estate report calls this:

...a handsome modern House, stuccoed, brick and slated containing servant's room, five best bedrooms, two large parlours, a third room, kitchen, a back ditto, Pantry and a Dairy in basement. It is surrounded by Pleasure Grounds, Garden and Orchard opening to a large Park like Paddock with good wooded scenery – Yards nearly all walled in with Coach house and Stable.

The interior had generously sized rooms with dry-lined walls and some surviving fragments of early wallpapers.

The barn and associated structures

The barn (Building 4) was situated to the north of the farmstead and runs north-south with its hipped end to the Maidstone Road (Fig. 7.35). It was of timber-framed construction, built on a brick plinth, with external covering of horizontal weatherboarding, and a slate roof. Internally it was of five bays with the threshing floor in the middle third bay. All the walls, with the exception of the south, were of timber framing with a brick-built plinth, and with long diagonal struts. The roof was a tapered king-post design with iron fittings, typical of Yonsea buildings.

In the northern angle of the porch and the main barn was an enclosed area with a suspended boarded floor, used as a corn hole: a storage area where threshed grain could be temporarily stored until enough had been gathered for winnowing.







Β.

Figure 7.35 Yonsea Farm: photographs of (A) east elevation of the barn and (B) west elevation of the barn and stable

At either end of the east side of the barn were two open-sided animal sheds with 'vernacular' detailing in the timber knee braces.

Machine room

A later timber-framed building situated to the north-west of the barn was of four bays with a slated hipped roof. It functioned as a machine room, and at the south end of the building the foundations for a brick-built engine house were visible (housing a steam engine which would have been connected to a flywheel in the machine shed by a drive belt, the gap for which is seen in the west end of the building).

Oasts

The oast house (Building 3) was situated to the southeast corner of the farmstead and consisted of two round drying kilns to the west and a two-storeyed receiving and processing barn to the east (Figs 7.36–8). The building was of brick mostly laid in Flemish bond, although the roundels were laid in header bond up to the plat band of the northern elevation marking the first floor level. The complex was roofed with slate covered boarded roofs. Neither of the roundel cowls survived but the wind vane of the northern most roundel was extant. The 1850 estate survey suggests that there was only one roundel at that time and that the second oast was a later addition. The floors of the oasts were further investigated during the evaluation, but no evidence was seen for an original single roundel.



Figure 7.36 Yonsea Farm: photograph of north elevation of double oast

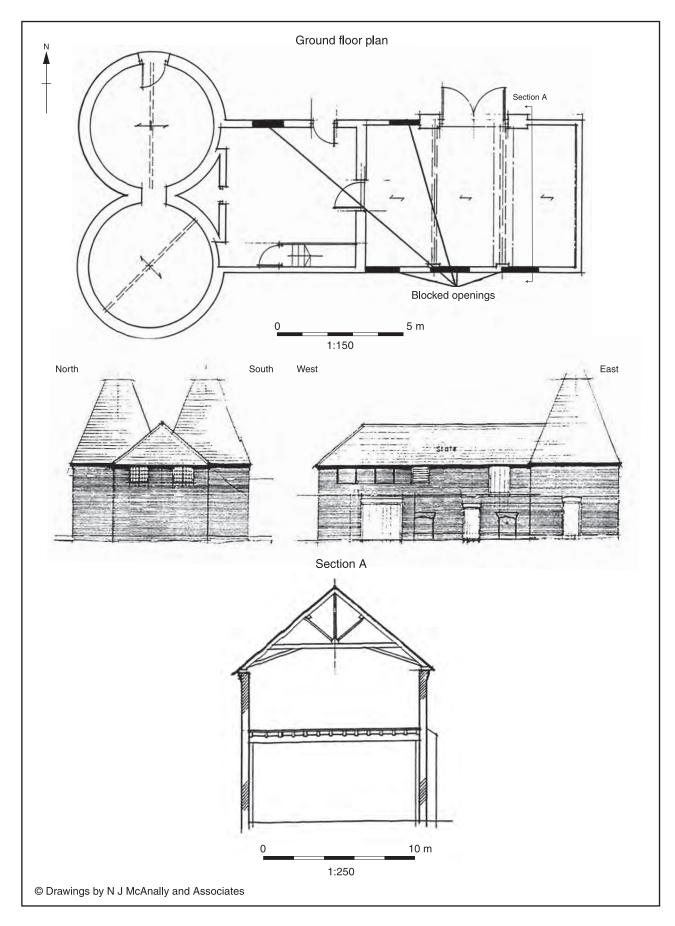


Figure 7.37 Yonsea Farm: oast house plan and elevations

The ground floor of the brick roundels had been quite substantially altered with doors inserted into the north external wall of the north roundel and in the dividing wall between the two kilns. The floors of the roundels had been sealed with modern concrete screed surfaces which were removed during the archaeological investigation revealing evidence of the former fire arrangement. During the excavation of a test pit to locate the depth of foundations, an air flue channel was located immediately to the east of the double roundels. The air flue was constructed in brick and capped with brick and seemed to serve the southern most kiln.

The wooden slatted drying floors of the roundels still survived supported on softwood joists and a T-section cast iron lintel. The floor of pine slatts or batons were spaced to support the hops and let the heat through.

The stowage building adjoining the roundels was divided into two rooms on the ground floor with flooring

of brick tiles. The first floor of the building functioned as a single area for drying and storing hops. The freshly harvested hops would be fed onto the drying floor through the linking doors and after drying the hops would be removed and spread out over the whole floor to cool before being loaded into hop pockets.

Other buildings/structures

The loose boxes and byres (Building 7) were located to the east of the main barn in a 'L'- shape, comprising a number of loose boxes and open stalling areas of brick and timber framing.

The granary and cartsheds (Building 6) were constructed against the west boundary wall of Flemish bond brick with decorative plinth and raised pilaster detail. The granary was a two-storey building (with a wagon lodge below) and the (post-1850) cart shed was a singlestorey structure.

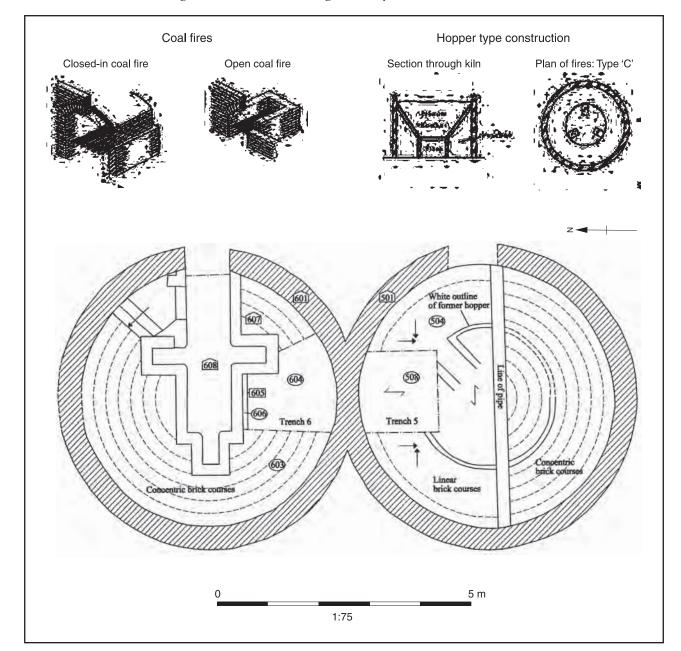


Figure 7.38 Yonsea Farm: plan of drying kilns within oast

The toll cottage (Building 2) was reputedly associated with the Ashford to Hothfield turnpike road (and was not mentioned in the 1850 estate survey). It may be that the original house (of square plan with a slate-covered pyramidal roof and central chimney stack) was indeed moved from a roadside position.

The stable and cowsheds (Building 5) were in the centre of the farmstead, consisting of a single-storey 'L'-shaped cow shed with food processing room at the south-west corner and a brick-built two-storey building at the north thought originally to have functioned as a stable, with a single storey slaughter house to the rear. The buildings were again a mixture of brick laid in Flemish bond and timber framing with weatherboarded exterior, and a slate roof.

New building materials

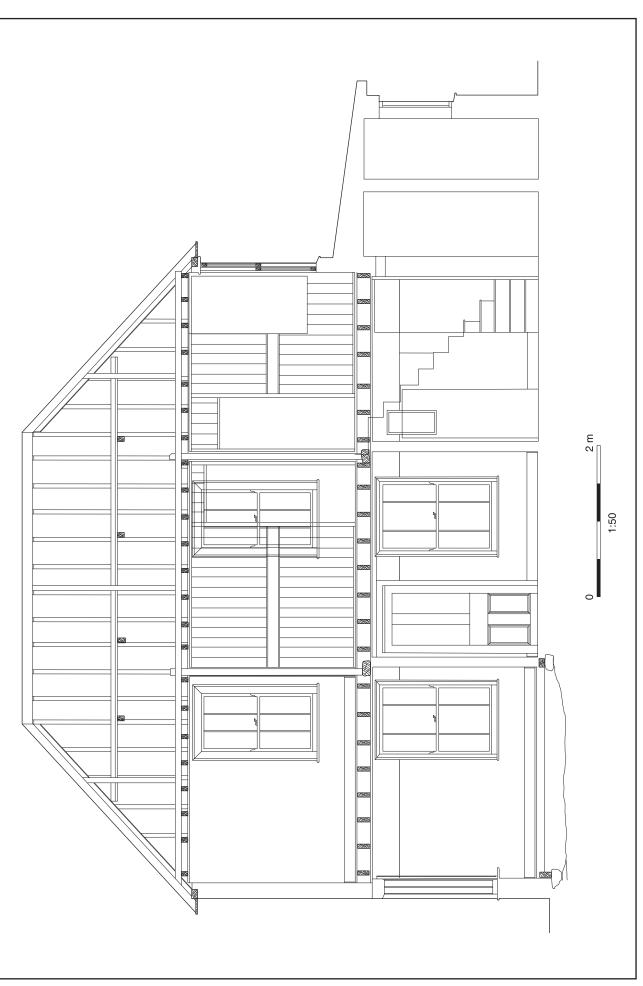
The railways (and no doubt coasting trade) finally brought slate to Kent as a rival to the 'native' peg tiles, and brick became more prevalent than timber framing. One local innovation of note was the development of Portland cement in the Medway chalk pits. The Medway and its tributaries was perhaps most notable for the paper industry, which supplied the needs of the watercolour artists in the 18th–19th centuries, but the chalk pits were a larger feature in the landscape. At Borstal by Chatham the HS1 passes very close to Borstal Court Farm, a building and farm perhaps easily dismissed as a modern building of concrete blocks, until it was realised that it was in fact an early example of block building, if less surprising for its location near to a chalk quarry and cement works at Wouldam. In fact the site (shown as 'Bugdens' on the 1867 OS map) was bought by the owner of the Burham cement and brick works in c 1882, who built a model farm, with a three-storey stuccoed house and farm buildings all constructed of concrete blocks.

No. 4 Boys Hall Road (Figs 7.39-40)

This Grade II listed building situated adjacent to Crowbridge Cottage already described above had a tilehung exterior that belied its true age. It was investigated prior to dismantling, and the building would appear to have originated in the early 19th century as a three-cell, single-storey brick-built structure. The nature of the primary building remains uncertain, though the identification of a primary fireplace within the central room would appear to indicate a domestic function. This is perhaps supported by the evidence of a property survey undertaken in advance of the construction of the railway which describes the building as a 'lodge', related to No. 2 Boys Hall Road. In c 1890, the building was extended



Figure 7.39 No. 4 Boys Hall Road: photograph of building



by the addition of a first floor of timber stud construction clad externally with decorative banded tiles and providing three new bedrooms. The additional level was constructed of timber studwork with lath and plaster internally and a tile-hung exterior. It would appear that this adaptation of the building necessitated the rebuilding of the upper courses of the existing brickwork walls. The pre-existing central brick stack was raised and a new, southern stack added in a similar style with fireplaces at ground and first floor levels. A consistent system of fenestration, comprising vertical sash windows with three pane panels was inserted using, at least in part, preexisting openings at ground floor level. During the 20th century, a single storey, pent-roofed bathroom extension was appended to the north elevation. The house can be seen as a late example of 'vernacular' construction on a modest scale.

The modern world and the development of rapid access

Roads

The history of transport in Kent is dominated by the routes from London to the Channel ports, and heavily influenced by the landform and the obstacles to easy north-south routes (Lawson and Killingray 2004). The road pattern was clearly influenced by the Roman patterns, with Canterbury as a distribution hub for east Kent routes from London, given the choice of Richborough and Reculver as ports. With the selection of Dover as the main entry point the road pattern was established, with the principal route through Chatham and Canterbury, and a southerly route through Maidstone and Ashford. It is notable, however, that the Roman roads were dispensed with as necessary, and the diversion of the London road though Gravesend (itself an exit port from London) meant that the old route past Cobham was unused until it was re-adopted in the 19th/20th century.

Railways

Ironically for those planning the route of HS1, the faltering development of the 19th-century railway in Kent left a difficult legacy. The reluctance of Maidstone and its landed proprietors to countenance a direct railway line from London drove the first line southwards, to that extraordinary straight route of the SER from Redhill to Tonbridge to Ashford, which left London Chatham and Dover winding round the north coast. It was left to HS1 to find the best fit to the natural route direct from London to Folkestone.

The HS1 route encountered railway heritage from start to finish. The story of the impact on London stations must be told elsewhere, though the triumphant recovery of St Pancras Station to its iconic status may be seen as a great benefit set against the loss of some of the nearby railway lands. In Kent the South Eastern Railway (SER) came to Ashford in 1842, and the extensive SER works were established in 1847, with the railway New Town laid out in 1851; these have survived almost unchanged beside the new Ashford International Station, though the Willesborough Crossing Keeper's box, the 'last level crossing between London and Paris' was necessarily removed. Also lost was the terminus of the Maidstone to Ashford branch line, a later arrival whose terminus had only a short life as a station between 1884 and 1899 when amalgamation made it redundant. The polychrome brick station building had been used as flats, and behind it were the contemporary Carriage and Goods sheds of brick with timber roofs and cast iron windows.

A number of original brick bridges were removed to accommodate the 'European gauge' of trains running through the tunnel on the existing track between Folkestone and Ashford, but the attractive 1880s vernacular revival-style station at Sandling at the Hythe junction was avoided. Just beyond this is one of the more interesting pieces of railway heritage on the route, the 1840s railway tunnel at Sandling, whose engineer was so taken with his achievement of tunnelling out from a series of previously excavated shafts that he wrote a book about it (Simms 1844). The tunnel was built in 1842-3 and is 954 yards (872m) long, brick-lined and with brick portals; the shafts had been sealed and capped. The archaeological benefit of this restricted ground disturbance in the 1840s was the preservation of sites above it that could be excavated in the 1990s (Millward 2000).





Figure 7.41 Westhanger Fairmead Farm: photographs of barn from the south-east (A) and north-east (B)

Defence

The defence of the realm is a major theme for postmedieval and modern Kent. The defence lines round London were encountered in route optioneering in southerly routes in west Kent, while the chosen route slips below the outer line of the ring of Chatham defences at Fort Borstal, one of five forts ringing Chatham constructed from 1860–90, outmoded almost before they were completed, but impressive remainders of the last major works of traditional fortification in the country (Smith 2003).

The railway was always important for troop movements, and itself needed protection against aerial attack as well as providing accommodation. At Saltwood, there had been a First World War barracks near the railway tunnel, and later a camp for marshalling troops in the Second World War. Remains of service trenches, some structural footings and a number of large latrine pits probably dating from 1914–18 were encountered. In

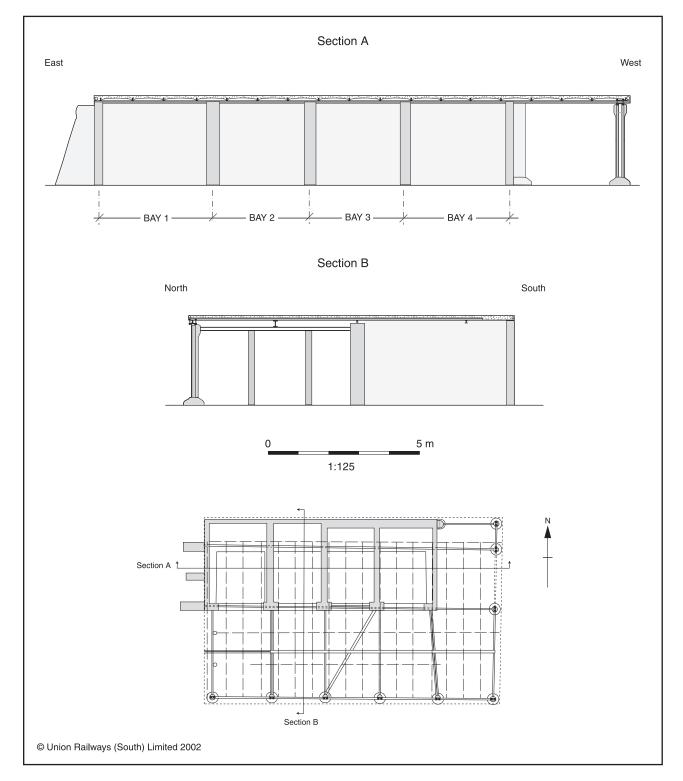


Figure 7.42 Westhanger Fairmead Farm: plan and sections of barn

Ashenbank Wood, Cobham, were the remains of a WWII army camp that had been demolished to its foundations. Four air raid shelters were rapidly recorded, and traces of perhaps three other buildings in heavy undergrowth (previously located by Victor Smith in 1998). At Northumberland Bottom in Cobham was the site of a WWII anti-aircraft gun battery and its associated domestic encampment, with some 26 single-storey buildings over an area of at least 7ha (some of them of post-war date, and some still in use), built of brick, concrete block, timber or steel-framed, with asbestos roofs. The site was chosen in 1938 for a four-gun 4.5 inch HAA battery, and by 1942 there was also a radar station, with personnel (male and female) increasing



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Figure 7.43 Westwell: photographs of (A) pill box A, south-west elevation and (B) pill box A south-east elevation

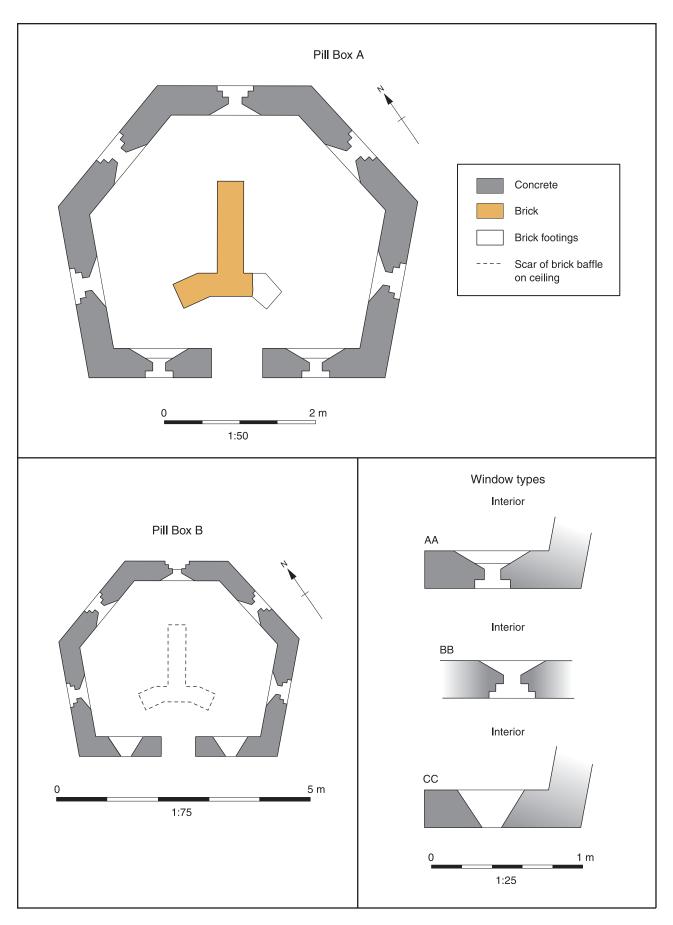


Figure 7.44 Westwell: plans of pill boxes A and B

from 312 in 1942 to 747 in December 1943, and finally closed in 1946. There were distinct operational and domestic areas, the gun park contained gun emplacements, NAAFI institute, guard house and sewage works, and the domestic camp three barrack blocks, kitchen/ canteen, cinema/lecture hall, guard hut and kennels. [ARC NBAC 98].

In Westenhanger, a barn of traditional appearance at Fairmead Farm (Figs 8.41-2) was found to have an internal concrete structure forming a protected magazine for WWII 12-inch railway guns, for which sidings were provided nearby at Grove Bridge. It was rectangular in plan with five bays and a flat roof, and its core comprising four magazine bays with concrete walls. To the front and side of the magazine was an open area with six columns at the front and three at the sides, made of concrete piers cast against a 4¹/₂ inch cast-iron column flanked by timber uprights. These carried a series of narrow-gauge rails, an 'I' section beam and a series of secondary beams, supporting carrying a roof of concrete cast on corrugated iron, with curved soffits. This was no doubt sufficient to withstand casual fire or strafing, if not a direct hit. Remains such as these in Kent are the tangible 'battlefield' remains of the Battle of Britain, fought overhead in 1940.

Had invasion followed a less successful outcome of that conflict, then a variety of ground defences were relied

upon, including lines of concrete pill boxes. At Westwell two WWII pill boxes were recorded in advance of their demolition prior to the construction of HS1 (Figs 7.43-4). The two shuttered concrete structures were built as part of the WWII 1940 defence strategy protecting the country from invasion, and occur at the north end of the mid-Kent spur defence line running from the Military Canal up to Ashford and Charing (Smith 2003, 96). They were specifically designed to protect the nearby Maidstone to London railway line either side of the Westwell Lane crossing. They were examples of the 'Type 24' pill box. The six sided structures had one doorway, facing southwest, flanked by two windows. The remaining walls all had a central window providing all round visibility. A brick baffle structure, protecting the doorway and dividing the internal space was largely intact in Pill Box A and had been removed from Pill Box B, but was visible in outline on the ceiling (Ruddy 2003).

It is an interesting sidelight on the development of archaeology during the life of this project that the monuments of the Second World War, somewhat less regarded in 1990, have by the second decade of the 21st century become more of a mainstream interest, and their context in Kent is much better understood. It was also thanks to the work of Ken Gravett and those on the project that building archaeology took its place alongside the other disciplines working on HS1.