

**An Archaeological Interpretative Survey of
The Crown, Horsted Keynes, West Sussex**

**Commissioned by
David Head MCIAT ACIOB on behalf of Steven McArthur**

Project Ref. 3522



by David Martin FSA IHBC MIFA & Barbara Martin AIFA

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**Archaeology South-East
Institute of Archaeology
University College London**

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STANDING BUILDINGS

ARCHAEOLOGICAL INTERPRETATIVE SURVEYS

AN INTRODUCTORY NOTE

ABOUT THESE SURVEYS

The intended purpose of an *Archaeological Interpretative Survey* is to give an overview of the date, sequence of construction, and principal architectural features of a building. As such, they should not be regarded as a detailed archaeological record, nor should they be taken as definitive. Further research, particularly that undertaken during building works, is likely to refine and extend the archaeological record.

These reports are aimed at three groups of user, namely those owners who wish to know more about their property, those persons (architects and planners) who are charged with the responsibility for both conserving the buildings and ensuring that they are carefully adapted to the needs of the future, and finally the academic carrying out wider historical or archaeological research,. A secure use for the future is, in our opinion, the only way of ensuring the long-term survival of any historical building.

INVESTIGATIVE TECHNIQUE

Unless noted to the contrary, the assessments involve a visual inspection of the fabric, both internally and externally, including any accessible roof voids and basement areas. Except where building works are being carried out, intrusive techniques are inappropriate. Interpretation of the fabric and fittings therefore relies principally upon inspection of the visible evidence. As part of the interpretative procedure, a measured outline survey of every property is undertaken.

THE WRITTEN REPORT

For ease of reference the written reports are divided into sections under a series of headings and sub-headings. The typical sequence of headings is as follows:-

- 1 Location of the building.
- 2 Sequence of development.
- 3 Detailed architectural description, arranged period-by-period.

THE DRAWINGS

A set of drawings produced from an measured outline survey is included within the body of each report. The purpose of these drawings is to identify the features included within the written text and to illustrate, as far as is known, the form of the structure during its various stages of development. For clarity the drawings have been prepared in the form of scale 'sketches', rather than detailed archaeological record drawings. For reasons of economy, the making of detailed archaeological drawings is restricted to stripped-out or exceptionally important buildings.

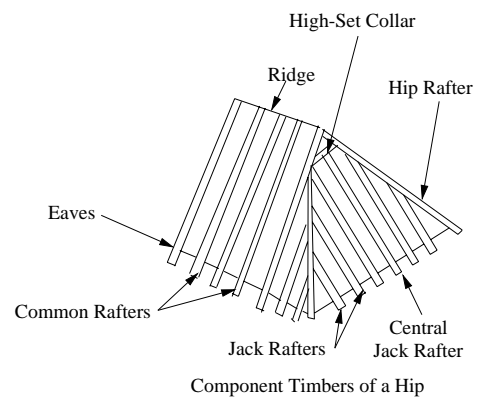
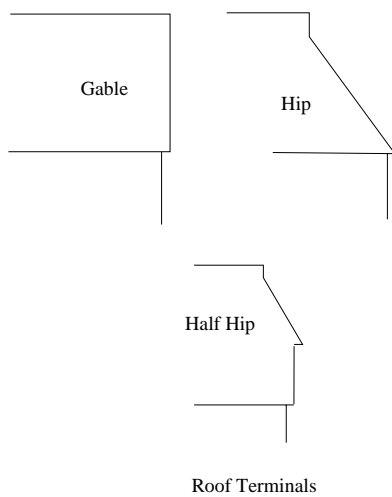
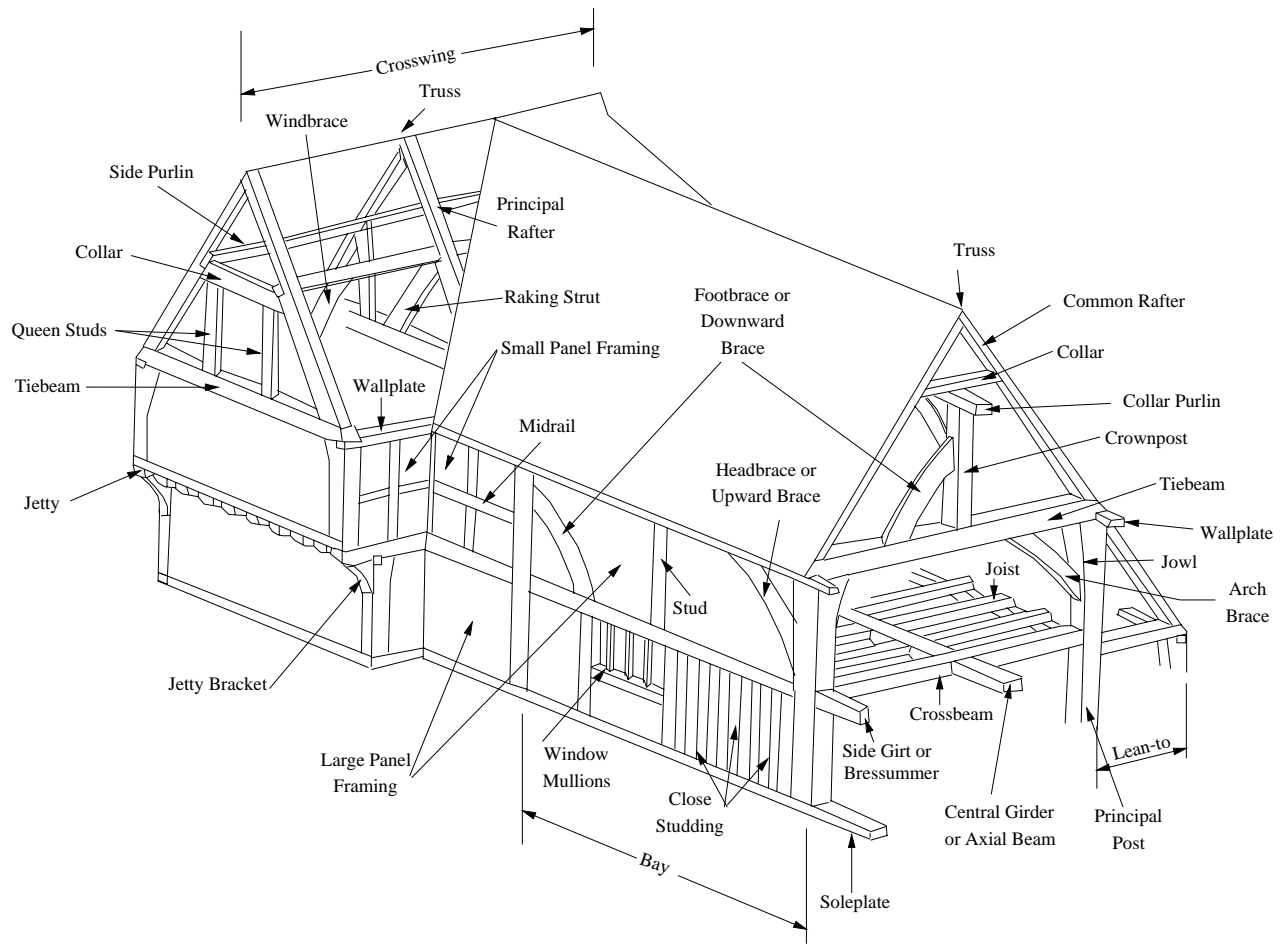
The symbols as used in the drawings attached to this report are as follows:

—————	Surviving Timber-Framed Wall
///////	Surviving Brick or Stone Wall
-----	Features evidenced but destroyed or masked from view
- - - - -	Beam or feature immediately overhead
.....	Conjectural or very approximate
■	Structural timber
?	Details unknown or doubtful

OTHER CONVENTIONS USED -

1 Doors are shown in plan only where known: hence rooms may appear to have no obvious means of access.

2 With the exception of rafters, wallplates, and some chimneys and roof-lines, sections show features cut by or immediately adjacent to the cutting line only.



GLOSSARY OF PRINCIPAL TERMS

REPORT NO. 1687

HORSTED KEYNES - THE CROWN

NGR TQ 3851 2818

LOCATION [Plate 1]

The Crown, built on flat ground at height of approximately 97 metres above O.D., stands on the southern side of The Green in Horsed Keynes village, 0.3 of a mile SSE of the parish church. It is a building of modified 'L' plan with a northern range aligned east-west and an eastern range aligned north-south, intersecting in a hip at the north-eastern corner. Today the principal elevation (of stone) faces north towards the road, but this is the result of 18th-century modifications: prior to that time the principal range was that aligned north-south, and the principal elevation of the house faced east.

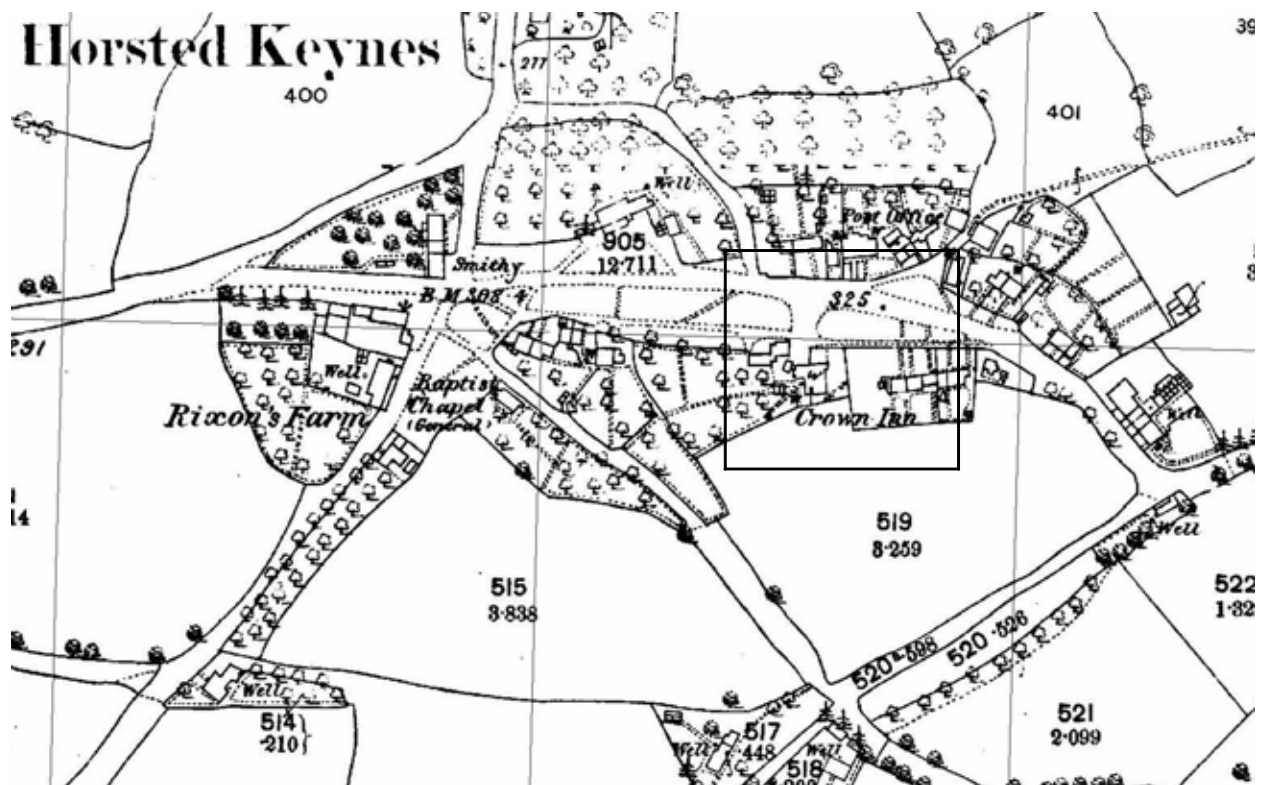


Plate 1

Extract from 1st edition 1:2500 O.S. Plan of 1873

[Not reproduced to scale]

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OVERVIEW OF THE BUILDING [Drawing Nos. 1687/1-3]

Despite the present external appearance, the earliest part of the house dates from the late 14th century [**Period A**] and comprises two bays and the fragment of a third of an originally four-bay timber-framed structure aligned north-south. The principal period-A remains are embedded within the middle part of the eastern range, with the eastern wall of a third bay extending through to the present main northern facade. The surviving section formed the two-bay hall and parlour of the medieval house, which was set at right angles to the present road.

In the early 16th century [**Period B**] a primitive form of enclosed heating system was inserted into the southern end bay of the hall and a first floor was added into the hall, allowing the formation of a hall chamber. Adjustments were made to the hall windows so as to suit the new arrangement, but otherwise the house appears to have retained its medieval layout.

It was during the 17th century [**Period C**] that the primitive heating system was removed and a two-flue chimney inserted upon the same site, perhaps retaining the earlier stone reredos wall. At about the same date a new range (of similar height to the medieval part) was constructed at right angles, against the northern end of the west wall. The remains of this are now fragmentary in the extreme — the only surviving work is a short section of its southern wallplate, jointed into a fragment of medieval wallplate at its eastern end and cut-off about a metre to the west by period-E2 reconstruction work. With so little surviving, it need hardly be said that no details of the range's internal layout are known.

Two minor early 18th-century [**Period D**] modifications are recognizable. The period-C hall fireplace was repaired by replacing its c.350 mm wide jambs by new brickwork, at the same time skinning the back wall of the fireplace in brick. In addition, the first-floor window in the east wall, serving the hall chamber, was modernized by the insertion of a new frame.

A major sequence of alterations and upgrade took place over two phases during the middle years of the 18th century [**Periods E1 and E2**]. These utterly transformed the external appearance of the building, giving it very up-to-date proportions with all external timber framing hidden from view. The two phases are very close in date, but a difference in design and materials suggests that they do not form part of a single planned upgrade carried out, for convenience, in two phases. The earlier of the two alterations [**Period E1**] involved demolishing the southern (service) bay of the medieval (period-A) house and replacing it with a tall back parlour addition with cellar beneath. At the same time, the walls over the remainder of the medieval house were heightened and capped by a new roof, but the period-C western range was retained unaltered. A relatively short western service lean-to was, however, added to its south. The ground-floor walls of the new parlour, together with those of the added lean-to outshut were

built of mass construction, but otherwise the new works use timber-framed construction, infilled using regularly-spaced studs and raking struts. These infill timbers were always intended to be masked internally by lath and plaster, whilst externally the frame was tile hung. At a slightly later date [**Period E2**] the period-C extension was demolished and replaced by a new stone range of identical height to the period-E1 part. It was not until this phase of alterations that the northern rooms became the main part of the house, the internal layout of this part being altered to provide a central entrance area (with staircase) flanked by principal rooms. To achieve this, the stone walls of the new period-E2 range were extended across the end wall of the period-A/E1 part in order to give a new, symmetrical northern facade, facing the road.

Yet another phase of upgrading was carried out in the early 19th century. The principal alteration undertaken at this date was the reconstruction of the main roof to a less steep pitch, incorporating a new brick gable and chimney cap at the western end, replacing the earlier (assumed tile hung) gable of timber-stud construction. At the same time the period-E1 rear lean-to outshut was widened, capped by a less steeply pitched roof cradled over the period-E1 southern end gable (see Plate 2). Furthermore, the principal



Plate 2

Southern gable of Period-E1 lean-to, showing two subsequent phases of adjustment, firstly shallowing the pitch and secondly widening the outshut.



Plate 3
Remains of early 19th-century balustrade.

windows in the north elevation were replaced by tripartite double-hung sashes, apparently fitted within the original period-E2 openings without the need for modification. Internal alterations of this period were minor, but included the insertion of a new stairs, in a slightly different location than previously. This 19th-century staircase has itself been partly rebuilt subsequently, but is evidenced by a handrail, newel post and an attached turned half baluster trapped at a point near the head of the flight (Plate 3), together with the carriage and upper treads and risers visible above the cellar steps.

The first edition 1:2500 O.S. map of 1873 (Plate 1) shows that already by that date a brick-built lean-to outshut had been added at the eastern end of the north wall, but otherwise the building retained its period-E2/E19th-century footprint. The new lean-to is served by a single-flue chimney incorporated into its south wall, but its fireplace is today masked on the internal face. Internally, all construction is hidden, but it may be relevant that the period-E2 stone front wall is cut/broken-off at an angle where the outshut has been added.

There have been a number of additions since 1873. The earliest of these is a single-storeyed range at the western end of the road facade, with its front wall stepped back very slightly from the main building. It has an ashlar sandstone facade so as to match the main front, but its rear and end walls are of brickwork. Subsequently, a narrow outshut was added against the south wall of the period-E2 range, overlapping the above mentioned extension slightly, and, more recently still, a complex of single-storeyed modern accretions have been built at the rear, engulfing the earlier work.

The building was very seriously damaged by fire in July 2003, following a lightning strike. Shortly afterwards, the remains of the roof, together with the upper parts of the chimneys and part of the period-E2 rear wall were removed for safety reasons — as far as is known, no record was taken prior to their removal. The present archaeological interpretative survey was commissioned in June 2008 by David Head, Architectural Services, on behalf of his client, Steven McArthur. The recording was carried out in July 2008. The contractors were at that time just commencing clearance work, prior to undertaking initial repairs.

All work carried out since period E is excluded from the more detailed architectural description which follows.

LISTED STATUS OF THE BUILDING

The Crown Inn was listed grade II on 11th May 1983, its listed building reference being TQ 3828 34/448. The description in the list entry is purely for the purpose of recognition and is normally, therefore, primarily based on external appearance. The date is given as C18. [Source: English Heritage, Images of England - website]. The description must not be treated as a comprehensive schedule of those elements which are legally protected as, no matter what the grade, the legislative cover not only relates to both the interior and exterior, but also extends to any building within the curtilage which predates the 1st July 1948.

DETAILED ARCHITECTURAL DESCRIPTION

PERIOD A (Late 14th C) [Drawing Nos. 1687/4-5]

LAYOUT

Although now very fragmentary, the timbers which survive are sufficient to give a reasonable impression with regards the size and original form of this medieval timber-framed building: the principal doubts relate to the layout of the destroyed southern end. Assuming that, as is usual, this destroyed part was of one bay only, the house was of four bays and on the ground floor comprised a northern parlour, a central two-bay open hall, with services in the southern bay. The two hall bays were only slightly different from one another in length — northern bay 2.30 metres (7'6") between posts; southern bay 1.90 metres (6'3") between posts. Factoring in the 230 mm (9") width of the hall truss, the overall length of the open hall was therefore 4.45 metres (14'8"). What is uncertain is whether access from the exterior was direct into the smaller of the two bays, or whether the external doorways led into an overshoot cross passage located within the destroyed southern service bay. Given that the hall measured 5.95 metres (19'6") wide overall, and was therefore shorter than it was wide, the likelihood (based on other buildings of the same period) is that it incorporated an overshoot cross passage beyond its southern end.

As is usual in vernacular buildings of this date within Sussex, from the outset there was a first-floor chamber over the parlour, and the same would almost certainly have been the case within the destroyed southern bay, though here the point cannot be proven as the crossbeam at truss B-B (which would have contained joist mortices) has been

removed.

Despite the northern principal post within the east wall having been destroyed during period E2, its position is indicated by a wide pegged mortice in the underside of the wallplate. Thus, at the eastern wall the overall length of the extant three bays can be reconstructed at 7.45 metres (25'2"): allowing an average length for the destroyed southern service bay would have given an overall length for the medieval building of very approximately 11½ metres (just under 38 ft). The present northern end wall is canted, and this is likely to reflect the earlier arrangement: if so, the length of the western side wall would have been slightly greater. The height of the side walls within the parlour chamber can be calculated based upon the known level of the original first floor within this area: they measured a respectable 1.55 metres (5'1") from first floor to top of wallplate. As is usual, the chamber was open to the roof.

WALL DESIGN

The best preserved parts of the medieval house are the three bays of the eastern wall, a reconstruction of which is shown in Drawing No. 1687/4. The wall shows that the building used standard timber-framed construction, with splay-cut jowls to the principal posts, which carried the tiebeams and wallplates in normal assembly at the wall heads. At the upper level, curved headbraces (intact) rise from the principal posts within the southern hall bay, whilst a similar headbrace (now removed, but evidenced by mortices) rose from the northern principal post to joint into the wallplate of the northern bay. Except for window jambs (one *in situ*, three evidenced by pegged mortices) the external frame is lacking other infill timbering — a characteristic 14th-century feature. From the outset, the wall was infilled by daub supported by staves fitted into round-ended mortices at their head. The present daub infill (where it survives) is later and is un-combed: it is carried on cleft laths interwoven around the staves.

Apart from a c.200 mm length of 190 mm x 195 mm medieval wallplate trapped in place during alternate rebuilding carried out during periods E1 and E2, the west wall of the medieval house has been entirely destroyed, and, apart from its eastern principal post, the same is true of truss B-B at the southern (low) end of the hall. The principal post contains a mortice indicating the former level of the truss's crossbeam, whilst higher up the post there is some evidence to suggest a mortice for a footbrace, but at this point the post is damaged. In contrast, a reasonable amount of truss D-D (which divided the northern (high) end bay of the hall from the parlour) survive, though even here the western part of the truss was cut away during the period-E2 alterations. A reconstruction is shown in Drawing No. 1687/4, Truss D-D. The eastern principal post retains its splay-cut jowled head and rises to a flat (*ie* un-cambered) and very slender (170 mm x 190 mm) tiebeam. A curved 55 mm x 225 mm footbrace descends from virtually the level of the underside of the tiebeam to joint into the top face of the dais beam. The only other timber at this upper level is a 150 mm wide central stud, secured to the tiebeam and dais beam by means of pegged morticed-and-tenoned joints. A mortice in the western end of the extant length of dais beam indicates that the western



Plate 4

Detail of crenellation on Dais Beam. The moulding on the lower part of the beam is hidden from view at this point.

end of the truss originally incorporated a footbrace matching that at the opposite end. The dais beam itself has had its bottom section trimmed off, removing all evidence regarding the design of the ground-floor wall framing. Even so, the moulded and crenellated hall face of the beam survives in good condition, allowing the profile of much of the moulding to be ascertained (see Drawing No. 1687/5). The style of the moulding is pure 'Decorated', indicating a 14th-century date. Furthermore, the design of the crenellation is of early type (Plate 4).

OPEN TRUSS

The hall was originally crossed by an open truss (Truss C-C). Although most of this has been destroyed during subsequent phases of alteration, the extant eastern principal post incorporates a 670 mm (2'3") long mortice for the former arch brace which rose to the tiebeam (tiebeam removed, but evidenced by a dovetail in the wallplate). The location of the brace mortice indicates that the braces sprung from relatively low down the face of the principal post. From what survives, there is no way of obtaining an

indication of the likely scantling of the brace, nor is it known whether its leading edges were chamfered or left plain. Nevertheless, as well as fulfilling its principal functional purpose of preventing sideways racking, the braces would have formed an impressive feature crossing the hall.

WINDOWS

The location of three windows are evidenced in the east elevation — see Drawing No. 1687/4. That serving the parlour chamber measured 580 mm x 520 mm (1'11" x 1'9") and was originally absent of mullions. A long groove in the underside of the wallplate indicates that the window opening was originally closed by a sliding timber shutter. The other two windows for which evidence survives are the upper lights of the tall window which served the hall. As is usual, this was located within the high-end bay of the hall so as to flood the dais partition in light. These two tall openings would have risen from side girt level (only a short section of which remains trapped against the dais partition) and would have formed the upper lights of a block of four. The windows are evidenced by three mortices for the jambs and king mullion, between which the underside of the wallplate is absent of either mortices or stave holes: thus these windows too were absent of mullions. Over the windows, the lower leading edge of the wallplate is neatly chamfered, terminating in run-out stops.

DOORWAYS

As noted under 'Layout', the location of the external doorways, leading into the house, are not known, but (based upon other similar buildings) they would have been adjacent to truss B-B, either to its north or south.

No evidence survives to indicate the sites of the internal doors leading from hall to parlour and from hall to the service room(s).

FLOORS, CEILINGS AND STAIRS

Although the first floor within the northern (parlour) bay was destroyed when the storey height was increased during period-E, joist mortices in the northern face of the dais beam survive, though now masked by a thin, modern, applied board. The mortices indicate that the joists within the parlour measured 180 mm wide and were set at 600 mm centres. Evidence for any similar floor within the service bay was destroyed when the crossbeam to truss B-B was removed during period E1.

As the floors within both end bays have been destroyed, no details are now recoverable to indicate the locations of the stairs rising to the chambers.

CHIMNEYS

The hall would have been heated by an open hearth set on the floor of hall. No evidence of this now survives, the ground floor within the building having been lowered.

ROOF

The period-A roof was destroyed during the mid 18th-century upgrading, at which date the first-floor storey height of the range was considerably increased. The surviving tiebeam over truss D-D is flat and there are no period-A mortices in its top face; nor is there a groove for stave fixings. The roof over the house must, therefore, have been of paired-rafter-and-collar type, absent of crownposts and without closed partitions at roof level. This interpretation of the evidence is consistent with the fact that there were no rafters located over the tiebeam of truss D-D: instead the rafter couples were positioned a little way away from the tiebeams. The lack of crownposts explains the exceptionally heavy scantling of the wallplates — they supported the full weight and outward thrust of the roof. As the tiebeam which formerly crossed the open hall has been removed, it is not known whether there was a crown strut at this point — crown struts are rare, but they are occasionally found over open trusses in houses with roofs of this type.

PERIOD B (Early 16th C) [Drawing No. 1687/6]

LAYOUT

The house continued to function very much in its medieval form throughout this period, except that it now had a first floor and a new enclosed heating system inserted into the hall. The new hearth was located against truss B-B, at the low end of the hall. Therefore, depending upon whether or not the period-A house had an overshoot cross passage, the new enclosed hearth either backed onto the cross passage or was sited a little way in front of the entrance doorways, forming baffle entries.

WALL DESIGN AND WINDOWS

The only recognizable alteration to the external framing appears to have been adjustment of the tall hall window to suit the newly-formed hall chamber. This was achieved by raising the side girt to coincide with the level of the new floor, inserting a new rail (using a slip mortice) so as to form a new first-floor window cill, and forming a window above it (see Drawing No. 1687/6, East Elevation). Because they formed a serious obstacle crossing the new hall chamber, it was also at this date that the tiebeam and arch braces of the hall truss (Truss C-C) were removed. Almost certainly the tiebeam was not destroyed, but was re-set about 750 mm (2'6") further south so as to

support the head of the partition which divided off the newly-formed smoke cavity/chimney. The location of the tiebeam is indicated by an intruded dovetail in the top face of the eastern wallplate and by a mortice (for a stud) visible in the top face of the new crossbeam which defines the northern edge of the smoke cavity/chimney. The stud must have been jointed into the tiebeam at its head.

DOORWAYS

It is not known how the hall chamber was accessed at this date, though (given the smoke cavity) most likely a doorway was intruded through truss D-D, leading in from the parlour chamber.

FLOORS AND CEILINGS

A new crossbeam was inserted part way along bay B-C, carried over the side girts. In order to carry the floor of the new hall chamber, joists were morticed into the northern face of the crossbeam and lodged over the dais beam at the opposite end of the hall. The joists are plain and of medieval (170 mm x 130 mm) scantling, suggesting that the floor was inserted during the early years of the 16th century. As with the parlour and service chambers, the newly formed hall chamber would have been open to the roof.

STAIRS

The medieval stairs at either end of the hall would have remained in use at this date.

CHIMNEYS

The new heating system was positioned against truss B-B and, based upon the available evidence, it included a short section of stone wall (reredos) which formed a non-combustible surface against which to construct the fire. Towards the eastern end of the period-B crossbeam, immediately over the eastern jamb of the later fireplace, are a pair of peg holes marking the location of a jamb, defining the edge of the hearth area. Immediately above is a second pegged mortice for a stud which delineated the area of the smoke cavity. Most likely the eastern edge of the hearth area was delineated by a lath-and-daub partition — a not uncommon arrangement. The arrangement on the western side of the hearth is uncertain.

ROOF

No details known, but there are no reasons for suspecting period-B alterations were necessary.

PERIOD C (17th C) [See Drawing No. 1687/7]

The principal surviving alteration of this date relates to the construction of the two-flue chimney on the site of the period-B heating system. The earlier arrangement was demolished, probably leaving *in situ* the ground-floor section of the rear stone wall. The inglenook fireplace retains its period-B timber lintel, but its side jambs represent period-D replacements. A narrow fireplace was incorporated at first-floor level in order to serve the hall chamber. The projecting brick hearth of this fireplace is constructed over the floor boards. Photographs taken prior to the fire indicate that the chimney had a rebated cap.

Associated with the insertion of the chimney, two ceiling joists were inserted to fill the gap between the eastern wall and the chimney flue. These joists measure 115 mm x 120 mm and are neatly stop-chamfered along their lower leading edges.

Although very little now remains *in situ*, the main alteration of this period was the construction of a western range, set on an east-west axis, at the northern end of and at right-angles to the main house. The range was effectively replaced by the present stone structure during period E2, but a short section of its south wall was retained *in situ*



Plate 5

*Detail showing trapped, sawn-off fragment of medieval western wallplate with stub-section of wallplate to south wall of period-C range projecting to right.
To the extreme right, the period-E2 stone wall has been demolished for safety.*

immediately to the east of the period-E2 southern stone wall — it was not possible to extend the period-E2 wall up to the medieval frame because of the cellar steps. The fragment (shown in Plate 5) is sufficient to show that its wallplate was jointed into the side face of the medieval wallplate, and thus the range was the same height as its medieval neighbour. Further, the fragment indicates that it followed the same canted alignment as its successor, and thus, most likely its northern wall was set on the same alignment as the (assumed canted) north wall of the medieval parlour.

PERIOD D (Early 18th C) [Drawing No. 1687/7]

In the early 18th century the period-B window serving the hall chamber was replaced by a four-pane casement window, rebated externally for flush glass and bead-moulded internally. The window frame survives in total, complete with its mullions, having been blocked by lath and plaster when a new high-level window was inserted during period E1.

The only other recognizable alterations of this date are repairs to the hall fireplace. This involved replacing the wide period-C jambs to a lesser width in brickwork and adding a brick skin to the rear wall. The width of the original jambs is evidenced by the fact that the chamfer on the lower leading edge of the timber lintel stops short, as too does the chamfered-back throating cut into the reverse face. The lintel does not appear to represent a reused timber and the brickwork is 18th-century in style.

PERIOD E (Mid 18th C) [Drawing Nos. 1687/8-10]

NOTE

Two separate phases of alterations can be attributed to the mid 18th century — these are here designated as periods E1 and E2. They represent the progressive reconstruction/modification of the east (medieval) range and the western half of the present north range (Period-C west range). The phasing is best demonstrated at the junction of the medieval range's west wall with the south wall of the period-C west range — this is the area shown in Plate 5. Here, the length of medieval wall to the south of the junction was totally rebuilt during period E1, cutting through and removing the southern section of the medieval wallplate. At this time the northern part of the wallplate was retained, not only because the wallplate of the period-C west range was jointed into it, but also because the medieval fabric at the northern end of the east range was retained *in situ* at this period. As within the east elevation, here the wall heights were increased to the required level by planting new timber over the earlier wallplate and frame. Subsequently, during period E2, when the period-C west range was itself rebuilt taller, the northern end of the medieval west wall was totally removed, leaving a

sawn-off fragment of the medieval wallplate trapped between the two sections of rebuild. It is this fragment, about 200 mm long, which is shown in Plate 5. As further proof of the difference in construction date of the two sections of the mid 18th-century building, the period-E2 construction methods are totally different from those used during period E1 (see below).

Within this report, the two phases will be described separately, but the building is illustrated in its period-E2 form in Drawing Nos. 1687/8-10.

PERIOD E1

LAYOUT

The period-A service bay was demolished at this date and replaced by a longer and taller structure with a cellar beneath it. In addition to the cellar, it housed a large, heated ground-floor room (which probably served as a back parlour) above which were two chambers divided by a partition set on the line of the central girder. In addition to the main ground-floor room, a lean-to outshut ran part way along the west wall to house the back parlour chimney and accommodate a service area. The roof of this lean-to was, from the outset, used as storage and there was (evidently) an attic room within the roof of the main extension.

As part of these works the walls of the period-A first-floor chambers were raised in height to match the new work, increasing the storey height within the hall chamber very considerably. It is uncertain what happened within the medieval parlour bay, but the likelihood is that the level of the first floor was raised at this period, improving headroom within both the medieval parlour and the chamber above it. Otherwise, except for the introduction of ground- and first-floor corridors down the western side of the hall bay, giving access to the new southern end, the earlier ground-floor and first-floor layout appears to have been retained within the northern part of the building at this period.

WALL DESIGN, WINDOWS AND DOORWAYS

With regards the southern extension, on the ground floor the eastern, southern and the southern part of the western wall were of mass construction from the outset, plastered over on the internal face. [Because the external face of the ground-floor east wall is today rendered, whilst the ground-floor southern wall has been entirely removed, it is unclear whether these walls are/were of brick or stone, or, indeed, a mixture of both]. Only the southern end of the west wall was of mass construction: where internal, the remainder of this wall was built using timber studwork. In similar vein, the external walls of the period-E1 outshut were of mass construction, though its entire western side wall was subsequently removed to enable the lean-to to be increased in width. The walls of the cellar beneath the back parlour are constructed in rubble stonework, partly masked by paint.

On the first floor of the extension (bay A-B) all the new walls — both external and internal — are of pre-fabricated timber-framed construction, built off continuous soleplates laid over the mass walls. Only the southern end wall incorporates principal posts with rounded bowls to their heads. The wallplates and tiebeams throughout bay A-B are held in standard assembly. The infill to the frame is of late style regularly-spaced studs interrupted at intervals by straight raking struts which stiffen the frame. There are heavy-scantling principal post/studs at B-B and midway along each wall. These, together with the wallplates and tiebeams were always intended to be left visible, but the struts and all other studwork were masked by plaster from the outset. Externally the walls were tile hung. As a consequence of the fire (with much of the daub-based plaster either removed or fallen) the majority of the infill timbers were temporarily exposed to view, allowing them to be illustrated in Drawing Nos. 1687/8-10.

To obtain a common eaves level and improve headroom within the retained northern three bays of the medieval range, the walls of the period-A part were raised by 1.30 metres (4'3"). These new raised elements of wall are built off the wallplates and tiebeams of the period-A frame. They too use regularly-spaced studs and raking struts. Following the fire, the studwork of these walls was exposed to view within the hall chamber. Here, unlike in the south bay, the wall plaster is set between principal studs, but supported by secondary studwork which was always hidden from view. That this variation in construction detail does not indicate a difference in date is not only shown by the jointing in the wallplates between the two parts, but also in the fact that the section of the hall's west wall which was totally rebuilt during period E1 (*ie* that section within the first-floor corridor divided off down the western side of the hall chamber) follows the same method as used within the southern bay. The difference, therefore, probably reflects a variation in status between the two areas.

All the first-floor windows lighting the new southern bay are sited within the southern wall: the frames have been replaced, but the openings are taller than they are wide and may have been designed to accommodate cross-mullioned window frames, rather than double-hung sashes. Because of the increased storey height, a new window was inserted into the kitchen chamber, set above the period-A wallplate so as to better light the chamber. The new window is of shallow casement type, and thus contrasts with the design of those serving the southern chambers.

Access into the two southern chambers was via doorways from the kitchen chamber, with a further interconnecting doorway (now blocked) towards the southern end of the axial partition. The two doorways which remain in use retain simply moulded architraves, whilst the eastern doorway is fitted with a two-panel door.

FLOORS AND CEILINGS

The ceiling over the back parlour was specifically designed to be flush under-plastered, without any structural timberwork being visible. This reflects the high status attributed



Plate 6

Ceiling to Back Parlour showing deeper joists set at intervals in order to support counter-joisting (removed) which carried the flush plastered ceiling.

to this room. This was achieved despite the need to incorporate deep structural timbers in order to carry the load. It has twin girders which originally supported a twin layer of joists. The upper set carry the floorboards of the chambers above. They span east-west and most measure 75 x 90 mm in section, but at two points across the ceiling they are deeper (80 mm x 185 mm) being the same depth as the girders (Plate 6). These deeper joists have a mix of mortices (one face) and long slots (opposite face) and are intended to carry a lower set of counter joists which supported the ceiling. The slots enable the ceiling joists to be fitted after completion of the floor construction: it is a method commonly used in good-quality work of this period. Rather misguidedly, during the 20th century all the ceiling joists were removed in order to expose the floor joists to view. On the storey above the joists (90 mm x 110 mm) were likewise always intended to be under-plastered, but here the tiebeams project down below the ceiling and are chamfered.

On the ground floor the period-B ceiling over the kitchen was retained, but it seems likely that it was during period E1 the medieval joists within the old parlour bay were removed and a new floor inserted at a slightly higher level, comprising a lodged north-



Plate 7

Dragon girder in ceiling of Old Parlour Chamber, looking towards NE corner.

south aligned girder supporting 80 mm x 95 mm scantling joists, originally under-plastered. That this rebuilt floor predates the period-E2 stone facade is indicated by the poor junction of the girder with the head of the period-E2 window opening.

Of particular interest are the ceilings over the kitchen chamber and old parlour chamber. Here a dragon girder (Plate 7) spans diagonally across the range to the north-eastern corner, supporting the ceiling joists, some of which are merely nailed into position. This diagonally-set timber serves as a tiebeam, supported the roof construction (see below). A second diagonally-set girder spans the kitchen chamber so as to prevent the east wall from spreading, following removal of the period-B tiebeam.

Despite the period-E1 lean-to having been widened, its ceiling joists were retained, bolted to the side of the new joists.

STAIRS

It is not known where the stairs were located during period E1: they were either in the period-C extension, or in the period-E1 outshut, rising to the first-floor passage.

CHIMNEYS

The period-E1 back parlour was heated by a fireplace served by a single-flue chimney which rose against the western wall of the range, constructed within the service lean-to. Although now destroyed, it is evidenced by its hearth (which corbels out and is visible at ceiling level within the cellar) and by the trimmed opening through the lean-to ceiling, where the flue formerly rose. Some of the broken-back brickwork still survives in the party wall between the lean-to and the back parlour.

ROOF

The roof over the main range was totally destroyed during the fire in 2003. However, this loss was not as great as it might seem, for it is clear from the pitch of a principal rafter in the end (southern) slope of the western lean-to (see Plate 2) that the roof which was burnt off the two-storeyed ranges was not the original, but a 19th-century replacement set to a less steep pitch. There is other evidence contained within the period-E2 range which indicates that this roof too represented a 19th-century rebuild.

If the period-E1 main roof was the same design as that used over the lean-to outshut, it was of butt purlin construction — the mortice for a butt purlin of the lean-to's roof is visible in the northern face of the retained rafter shown in plate 2. Given the dragon-girder in the first-floor ceiling, it is assumed that the main roof turned westwards at its northern end, being turned by an angle-set truss so as to abut as a gable against the lower roof of the period-C range. This may indicate that the owner already by this date had designs on rebuilding the period-C range to the same height as the rest of the building. This is, indeed, what happened during period E2.

PERIOD E2

LAYOUT

The low period-C west range was demolished at this date and replaced by a new range of the same width, but perhaps longer than its predecessor and incorporating a cellar beneath it. Rising to the same height as its period-E1 neighbour, unlike the period-E1 work, it uses ashlar sandstone external walls.

By removing the northern end of the medieval western wall, it was possible to redesign the layout at the northern end of the house, with a new entrance area set astride the alignment of the removed medieval wall. The result of this was to reduce in its east-west direction the size of the period-A parlour (Labelled 'old parlour' in Drawing 1687/8). This allowed the north elevation (facing the road) to be redesigned as a symmetrical principal facade. In this revised form, the western ground-floor room became the principal room within the building. It is separated from the old parlour by a central entrance area, which also incorporated the stairs giving access to the first floor of the

entire property. [The present stair still occupies this site, but moved southwards so as to increase the size of the entrance area]. The new overall length of the northern facade measures approximately 12 metres (c.39'4").

On the first floor the central area of the north range was altered somewhat when the stairs were moved southwards in the early 19th century, and from this time onwards the area over the entrance formed a small chamber. Previously, this area was so small it may have formed part of the landing. As on the ground floor, the entire area to the west of the stairs formed a large chamber, whilst the north-eastern corner served as a small chamber formed out of the sized-down period-A parlour chamber. The southern section of the house retained its period-E1 layout.

The cellar beneath the western room was (and still is) accessed by a flight of steps located beneath the stairs and reached from the rear lean-to outshut. A passage links it back to the cellar beneath the period E1 rear parlour.

WALL DESIGN, WINDOWS AND DOORWAYS

The (northern) front, (southern) rear and western end walls are constructed in neat ashlar sandstone, 500 mm (1'8") thick on the ground floor, reducing to 360 mm (1'2") on the first floor. On the ground floor a large part of the south wall had been removed in the 20th century to form a large opening, with the upper part of the wall supported on steel. This upper part was badly damaged during the lightning strike and had been partially dismantled immediately following. The remainder was removed in July 2008, immediately following the archaeological recording. Sufficient remained to indicate that at this level a considerable part of the wall was occupied by a wide window opening, similar to that in the front wall, and no doubt the same was originally the case on the ground floor also.

The northern wall (principal elevation) rises off a square-topped plinth, whilst at the level of the first floor is a projecting string course. The centrally-placed front doorway is capped by a flat timber hood, carried on brackets — it looks to be a 19th-century reconstruction (Plate 8). The flat arches over the ground-floor window heads have voussoirs which are angle-cut (Plate 9).



Plate 8



Plate 9



Plate 10

North elevation pre fire

© Norman Wigg. [Source - English Heritage, Images of England - website]

This part of the building was the most seriously damaged by the fire, but internally sufficient remained to show that the partitions were of timber stud construction which were clad with laths, the entire surface being plastered. It was further evident that a considerable proportion of these partitions had been rebuilt in modern times, perhaps indicating the use of poor-quality timber which had been eaten away. If so, this is in stark contrast to the quality of the timber used for the period-E1 partitions.

FLOORS AND CEILINGS

The joists (80 mm x 100 mm) over the cellar and front parlour ran east-west and were carried at centre span by a crossbeam: they were always intended to be masked from view by under-plaster. Over the front parlour chamber the ceiling had been totally destroyed by the fire, but the impression of a central girder embedded in the rebuilt (19th-century) western end gable indicates that at this level the design was varied, though the chamber's ceiling was nonetheless divided into two bays by a tiebeam.

STAIRS

A double mortice cut into the east face of the extant crossbeam, 1.35 metres to the north of the range's south wall, indicates the landing point of the period-E2 stairs, confirmed by a single-depth mortice further south, supporting the landing. To the north, there are no joist mortices in this face of the crossbeam for some distance, indicating the site of the stair trimming. Thus, although the stairs rose from the entry (as today) the period-E2 stairs were further to the north than now. How the attic area was reached is unclear. Beneath the main stairs are the cellar steps, tucked under the front flight.

CHIMNEYS

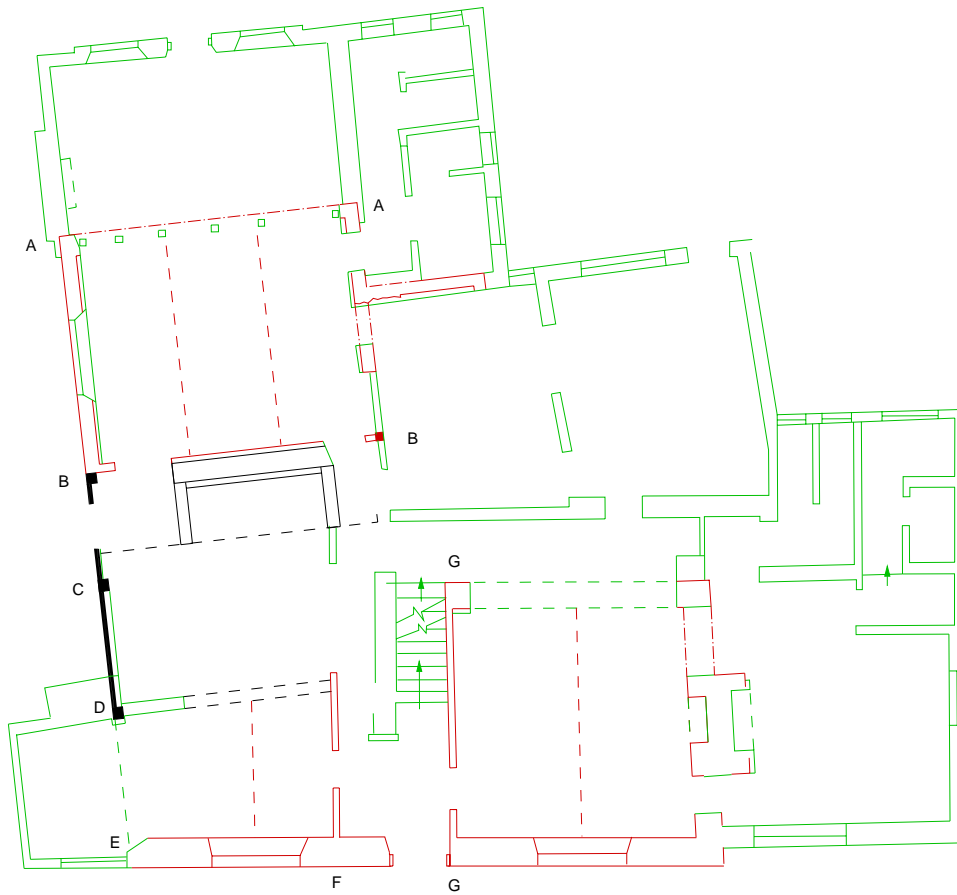
At the western end of the range is a two-flue externally-built terminal chimney, the upper part of which was rebuilt in the early 19th century. No details are visible as to the design of the fireplaces, both having been adjusted.

ROOF

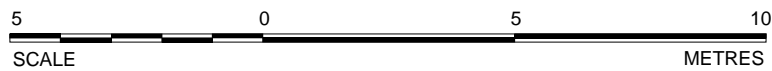
No details are known regarding its construction, though that burnt off in the fire was, in any case, a later (19th-century) rebuild. At the time of the fire the western gable was constructed in 19th-century brickwork. The impression of a girder at attic-floor level suggests that the original gable stood on a tiebeam (into which the girder would have been morticed) and therefore, most likely, was of tile-hung studwork. Certainly the period-E2 stonework terminates at wallplate level.

BASED UPON PLANS DRAWN BY WYATT CARRUATHERS JEBB LTD IN 2004, WITH SOME MODIFICATIONS
 SOME DETAILS ARE SHOWN APPROXIMATE ONLY

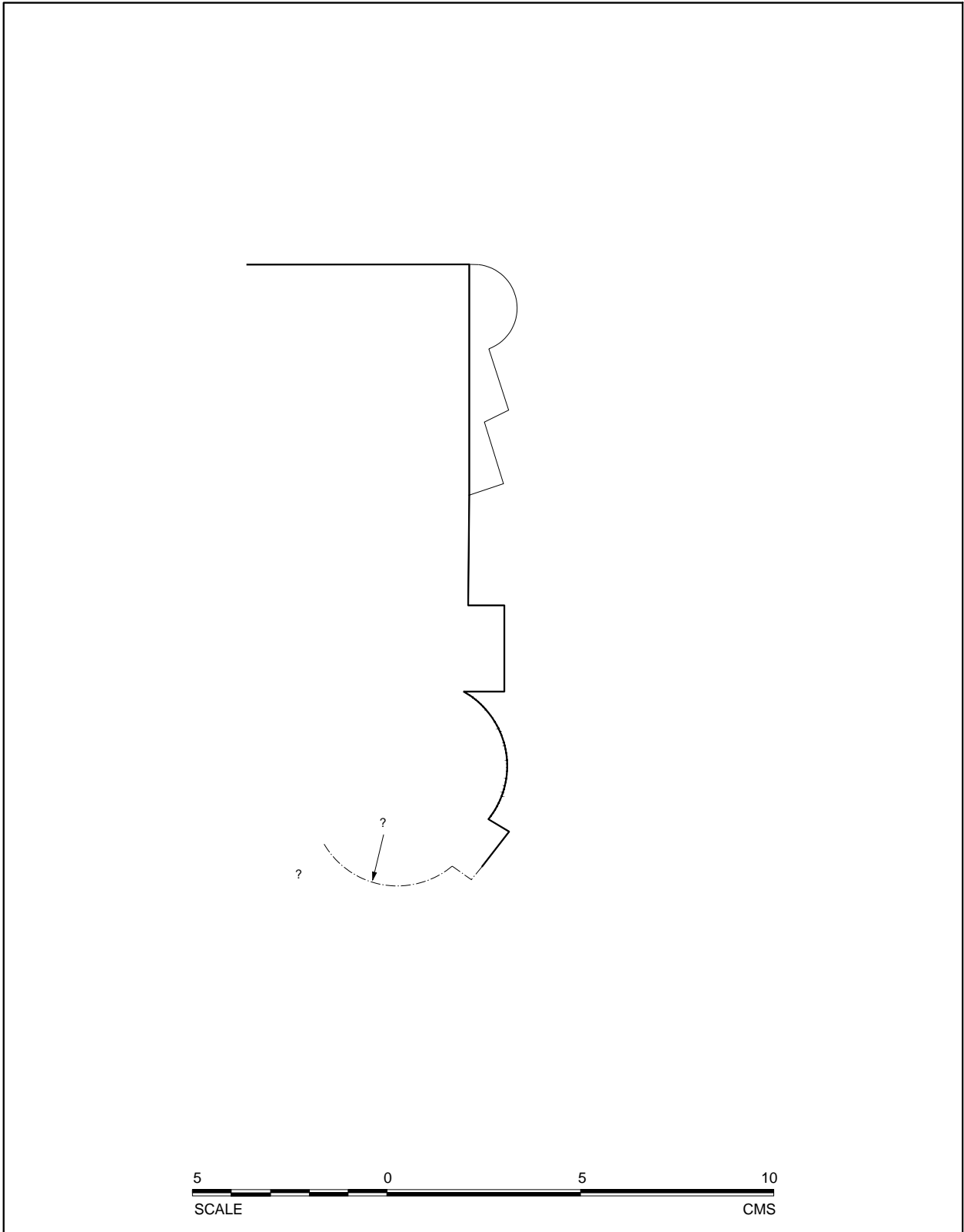
- PERIODS A-D
- PERIOD E
- 19th C AND LATER



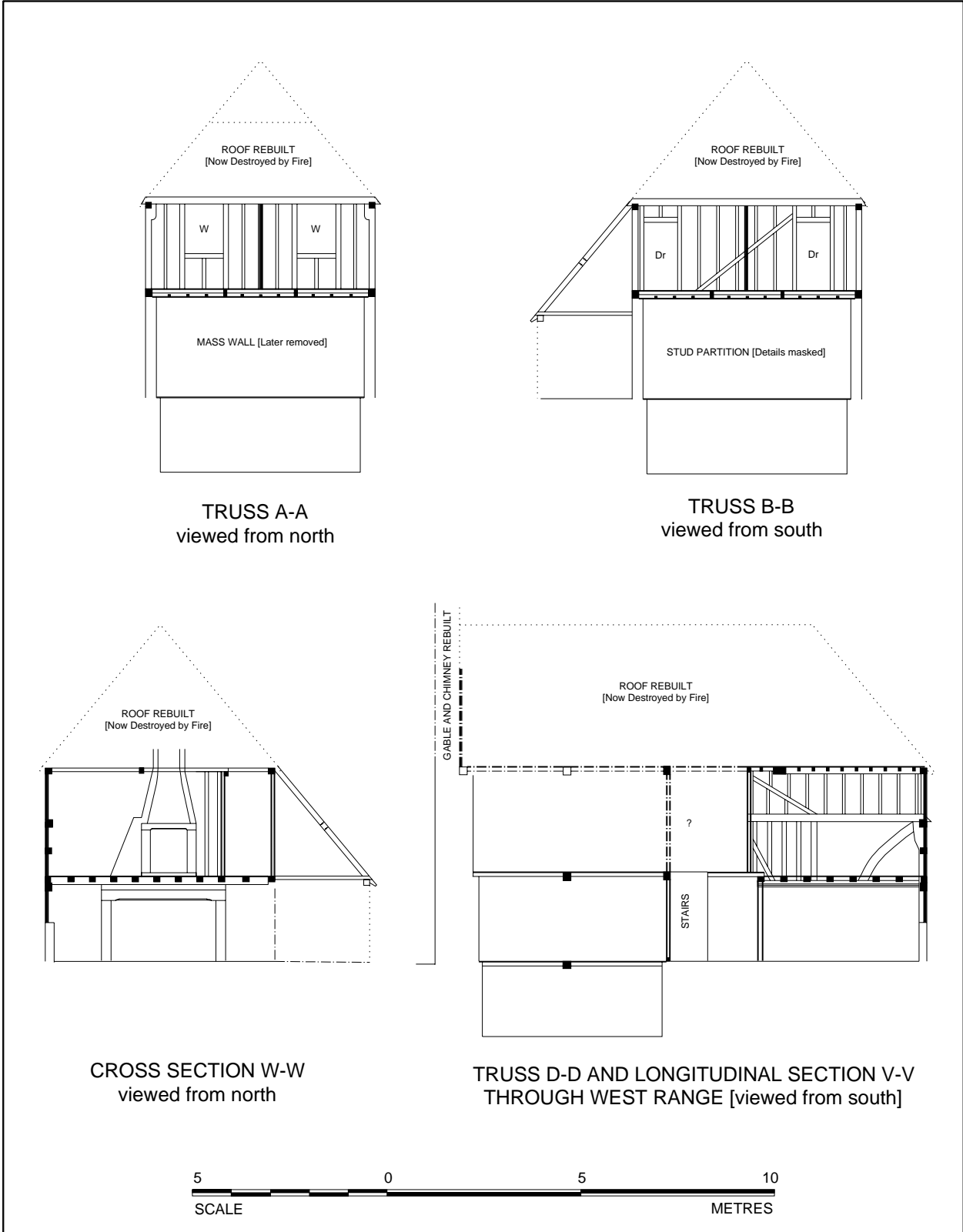
GROUND FLOOR PLAN



THE CROWN, HORSTED KEYNES, WEST SUSSEX GROUND-FLOOR PLANS AS EXISTING, 2004				Site Ref	P82/01		
				Drawing No.	1687/2		
Drawn By	J Clubb	Revision No	-	Date of original survey	2008	Date of this revision	2008



THE CROWN, HORSTED KEYNES, WEST SUSSEX PERIOD-A DAIS BEAM - DETAIL OF MOULDING				Site Ref	P82/01		
				Drawing No.	1687/5		
Drawn By	J Clubb	Revision No	-	Date of original survey	2008	Date of this revision	2008



THE CROWN, HORSTED KEYNES, WEST SUSSEX PERIOD-E RECONSTRUCTION DRAWINGS				Site Ref	P82/01
				Drawing No.	1687/10
Drawn By	J Clubb	Revision No	-	Date of original survey	2008
				Date of this revision	2008

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