

Beddington Park Cottages

**Investigations before and during building work,
1982 - 1987**

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Other publications relating to Carew Manor in this series:

The garden at Carew Manor Beddington: an interim report on investigations.

The orangery at Carew Manor Beddington.

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1 INTRODUCTION

Beddington Park Cottages are a long north-south aligned range of building to the north of Carew Manor, Beddington, Surrey.¹ The cottages were originally part of the outbuildings of a country house now generally known as Carew Manor. The house passed out of private ownership in 1859 and part of the Cottages were subsequently sold separately and used as a dairy farm. They were acquired by Beddington and Wallington Council in 1926 as part of Beddington Park. The Council used them as changing rooms and for other purposes but they fell into decay and gradually became derelict.

In 1979-80 a small amateur group had formed to study the history and archaeology of Carew Manor. In 1981 they were formally established as the Carew Manor Group at the instigation of the late Dennis Turner. In the late 1970s the Council had tried unsuccessfully to get permission to demolish the cottages and in the early 1980s they were planning to sell them for conversion into houses. They were clearly in such a bad state that any conversion would result in the destruction of a significant part of the historic fabric. The members of the Carew Manor Group therefore decided to make a record of the building. The key members of the group were the author, the late Doug Cluett, Barry Weston, Nicholas Burnett and Beverly Shew. It was the first archaeological project on this scale that any of the group had undertaken and progress was slow with a good deal of learning as we went along. Work started in July 1982 and continued mostly at weekends into 1984. There was then a period of inactivity until 1986-7 when the building work took place. A watching brief was then carried out largely by the author and some additional information was gained.

The author wrote a word processed interim report in 1985 which has been used as the basis of this document. However, it has been thoroughly checked against the original notes, drawings and photographs and considerably revised and expanded. The material gained in 1986-7 has also been incorporated. Thanks are due to Clive Orton for proof reading.

Cottage number 1 at the north end of the range contained parts of a timber frame with a crown-post roof which probably dated from the fifteenth or early sixteenth century. There was clear evidence of numerous later alterations. The rest of the range was partly demolished but the surviving parts appeared to be of later date and less interest although there was some reused material. Recording was therefore focused on number 1 and the rest of the range was only examined briefly.

¹ The north end is at TQ 29566543, the south at TQ29586538.

2 THE LAYOUT AND NUMBERING OF THE COTTAGES

In 1977 the Council commissioned a survey of the Cottages from John S West and Partners in which the rooms were numbered. These numbers were used in our survey and in this report.



Figure 1. Plan of the ground (left) and first floor (right) of Beddington Park Cottages showing the room numbers. Based on a survey made in 1978 by John West and Partners.

3 COTTAGE NUMBER 1

3.1 The timber frame

Cottage number 1 contained a substantial part of a timber frame with a crown post roof. It consisted of two bays with the two trusses and an end wall. These were numbered one to three, from north to south. The bays were similarly numbered one and two; one being at the north end. (See figure 2). The posts which support the trusses were identified by the number of the truss plus the letters W, E or C to indicate whether they at the east or west side, or are in the centre. The rafters are numbered from two to sixteen starting at the north end of the building. Rafter couple seven was part of truss two.

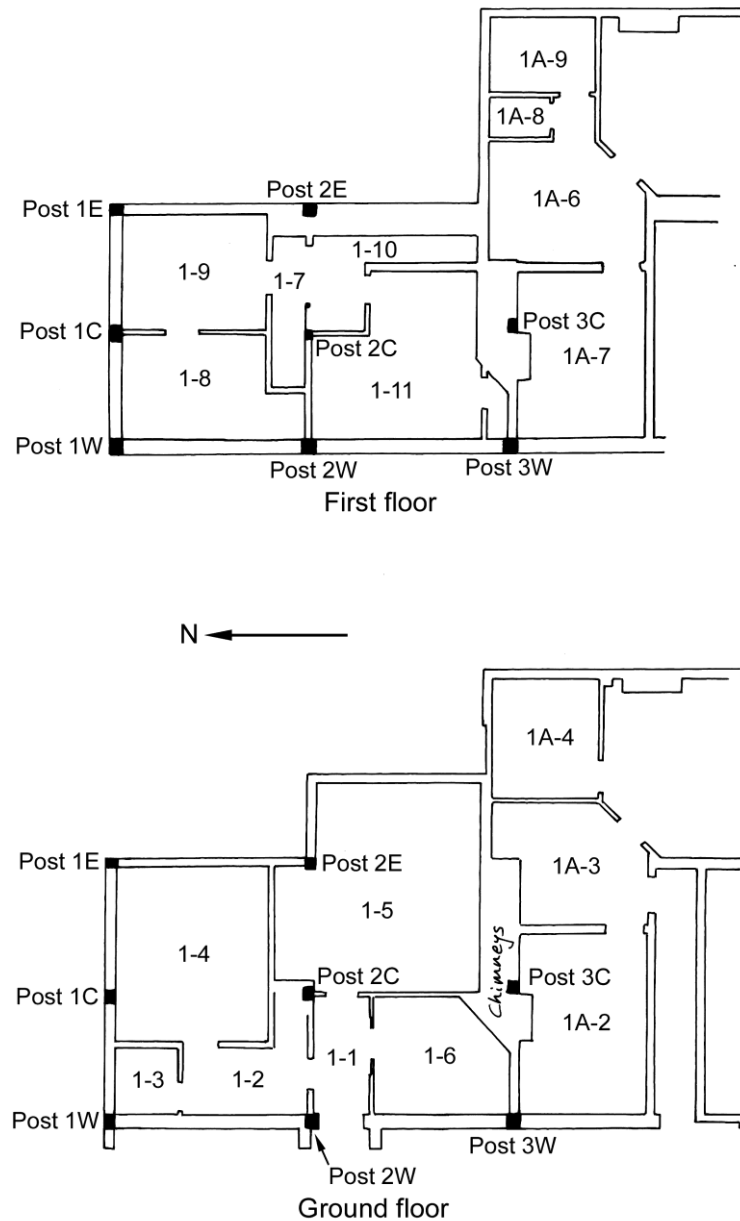


Figure 2. Number 1 and part of 1A showing the room numbers and the positions of the main posts. Not to scale.

3.1.1 The roof

The Cottage had a crown post roof with a hip at the north end. There were crown posts in trusses two and three and a collar purlin which ran from the southern end of the frame and terminated against the hip in bay one. Both crown posts had plain slightly curved braces to the purlin on the north side and there were mortises to show that southward running ones had once existed. Bay one was 4.76m long and contained the hip and five common rafter couples while bay two had nine couples and a length of 4.96m.² The building was 6.75m wide at the north end where the frame was not significantly distorted.

² The bay lengths exclude the posts.

The common rafters were between 11 to 12cm deep and 15 to 17cm wide although one was 18cm. The principle rafters were slightly larger than the average common rafter. The principle of truss 2 on the east side of the roof was 18cm wide and 12cm deep.

There was an edge-halved scarf at the south end of the surviving length of collar purlin above room 1A-7 close to the north wall of the room (figure 5).

There were jig holes in the south side of most of the original rafters and in two cases there are holes in both sides.

There was a hip and gablet at the north end of the roof. The hip was constructed of old timbers which were wider than they were high but they were nailed rather than jointed so the structure was probably later than the main part of the frame. There was a dormer on the north side of the centre and a cut rafter suggested that there had once been one to the south (figure 6).

There is no indication of the original roof covering. At the time of the survey the main roof was covered with red tiles which were probably of twentieth century date. There were slates on the east side extensions.

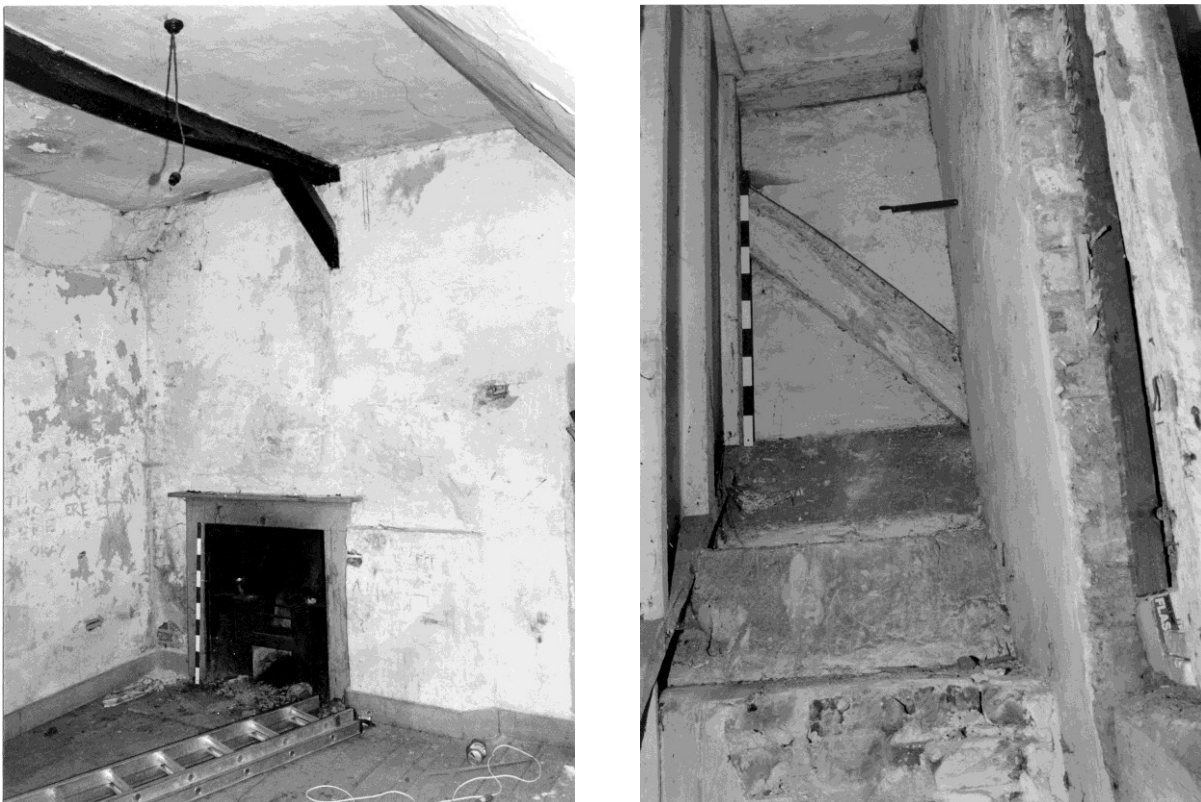


Figure 3. The crown post brace on the north side of truss 3. Seen on room 1-11 on the left and in the cubby hole at the south end of room 1-11 on the right. 1982.



Figure 4. The sawn-through collar purlin and the brace to crown post 2 seen during conversion work in 1986-7. Looking approximately south.



Figure 5. The scarf at the south end of the surviving length of collar purlin looking roughly northeast. The joint was located above room 1A-7 close to the north wall of the room. Scale in 30cm long.



Figure 6. The hip on the north end of the cottages in 1986-7. Note the gap for a dormer window on the left and the cut rafter to the right of it, perhaps the site of an earlier dormer.



Figure 7. The northeast corner of the hip with the east face of the roof on the right and hip face on the left. 1986-7.

3.1.2 The carpenter's marks

The original rafters had carpenter's marks on the underside immediately above the collar and some collars also had mark on their upper sides. The numbers did not form a complete sequence, were not in order, and in three cases the correct parts were not together. The crown posts were also marked below the mortise for the brace: number three had 12 on the south side and 13 on the north, while number 2 had 16 on the north side while the south side was destroyed by fire before a record was made. Similar marks appeared on the braces where they survived. This again suggests that the timbers were not in sequence: the posts were with the correct braces but the numbering suggests that they were not in order in the bays.

Couple no.	E rafter	W rafter	Collar	Interpretation
3	x	x	—	13 18
4	≡≡	≡≡	—	20
5	x	x	—	19
6	x	x	—	16
(Truss 2) 7	∨	∨	∨	1 with mark
8	x	x	—	14 13
9	x	x	—	17
10	x	—	≡?	21
11	≡	≡	—	42
12	≡/	/≡	—	25
13	≡	≡	≡	41
14	v	v	—	8
15	≡	≡	≡	43
16	—	x	—	14

Figure 8. The carpenter's marks on the rafters and collars.

3.1.3 Alterations to the roof

There were a number of later alterations to the roof. On the west face pieces of rough softwood, which often showed signs of reuse, were laid on top of the original rafters in some cases to collar level and above. This probably served to compensate for the uneven settling of the original rafters and to extend the roof over the brickwork added to the outer face of the walls. This packing varied from 4.5cm to 20cm on the west side. On the east side it varied from nothing to 8cm with little packing in bay 1.

On the eastern side of the roof alterations had been made to cover extensions built against the side of the building. In bay one a few thin rafters survived which were laid on top of the earlier rafters and projected out to cover an extension. At the time of the survey the extension and roof had gone and only a few unsupported rafters remained with corrugated iron inserted below to protect the head of the wall (figures 29, 30, 32 and 33).

In the second bay the roof was extended eastwards to cover an extension to room 1-5. The ends of the extension rafters rested on the top of the packing on the original rafters but then ran clear as the new roof was less steeply pitched (figure 9). An additional 'purlin' had been inserted under the original rafters to carry part of the extra weight. The northern end of this rested on the top of tie-beam 2 while the southern end was cut off at the wall between rooms 1-10 and 1A-6 where it was supported by a thin upright resting on a floor joist. It probably once extended to truss 3 but the timber frame in this area had been removed.

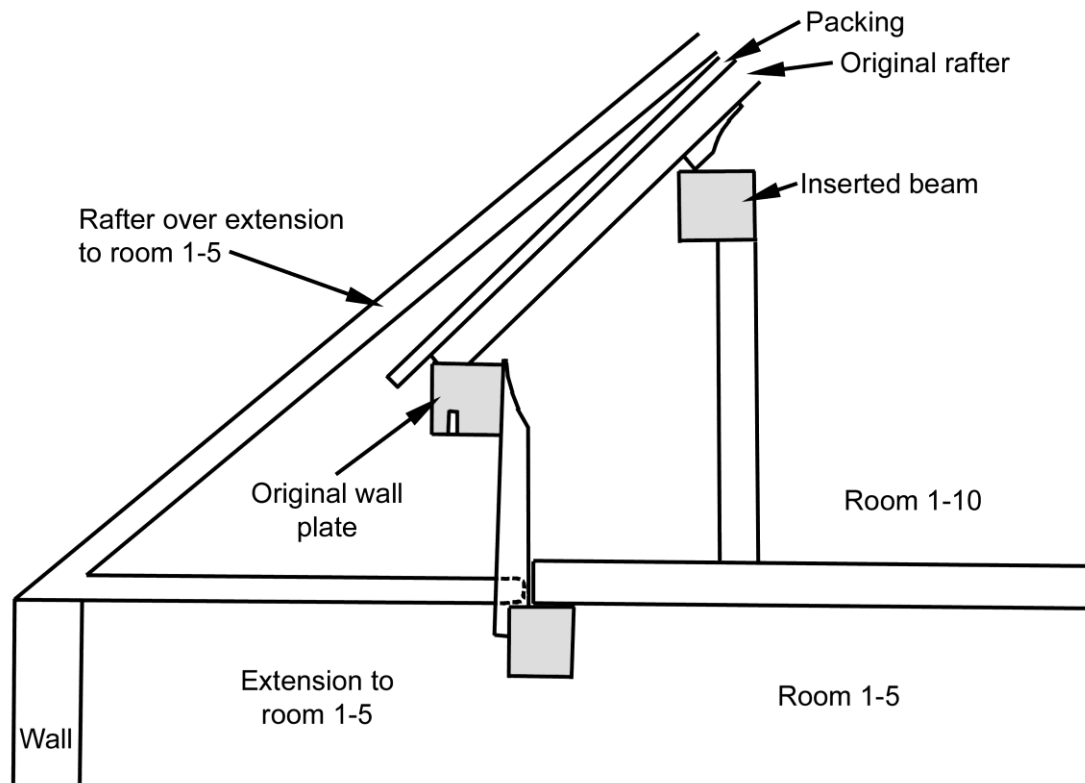


Figure 9. Section of the roof above the extension to room 1-5 looking south. Not to scale.

There were two groups of features which may mark the site of former chimneys or stove flues. The first was on the eastern side of the roof in bay one where a recess for a vertical feature was cut in the south side of rafter couple three and in the north side of couple four just above collar level. There are corresponding cuts in the collars. The second possible chimney or flue was on the western side of the roof in bay 2 where rafter 10 had been removed and replaced by two pieces of timber which butted together just above collar level. The joint was supported by a little 'purlin' between rafters 9 and 11. The upper section of rafter 10 is clearly a comparatively modern piece of deal which must have been reused as there are nails for laths on its underside. The lower part of the rafter was similar to the others and may be a reused section of the original although it was probably not the original lower part as there is no jig hole in the foot. The eastern end of collar 10 has been shortened slightly and has had a notch cut in it. (figure 10).

Cottage number 1 had three dormers in the roof. Two faced westwards and light rooms 1-11 and 1-8, while the other faced north and lit room 1-9. The dormers were of two different designs. Those lighting rooms 1-8 and 1-9 at the north end of the building had an exposed timber frame filled with pebble dash while the sides of the dormer or 1-11 were hung with tiles. Both designs looked no earlier than the late nineteenth century.

There was also evidence, in the form of cut rafters, for an earlier dormer in the north face of the roof lighting room 1-8 (see figure 6 above). The dormers presumably replaced two small blocked windows in the upper part of the west and north walls, which represent the earliest traceable lighting of the first floor (see sections 3.3.1 and 3.4).



Figure 10. Cut rafter 10 with a little 'purlin' on the west side of cottage 1. Collars at the bottom of the photo.

3.2 The timber frame below the roof

3.2.1 The posts and braces

Below the roof the two trusses and the north wall once consisted of a tie-beam and three posts, one at each end and one in the centre although all had suffered damage before the survey.

The north wall (figures 23, 23 and 25) was 6.75m wide. The three posts remained although the lower parts of them were rotten. The joint between the tie and the eastern post had completely rotted and the two timbers were held together with two iron bars. The eastern end of the tie also appears to have rotted and had been replaced with a new section of timber connected to the original by a very rough plain vertical scarf. The tie of the second truss (figure 11) had been cut between posts 2C and 2E to make a door leaving two sections about 3.3m long to the west and 1.5m to the east. The eastern end of the western section of the tie had clearly dropped and had twisted and split the joint at the head of post 2E. The width of the truss at tie level was just over 6.84m but the cut had clearly allowed the truss to spread. The eastern post (2E) was 2.83m high and survived down to a ground sill. The bottom of the western post (2W) was rotten and the lower part and the ground sill was missing. The centre-post (2E) was severely damaged by fire before it was recorded. Its original length and the nature of its footings are unknown. Two sections of the tie-beam of the third truss survived (figure 12). One of these ran from the head of the western post (3W) for about 1.8m where it had been cut away to accommodate a brick chimney-stack. The stack was 1.2m wide and the second section of truss survived to the east of it. This was 1.54m long and ended well short of the projected position of the eastern post which had gone. The western and centre-posts survived although in both cases the bottoms had gone.

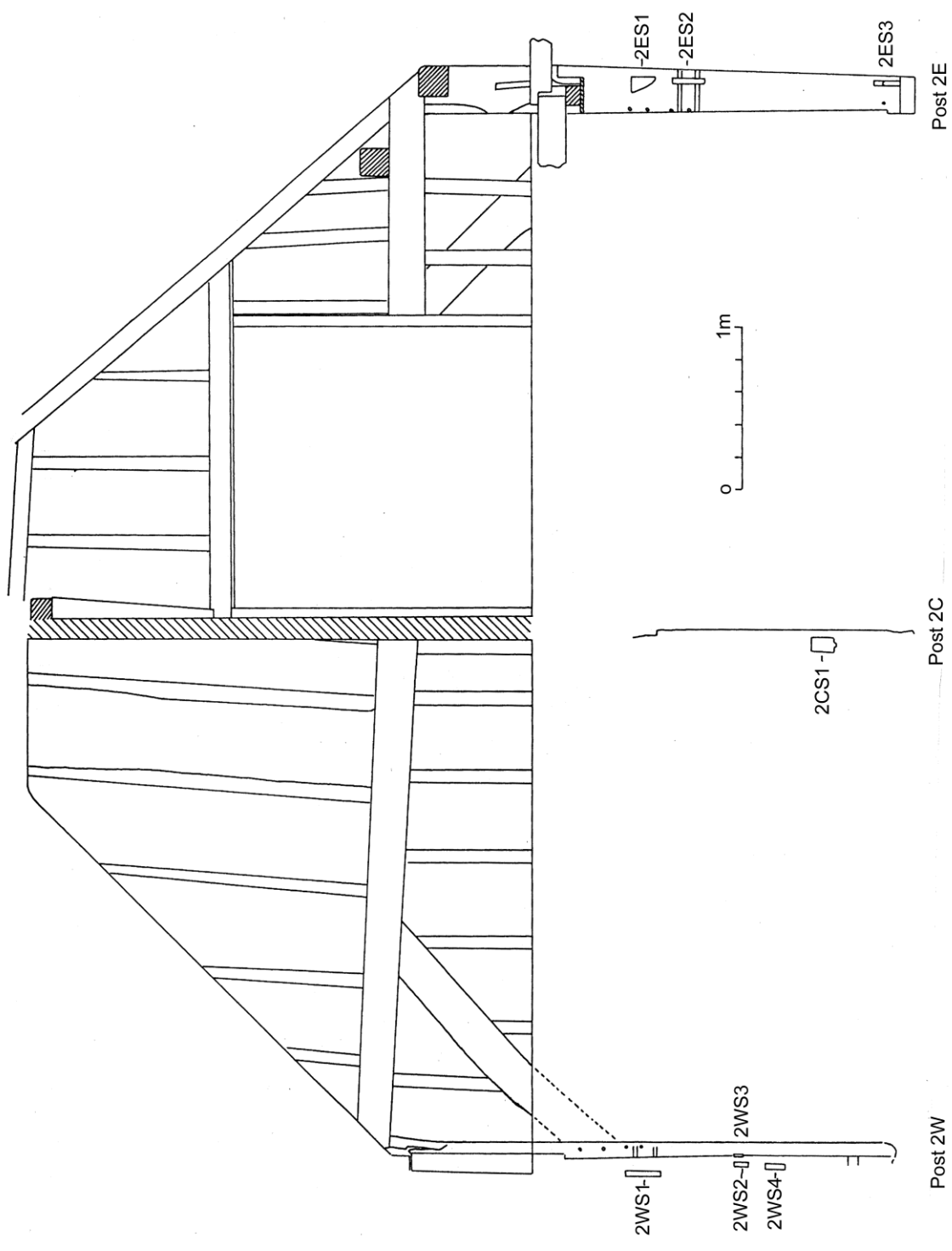


Figure 11. The south side of truss 2. Details of the ground floor walls are omitted. The west sides of posts 2W and 2C were hidden by brickwork. The top of post 2C had been destroyed by fire.

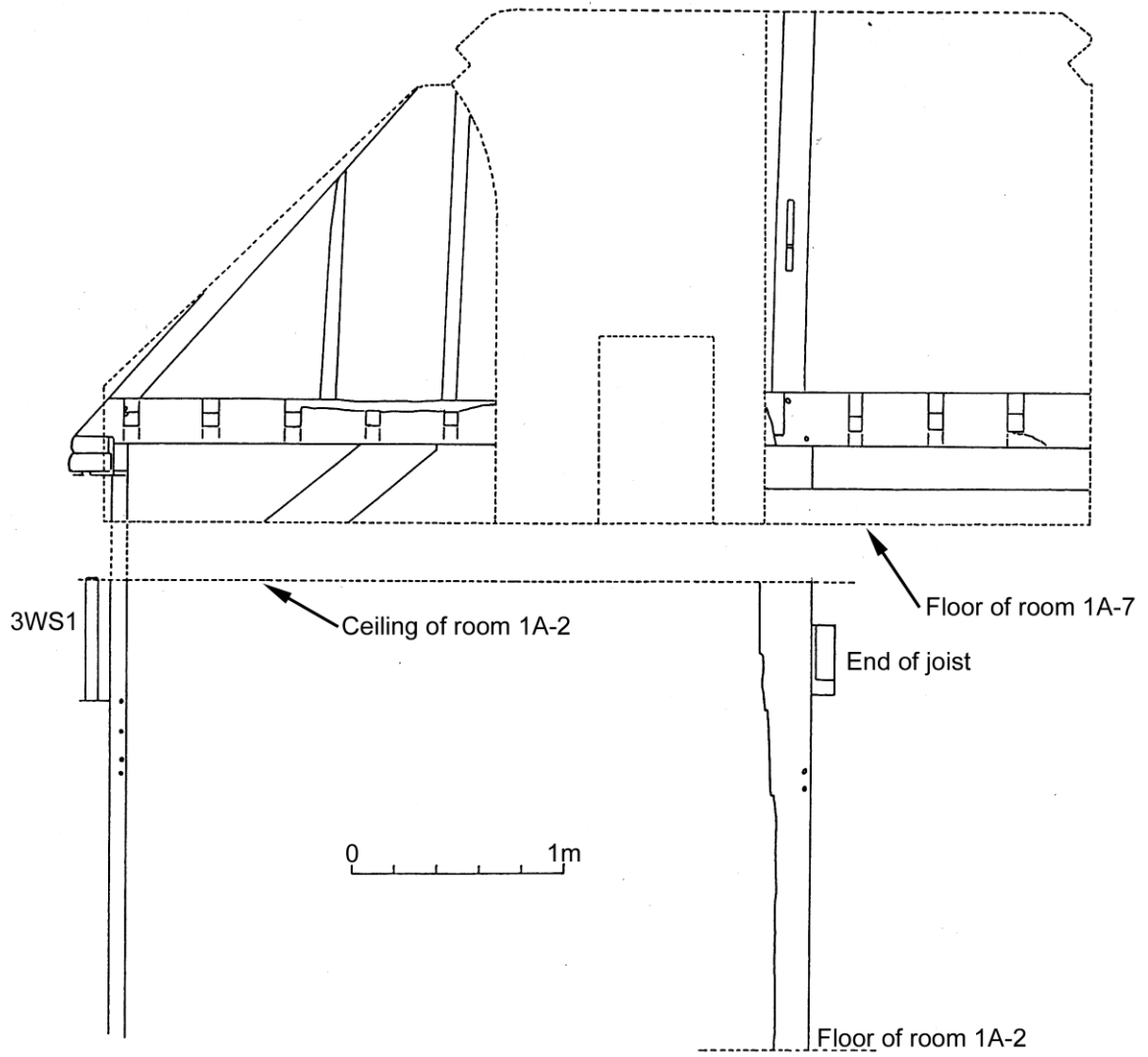


Figure 12. The south side of truss 3. Post 3E had gone. The chimney is not shown below the first floor.



Figure 13. The head of post 2E during conversion.

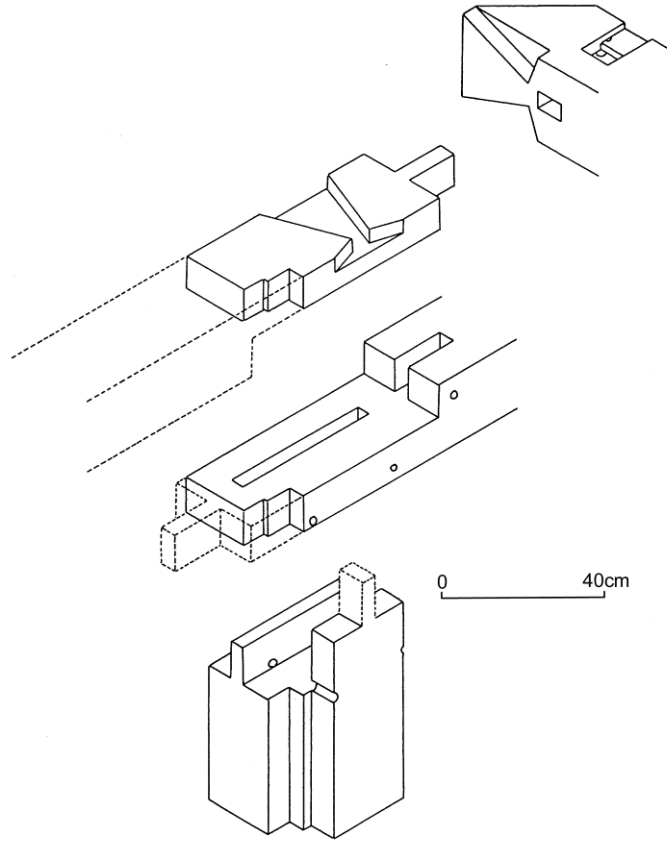


Figure 14. The joint at the head of post 3W.



Figure 15. The head of post 1W.

The joint between the wall post 3W, the wall-plate and the tie-beam were examined in detail while the head of post 2E was exposed during reconstruction work (figures 13 and 14). The joints were of a fairly conventional form with an upstand linking the post and tie-beam, a dovetail lap joint with entrant shoulders between the tie and the top of the wall-plate and a simple mortise and tenon between the post and the bottom of the wall-plate. On the eastern post there was a small upstanding ledge along the outer edge of the post to hold the wall-plate in place. It is not known if this was present on the western post as the area was not visible. The joint at the western end of truss 3 was similar except that the wall-plate was scarfed where it passed through the joint.

The joint at the head of post 1W differed as it only had a half dovetail the southern side being straight.

All the posts in the east and west walls were braced to the tie-beam. In the case of truss 2 and post 3W the braces survived, while the peg-holes for them could be seen on post 1W and the adjoining tie. The relevant part of post 1E had been cut away, but there was a pair of peg-holes in the correct position on the tie. There was also evidence, in the form of mortises and peg-holes, for bracing between posts 1E and 1W and their respective wall-plates. The underside of the wall-plate close to the site of post 3E has a brace-like mortise, but it is impossible to be certain about its function, as the post had gone. There was no brace between the north side of post 3W and the wall-plate, but there was a mortise on the south side of the post, although this is unlike the other brace mortises, and may have served some other function, perhaps a door head. There is no evidence of bracing between the posts of truss 2 and the wall-plates, or between any of the centre-posts and the tie-beams.

3.2.2 The post lengths and ground sill

The sill beam, on which the wall posts would have rested, was very poorly preserved. The only section in good condition was located beneath post 2E (figures 16 and 17). Here the post had a height of 2.83m. There were traces of a sill about 2cm below the rotten bottom post 1W which had a surviving height of 3.1m and there was a short length of timber below post 1C which had a height of 2.92m. The bottoms of all the other posts were badly rotted but the wall posts had surviving lengths of 3.1m or more and 3W was 3.19m. The lengths of posts 2E and 1C are therefore anomalously short. It seems likely that the ground sill below post 2E was a later piece of under pinning. It rested on brickwork rather than chalk.

In this area a late medieval timber framed building is likely to have rested on a chalk foundation.³ A chalk and flint foundation was exposed on the south side of room 1-5. This had a width of 0.4m. There was a layer of rammed chalk and clay on the west side of it which had ash on it and was probably an early floor. The surface of this was about 2.7m below the existing first floor and about 1.9m below the notch on the north side of post 3C which may have supported the bridging joist for an early first floor.

The sill was covered by the brickwork of the earliest oven (section 3.6.2).

³ As for example at Whitehall, Cheam.

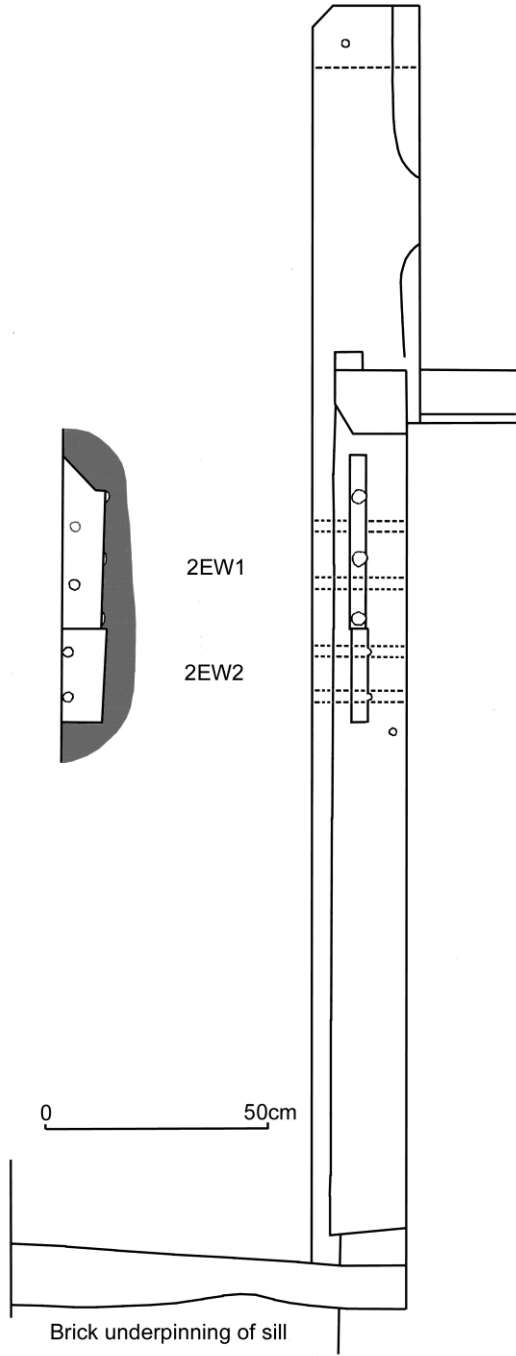


Figure 16. The west side of post 2E.

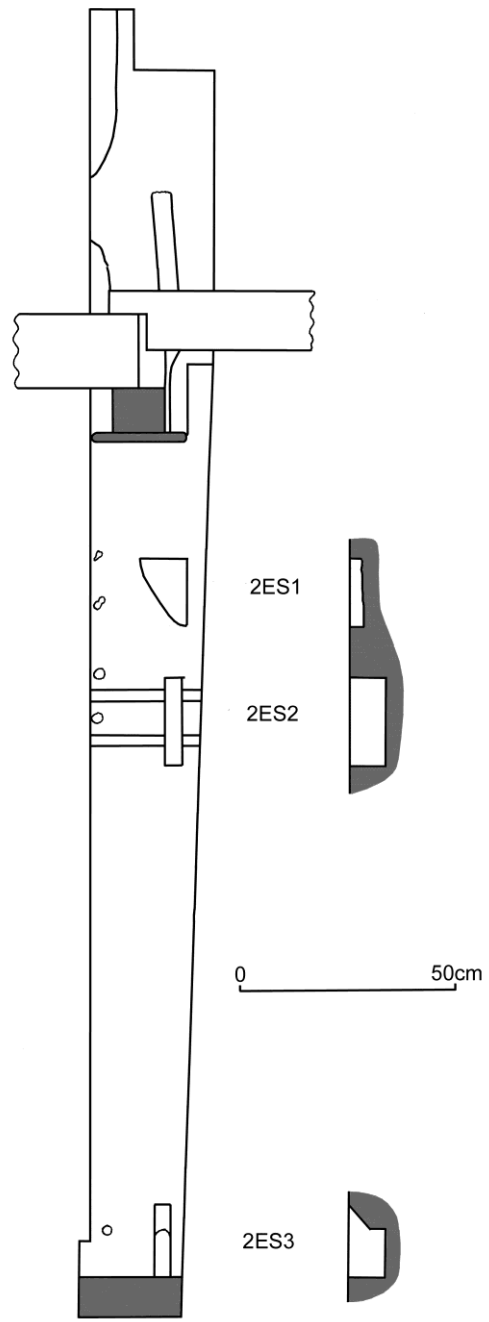


Figure 17. The south side of post 2E.



Figure 18. The bottom of post 2E showing a surviving section of ground sill resting on a brick foundation.



Figure 19 (above). The west side of post 2E with the surviving section of ground sill.



Figure 20 (right). The south side of post 2E.

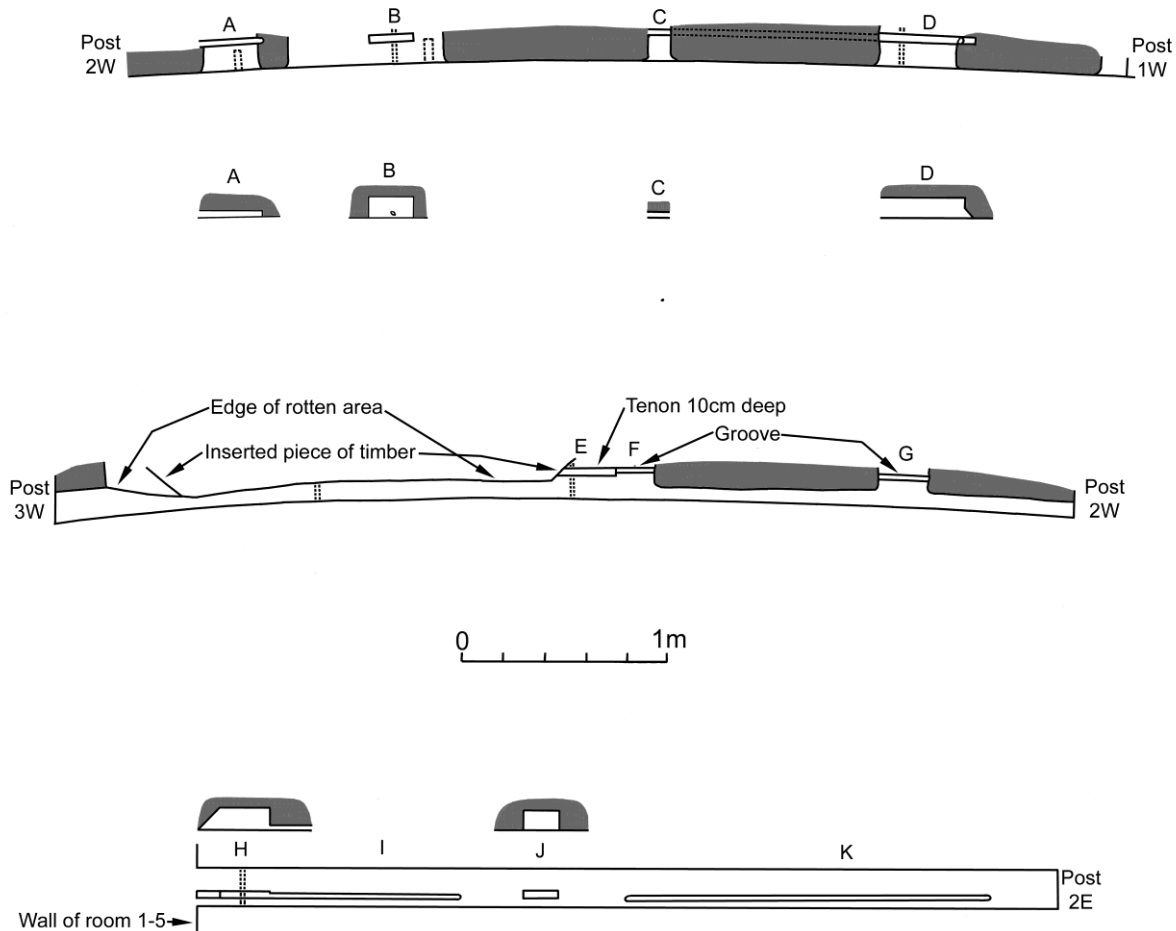


Figure 21. The underside of the wall-plates drawn as if looking down from above through the timber. The shaded areas on the plans show where the timber was in contact with the brick.

3.2.3 The wall-plates

The underside of the wall-plates were partially exposed on the east side of bay 2 above room 1-5 and on the west side of bays 1 and 2 (figure 21).

The southern end of the east side plate had been removed at some point in the past but the rest of the underside was fully exposed. There was a mortise in the centre presumably for a vertical post mid-way between the principle trusses. There was also a tenon for a brace to post 3W but not to 2W. There was a slot in the underside of the plate close to the outer edge. This ran northwards from the brace tenon and ended about 30cm from the mortise for the centre-post. It then resumed 32cm north of the centre-post mortise and continued until 32cm from post 2E. It was not exactly parallel to the west or outer side of the wall-plate. The gap was about 2cm near the centre-post and about 4cm at the north end near post 2E.

The information on the underside of the western wall-plate is more fragmentary as it could only be examined where there were gaps between the timber and the brick. In bay 1 there was a mortise for a brace to post 1W (D on figure 21) and a mortise for a vertical post well off centre to the south. There was a slot which ran south from the brace-mortise. This ended short of the mortise for the post and resumed about 50cm beyond it. The distance between the slot and the outer edge of the wall-plate could not be determined. In bay 2 the west side plate had a 10cm

deep tenon at least 30cm long near the centre of the bay. There was a slot in the underside of the beam which ran into this mortise and could be seen at other points along the timber. There was a peg hole for a timber off centre to the south. At this point the west side of the wall-plate had rotted and been replaced so any mortise had gone. The peg hole would have been in about the right position for a brace to post 3W but it was rather further from the post than the brace for 1W and no brace-mortise was found in the post. It is therefore more likely that the peg-hole served a mortise for a post.

There was, therefore, a post in the centre of the east side of bay 2 but the posts in the bays on the west side of the building were unevenly distributed.

3.3 The north wall

3.3.1 The timbers

The north wall was divided into two sections by the centre-post. There were mortises for braces between the corner posts (1W and 1E) and the tie-beam, which have already been mentioned.

There was a rail running across the wall at about mid-height from the centre-post towards post 1W. It had been cut off 1.02m short of 1W but there are peg holes in the post for a mortise to secure it immediately below the brace mortise (figure 25). A similar rail appears to have existed on the eastern side of the wall as there are peg holes for it in the centre-post. The relevant part of the eastern post had been cut away.

The upper part of the western half of the wall had two studs connected by a horizontal timber. This was not part of the original frame as the western stud violated the line of the brace and the horizontal timber was joined with nails. There are rebates on the inner edges of the studs possibly to hold planks for a timber lining.

The upper part of the eastern half of the wall had three studs above the mid-wall rail all joined by thin pieces of timber. These were also not original as the rail was above the earlier peg holes and was lapped over the centre-post and secured with iron spikes rather than a proper joint. The only clue to the original filling of the wall was found on the underside of the tie where there were slots and mortises to hold the wall fill. There were slots 2.5cm wide and 3.5cm deep which ran from both the brace mortises along the underside of the tie to end 31.5cm and 30cm from the centre-post. There were no slots between the brace mortise and the corner posts. However, on the west side there was a mortise 28cm from post 1W which was 10.5cm long, 2.5cm wide and 4.5cm deep. It had rounded ends and had been made by drilling two holes and cutting out the wood between them. There was not a matching mortise on the eastern side but this section of the tie was a replacement. A window head has been cut into the underside of the tie-beam to the east of the centre-post.

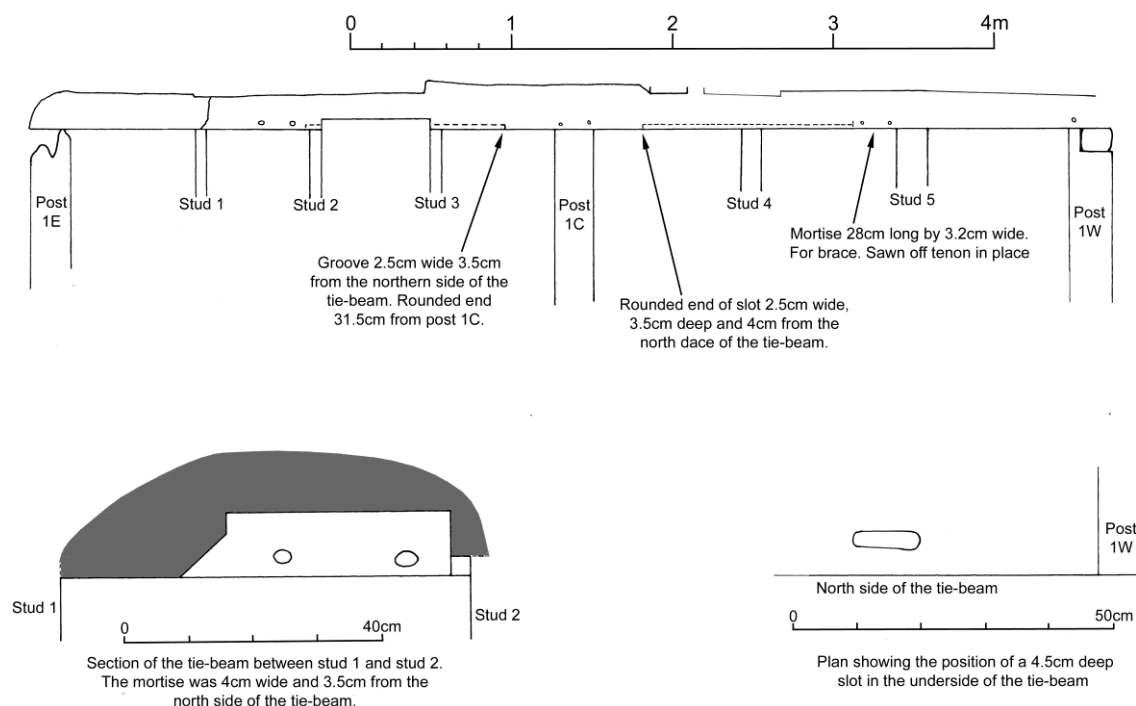


Figure 22. Details of the underside of the truss 1 tie-beam of truss.

3.3.2 The brickwork

The area between the timbers is filled with brick of varying finish and size suggesting haphazard alteration. The oldest appear to be on the east side above the wall-rail (figure 23). There most of the bricks had a rather rough finish and a median height of 60.5mm. Comparison with other bricks on the site suggests that they may date from the early eighteenth century although reuse is of course possible.⁴ There was a line of later looking bricks – possibly a repair – along the top of the mid-height rail and also blocking the window which cut the underside of the tie-beam. The other bricks appear to have been comparatively recent. Two groups were measured, both in the lower part of the wall, one to the east of the centre-post and one to the west. The median sizes differed suggesting that they may not have been placed in a single building episode.⁵

Alfred Smee's *My Garden* published in 1872 contains a small engraving of the 'Old Pigeon House, Beddington Park' – evidently the dovecote which still stands to the west of the cottage. The engraving shows a cottage to the right of the dovecote which is covered with climbing flowers and surrounded by a ramshackle fence. If the image is flipped horizontally it is clearly the north wall of Beddington Park Cottages (figure 24). The door on the right coincides with the cut in the west end of the mid-wall-rail and the bottom of the adjacent stud while the window is the one cut into the underside of the tie-beam.

⁴ Phillips and Burnett 2008 p. 159-151.

⁵ The bricks to the east of the centre-post has median lengths, heights and widths of 217, 60.5 and 106mm while the figures for those to the west were 216, 62 and 110.

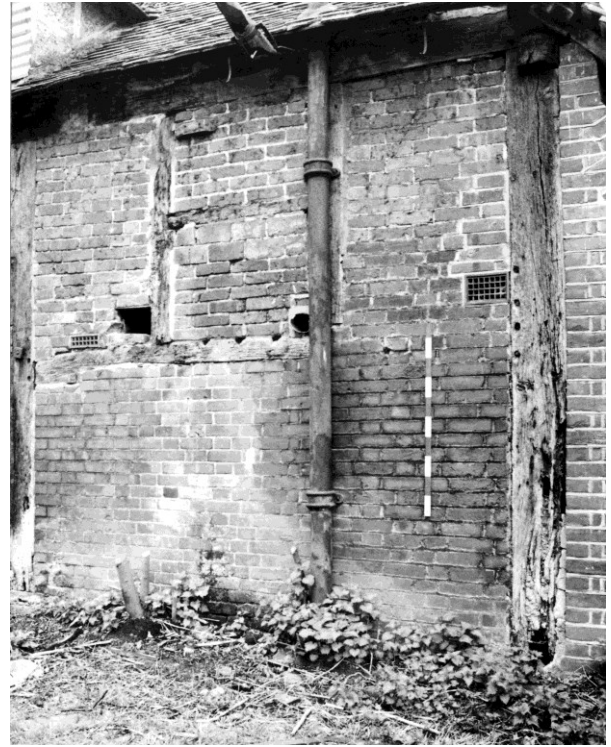


Figure 23. The north wall. East side to the left, west to the right.



Figure 24. 'The Old Pigeon house, Beddington Park' from Alfred Smee's *My Garden* 1872 page 66. The image has been flipped horizontally and clearly shows the north end of the cottages.

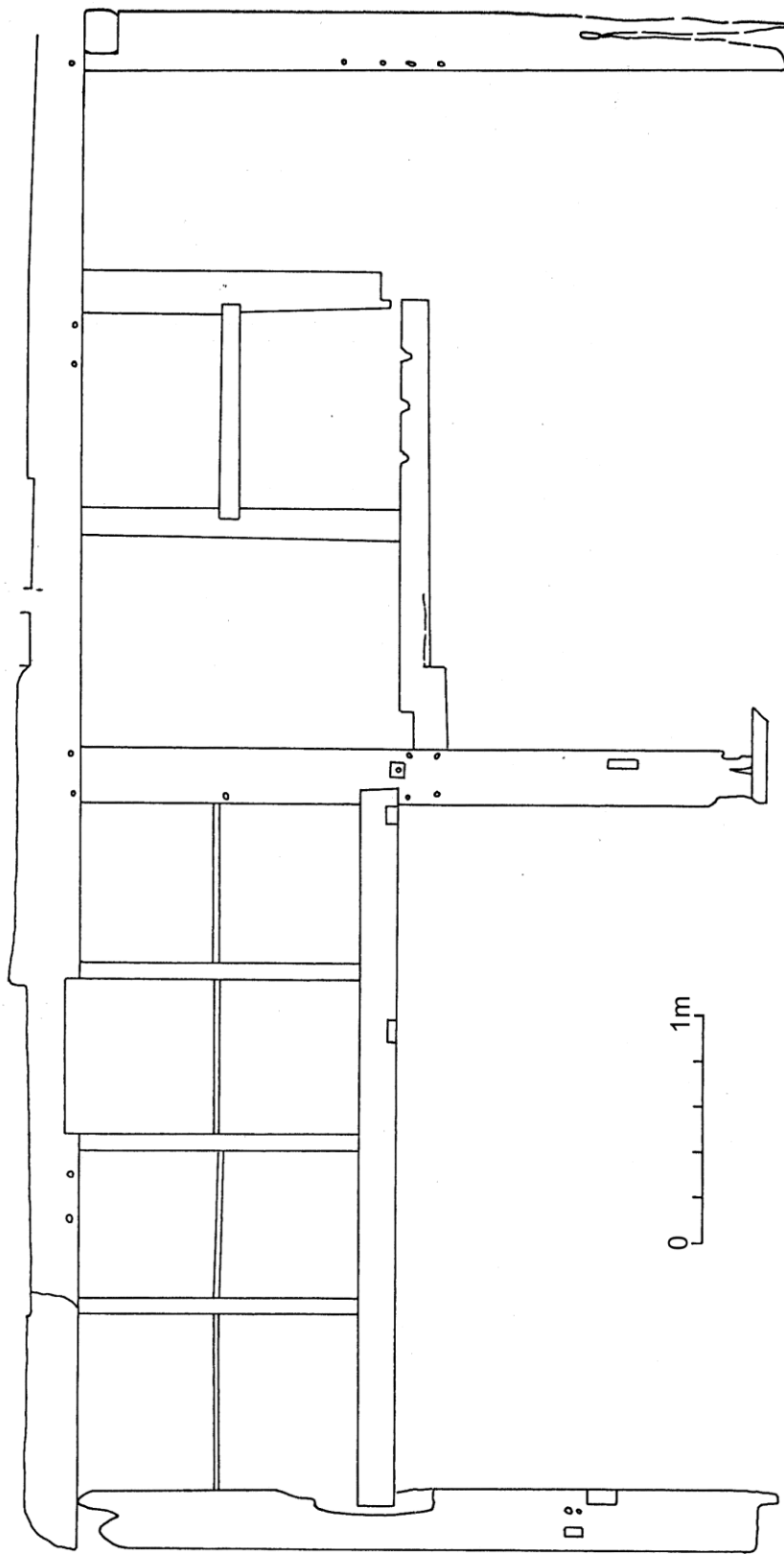


Figure 25. The north wall of the cottages with the timbers of truss 1. Modern windows omitted.

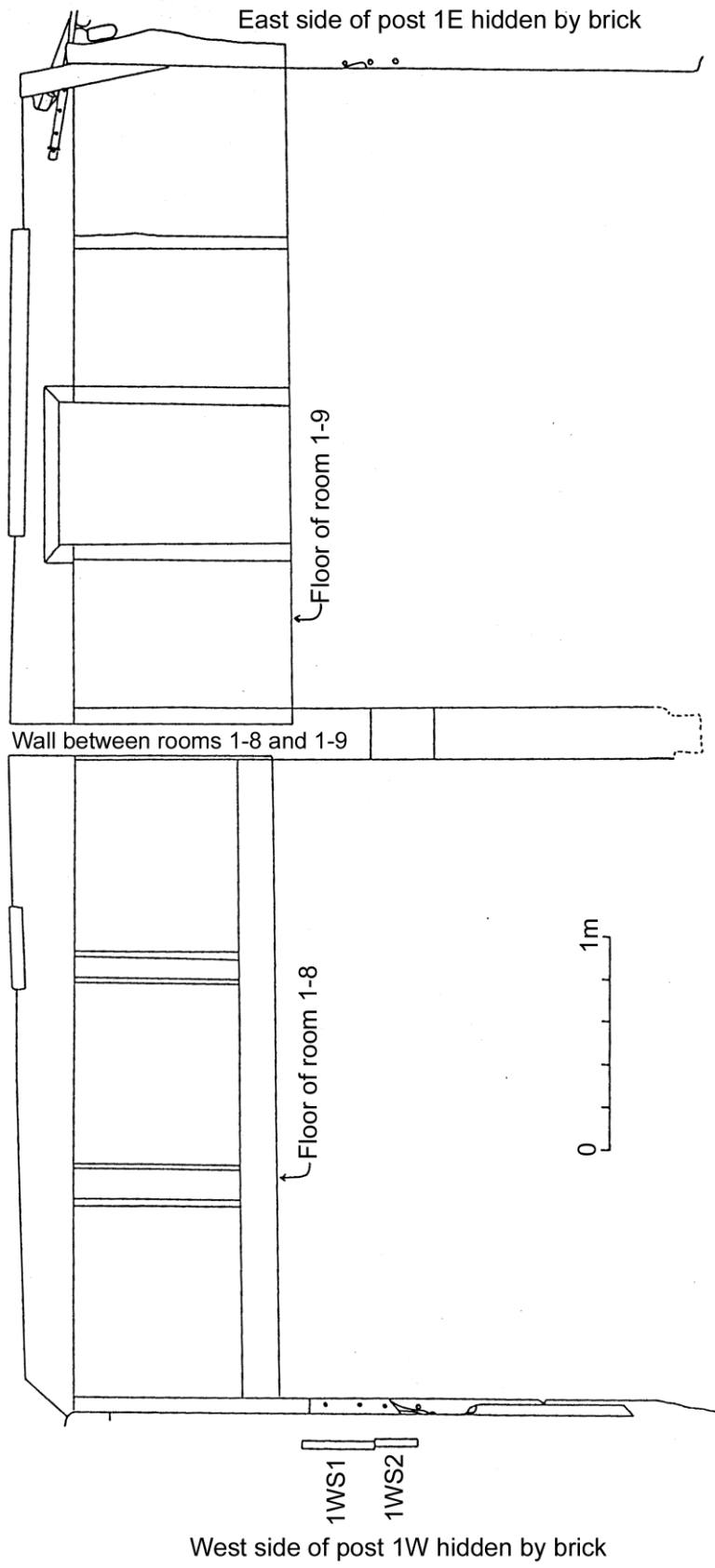


Figure 26. The south side of truss 1 from within the building. Ground floor details not drawn.

3.4 The west wall

The west wall was, at one time, divided by mid-height rails and several irregularly spaced posts (see section 3.2.3). At some point in the past these were been removed and replaced by a brick wall. There were several open and blocked windows and doors which can be divided into four groups:

- A blocked window (A on figure 28) at the top of the wall towards the north end. This would have lit the first floor. The top did not cut the wall-plate. The lower part of the window had been cut away to create window B.
- A segmental brick head probably for a window rather than a door (C on figure 28).
- Two windows and a door with flat heads lined with a soldier course of bricks (B, E and F on figure 28). The windows were still open but the door had been bricked up. It would have opened into room 1-6 opposite the main chimney-stack.
- The present door to the cottage which opened into room 1-1. The brickwork around this was covered with cement render.

There were three brick buttresses, one on each side of the door and one at the northwest corner of the building. These appeared to be fairly recent additions.

The plaster was missing from part of the inner face of the wall in room 1-6 to the south of the entrance door. Here the bricks had a rough surface unlike the smooth ones on the outside. This suggests either that the wall had been refaced or that old bricks were reused behind the facing.



Figure 27. The west wall of cottage 1. North end to the left, south end to the right.

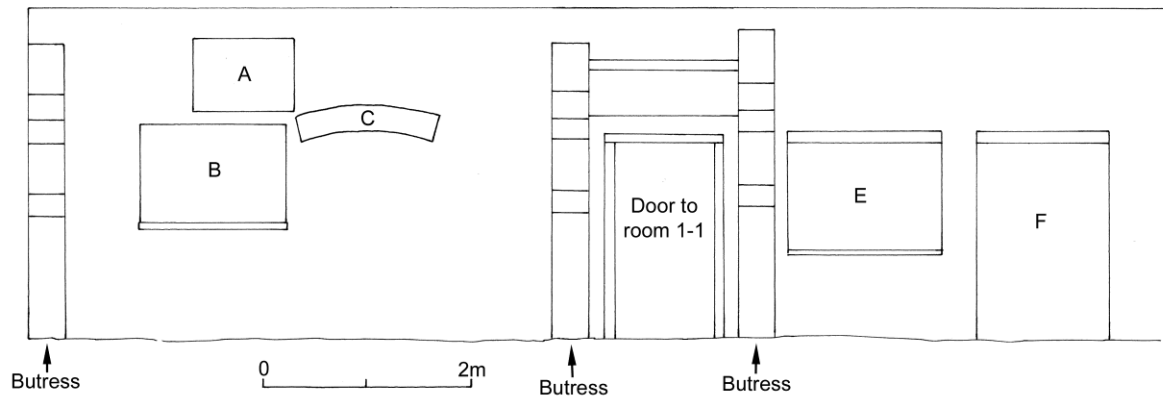


Figure 28. The outside of the west wall of cottage 1.

3.5 The east wall and the extensions to the rear

This can be divided into two sections:

- The outside wall of room 1-4 which is the eastern wall of bay 1.
- The outside walls of room 1-5 which formed an extension projecting from the east side of bay 2 of the original building.

3.5.1 The outside east wall of room 1-4

The wall was one stretcher thick, was laid in Flemish bond and appeared to be fairly uniform suggesting that it was of one date (figures 30, 31 and 32). There was a window at the north end and a door at the south, both with segmental heads and both bricked up. The door blocking included a rustic Fletton brick which were first produced in 1922.⁶ Both door and window blockings also contained some plain Flettons. The wall-plate rested on the wall and sloped down considerably to the south. The north end of the wall was a ragged break suggesting that it originally extended north beyond the northeast corner of the existing building.

There was clear evidence that a lean-to formerly existed against the east side of the building:

- Secondary rafters had been laid on top of the main rafters and extended beyond the main wall (figures 30, 32 and 33).
- There was a line of notches cut in the brickwork below the wall-plate presumably to hold the ends of joists to support a ceiling (figures 31 and 32).
- The ground by the wall was covered with concrete and planking probably to form the floor of the extension although they could have surfaced an outside yard. At least part of the concrete was underlain by heavily broken red floor tiles. These were partly excavated (figures 33 to 35) but the eastern wall of the extension was not exposed.

3.5.2 The walls of room 1-5

Room 1-5 had been extended eastwards beyond the original line of the wall and the roof had been extended outwards to cover it (section 3.1.3). The wall was of red brick one stretcher thick. There was a bricked-up segmental headed window in the north side and a strait-topped one in the east. Most of the outside was covered with cement rendering but various details such as the blue engineering brick along the bottom one of the windows, the regular shape of the bricks and the single layer of plaster on the inside of the wall suggest that it was not very old.

⁶ Woodforde 1976 p. 105.



Figure 29. The east side of cottage 1 showing the lean-to extensions. 9 January 1983.



Figure 30. The northeast corner of the building looking south.

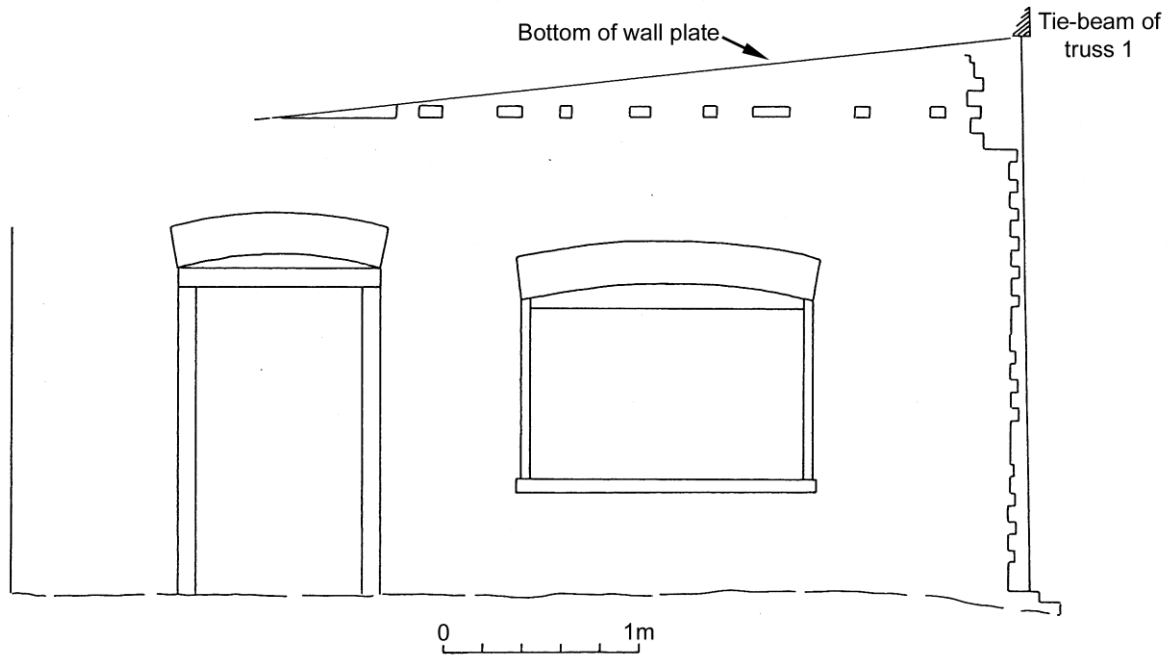


Figure 31. The east wall of room 1-4 with the northeast corner of the building on the right.

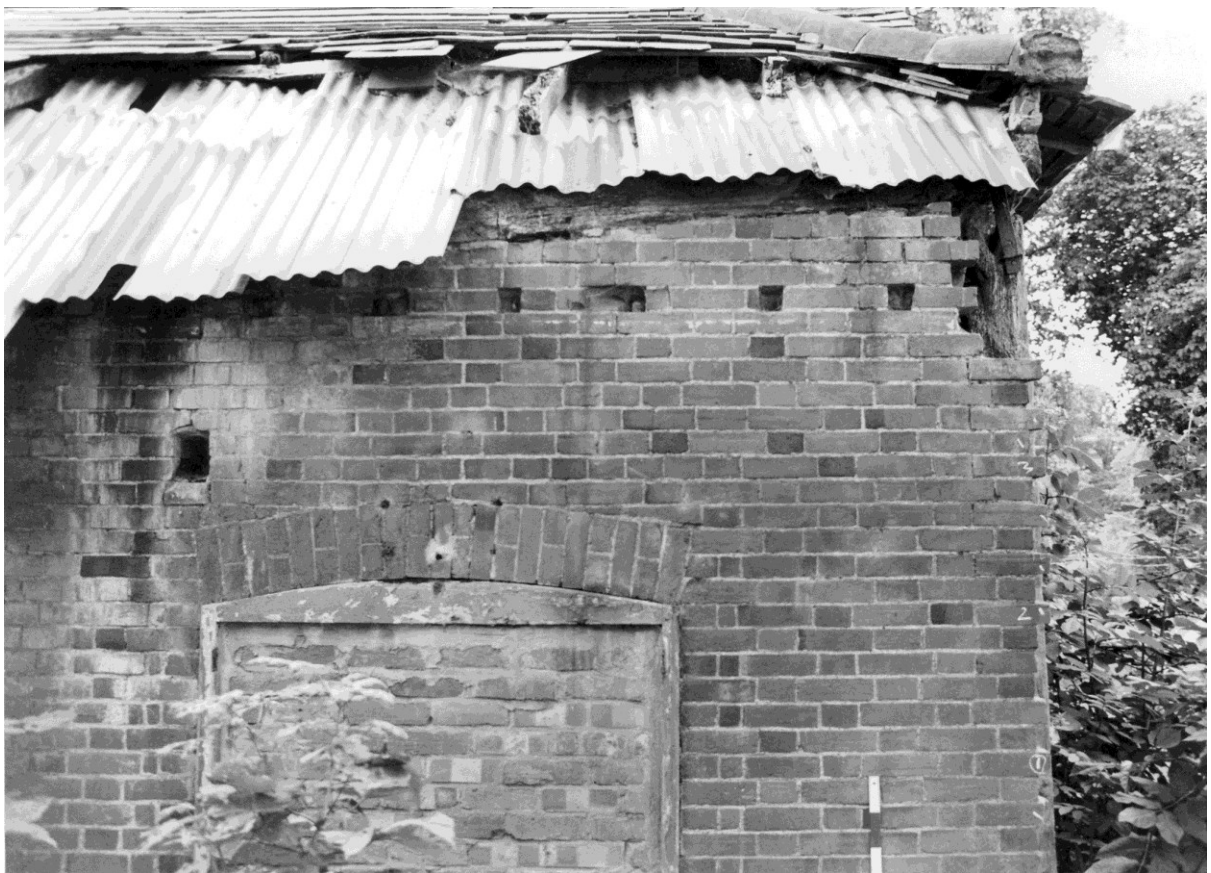


Figure 32. The upper part of the east wall at the northeast corner.



Figure 33. The east side of the cottages looking south from the northeast corner towards the extension of room 1-5. The foundations of the structure built against the east wall of room 1-4 are in the foreground.



Figure 34. The corner between the extension of room 1-5 (left) and east wall of room 1-4 (right) showing the floor of the structure built against room 1-4. Blocked door to room 1-4 in the background.



Figure 35. The remains of a tile floor at the south end of the structure built against room 1-4. Looking east. Note the edge of the boards in the foreground which appear in figure 34 above.



Figure 36 The east wall of room 1-4 with exterior wall or room 1-5 on the left. 1983. The corrugated iron appeared to have been inserted as a bodge repair to protect the head of the wall following the decay of the roof of the extension against the wall of room 1-4.



Figure 37. The exposed timber frame of the east wall of room 1-5 during conversion in 1986.

3.6 The chimney-stacks and the oven

There were two chimney-stacks on the boundary between cottages 1 and 1A. The eastern stack had three pots on the top and served fireplaces in rooms 1-5, 1-6 and 1-11. The western stack was in cottage 1A and was connected to fireplaces in 1A-2 and 1A-7. There was an oven, or rather two successive ovens, against the east side of the eastern stack.

3.6.1 The eastern chimney-stack

This was built in the eastern half of the cottage with the west face of the chimney against the collar purlin.

The first floor was supported by a ledge on the side of the chimney-stack. This ledge had been built up under an existing floor as the ceiling plaster was still in place on the ledge and roof tiles had been used to pack a gap between the plaster and the top of the brickwork (figures 45, 46 and 47).

The west side the eastern stack was built around the bridging joist which ran down the centre of bay 2 and supported the first floor. The stack appeared to butt up against a brick wall which ran below the joist separating rooms 1-5 and 1-6 (figure 41).

The fireplace in room 1-6 was built into the southeast corner of the room. Its brickwork butted up against plaster on the west side of the bridging joist showing that it was later than the timber (figure 44).

The bridging joist passed through the brickwork of the chimney-stack to post 3C which supported its south end.

The chimney was therefore built in a cut through a pre-existing first floor.

The western side of the fireplace in room 1-5 had been narrowed. The earliest filling (area IV on figure 48) narrowed the fireplace by 0.3m. The second filling (area III) narrowed the opening by a further 0.36m. The third filling II appeared to be for the modern fireplace I. An iron bar ran across the top of fill III and presumably ran behind the modern structure and then continued into stone work around the oven door on the east side of the fireplace. The western end of this was split up and down and inserted into the gap between areas III and IV. This was presumably contemporary with fill III and supported the top of the fireplace. The chalky mortar bonding area III was likely to be eighteenth century or earlier.

There was a vertical bonding break above the east side of the fireplace which appeared to be the boundary between the chimneystack and the adjacent oven. If so the fireplace was unusually close to the eastern edge of the stack but the exact arrangement was hidden by a modern fire surround.

The fireplace in room 1-11 on the first floor had a cast iron grate which may have dated from the early nineteenth century (figure 49). The brickwork around it was covered with plaster until the reconstruction took place. A photo taken during the reconstruction (figure 40) suggests that the, apart from the grate, the opening had not been much altered.

The brickwork around the fireplace in room 1-6 was not seen.



Figure 38. The east and west chimney-stacks (left and right) during conversion work.



Figure 39. The east and west chimney-stacks showing the relationship to the roof during conversion work.



Figure 40. The north side of the eastern chimney-stack around first floor level showing the bridging joist which supported the floor of rooms 1-10 and 1-11. The fireplace heated room 1-11. Part of the fireplace of room 1-5 is visible at the bottom of the photo. During conversion work.



Figure 41. Detail of figure 40 above showing the butt joint between the chimney-stack (left) and the bridging joist and the wall beneath it.

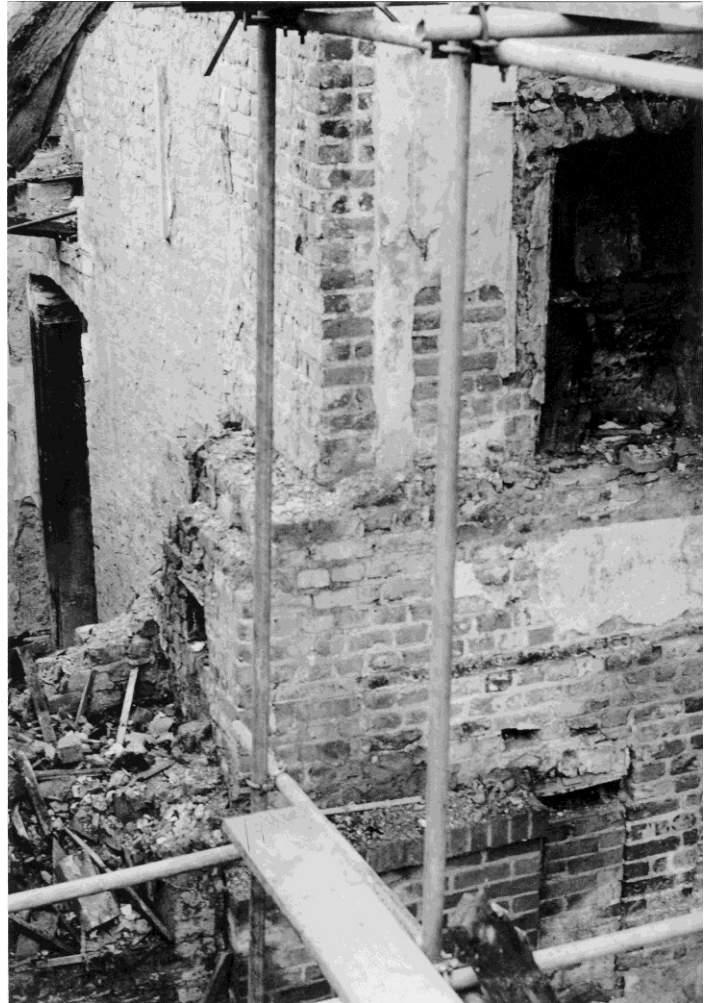


Figure 42. The northeast corner of the eastern chimney-stack with the fireplace of room 1-11 top right, the fireplace of room 1-5 bottom centre and the remains of the oven on the right. During conversion work.

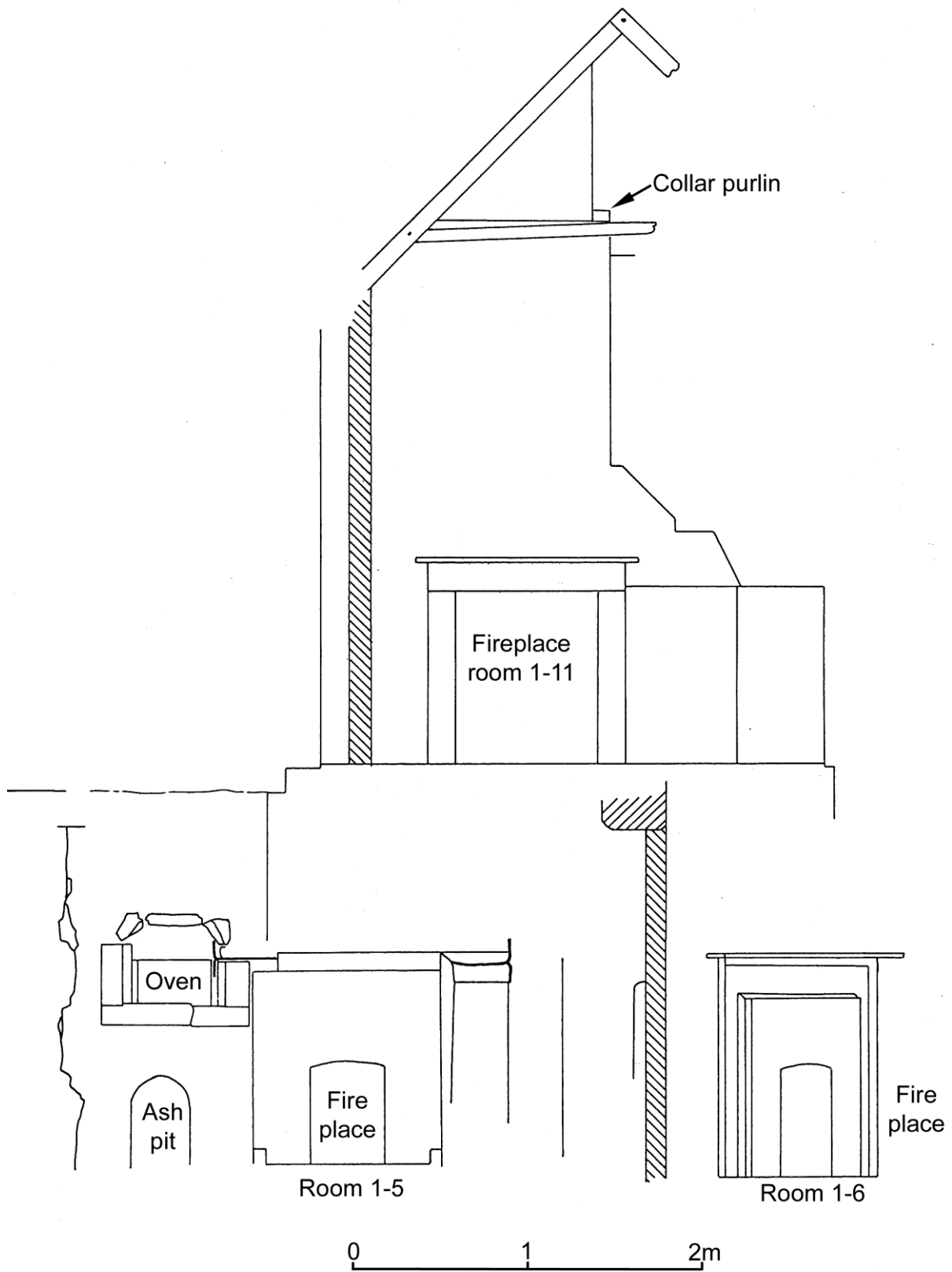


Figure 43. Partial drawing of the north side of the main chimney-stack.



Figure 44. The southeast corner of room 1-6 at ceiling level. The plastered area to the right is the edge of the fireplace which was built into the corner of the room. The timber to the left is the bridging joist which supported the first floor in bay 2. The brickwork under it is the wall between rooms 1-6 and 1-5. Note the plaster on the side of the bridging joist showing that it and the wall were earlier than the fireplace.

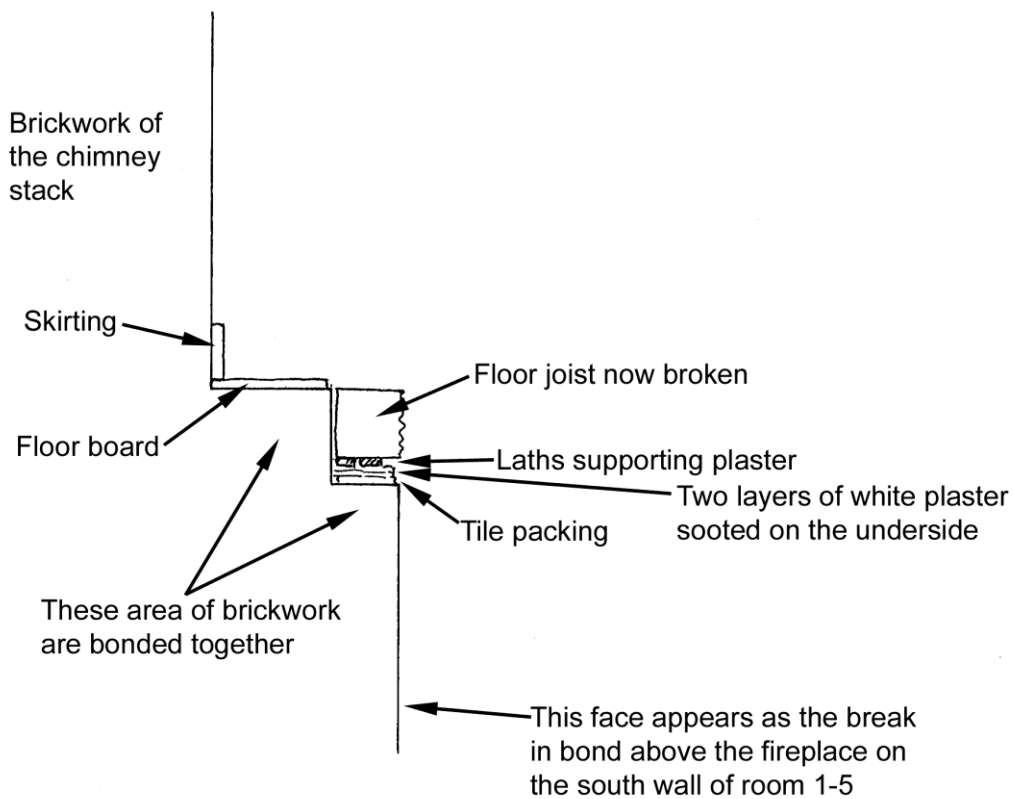


Figure 45. Section through the eastern face of the east chimney-stack at first floor level above the oven. Looking north.



Figure 46. The north side of the chimney-stack above the oven. Note the lath, plaster and tile packing on the lower ledge which originally supported the first floor. The skirting and floorboard on the upper ledge appear to relate to a staircase which was constructed over the oven probably after it had gone out of use.



Figure 47. Detailed view of the two ledges shown in figure 46.

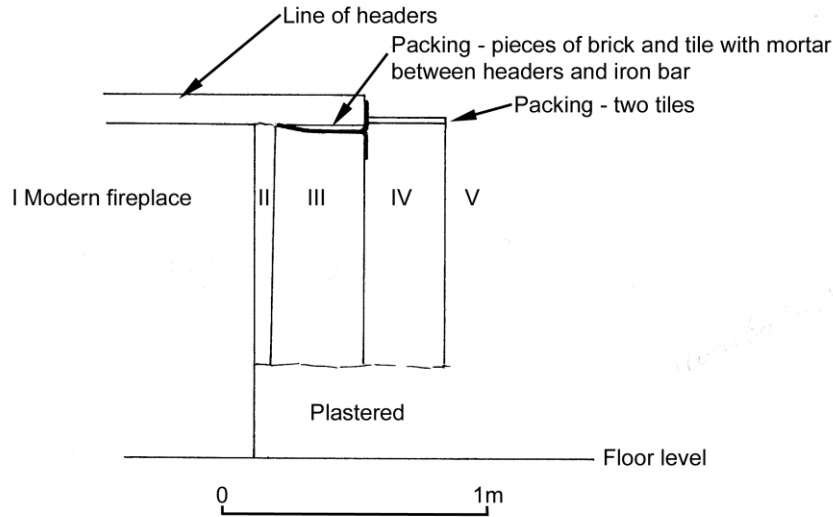


Figure 48. The western side of the fireplace in room 1-5.

- I Modern fireplace.
- II Hard purplish bricks separated from of the fireplace by a straight joint. Bonded with orange mortar similar to area I.
- III Bricks bonded with white mortar with pieces of chalk, some tiny fragments of flint and possibly some coal. The bricks were fairly well moulded. The joint between II and III was filled with red mortar.
- IV Bricks and mortar with traces if smoke blackening on some edges. The top of the section is packed with tiles.
- V Brickwork of the chimney-stack.



Figure 49 (above). The fireplace and grate in room 1-11.

Figure 50 (left) The west side of the fireplace in room 1-5.

3.6.2 The ovens

There were the remains of two ovens built against the east side of the eastern stack. The earliest of these opened into room 1-5, while the other, which replaced it, faced eastwards into the corner of room 1A-3.

The earlier oven had a door-surround of neatly-cut blocks of Reigate stone. The top was reinforced with an iron bar carefully set into its underside. There was a brick-vaulted ash pit below the door, but the rest of the structure has been destroyed by the construction of the second oven.

At some point the first oven was largely demolished and a new oven was constructed at right angles to it with the door on the east side. The new oven had a floor of tiles, which were 2.5cm thick and probably 31.5cm square. The oven wall, which rested on these, consisted of a row of bricks standing on end with their sides facing into the oven, while the roof was vaulted with bricks whose heads faced inwards. The ash-pit was also vaulted in brick, and appears to have had a brick floor; although most of this was missing, revealing an earlier brick floor about 11.5cm below it. The opening to the ash pit had a segmental head. The top of the end wall of the ash-pit curved inwards and appeared to be the west side of the ash-pit of the earlier oven. The floor of the second oven was 32cm above the first.

There was an opening for a flue in the east side of the east chimney-stack (figures 57 and 58). It was not clear whether this served the first or second oven or both.

The southern side of the second oven had been demolished to make way for a brick wall which formed the north side of room 1A-3. A stair case had then been erected which extended over the top of the remains of the ovens. The space above the remains of the second oven was filled with loose rubble which contained brick and plaster – some of the latter modern-looking.



Figure 51. The blocked door and ash pit for the earliest oven in the south wall of room 1-5.



Figure 52. The door of the earliest oven with the blocking partly removed.



Figure 53. The oven and the south wall of room 1-5 looking south east.



Figure 54. The second oven looking northwest.



Figure 55. The remains of the second oven from above. North at the top.



Figure 56. The remains of the ash pit of the second oven looking west. The back curved inwards towards the top and had formed the west side of the ash pit of the first oven.



Figure 57. The east side of the east chimney-stack by the ovens. Note the blocked flue to the right of the scale.



Figure 58. The east side of the east chimney-stack by the ovens. Note the unblocked flue to the right of the scale.

3.7 The upper floors

3.7.1 An early first floor?

Several joints and cuts in the posts suggested that there was formerly a first floor at a slightly lower level than the surviving one. There appeared to be a mortise on the south side of post 1C the bottom of which was 29.5cm below the bottom of the bridging joist for the existing floor. This was filled with mortar and brick so that it could only be seen on the east side of the post (figures 59 and 60). There appears to have been a similar joint on the north side of post 3C (figure 67) where the bridging joist for the existing floor was supported by a piece of wood lodged on a ledge similar to that on 1C. The gap between the ledge and the underside of the joist was 40cm.

On post 1C the ledge was 1.66m below the underside of the tie-beam while the ledge on 3C was 1.6m below.

Post 2C had mortises on its north and south sides just below existing floor level but the upper part of the post had been destroyed by fire which had severely damaged the area around the joints, so that their size could no longer be determined. The exact distance between their tops and the bottom of the tie is also uncertain, but must have been similar to other posts. The joints differed from those on posts 1C and 3C, as they had plain rather than diminished haunches.

There was also evidence for rails across the walls at about the same height as the empty joints on the centre-posts. The rail on the west side of the north wall was still in place (figures 23 and 25). The evidence for the others consisted of empty mortises:

Mortise ⁷	Size height, width and depth (cm)	Distance from top to tie-beam (m)
Along the west wall		
1WS2	H=20, W=3.5	1.48
2WN1	H=24, W=3, D=16	1.18
2WS1	H=22, W=4, D=11	1.44
3WN1	H=21, W=3.5, D=11	1.23
3WS1	H=58, W=6, D=11 (max)	0.62 (diminished haunch)
Along the east wall		
1ES	Not seen	
2EN2	H=20, W=4, D=11	Not seen
2ES2	H=20.5, W=3.5, D=8	1.53
Post 3E was missing		
Across the north wall		
1WE	Mortise not seen	Top of rail 1.38 below tie-beam
1CW	Mortise not seen	Top of rail 1.38 below tie-beam
1CE	Mortise not seen	Peg holes at same level as 1CW
1EW	Mortise cut away	
Across truss 2		
2WE	Not recorded	
2CW	Not recorded	
2CE1	H=17, W=3.5, D=4	Post top damaged
2EW2	H=20.8, W=3.5, D=9-10	1.4
Across truss 3		
3WE	Not recorded	
3CW2	Peg holes suggest similar to 3CE1	
3CE1	H=18, W=3.5, D=unknown	1.59
Post 3E was missing		

The mortises for rails in the west wall of bay 1 were not at the same height – 1.48m to the tie-beam at the north end, 1.18m at the south. There was a tenon for a vertical post on the underside of the wall-plate 1.2m from post 2W which may mark the north side of a door. There was also a difference in the rail heights in bay 2 – 1.44m to the tie-beam at the north end, 1.23m at the south. Here the only known mortise for a post was near the centre of the bay. This suggests that main function of the rails was to support the wall infill so they most likely predated any floor. There is not enough evidence to draw any conclusions about the east wall.

The rail across the west side of the north wall survived, the top of which was 1.38m below the tie-beam. There were peg holes in the centre-post for a rail at the same height on the east side. The east post had been cut away at the projected junction.

Enough evidence survived to show that there was a rail across truss 2 and that, on the eastern side, it was 1.4m below the tie-beam.

The rails in truss 3 appear to have been 1.59m below the tie-beam on both sides of the building.

⁷ The mortises are identified by the number of the post, the face, and a running number. So mortise 2CE1 is on post 2C, on the east side and is the top-most.

The ledge below the bridging joist on the south side of post 1C was 1.66m below the tie-beam which could be consistent with a floor at the height of the rail tops 1.38 below the tie-beam as bridging-joists were generally substantial. The rails in truss 2 were only 2cm below those in truss 1, a discrepancy of little significance as one measurement was to the rail top and the other to the mortise top.

The rails in truss 3 were, however, 19cm below those of truss 2.

On balance it seems likely that the rails are earlier than the earliest first floor. If a floor rested on them a good deal of packing would have been necessary.

The inside corners of the western posts had a rebate cut into them making a cross section in the form of a blunt 'T'. These cuts were probably not original, as the one on the southeast corner of post 2W sliced through the peg-holes for mortise 2WS1, but they must have been earlier than any floor, as they ran from top to bottom of the building without a break. On the north sides of posts 2W and 3W the lower parts of the cuts have been deepened westwards leaving a nick at 1.39m and 1.38m below the tie-beam (figure 62). This was close to the bottom of mortises 3WN1 and 2WN1 so that the nicks could fairly easily be explained in terms of the posts being cut back flush with the wall and floor up to the level of a ceiling resting on the timbers in the mortises. Unfortunately, the relevant parts of the south sides of posts 1W and 2W had been cut away to respect the existing higher ceiling.

These cuts were not present on the eastern and centre-posts.

There was a rammed chalk and clay floor in room 1-5 beside a surviving section of flint and chalk foundation (section 3.9.4). This floor was about 1.9m below the notch in the north side of post 3C.



Figure 59 (left). The south side of post 1C below the first floor. Note the brick filled notch cut into the timber probably to hold a bridging joist below the level of the existing floor.

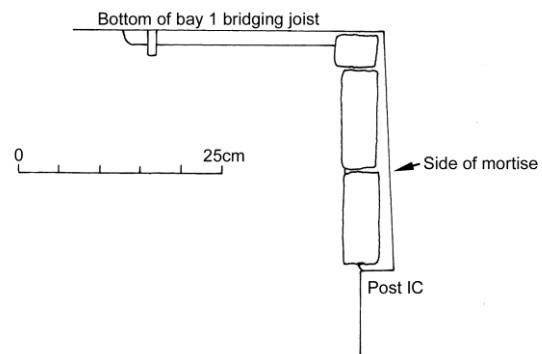


Figure 60 (above). The east side of the joint.

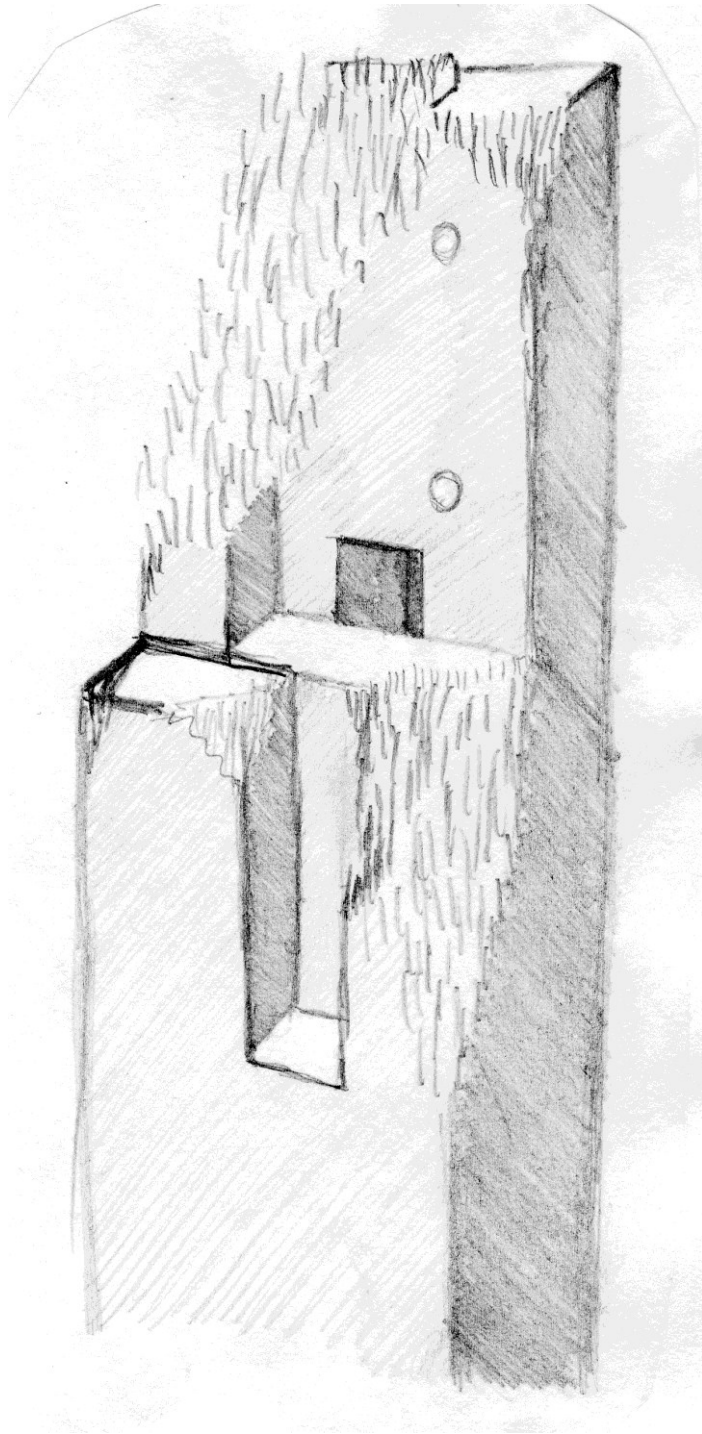


Figure 61. The top of the surviving part of post 2C after it had been damaged by fire. Looking southwest with the east face to the left. The east face had probably been cut away removing the side of a tenon for a south running timber. Not to scale.

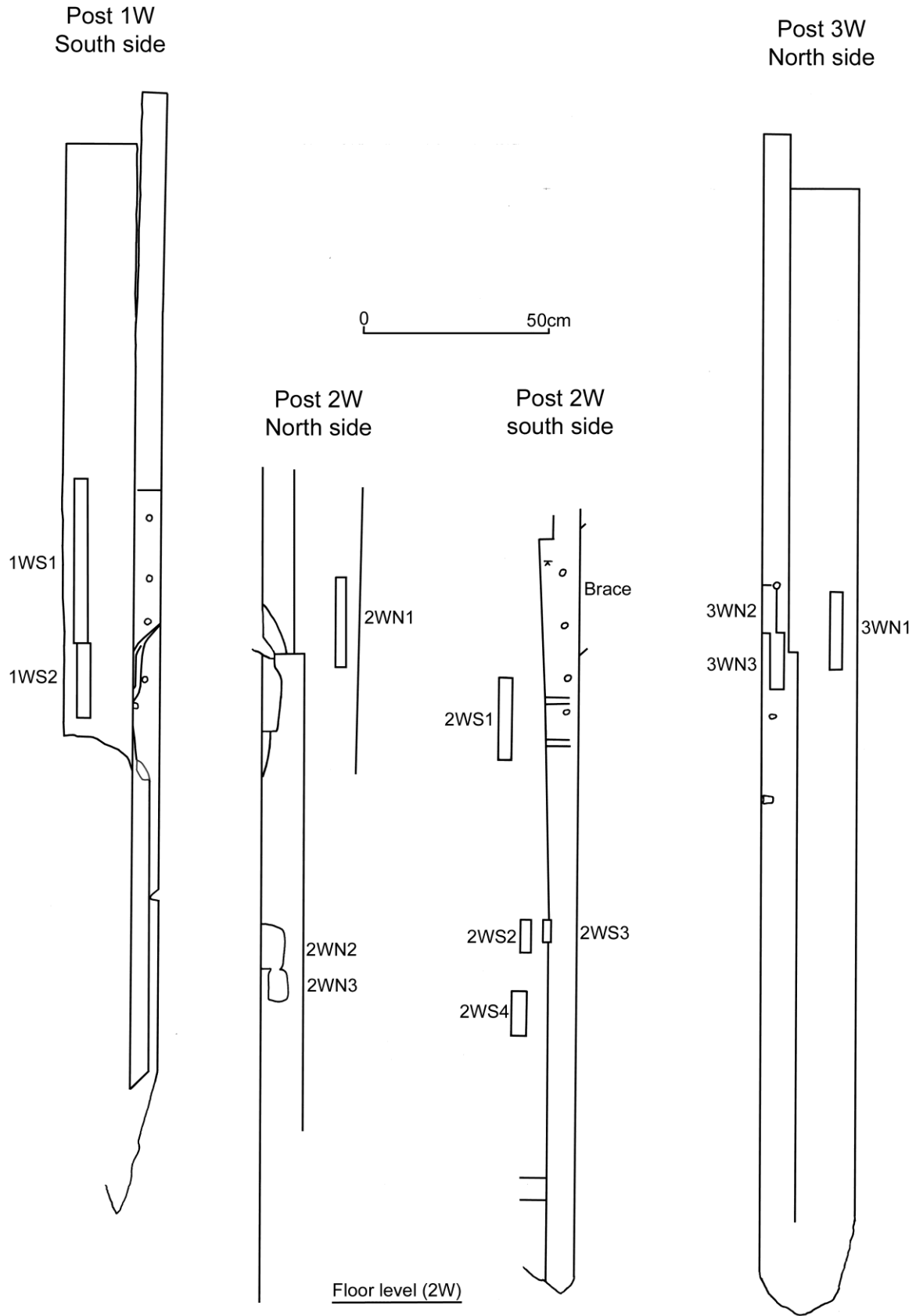


Figure 62. The joints in the posts along the west wall.

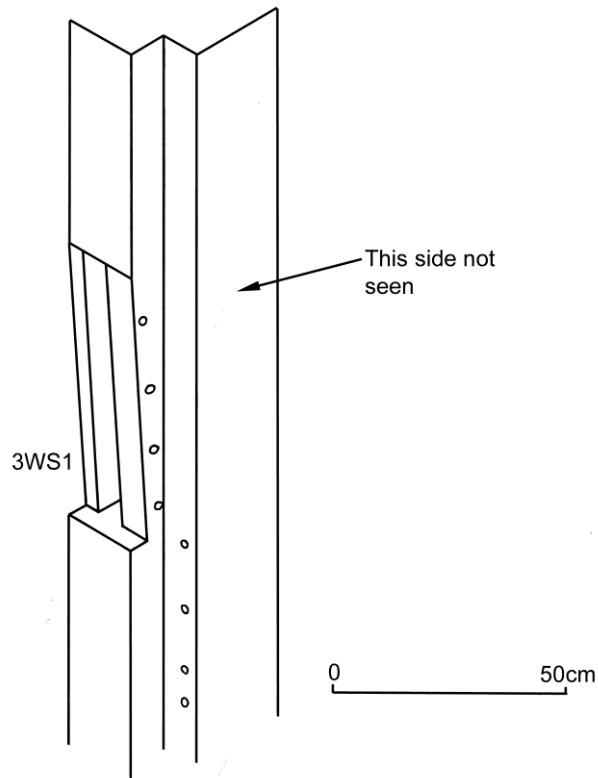


Figure 63. Mortise 3WS1 on the south side of post 3W.

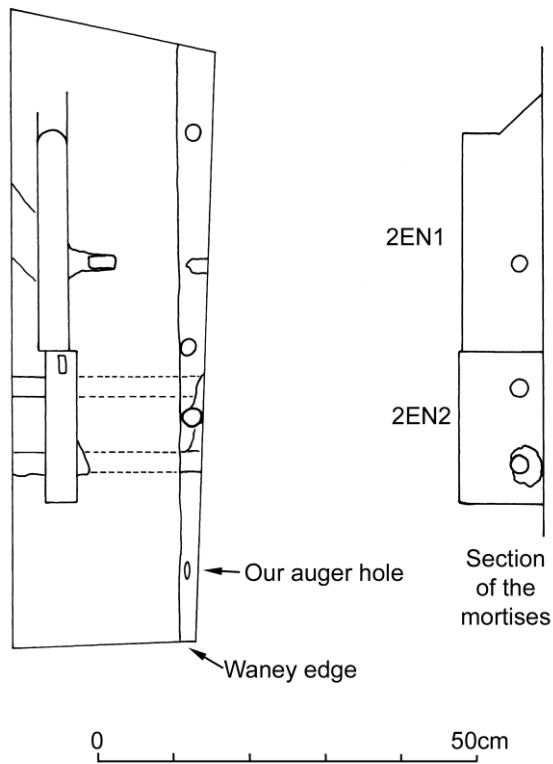


Figure 64. The north side of post 2E after the post had been cut into three. Middle section.

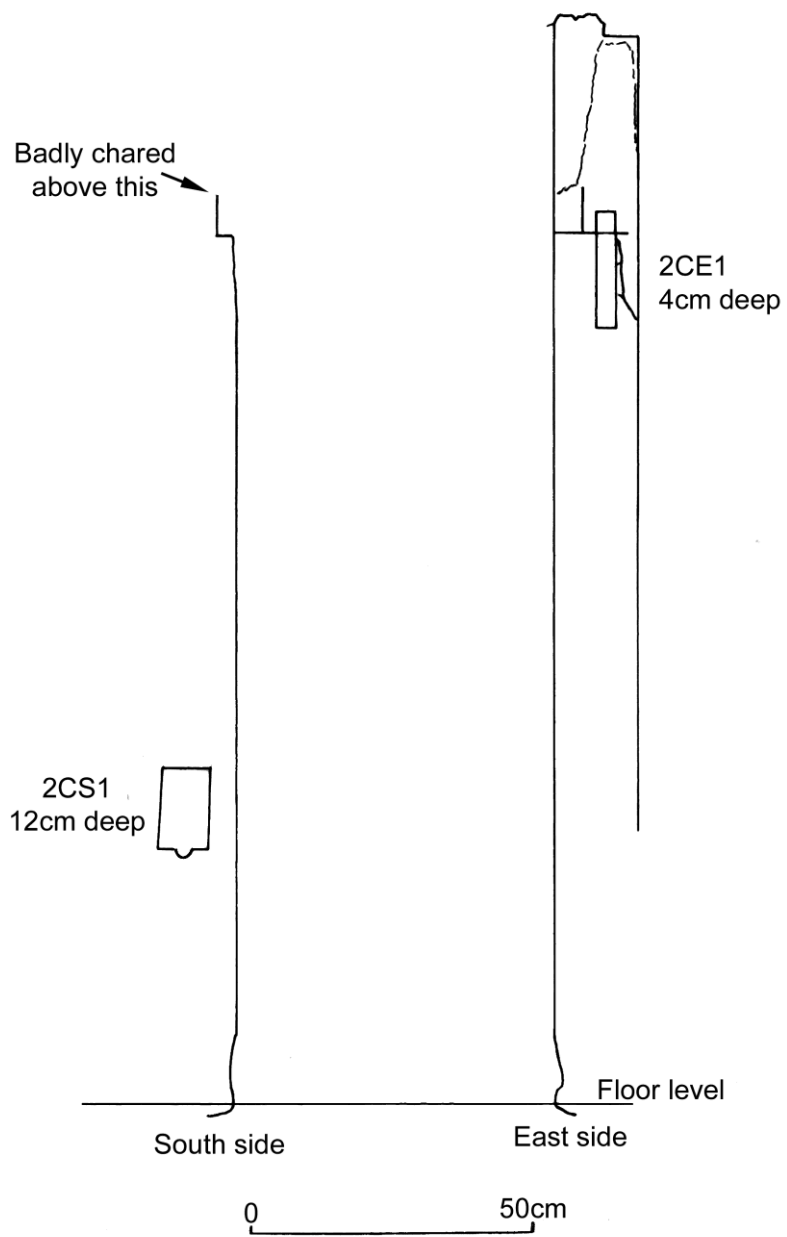


Figure 65. The exposed parts of the south and east sides of post 2C.

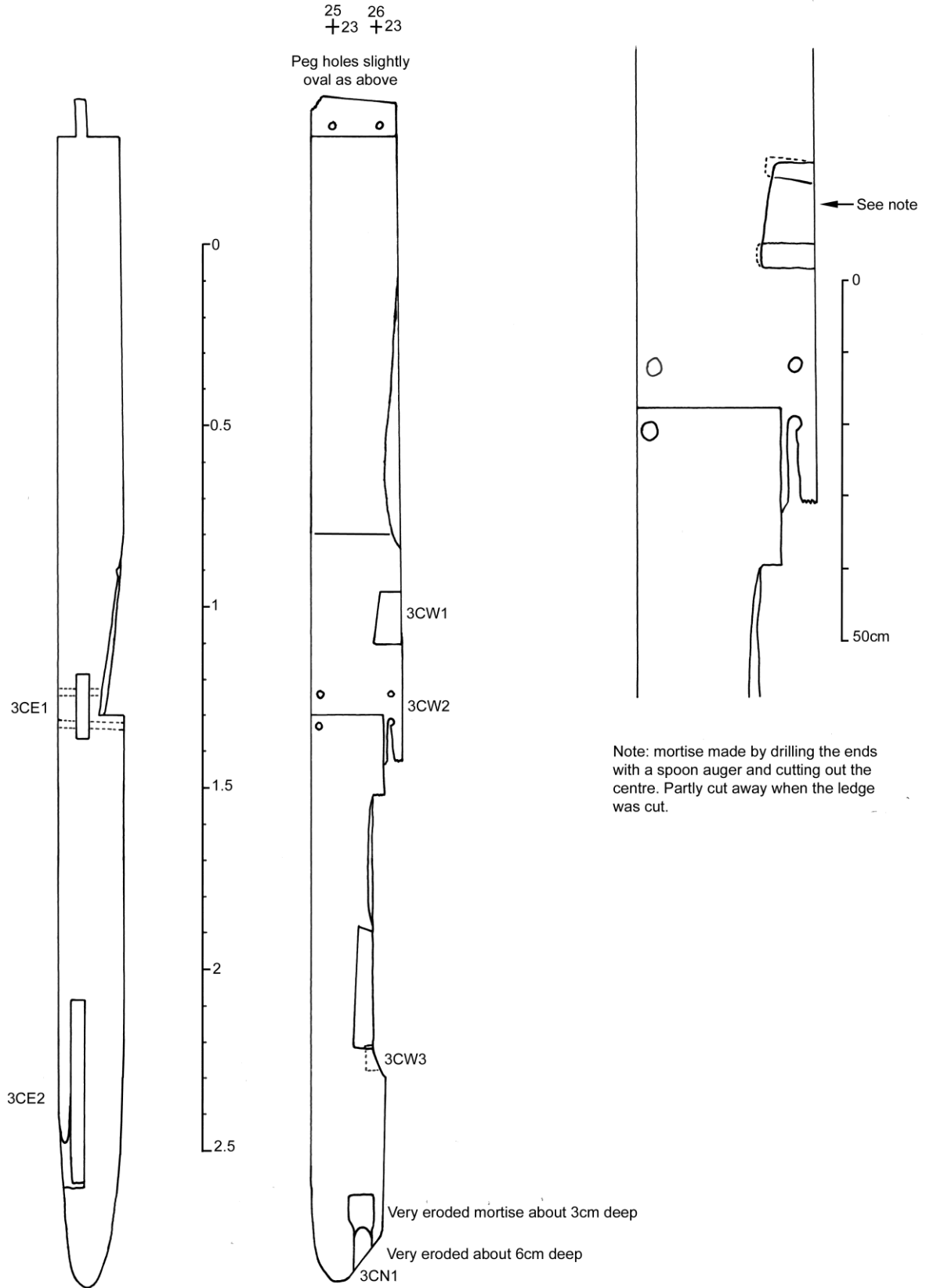


Figure 66. The east and north sides of post 3C drawn after the post had been removed during conversion. This figure is to be preferred to figure 67 which was drawn when access was restricted by brickwork.

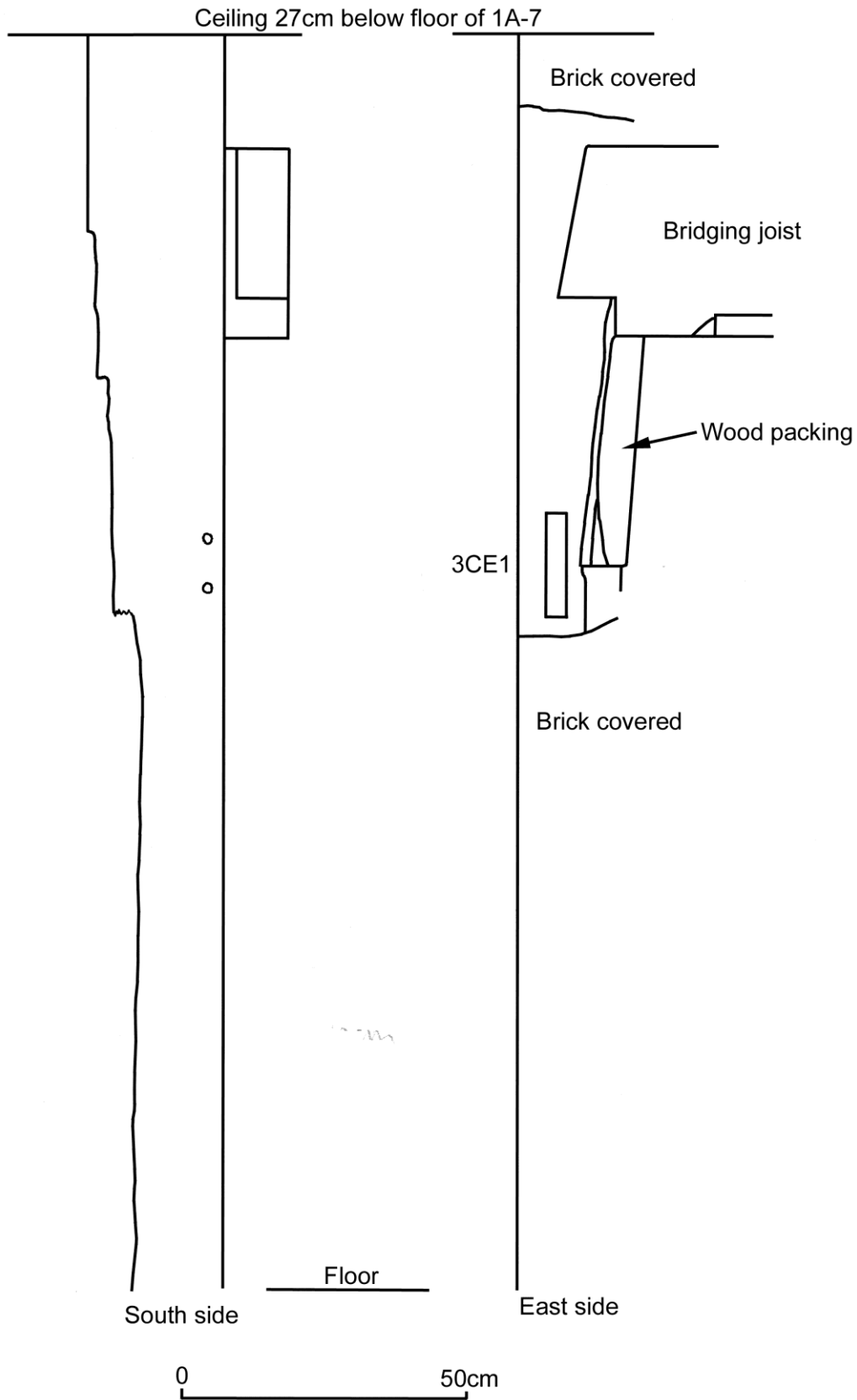


Figure 67. The junction of the bridging joist and post 3C. South and east sides of the post.

3.7.2 The surviving first floor

There were considerable differences between the first floors in the two bays.

The floor in bay 1 was supported by a large softwood bridging-joint which ran from post 1C southwards along the centre of the bay. At one time it must have connected to post 2C, but it had been cut to accommodate the existing staircase, and the south end rested on the wall along the south side of room 1-4. On the west side of the bay there is a secondary bridging-joint. The east end of this was supported by a metal bracket attached to the main bridging-joint, while the other end was built into the west wall. Common joists ran north and south from the secondary joint, and had neatly cut carpenter's marks numbered I to VIII from west to east. There were some older scored marks showing that the timbers had been reused. The joists were covered with floor boards of very mixed size. The older ones were about 25 to 27cm wide but there were many repairs with narrower boards.

The floor in the eastern side of the bay rested on nine north-south running joists which rested on the mid-wall rail at the north end, and the top of the wall between rooms 1-4 and 1-5 at the south. The joists were 12.7cm high and 5.2cm wide and were reinforced with metal struts. They were covered with thin boards of fairly uniform size (13 to 14.6cm wide by 1.5cm thick) and were obviously modern. The ceiling of room 1-4 had been lowered by breaking away the original lath and plaster, and then installing timber packing and a new ceiling (figure 70). The floor in room 1-9 was 7 to 8 cm lower than room 1-8.

The arrangement in the second bay was simpler. A large elm bridging-joint, about 0.34m wide by 0.35m deep, with waney edges on all four corners, ran along the centre of the bay between posts 2C and 3C. The joint at the south end, between the joint and post 3C was cut to fit around the east side of the post and was supported by a piece of wood wedged between it and the bottom of the earlier tenon (figure 67). The joint with post 2C at the other end of the beam had been destroyed by fire and only a slender bracket remained connecting the two. The bridging-joint supported east-west running joists on both sides. These were joined with diminished haunched tenons (figure 72). On the west side the joists had widths between 12 and 15cm and heights between 15 and 17.2cm. The outer ends of the western rafters rested on a piece of re-used timber, which sat on the brickwork of the west wall. The wall had bulged outwards, so that the joints did not quite reach it, and small pieces of wood had been nailed in to fill the gap in a very shoddy manner (figure 74). On the west side of room 1-11 the joists had been removed and replaced with a patchwork of timber (figure 71). It was not clear whether this had been done to accommodate the fireplace and chimney in room 1-6 or whether it was the site of a staircase. The explanations are not mutually exclusive.

On the east side of the building, the joists rested on a beam which ran between post 2E and the site of 3E (figure 73).

The floorboards in room 1-11 ranged up to 21.1cm. Those in 1-10 were between 16 and 17cm wide.



Figure 68. Ceiling of room 1-4 looking north showing the bridging joist below the wall between 1-8 and 1-9. Post 1C can be seen below the joist by the window. 1983.



Figure 69. The ceiling of room 1-4 looking east showing the bridging joist which runs below the wall dividing rooms 1-8 and 1-9 (running right to left across the photo) and the metal bracket which supports the subsidiary east-west running bridging joist for the floor of 1-8.

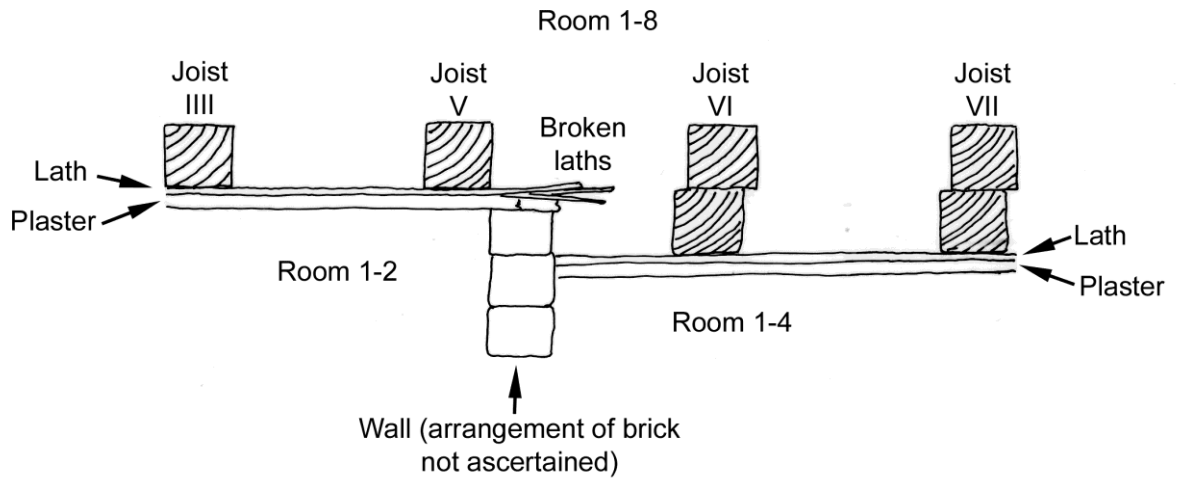


Figure 70. Sketch section of the ceilings of rooms 1-2 and 1-4 looking north. Not to scale.

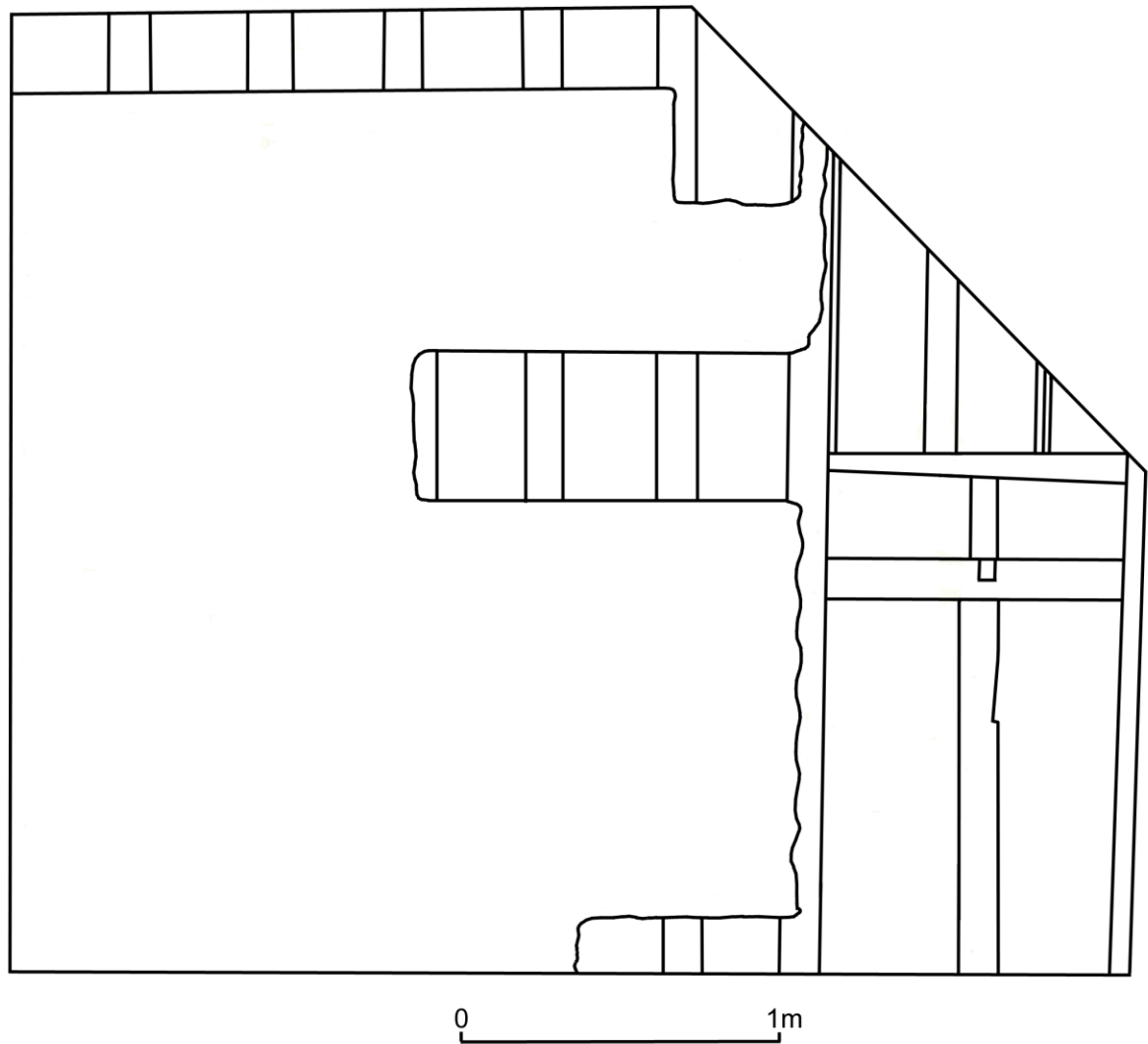


Figure 71. Room 1-6. Drawn from below but planned as if seen from above.

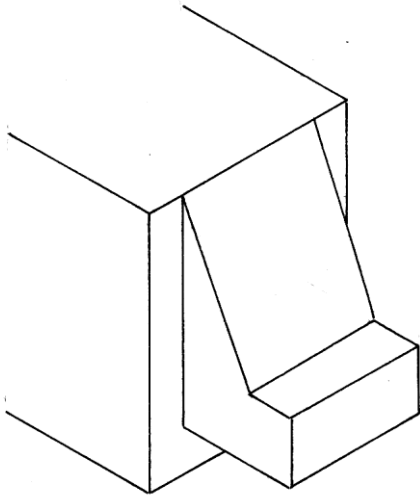


Figure 72. The tenon connecting the common joists to the bridging joist along the centre of bay 2. Not to scale.



Figure 73. Head of post 2E with the tie-beam of truss 2 to the left. The beam added to support the roof extension of room 1-5 can be seen at the top. The floor room 1-10 at the bottom. Looking northeast. March 1983.



Figure 74. The ceiling at the southwest corner of room 1-6 showing the bodged repairs to fill the gap between the joists and the west wall.

3.8 The internal walls

3.8.1 Trusses 1 and 2

The upper part of trusses 2 and 3 were filled with lath and daub. This was best preserved at the western end of truss two in room 1-11. The area between the tie-beam and the collar had been subdivided with vertical studs (figure 11). The one example that could be examined was nailed to the underside of the collar, rather than slotted into a hole. The space between them was filled with a grid of horizontal and vertical split laths which were not interlaced. These, in turn, supported brown daub which contained straw and some pebbles of 2-3cm size. The daub was covered with a layer of white plaster with hair. This was covered with fairly modern wallpaper. Battens were later laid over this to support modern lath and plaster. The area below the tie-beam was similar, except that the white finishing-plaster, and all the layers which covered it, did not extend below boards forming the first floor. The laths and brown daub continued downwards for a short distance but had then been destroyed and replaced by a later wall of brick on a light timber frame (figure 75). The lath and daub presumably once continued to the east end of truss two, but it had gone. Truss 3 had patches of similar lath and daub above the tie-beam close to post 3W, and on the east side of the crown-post. The latter had a white finishing-surface on the north side which had the chimney-stack built against it; so that the chimney-stack was clearly later.

3.8.2 The first floor walls

The wall between rooms 1-8 and 1-9 consisted of a light timber frame which supported horizontal split laths on the west side. These are covered with white plaster, which included hair, and was finished on both sides. Several layers of wall paper were added to the east side covering both the plaster and the frame. The wallpaper had then been painted. Several pieces of graffiti were written on this including the dates 'Aug. 17th 1915' and 'June 16th 1946'. This eastern side of the wall had subsequently had battens laid over it to support obviously modern sawn laths and plaster. The wall continued below the existing floor and rested on the main north-south bridging joist along the centre of the bay. The door between rooms 1-8 and 1-9 was clearly inserted into the frame perhaps when the plaster was added to the east side. The wall divided the dormer window which formerly existed in the north face of the roof.

The east wall of room 1-10 was of white plaster on split laths. It was finished on the west side but not the east.

The wall of the 'cubby hole' at the south end of room 1-11 consisted of vertical battens fixed to a plank at the top. Lath and plaster was laid along the north side of the battens. The plaster was finished on both sides.

The remaining walls, between rooms 1-8 and 1-9 and the stair case, and between rooms 1-10 and 1-11, consist of a sawn deal frame, with sawn laths covered with plaster which had a pink finishing-skim and was very obviously modern. The staircase appeared to have been inserted through the wall between rooms 1-8 and 1-9.

The ceilings in rooms 1-8, 1-9 and 1-11 consisted of white plaster with hair supported by split laths.

3.8.3 The ground floor walls

The woodwork surrounding the door between rooms 1-1 and 1-6 rested on the floorboards and the rest of the wall may also have done so. At the time of the survey the wall was still plastered but one small exposed area suggested that it was a single thickness of brick in a deal frame.

The wall which separated rooms 1-5 and 1-6 had a frame of vertical timber studs, which were nailed to the underside of the main bridging-joist. The space between them was filled with a single thickness of brick. This wall passed behind the fireplace in room 1-6 so it must have been older.

The south wall of room 1-6 (truss 3) was covered with plaster and wall paper apart from an area at the west end close to post 3W which was of breeze blocks and obviously modern. The wall rested on the ends of the floor joists of room 1A-2. The floor boards of room 1-6 ended under the skirting and did not extend under the wall.

The wall between rooms 1-2 and 1-3 was probably a single layer of brick although this was uncertain as both sides were covered with textured paint. The wall rested on the floorboards and divided the window in the outside west wall.

The wall dividing rooms 1-2 and 1-3 from room 1-4 was thick enough to be a double layer of brick. It rested on a wider foundation.

The wall between rooms 1-4 and 1-5 was a light softwood frame filled with brick. There was a course of blue slate along the top between the brickwork and the joist for the first floor.



Figure 75. The upper part of the north wall of room 1-1 showing the boundary between the wattle and daub above and the timber framed brick work below. The timber across the top was one of the floor joists for room 1-11. The wattle and daub continued upwards to form the north wall of 1-11 which was part of truss 2.

3.9 The ground floors

3.9.1 Bay 1: rooms 1-2 and 1-3

The west wall of rooms 1-2 and 1-3 on the west side of bay one rested on a heavy brick foundation. The existing floor boards rested on an offset at ground level and there was a second earlier floor beneath them. This was covered with red tiles about 254mm square and 38mm thick. This floor was not level as the north end had settled. At some point after the settlement had taken place several lines of brick were laid end to end across the tiles. A timber was laid along the top of these lines which supported north-south joists for the existing floor. There was a step up from the tiles to the door to room 1-1. This was of brick. It overlay the red tiles and was put in after the settlement had taken place. In the centre of the room – a fairly average position – the distance from the tiles to the top of the existing floor boards was 31cm.

3.9.2 Bay 1: room 1-4

The floor boards of room 1-4 were aligned east-west. They were 19mm thick and between 17.1 and 17.3cm wide. The boards were supported by north-south running joists of sawn soft wood 5.5 to 5.6cm wide and 9.7 to 9.9cm deep. They ended just short of the north wall. The joists rested on east-west running planks of sawn soft wood 5.2 by 10cm. These were laid flat and were supported by pillars of Fletton bricks. There were pieces of damp-proof felt on top of the brick and then cement packing between that and the timber. The floor below the pillars was covered with red tiles 20.4 by 10.2cm and 1.3cm thick. These were set on thin mortar about 1cm thick.

There were steps in the southeast corner of the room which ran down from a blocked door to the tiled floor. The distance from the tiles to the top of the floor was 0.61m. The existing floor was level with the floor of room 1-2.

3.9.3 Bay 2: room 1-1

The floor of room 1-1 was lower than the ground outside the building. The floor boards ran north-south and mostly had widths between 13.3 and 13.5cm although there was one wider one on the west side. The floor boards ended just short of the wall between rooms 1-1 and 1-2. This gap was presumably once covered by skirting. The floor was intact at the time of the survey and it is not known how it was supported.

3.9.4 Bay 2: room 1-5

Many of the floor boards were missing at the time of the survey. Those surviving in the main part of the room south of truss 2 had widths between 11 and 18.8cm (the median was 15.8cm). Most of the floorboards in the northern extension had gone (figure 77). The floor boards north-south and rested on two layers of joists. The upper ones were between 9 and 12cm wide and mostly 14 or 15cm high. The ends of these were halved over two lower joists which were supported by brick resting on earth. Some of the upper joists were directly supported with brick.

There was a break in nearly all the floor boards on the line of truss 2 and the main joist was also split at this point. The timberwork to the north of this was thinner.

There were the remains of bins, probably for animal food, against the west and east walls.

A small excavation (trench AF) was undertaken on the south side of room 1-5 on the line of the east wall of the original building. The floor had been covered with loose rubble [AF1] which rested on a layer of brown earth containing chalk, brick and orange clay [AF2]. The brick floor supports rested on this deposit. It was 2 or 3cm thick and covered a flint and mortar foundation which was in the correct position to have underpinned the ground sill of the building. The area to the west of this consisted of small and large broken chalk in sticky orange clay with some rounded pebbles [AF3]. There was some charcoal pressed into the surface and it may have been a floor. This rested on loose earth and crushed chalk and then a black deposit possibly 'humus and charcoal' [AF4].

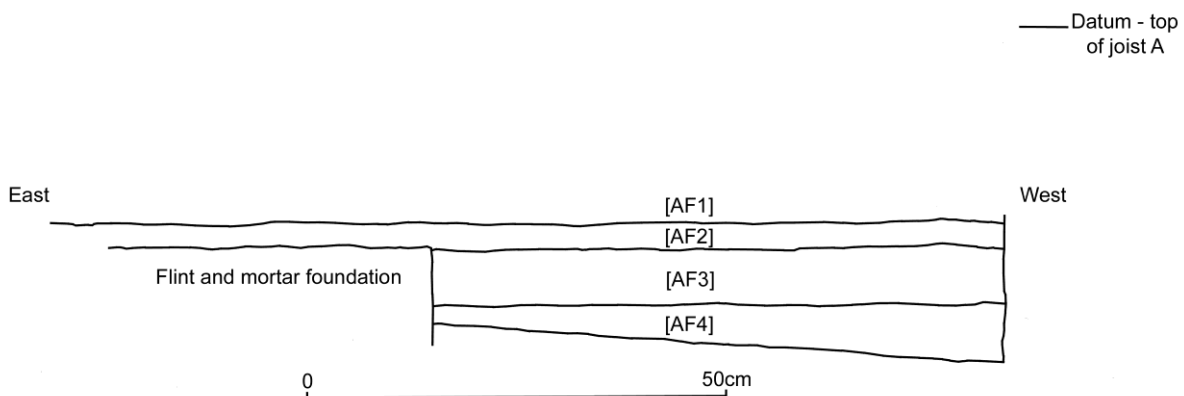


Figure 76. Trench AF by the oven on the south side of room 1-5.

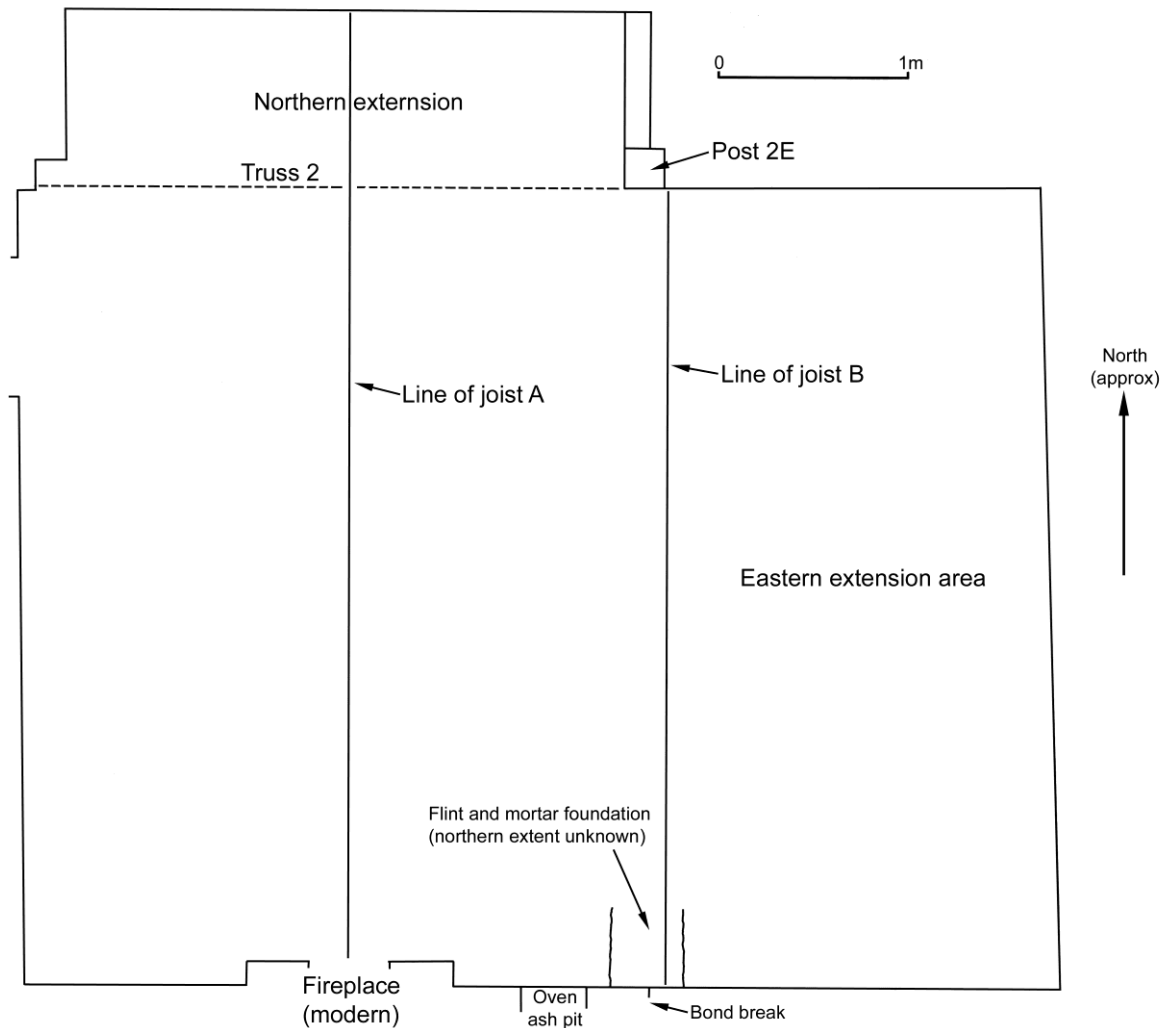


Figure 77. Features on the floor of room 1-5.

3.9.5 Bay 2: room 1-6

The floorboards in room 1-6 ran east-west and rested on north-south running joists. They were mostly between 13.3 and 13.5cm wide. There were seven joists with widths of 5.4 or 5.5cm and heights between 10.4 and 10.6cm. There may have been east-west running joists below the north-south ones but only one was visible where the floorboards were missing in the middle of the room.

3.10 Discussion of Cottage 1

The oldest parts of the structure appear to be the wall and centre-posts, the tie-beams and crown posts, the collar purlins and rafter couples 3 to 16. These formed part of a building about 6.75m wide, and 3m high to the tie-beams.

The original building was longer than the existing frame as the collar purlin and the wall-plate are scarfed for a southward running continuation, and there were mortises in the south side of the crown-post and post 3W. The carpenters' marks on the roof offer some clue to the former length. The rafters have been numbered and similar numbers appear on the collars. The numbers were not in order, did not form a complete sequence, and in three cases the correct parts were not

together. The most likely explanation is that the building has undergone a substantial reconstruction at some time, and that the rafters were re-erected in the order that they came off the ground. The highest surviving number is 43, and as there were ten rafter couples over bay two this would suggest a minimum length of 5 bays. The crown-posts suggest the building was longer. Number three is marked 12 on the south side and 13 on the north; number two has 16 on the north side but the south side had been destroyed by fire. A lack of order is again apparent; the number 16 suggests a minimum of nine bays in a building with hipped ends, or seven in one without. Bay one is 4.76m long, and bay two is 4.96m, not allowing for the thickness of the posts – 0.355m in the case of 3W. Nine bays at an average of 4.86m totals 43.74m, to which 3.55m needs to be added for the posts, making a possible length of 47.29m.

Crown-post roofs are generally thought to have gone out of use about 1550 so the building can be described as loosely late medieval. Greater precision is very difficult as the only evidence presently available is the style of carpentry. The scarfs at the end of the collar purlin and wall-plate are of little use in dating as the design was common from the end of the fourteenth to the end of the seventeenth century.⁸ The joints at the head of posts 2W, 2E and 3W are only slightly more helpful. The basic design is the normal late medieval arrangement, and the only unusual details are the entrant shoulders on the dovetail and the small angled upstand on the outer edges. The dovetails with entrant shoulders exist in the Wheat Barn at Cressing in Essex which is dated to about 1250.⁹ The scarfs and crown post on the Cottages are not consistent with such an early date and it seems more likely that entrant shoulders were used on a limited scale for a long period.

David and Barbara Martin have noticed that head-bracing, between the posts and the wall-plate, is relatively common in East Sussex houses for a short time in the first third of the sixteenth century although rare examples can be found in other periods.¹⁰ In *English Vernacular Houses*, Eric Mercer is more circumspect, saying that while head-bracing may be older, both designs were in use by the mid-fifteenth century, a view supported by a study of timber-framed buildings in Kent.¹¹ It therefore appears that precise dating of the timber frame is presently impossible, and that it could have been built at any time in the fifteenth, or the first half of the sixteenth, century.

The mid-wall rails are likely to be older than the earliest traceable floor as they are at various heights, and at least parts of the floor appear to have rested on them: an arrangement which is very unlikely if the floor and rails are of the same date. The tenons in the underside of the wall-plates, which seem to have held intermediate wall-posts, are probably of the same date as the rails, although they are only provably older than the brick infill on the inside of the west wall. It seems likely that both rails and posts were original. At the beginning of its life the building appears to have been a barn-like structure; as there is no evidence for a first floor or for a fireplace. The rails connecting the centre-posts and wall-posts suggest that the bays were partitioned one from another.

The slots in the underside of the wall-plate respect the intermediate wall posts and may also have been original. They could have held the upper end of staves to support a lath and daub wall. However, there was also no provision for staves to support the end of the laths next to the posts apart from one conventional stud-hole east of post 1W. The arrangement is unusual. Staves were

⁸ Hewett 1980 p. 267.

⁹ Hewett 1980 p. 273.

¹⁰ Martin 1982 p. 85.

¹¹ Mercer 1975 p. 116; Barnwell and Adams 1994 p. 76-7.

normally fitted into a hole at the top and a slot at the bottom.¹² It is possible that the slots served some other purpose.

The earliest traceable modifications to the Cottages are the insertion of the first floor and a major reassembly of the frame. The evidence for the floor comes from the wall-posts, while the evidence for a reconstruction comes from the roof; and there is nothing to relate the two episodes, so that it is impossible to say which came first or whether they were contemporary. The disordered state of the rafters, the odd numbering of the crown-posts and the lack of an original hip at the north end all suggest that at least the roof has been taken apart and reassembled, and it is possible that the whole building was dismantled and moved. This could have been part of a general reorganisation of the grounds around the house. Many large medieval houses had service courts around the entrance, the obvious location at Beddington being the present west lawn. If one existed there it would obstruct the view from the house, and may have been removed when the west lake was constructed at the beginning of the eighteenth century.

The earliest floor in the Cottages was replaced by the present one, which is at a slightly higher level, and the framing of the west wall was probably filled with brick at the same time. The dating of this episode is again problematical. The floor is best preserved in bay two, where the bridging-joint appears to be reused, as it is too large for its present location and is very poorly secured. The next traceable major episode is the insertion of the existing eastern chimney through the floor of bay two. At this time there may have been a staircase and lobby entrance on the western side of the chimney, and there was probably an extension on the east side of the building, as the earliest of the two ovens, which may have been the same date as the chimney or a little later, was built into a wall which projected eastwards beyond the timber frame. The dating of the chimney is also difficult as the only evidence is the bricks of the chimneystack and the Reigate stone opening to the first oven which may be eighteenth century. The brick cladding on the outside of the west wall could be the same date as the chimney or could be later as there is nothing to relate the two. There were extensive alterations to the interior walls in the late nineteenth or early twentieth century, and the lower part of the north wall was also rebuilt after 1872. The existing dormers are also of a late date.

4 THE OTHER COTTAGES

The remaining cottages appeared to be relatively recent and were only subjected to a brief examination. Cottage 2A (figure 78) had been demolished before the survey started while number 2 was destroyed by fire in or shortly before August 1982. The upper storey of 2B had also been demolished.

4.1.1 Cottage 1A

This had a large brick built extension on the east side. The second oven had opened into this extension (section 3.6.2). There was a chimney-stack on the east side of room 1A-2 which served a fireplace there and in room 1A-7 above. It was built against the south side of truss 3 of cottage 1. It covered the lath and daub infill on the upper part of truss 3. The daub had a white finishing surface suggesting that the stack was later. The stack was corbelled out slightly to the west. The brickwork was almost entirely plaster covered, but the overall impression suggested a date no earlier than the nineteenth century.

The south side of the tie-beam 3 of cottage 1 had been mortised to support an attic floor in 1A (figure 80). The roof looked fairly recent.

¹² Harris 1978 p. 20-21.

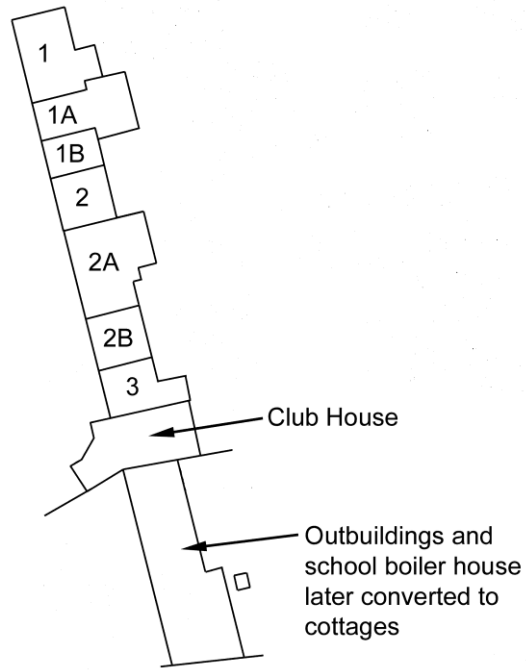


Figure 78. Block plan showing the cottage numbers.



Figure 79. The extension to the rear of cottage 1A with cottage 1 to the right.



Figure 80. The west end of the south side of truss 3 in room 1A-7. Note the lath and daub and the mortises for floor joists at attic level.

4.1.2 Cottage 1B

This had brick walls. The roof was supported by three large reused tie-beams which were tapered so that the centre was thicker than the ends. The centre tie-beam was 6.68m long, 0.21m wide and was 0.37m high in the centre tapering to 0.18m at the ends. There was a mortise in the centre to hold a crown-post or king-post. It was 155mm by 35mm and at least 85mm deep. There was a hole for one peg. The tie-beam at the north end was very similar except that it was only 350mm high in the centre. The tie-beam at the southern end had a similar shape but had been sawn in half vertically along its length. The surviving section was 105mm wide and 0.29m high in the centre. The mortise for the central post had been cut through and was 165mm long and 100mm deep.

The tie-beams supported queen-posts which were of softwood and clearly later. They were

about 75mm wide and 230mm deep. The purlins at the head of the queen-posts were also of soft wood. The east one was 145 by 85mm and the west 135 by 58mm. All the rafters looked old and had a weather-beaten appearance. The halvings where the purlins passed the principle rafters were much larger than they needed to be (figure 81). One was 200mm long at the base rising to 215mm at the surface and 60mm deep. The others were similar. Each principle rafter had a dovetail joint in it about 0.65m from the halving for the purlin.¹³ In four cases this joint was above the purlin and two below.

The whole structure was clearly reused timber and, in its then existing form, was probably no earlier than the nineteenth century.



Figure 81. Roof of 1B looking NE. 29 August 1982.

¹³ Measured nearest edge to nearest edge.



Figure 82. Roof of 1B. NW corner on the left. 29 August 1982.



Figure 83. The centre of north truss in cottage 1B. Seen from above showing the mortise for a crown post or king post. Scale 8cm. 30 August 1982.



Figure 84. The west side of the north truss of 1B showing junction of queen post with principle rafter. 29 August 1982.

4.1.3 The rest of the range

Cottage 2 was destroyed by fire in or just before August 1982 when only a few photographs had been taken (figures 85, 86 and 87).

Cottage 2A had been demolished before the investigation started. The upper part of 2B had also gone.

The surviving parts of the southern end of the range appeared to be of brick probably of nineteenth or twentieth century date with no obvious sign of earlier work. The southern end of cottage 3 had been turned into changing rooms and a recent flat-roofed brick extension had been added to the west side.

At the time of the survey the extreme southern end of the range was in the grounds of Carew Manor School. In the nineteenth century it had housed a boiler and steam engine to pump water from a bore hole to supply the Orphanage which then occupied Carew Manor. It was later adapted to house the school boilers and a shed. The buildings were later sold and converted into cottages.



Figure 85. The south end wall of number 2 looking north on 1 March 1981 before the fire.



Figure 86. Cottage 2 shortly after being destroyed by fire. August 1982. Cottage 1B to the left.



Figure 87. Cottage 2 shortly after being destroyed by fire. August 1982.



Figure 88. Looking south across the site of 2A to the lower part of 2B. The modern extension to the west side of the changing rooms can be seen background right. Yellow filter. 1 March 1981.

5 CONTRACTOR'S TRENCHES

5.1 The ground beneath the cottages

Several small contractor's trenches were examined during the conversion work.

5.1.1 The foundations of Cottage Number 2

A section across the foundations of the western wall of Cottage number 2 was examined on 22 September 1986 (figure 89). Some of the black sticky layer (bottom right in figure 89) was excavated to a depth of about 25cm below the chalk without finding the bottom. The upper part of the layer contained many sub-angular flints in black sticky clay-like soil. The flints seemed to be less common at the bottom of the layer although this was only seen in a small area at the bottom of a rough irregular hole. There were no finds but the volume of material examined was small. The deposit was probably natural and was similar to [AH2] except that the back material there was soily and not sticky and clayey.

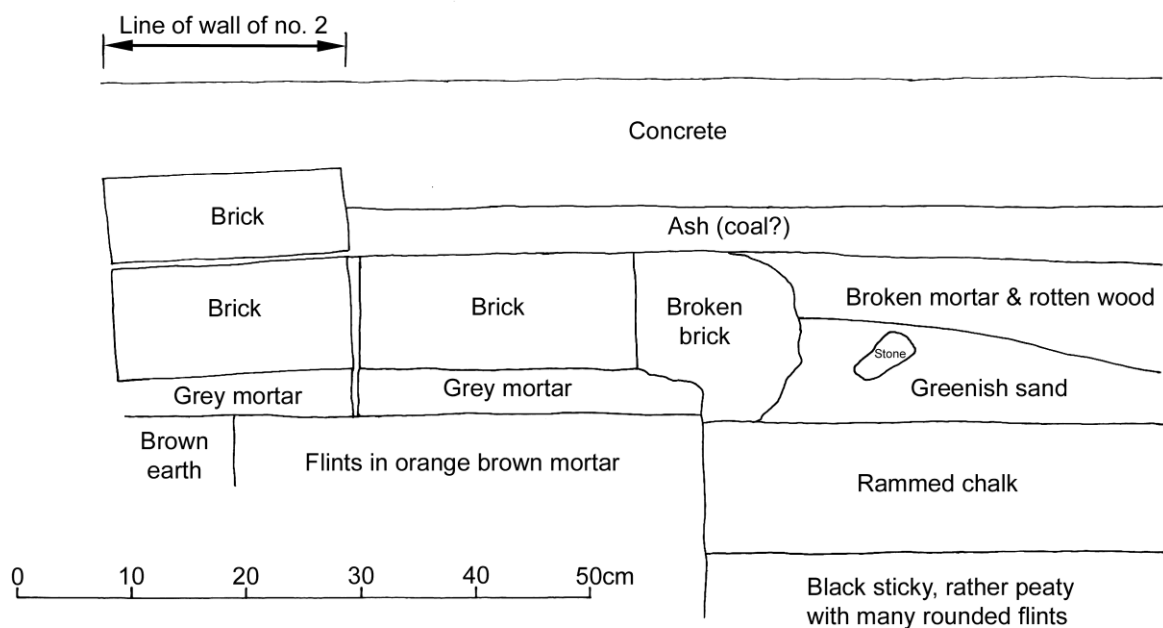


Figure 89. Section through the foundations of the west wall of cottage 2 looking north.

5.1.2 Trench BA

A water main-trench was dug from the end of Church Road near East Lodge, along the south side of the road to the cottages, to meet the boundary fence of the cottages opposite number 2A. Only the last 2m adjoining the Cottages were observed on 22 September 1986. The north side of the trench was examined close to the fence:

Layer		Depth of base
[BA1]	Tarmac	0.05m
[BA2]	Flinty brown soil	0.24m
[BA3]	Brown soil with less flint	0.35m
[BA4]	Rammed chalk	0.45m
[BA5]	Soil, chalk and tile	0.7m
[BA6]	Greenish silty sand	0.82m

[BA7] Chalk mostly small but some large pieces. Small amount of 1.06m grey clay. A piece of roof tile. Bottom of trench in the layer

The upper part of this section differed along the exposed length but layer [BA4] and the deposits below it existed along the whole of the exposed section (2m). A brick, which may once have been the base of a wall, was noted in the north section resting on the surface of layer [BA4]. It was 1.73m west of the fence around the Cottages. The south side of the trench had been disturbed by the insertion of a modern-looking sewage pipe.

5.1.3 Trench BE

A water pipe trench was dug on the site of the western part of the Club House (room C1) which had been demolished. The position is shown in figures 90 and 91. It was examined on 30 September 1986. It was not possible to clean the section but the following layers were noted:

Layer		Depth of base
[BE1]	Concrete	0.22m
[BE2]	Brown soil with much gravel	0.61m
[BE3]	Black soil with much tile and flint	0.84m
[BE4]	Flints in black, sticky, clay like matrix - no finds in a small sample which was dug out. Very similar to [BF5]	1.06m (bottom)

The lowest layer is very similar to the material below cottage number 2 (section 5.1.1).

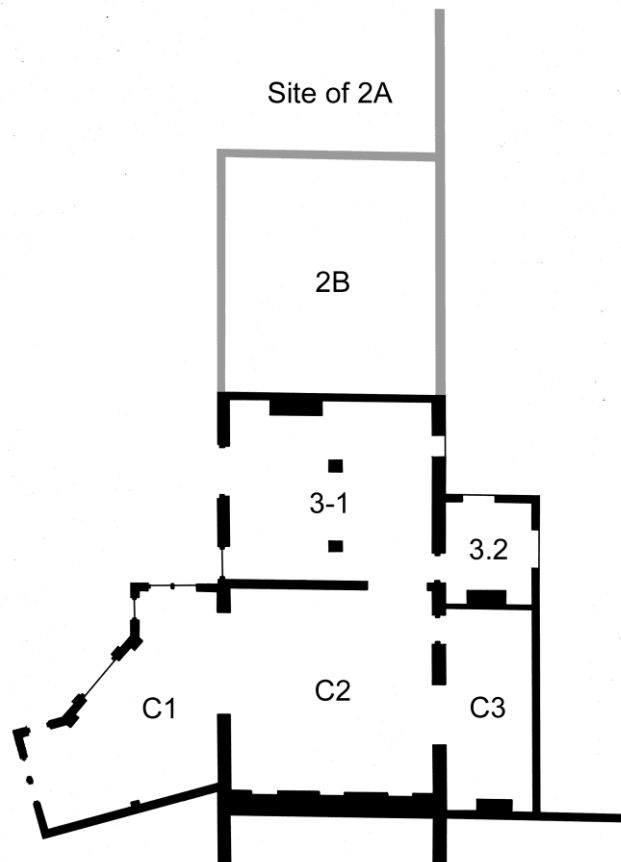


Figure 90. The southern end of the range based on a plan by John West.

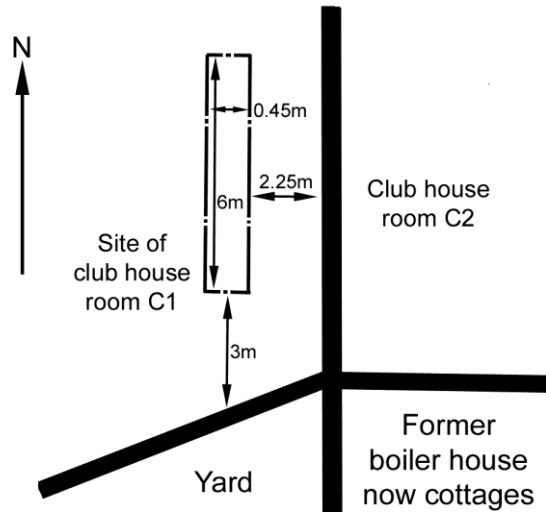


Figure 91. The location of trench BE. The thick black lines were walls. Not to scale.

5.1.4 Trench BF

This was located in room 3-1 in the position shown in figure 92. It was examined on 6 October 1986 when the following layers were noted (the section was not cleaned):

Layer		Depth of base
[BF1]	Concrete floor	0.13m
[BF2]	Rubble - more mortar at the top and darker below.	0.45m
[BF3]	Rammed Chalk	0.54m
[BF4]	Gravel in sticky black matrix	0.93m
[BF5]	Dark black - clay like - rich in humus - contained some small pieces of very rotten wood.	1.18m
[BF6]	Brown clay with some small flints.	1.25m
[BF7]	Gravel of mixed size.	1.33m (bottom)

The top of the concrete floor was about 1.01m below the window sill and the sill was 0.84m above external ground level on the west side of the cottages. Therefore the floor was 0.17m below ground level.

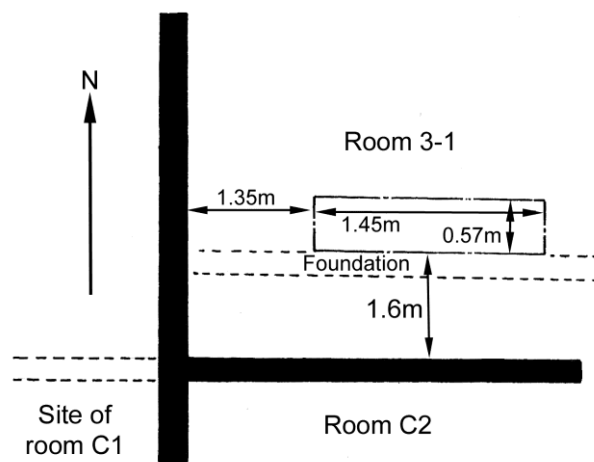


Figure 92. The location of trench BF. The thick black lines are walls.

5.1.5 Trench BH

This trench was located in the door between room C2 and the former room C1 in the Club House. It was 3.15m long and ran north to south along the line of the western wall of the main range. It was examined on 15 October 1986. The trench was not cleaned and the sides were very messy but the following layers were noted:

Layer		Depth of base
[BH1]	Rubble earth and chalk - this was almost certainly several layers but was not closely examined.	0.79m
[BH2]	Chalky layer. This was well marked in the southern end of the trench and was in several places thicker than in the measured section. However, it did not appear to be present in the northern end of the trench although the section was again very messy.	0.85m
[BH3]	Black layer with gravel which looked very similar to [BF4]	1.13m
[BH4]	Black layer with less gravel than [BH3]. Not so gravel free as [BF5] but the distinction between this layer and [BH3] is still clear.	1.31m
[BH5]	Gravel to bottom of trench	1.35m

There was no clay layer between [BH4] and [BH5]. The trench was a little smelly probably from the bottom layers.

5.1.6 Trench BI

This was the foundation trench for the eastern wall of the building filling the gap in the range, on the sites of numbers 2, 2A and 2B. The trench was examined on 8 December 1986 from the southern wall of number 1B, southwards for 14.4m beyond which the bottom was filled with concrete. Sections of the east and west sides of the trench were examined about 6.8m south of 1B.

On the west side:

Layer		Depth of base
[BI1]	Brown earth with flint chalk and brick	0.25m
[BI2]	Crushed chalk with some flint	0.37m
[BI3]	Black peaty layer with some flint	0.46m
[BI4]	Crushed chalk of mixed sized with some lumps several cm across.	0.55m
[BI5]	Black peaty with some flint	0.75m
[BI6]	Gravel of mixed size to bottom of trench	0.89m

Layers [BI1] and [BI2] were dirty and were not cleaned properly. They may have varied along the length of the trench. Layers [BI3] to [BI6] were present except where the trench was cut by a modern cable, though their depth and thickness varied.

On the east side:

Layer		Depth of base
[BI7]	Brown soil with chalk, flint and tile. There was a large amount of tile at the base of the layer.	0.42m
[BI8]	Flint in earth with a few pieces of tile	0.62m
[BI9]	Dark brown with flint. It is lighter than [BI3] and [BI5]	0.77m

opposite and looks much less peaty.
 [BI10] Gravel of mixed size to the bottom of the trench 0.92m

This section was not cleaned but the measured part appeared to be representative of the side of the trench except where a cable crossed and where there were some other feature intruded which was not examined. Both cable and feature were to the south of the measured sections.

Layers [BI3], [BI4] and [BI5] were examined closely for artefacts but nothing was found. A piece of green-glazed Kingston ware (c1250-1400) was found on the surface on the west side of the trench and had probably come from it.

5.1.7 Trench BJ

This was dug to underpin the western wall of the first and second bays of cottage number 1. It was examined on several occasions.

12 January 1987. The section examined lay within cottage 1, and ran along the wall from post 2W to the northwest corner. The east side of the trench was 0.83m from the wall near post 2W.¹⁴

At the south end of the trench by post 2W there were the following layers:

Layer	Depth of base
[BJ6] Rubbly soil with an L9 clay pipe bowl which was firmly embedded near the bottom of the layer. It was under the west wall or just within the house.	0.23m
[BJ7] Rammed chalk with some flint	0.31m
[BJ8] Black peaty layer with much flint to the bottom of the trench	0.52m

On the west side of the trench near the south end there were the following layers:

Layer	Depth of base
[BJ1] Tiles laid on the floor of room 1-2.	0.04m
[BJ2] Chalky layer	0.09m
[BJ3] Orange brown soil with rubble	0.14m
[BJ4] Rammed chalk with some flint	0.24m
[BJ5] Peaty black layer with flints to the bottom of the trench.	0.42m

A column of chalk 8-9cm wide extended into layer [BJ5] 1.35m north of the north face of post 2W. The feature extended to the bottom of the trench. At this point the side of the trench was 0.65m from the west wall.¹⁵ There was a piece of tile firmly embedded in [BJ5] near the top of layer immediately south of the column.

Further north (2m from the north wall) there were the following layers:

Layer	Depth of base
[BJ9] Tile floor of room 1-2 or 1-3	0.04m
[BJ8] Light sandy with some chalk	0.14m
[BJ9] Black peat with flint to the bottom of the later.	0.38m

The floor appeared to be drop slightly northwards while layer 4 rose in the same direction until it was pinched out.

20 January 1987. The trench had been extended southwards so that the southern end was 1.08m

¹⁴ Measurements taken from the brick wall not the projecting concrete footings.

¹⁵ Measurements taken from the brick wall not the projecting concrete footings.

from the southern (brick) edge of the door into room 1-1. The following layers were present in the south end of the trench:

Layer		Depth of base
[BJ9]	Concrete floor	0.05m
[BJ10]	Crushed brick and mortar A piece of stoneware with part of a coat of arms on the exterior probably from a Rheinisch wine bottle of about 1580-1610.	0.16m
[BJ11]	Crushed chalk	0.28m
[BJ12]	Black peat. There were some pieces of chalk in the top of the layer and flints and pieces of chalk scattered through it. Two pieces of tile and two flint flakes. To the trench bottom.	0.51m

The top of [BJ11] was 0.07m below the top of the concrete underpin which was 2.46m below the notch in the south face of post 2W. The top of the underpin was 0.47m below external ground level at the door.

This part of the trench was observed again on the 26 January when it was deeper. The peat extended down to 0.78m where it passed behind wooden shoring. The shoring ended about 1.25m down where the trench was in clean gravel which appeared to be fairly mixed in size though the workmen said that it was mostly large cobbles. The bottom was at about 1.5m. There was a strong inflow of clean-looking water.

9 February 1987. A brick drain, which was exposed in the east side of the trench was examined without cleaning. It ran approximately east-west. The northern interior side of the drain was 37cm south of the south side of the door into room 1-1 (measured to the brick side of the door opening not the wood work). The section cut through the drain was 76cm from the inner face of the west wall of the cottage (figure 93).

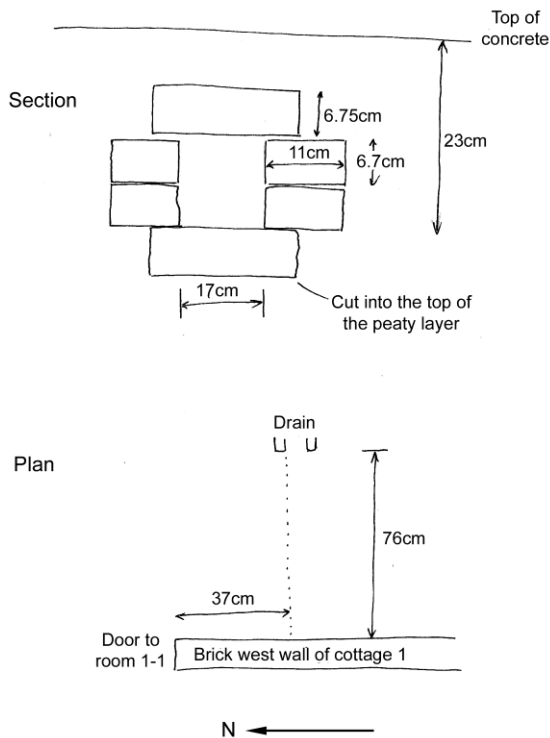


Figure 93 Sketch section and location plan of a drain found beneath cottage 1. Not to scale.

5.2 The site of the new build to the east of the cottages

At the end of January 1986 the developers dug three trenches on the land to the east of the cottages to allow their structural engineers to examine the subsoil. They were examined for archaeological purposes on 4 February 1986. The trenches have been designated AG, AH and AI (figure 94).

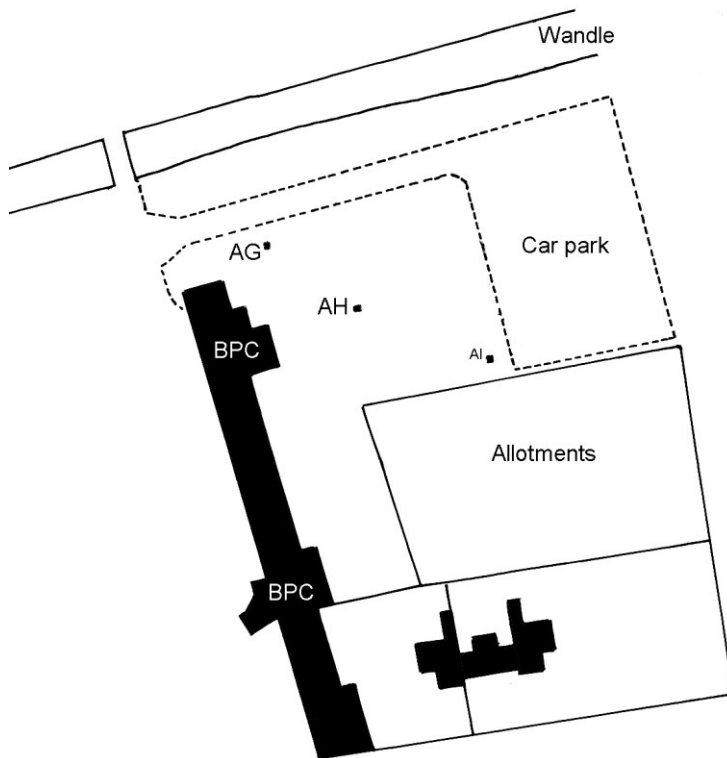


Figure 94. The location of trenches AG, AH and AI.

5.2.1 Trench AG

This was of slightly irregular shape, about 1.16m north to south and 1.04 to 1.16m east to west. The northern edge was 3.02m south of the road to the car park, and the eastern edge was 34.09m west of the car park. The main part was 1.04m deep but a smaller subsidiary cut had been dug in the floor so that the total depth was 1.34m. The north face is shown in figure 95. Eight layers were identified:

- [AG1] Dark brown soil which was pebbly, particularly towards the top. Fragments of tile.
- [AG2] Gravel of mixed size with some soil and also patches of yellow clay.
- [AG3] Soil with gravel possibly part of [AG2].
- [AG4] Soil with large lumps of yellow mortar.
- [AG5] Gravel.
- [AG6] Soil with brick, tile, flints and a few lumps of mortar.
- [AG7] White mortar with brick and tile in it. This layer formed the bottom of the main part of the trench
- [AG8] Gravelly brown soil with much broken tile. This layer could only be seen in the subsidiary cut. The top of the layer was 1.18m below ground level and it extended down to at least 1.34m, but the bottom was not seen.

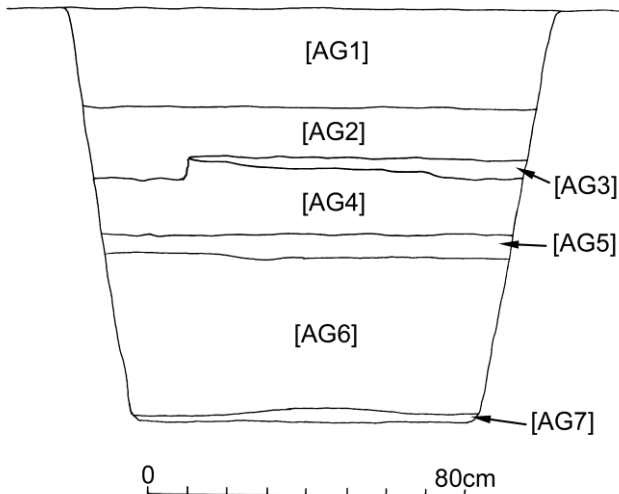


Figure 95. The north side of the main part of trench AG.

5.2.2 Trench AH

This measured about 1.15m north to south by 1.09m east to west and was about 0.98m deep. Three layers were exposed. The depth are approximate:

Layer		Depth of base
[AH1]	Dark soil with flints.	0.25m
[AH2]	Black soil but with more flints than AH (1) - a few scraps of tile.	0.25 to 0.7m
[AH3]	Gravel of mixed size. Some cobbles with a maximum dimension of 9-11cm but with smaller material down to sand size. Dark soil among the gravel.	0.98m

5.2.3 Trench AI

This hole was L shaped. The west side is shown in figure 96 where the following layers are shown:

[AI1]	Dark soil.
[AI2]	Gravel of mixed size.
[AI3]	Gravel.
[AI4]	Crushed chalk - some brick in it.
[AI5]	Brown earth.
[AI6]	Brown earth with some flints and brick.

There was a brown stoneware pipe at the bottom of the trench aligned roughly east-west which must have been of nineteenth- or twentieth-century date. The northern half of the section was very difficult to see, due to the narrowness of this part of the trench. Some uncertainty must therefore be attached to the details shown, particularly with regard to the boundary between layers [AI3] and [AI6].

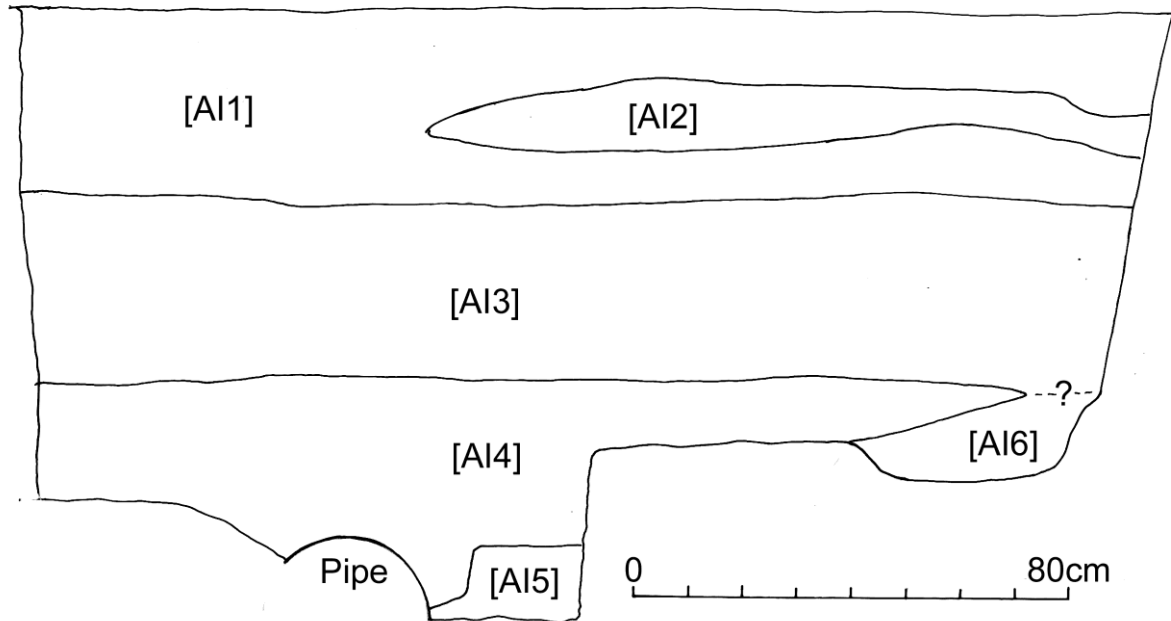


Figure 96. The west side of trench AI.

5.2.4 Trench BB

This was a foundation trench which started at the northwest corner of the wall around the allotments and ran eastwards parallel to the north wall of the allotments. At the west end the south side of the trench was 0.66m from the wall and the north side 1.8m from it.

A section was examined on 22 September 1986 on the south side of the trench close to the northwest corner of the allotments:

Layer		Depth of base
[BB1]	Gravel	0.2m
[BB2]	Chalk	0.25m
[BB3]	Soil merging into gravel	0.4m
[BB4]	Sub-angular gravel in black soil	0.75m
[BB5]	Lighter sub-angular gravel	1.05m
[BB6]	The bottom of the trench was orange clayey gravel	

The North Side was different from the south. The following layers existed close to the northwest corner of the allotments:

Layer		Depth of base
[BB7]	Gravel with brick, tile etc.	0.69m
[BB8]	White layer mostly of broken chalk with some pieces of pottery.	0.9m
[BB9]	Sub angular gravel of mixed size. To trench bottom/	About 1m

In the bottom of the trench orange brown gravel [BB6] was visible. The white layer [BB8] thickened eastwards and came much closer to the surface. There was a yellow stock brick close to the surface in the north side of the trench 1.5m east of the northwest corner of the

allotments. This may possibly be the remains of a northward running wall. A line of similar bricks were noted in a shallow trench a few meters further north.

5.2.5 The foundations of the northern range of new-build

When examined on 29 September 1986 the eastern and central parts of these foundations were filled with concrete, the top of which was 0.4m to 0.5m below existing ground level. About 0.1m of earth appears to have been removed when the site was levelled. From the edge of the car park westwards for at least 25.6m there was thin soil over gravel with no sign of water courses or other large features. The foundations of the western part of the northern new build, close to the cottages, had been dug into deeper soil although patches of gravel could be seen in some parts of the sections. At the northwest corner of the foundation trench, which was about 5m south of the road edge and 7.3m east of the line of the east wall of the cottages, there was a layer of demolition debris in the section. The layer extended south for 1.5m in the western side of the trench, and east for 1m in the northern side. The trench was about 1m wide and the layer was not visible on the inner (southern and eastern) sides. The top of the layer was 0.25m below ground level and may have been about 0.6m below the surface prior to levelling.

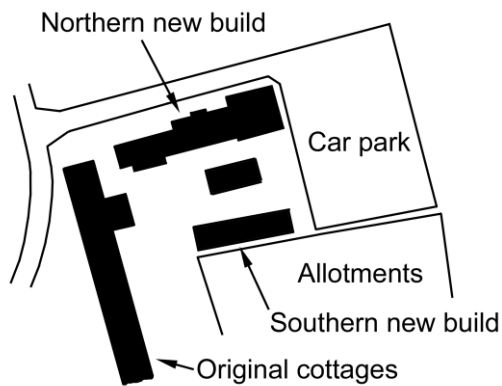


Figure 97. The new build to the east of the original cottages.

5.2.6 Trench BC

This water-pipe trench started just north of the northwest corner of the southern block of new-build and ran east parallel to, and a short distance from the block. It ended near the centre of the block. It was about 8.5m north of the allotment wall. It was examined on 29 September 1986. There was a thin layer of soil with gravel below.

5.2.7 Trench BD

A trench was dug on the south side of the sewer man-hole in the road to the car park. It was about 26.7m west of the western edge of the car park. It was about 2.3m deep and the visible section extended 1.5m south of the edge of the road. It was examined on 30 September 1986. Both of the Croydon to Hooley gas main pipes were exposed beneath the southern edge of the road.¹⁶ The upper part of the deposits, which must be the fill of the gas pipe trench, consisted of brown soily gravel with pieces of tile and brick. The layer was not examined closely to see if it could be subdivided. About 2m down the trench entered clean sub-angular gravel of mixed size from which enough water flowed to keep a small portable pump busy.

¹⁶ This is a pair of high-pressure gas mains laid across Beddington Park in 1968. They run immediately north of the Cottages. See Thornhill 1970.

5.2.8 Trench BG

This trench ran along the southern edge of the road to the car park. It was examined on 15 October 1986 without cleaning. On the south side the trench, about 1.4m from the road, the following layers were noted at a typical section roughly half way along the length:

Layer		Depth of base
[BG1]	Stony soil	0.12m
[BG2]	Soilly gravel	0.41m
[BG3]	Gravel of mixed size to bottom of trench	0.98m

The eastern end of the northern side of the trench was similar. The western end was of gravel but lacked the layering and was probably the fill of the Croydon to Hooley gas main trench.

6 DOCUMENTARY HISTORY

An inventory of Carew Manor taken in November 1562 lists five outbuildings, an armoury, a slaughter house, a pack house, a brew house and a stable.¹⁷ The armoury, brew house, slaughter house, stable and also a 'new' stable are mentioned in the sections of household accounts which survive from the second half of the sixteenth century.¹⁸ They also mention a Forge, milk house, wash house, coal house, wood house, hawk mew, joiners house and several barns. It is likely that the timber frame in cottage 1 was part of one of these structures but which is unclear.

The Cottages are not shown on Roque's mid-eighteenth century map of Surrey but the scale is too small for this to be of much significance. They do appear on the enclosure and tithe award maps of 1820 and 1840.

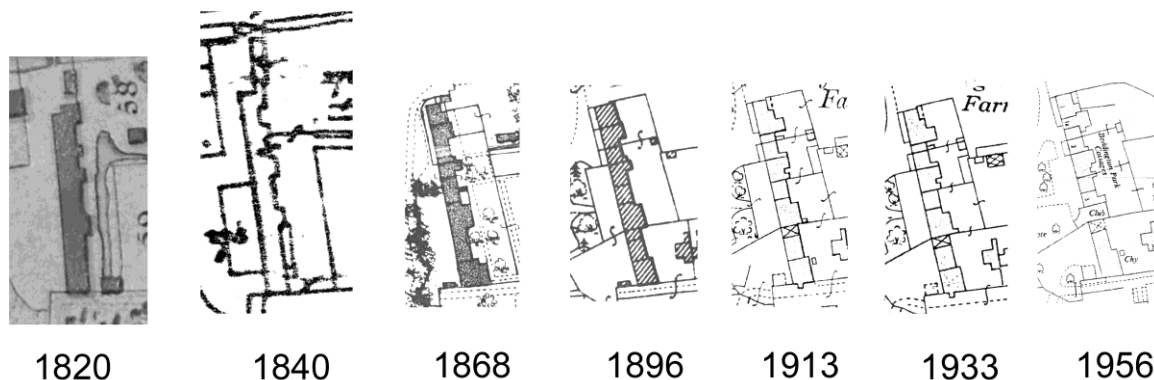


Figure 98. The cottages from the enclosure award map of 1820, the tithe map of 1840 and the 25 inch Ordnance Survey maps to 1956.

The Carew estate were sold in 1859 following the bankruptcy of Charles Hallowell Hallowell Carew. The property was split into lots and the outbuildings were sold with the main house. They were described as

... the Offices, which include a long brick and tile built range of Stabling, Coach-houses,

¹⁷ BL Add MS 29605 f19v.

¹⁸ For example armoury Surrey History Centre 281/4/23 p. 18, brew house 281/4/23 p. 18; Slaughter house 281/4/23 p. 21, 281/2/24 p. 12; stable 281/4/9, 281/4/23 p. 19; new stable 281/4/23 p. 7.

and Three neat Cottages for Servants adjacent; Timber Yard at back, in which is a Carpenter's Shop and Deal Shed; also a Farm Yard with Barn, Cow Sheds, Granaries, Dog Kennels and Dove Cote.¹⁹

The house and outbuildings were eventually acquired by the Lambeth Female Orphanage Asylum.

In May 1874 the Orphanage House Committee

... considered the repairs necessary to be done to the Cottages and Stabling.

M^r Dawson had given an estimate and Specification of the following works to be done:-

1. The Second Gardener's Cottage – Works specified to be done to the Roofs, Front Bed Room, Back Bed Room, Staircase, Passage, Front Room, Back Room, Washhouse, & external painting for £35.[0].10.

The Committee decided the above works to be done – and that in addition the paling at the back to be pulled down and the closet removed.

2. Works specified to be done at The Head Gardener's Cottage for £7.10.0 and,

3. Works at The Engineer's Cottage for £2 – both of which the Committee directed to be done.

4. Works specified to be done to The Roofs over buildings from the Engineer's Cottage to the Engine House (except the second Gardener's Cottage) for the sum of £93. This Committee directed should be again considered...

The Committee recommended that the old shed at the north corner of the range of cottage buildings should be removed & that the copper should be reset in the brick shed near the river.

The Committee directed that the old paling round the stable yard be cleared and that the roof of shed near the river at the north west corner should be repaired.²⁰

The work on the roof was subsequently approved.²¹

In September 1875 the Orphanage received a letter from Canon Bridges, who owned Beddington Park, offering to buy the Cottages and 8½ acres of land around them. This offer was eventually accepted and the Cottages and land were sold in 1876. The southern end of the range was retained as it housed the steam engine used to pump water for the Orphanage. Three new Cottages – now called Carew Manor Cottages – were built on the southern end of the former kitchen garden. The displaced orphanage staff moved into these in June 1877.²²

Bridges presumably used the Cottages for his staff. He died in 1891. The census taken in that year shows that the three cottages were occupied by Alfred Smith, stockman; George Pleridge (?) the sexton and Thomas Smith, farm carter, and their families.

By 1897 the three cottages were occupied by N Cole, Thomas Smith and Joseph Gardner.²³

From about 1898 part of the cottages and a large area of the adjacent park were let to a Benjamin Thirlby who used them as a dairy farm. Cole was listed in the 1898 Piles Directory but after that Thirlby was the only occupier until 1921. In that year a B Fudge and C Wells are

¹⁹ Carew Sale catalogue, 1859. Photocopy in Sutton Local Studies Collection.

²⁰ Sutton Archives D 2/2/1 p. 127.

²¹ Sutton Archives D 2/2/1 p. 132.

²² Sutton Archives D 2/2/1 p. 195, 200-1, 208, 227, 244, 257. 293 and 300.

²³ Piles directory 1897 under Croydon Road.

listed in addition to Thirlby. In 1923-4 only Fudge was listed. The following year there were again three occupants: R Darlington, H Moyce and FH Butler. The three were listed until 1931. After that the H Moyce, IT Mayhew and J Percy.²⁴

In 1919 the heirs of Canon Bridges sold the park. The farm included the Cottages and some buildings on the north side of the river. These were described as a cowshed for forty-three cows, chaff house, cooling shed with loft over, implement shed, three loose boxes and blacksmiths shop with loft over, cart and wagon lodges also a range of brick and tiled buildings forming the farm residence. Of the cottages described as the 'farm residence' one contained five bedrooms, bathroom, two sitting rooms, office, kitchen, scullery, three stall stable with harness room, the second was of five rooms and the third, of six rooms. There were also two loose boxes, a harness room, coach-house and two other three-stall stables.²⁵

The cottages and the northern part of the park were acquired by Sir Alexander Kaye Muir of Drummond Castle in Scotland. Beddington and Wallington Council had bought part of the park in the 1920s and they dithered about whether they should buy the rest. Muir seems to have tired of their dilatoriness and, in 1926, he sold the cottages and his part of the park to a property developer by the name of Seale. This pushed the Council into action and they bought the property from Seale in December 1926.²⁶ The extended park was opened on 26 March 1927.²⁷

When the Council acquired the park Henry Moyce was still using the cottages as a farm and grazing sheep in the park.²⁸ He remained as a tenant and a lease was agreed in September 1930.²⁹

In February 1938 the Council's surveyor suggested that they consider rehousing the occupant of cottage 3 in view of its condition and the cost of repairing it. The Parks Committee agreed but were unable to rehouse the tenant.³⁰ In 1941 the tenant was asking for repairs, the modernisation of the scullery and the building of an extra bedroom. This was refused and efforts were again made to rehouse the tenant. The sanitary inspector looked at the cottage and reported and in September 1942 but the Public Health Committee decided to take no action.³¹

In 1938 the Parks Committee decided to convert the 'northern section only of stable and cart shed' into changing accommodation. The Chief Sanitary Inspector was asked to look at the building.³² At this point the cottage disappears from minutes and it seems likely that the tenant was rehoused and the building may have fallen into disuse.

Mr Moyce died sometime before 7 March 1944 when his single daughter asked to take over his tenancy. The house had 10 rooms and her request was refused. The house was divided into two homes – 1 and 1A – which were let to members of park staff.³³

²⁴ Piles directories 1897, 1898, 1899, 1919, 1921, 1922-3, 1923-4, 1924-5, 1926, 1927, 1929, 1931, 1932, 1935 and 1937 after which the directory was not issued.

²⁵ Shew 2012 p. 238. The sales particulars are said to be in Croydon Local Studies Collection but enquiries for them have been unsuccessful.

²⁶ Council minutes 1926-7 p. 327-8, 372 and 418.

²⁷ Council minutes 1926-7 p. 610.

²⁸ Council minutes 1927-8 p. 266-8 and 426-7.

²⁹ Council minutes 1930-31 p. 250.

³⁰ Council minutes 1937-8 p. 243; 1938-9 p. 112, 603.

³¹ Council minutes 1940-1 p. 316-7; 1941-2 p. 262, 656, 670-1.

³² Council minutes 1937-8 p. 630-1 and 721-2.

³³ Council minutes 1943-4 p. 272, 1945-6 p. 432, 540, 723.

In 1950 the tenant of cottage number 2 was given notice and the following year improvements were made.³⁴

In 1951 the chimney-stacks of 1 and 1A were found to be dangerous and rebuilding was put in hand.³⁵

In 1954 the condition of cottage 2 was back on the agenda. Repairs were needed at an estimated cost of £170 and the Borough Treasurer said that £2,941 7s 4d had been spent on the buildings in the past six years. The committee inspected the buildings.³⁶

In October 1955 the Surveyor reported on work necessary to render cottage number 1 habitable during winter and added that the roof timbers were suspect. The Committee felt that it would be unwise to incur much expenditure on building as its use for residential purposes was very limited. The Committee recommended minor repairs to the roof.³⁷ The tenant of number 1 moved out in 1957.³⁸

In February 1964 reported on a plan for the comprehensive redevelopment of the Cottages and the area around them. The site of the cottages were to be used for 12 new flats and 17 garages. The committee gave general approval and asked for the ideas to be worked up in detail.³⁹ Beddington and Wallington Council was then merged into the London Borough of Sutton as a part of a general reorganisation of London government. The redevelopment scheme seems to have been abandoned.

In 1976 part of the Cottages used by Beddington and Wallington Allotment and Gardener's Association were demolished for safety reasons and it was thought that the buildings used by the Wallington Ladies Hockey Club might need to be demolished in the near future. The buildings were not listed but they were in a conservation area so the Greater London Council and the Secretary of State for the Environment were asked for permission to demolish them.⁴⁰ There was some opposition to this from the Council's own planning committee. This was ineffective but demolition was blocked by the Greater London Council. This and local objections led to a public enquiry.⁴¹ The Council employed John West and Partners to make a report on the condition of the buildings.⁴² The enquiry report dated 31 March 1978 recommended against demolition and the application was refused.⁴³ The Council then decided to sell the buildings and leave restoration to a private developer.⁴⁴ Consultation and further wrangling followed and in 1984 the Cottages were sold to Samuel Properties plc. The sale and restoration were slow which allowed the Carew Manor Group time to make a fairly thorough survey. The subsequent redevelopment was visually sympathetic to the setting of the buildings but it involved the destruction of much of the historic timber frame in number 1.

³⁴ Council minutes 1950-1 no 529, 642, 753, 852.

³⁵ Council minutes 1950-1 no 1099.

³⁶ Council minutes 1953-4 no. 1061; 1954-5 no 387.

³⁷ Council minutes 1955-6 no. 371

³⁸ Council minutes 1957-8 no. 270

³⁹ Council minutes 1963-4 no. 596.

⁴⁰ Council minutes 1976 no. 1377.

⁴¹ Council minutes 1977 nos. 764, 1400, 1701.

⁴² John S West & partners, Chartered Architects and Town Planners, 15 New Row, St Martin's Lane. London, WC. *Beddington Park Cottages: a report on the condition of the buildings for the London Borough of Sutton*. Dated 10 January 1978. Copy in Sutton Local Studies Collection.

⁴³ Inspectors report dated 31 March 1978 and decision letter on behalf of the Secretary of State dated 8 August 1978. Copies in Sutton Local Studies Collection.

⁴⁴ Council minutes 1982 no, 1312.

One of the Borough's few remaining late medieval or early Tudor building was effectively lost.

7 OVERALL DISCUSSION

The timber frame of Cottage number 1 has already been discussed in section 3.10 so it remains to consider the wider context of the buildings.

In 1968 the Croydon-Hooley gas main was laid across Beddington Park. It passed immediately north of the cottages and then turned south west towards Croydon Road. The construction trench was recorded by Lillian Thornhill under difficult conditions. She noted that:

the trench to the north of the Tudor outhouses near the bridge showed much disturbance, foundations of demolished buildings and a deposit of peat 65ft long and 18in thick which could have been left by an ancient duck pond, but which yielded no evidence of human occupation.⁴⁵

It seems likely that this peat was the same as the black deposits in the contractor's trenches around the Cottages. It was not present in most of the foundation trenches for the new-build to the east of the old cottages and according to Thornhill extended only a short distance west. It seems likely that this is the fill of a north-south aligned paleo-channel of uncertain date.

The main part of the timber frame clearly dates from the fifteenth or early sixteenth-century. It is likely to have been one of the outbuildings mentioned in the surviving sixteenth century documents but which is uncertain.

It is also doubtful whether the Tudor building was on the present site. The jumbled roof rafters suggest that it had been taken apart and moved. The contractor's trenches did not produce much evidence for the date of construction on the site as there were no stratified finds from beneath the walls. It was not clear whether the chalk foundation seen in room 1-5 could be equated with the layers of rammed chalk seen the trenches dug to underpin the west wall of the Cottages and footings could have been robbed out before the trench was examined. The chalk foundation seen exposed in room 1-5 was not closely datable and could have been in the eighteenth century as easily as the sixteenth. If the building was moved the obvious context would be the re-modelling of the house and garden carried out for Nicholas Carew, 1st baronet, owner 1707-1727. He is known to have created a west lake in the park on the axis of the house. Any buildings in an outer court the west of the house would obstruct this vista and would have been removed.

The original function of the building is unclear. There was clearly a complex history of alteration. By 1859 a considerable part of the range was used as three cottages, a coach house and stables – the latter probably at the southern end. The orphanage installed a steam engine in the southern end of the range to pump water from a bore hole. This part of the building remained with the Orphanage when they sold the rest of the range. It subsequently housed the school boilers. After they were removed it was used as a shed and was then sold and converted into houses.

The main part of the range, sold to Canon Bridges in 1876, seems to have remained as three cottages and some outbuildings down to the Council's ownership. One of the cottages – almost certainly number 1 at the north end, became the farmhouse for Thirlby's diary farm.

The Council appear to have made many improvements to try to keep the cottages in line with rising housing standards. It is likely that many of the internal walls were their work. Despite this

⁴⁵ Thornhill 1970 p. 89.

the Cottages gradually became inadequate for housing and were allowed to deteriorate to the point where the retention of much of the historic fabric would have been difficult and expensive. The subsequent conversion destroyed almost all the historic structure.

8 APPENDICES

8.1 Cottage 1 data

8.1.1 The surviving lengths of the posts

1W	3.10m
1C	2.925m
1E	3.07m
2W	3.106m
2C	Burnt
2E	2.83m (complete to ground sill)
3W	3.19m
3C	2.84m

8.1.2 Mortises in the posts

The mortises have been identified by the post number (e.g. 1W), the side of the post (N, S, E or W) and then numbered from top to bottom. In some cases the sides of the posts were not accessible so not recorded. All sizes are in cm.

Mortise	Height	Width	Depth	Figure	Note
1WS1	44.5	3.5-4	10	26, 62	
1WS2	20	3.5		26, 62	
2CE1	17	3.5	4	65	
2CS1	14.5	8.5-9	12	13, 65	
2EN1	29 (max)	4	10.5	64	
2EN2	20	4	11	64	
2ES1	15 (max)	11 (max)	2.5-3	13, 17	Irregular
2ES2	20.5	3.5	8	13, 17	
2ES3	16.5	3.5-4	8.5	13, 17	
2EW1	39	3.5	9.5-10	16	
2EW2	20.8	3.5	10	16	
2WN1	24	3	16	62	
2WN2	10-12	6		62	
2WN3	9	5		62	
2WS1	22	4	11	13, 62	
2WS2	8.75	3	2.5	13, 62	
2WS3	6	3	3.5-4	13, 62	
2WS4	12	4.5	20	13, 62	
3CE1	18	3.5		66, 67	
3CE2	51	3.5		66	
3CN1		5		66	
3CW1	15		8	66	
3CW2				66	
3CW3	7		5?	66	
3WN1	21	3.5	11	62	
3WN2	12.5	4	5	62	

Mortise	Height	Width	Depth	Figure	Note
3WN3	15.5	4	5	62	
3WS1	58	6	11 (max)	14, 63	

8.1.3 Evidence for braces between the posts, wall-plates and tie-beams

Post 1E to the tie-beam. There was a mortise for a brace in the underside of the tie-beam.

Post 1E to the wall-plate. Single peg hole in the face of the wall-plate. Other relevant areas hidden.

Post 1C to the tie-beam (east side). No evidence on the north side of the tie or post.

Post 1C to the tie-beam (west side). No evidence on the north side of the tie or post.

Post 1W to the tie-beam. Peg holes on both post and tie on the north side.

Post 1W to the wall-plate. Mortise in the post and also on the underside of the wall-plate. One peg hole in the side of the wall-plate.

Post 2E to the tie-beam. Part of brace survives.

Post 2E to the wall-plate (north side). Post had mortise for brace.

Post 2E to the wall-plate (south side). No mortise in the underside of the wall-plate or in the post.

Post 2C to the tie-beam (east side). No evidence on the surviving parts of the post.

Post 2C to the tie-beam (west side). Relevant areas not visible.

Post 2W to the tie-beam. Brace survived.

Post 2W to the wall-plate (north side). No mortise on the post of the underside of the wall-plate.

Post 2W to the wall-plate (south side). No mortise in the post or (as far as can be seen) the underside of the wall-plate.

Post 3W to the tie-beam. The brace survived.

Post 3W to the wall-plate (north side). No mortise in the post. Peg hole in the wall-plate about 20cm further from the post than 1W. No joint could be seen but most of the wall-plate had rotted and been replaced.

Post 3W to the wall-plate (south side). Mortise in the post (3WS1) but unlike the others. Possibly for a door head.

Post 3C to the tie-beam (west side). Relevant areas not recorded.

Post 3C to the tie (east side). No mortise in post.

Post 3W to the wall-plate (north side). The post had gone but there was a tenon for a brace in the adjacent wall-plate.

8.2 The finds

8.2.1 Finds from trench AG

Layer [AG3] or [AG4]

F51 Transfer print. Chinese style blue and white decoration on one side some blue on the other. This was found embedded in the east face of the trench but the relationship to the layers on the north side was clear. 5g.

Layer [AG6]

F50 Post Medieval redware. Shiny brown glaze on exterior and interior the latter being darker. Two shallow horizontal depressions round the exterior. Found in layer [AG6], lying directly on top of layer [AG7]. 18th century.

AG unstratified finds:

F52 Part of base and foot ring from a large tin-glazed platter. Top decorated with wavy medium blue lines and one patch of darker blue and also three thin pale lines of manganese. Underside has uneven white and manganese glaze. 64g.

F53 Border ware wall sherd. Dark green glaze on interior. Patches of yellow glaze on exterior. 19g.

F58 Porcelain - rim sherd of small bowl or cup. 1.5mm thick - blue and white decoration on the exterior - two blue lines around the rim on the interior, the upper line being darker than the lower one. 1g.

F59 Sherd of a bulbous stoneware flagon - grey body - dark brown dimpled exterior - clear throwing-marks on the interior. 17th cent. 28g.

F57 Pottery sherd - white body - white glazed interior - blue glazed exterior fading towards white at one corner. 4g. Modern.

F60 Transfer print rim sherd. Blue and white Chinese-style decoration on the exterior. Very similar to F51. 8g.

F56 <1> Pipe bowl close to L10. Bowl and beginning of stem. Bore 7/64. Rouletted. No marks. 1640-1660.

F54 Clay pipe stem. 45mm long 9mm dia. Bore 6/64in. 5g.

F55 Glass wine bottle - 2 pieces, 6mm thick and 3mm thick - both heavily patinated. 29g.

F61 Glass "medicine" bottle base - about 4cm dia. 1-1.5mm thick. 4g.

F62 Glass bottle - half of the rim with wide flange. - clear glass with greenish tinge - little patination. 6g.

8.2.2 The finds from trench BI

BI unstratified

- Kingston ware, Bubbly green glaze on exterior. 12g.

8.2.3 Finds from trench BJ

Layer [BJ6]

<1> Pipe bowl. L9 1640-1670. No marks. Rouletted. Bore 7/64.

Layer [BJ10]

- Stone wine bottle with part of coat of arms. Grey body. Mottled brown exterior with pale wash on interior. 18g.

Layer [BJ12]

- Flint flake probably from knapping. 3g.
- Flint flake. 1.5g.
- Peg tile. 3 pieces of which 2 join. 57g.

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