

## Gibbshaven Farm

### Structure

The house is constructed as two separate structures with an infill between them. The first is a single bay aligned roughly east-west with a double hipped roof. The bay is 17ft 3ins (5.3m) wide and 14ft (4.3m) long. The second is of two bays roughly aligned north-south with a queen strut collar and clasped purlin roof. Each bay is 12ft 3ins (3.8m) long and 16ft 3ins (5m) wide. Both structures are upon ashlar (smooth cut) foundation blocks, similar blocks are also found supporting the north and south corners of the single bay structure.

### Single bay structure

Frame 1 (at the east end) is weatherboarded above the transverse [crosswise] beam and below the beam has been infilled and no timber framing is visible. The wall posts are visible within the ground floor but not below the mid rail height. The wall posts are 10ins x 9ins (25cm x 22.5cm) with deep splayed jowls [the enlarged head of a main post that allows the tie-beam [the horizontal timber transversely connecting the tops of pairs of principal posts or vertical timbers]. The transverse beam is jointed into the wall posts just above the mid rail height. The tie-beam is 10ins x 9ins (25cm x 22.5cm) and cambered [slightly arched] with large curved up-braces [diagonal timbers that strengthen the frame] jointed into the wall posts about halfway between the transverse beam and the wall plate [lateral timbers that run the length of the building at eaves height]. The wall plate and tie-beam joints are of normal construction. The wall is infilled with daub between the transverse beam and the tie-beam. The top of the tie-beam has three peg holes indicating the original presence of a crown post [a vertical timber rising from the centre of a tie-beam and supporting the collar purlin above] and supporting braces. A mullion window had been inserted above the tie-beam after the crown post had been removed which indicates that the first floor room was open to the collar [horizontal timber jointing a pair of rafter] or ridge height at that time with a gabled roof. The wall plates project through the frame and weatherboarding, the northern one showing a stave mortice [hole for a vertical light weight piece of split timber] for the next panel. At the base of the weatherboarding on the west wall post the mortice is visible for the continuation of the mid rail to the east at a level higher than the mid rail to the west of the post.

### Bay 1 (frame 1-2)

This bay is floored with a heavy axial girder [a timber that runs the full length of the building at first floor level] and joists that are 7½ins x 3ins (18.75cm x 7.5cm) laying flat. The joist separations vary but average only 10ins (25cm). There are no chamfers [surfaces formed by cutting off the angle of the corner of a piece of timber] visible on the joists or axial girder however the axial girder shows that a partition ran along its underside length. The east end of the axial girder has been truncated and two later pairs of joists have been inserted. The ceiling height is very low and although the floor level has been dropped, it is possible to estimate the original underside of the joists to offer approximately 5ft 6ins (1.65m) clearance. Both the north and south walls have been partially infilled with dressed stone blocks at the base and solid walls up to the mid rail. The south wall has one visible peg hole for a wall strut below the mid rail. The upper wall section contains a large curved up-brace to the wall plate as well as a horizontal rail. The north wall has two peg holes visible for struts above the mid rail and no other timbers are visible. The roof above this bay is constructed with oak rafters pegged at the apex with no ridge board. The ceiling is made of rough timbers mostly from the edge of the tree and therefore having two straight faces and a curved sapwood face.

Frame 2 (west end) is of similar scantling [dimensions of timber] and construction to frame 1 but has a straight tie-beam. Again the wall posts are not visible below the mid rail height. The transverse beam is fully exposed and has mortices along the underside for three wall struts with infilled panels as there are round ended mortices for the staves. Above the transverse beam the wall is infilled although a doorway has been cut through the partition at the southern end, removing the curved brace at this point; the brace mortices are still visible. There are no peg holes in the tie-beam for a crown post; the use of the straight tie-beam also indicates that this frame could have been the end frame for a hipped roof with the hip rafters on top of the tie-beam. The west face of the frame shows little sign of weathering and must have been exposed for only a short period.

## Outshot west of frame 2

To the west of frame 2 there is an outshot [single storey, roofed building portioned from the main structure] 5ft 10ins (1.8m) wide, the full width of the frame. Its roof continues from the frame 2 tie-beam down to a height of approximately 6ft 4ins (1.9m). The outshot is constructed from much lighter timbers than bay 1 with wall posts 8ins (20cm) square with splayed jowls. The outshot is floored with axial joists 5ins (12.5cm) wide and 3½ins (8.75cm) high. There was a square mullion window in the north end of the west wall and another still remains in the south wall on the first floor. There appears to have been a doorway at the south end of the west wall of the outshot as the mid rail in this wall terminates at a pegged wall strut with no peg or mortice for the rail to continue.

## Two bay structure

Frame 4 (the north end wall) is weatherboarded above the transverse beam height. The wall posts are visible down to the sill beam and are 9ins x 9ins (22.5cm x 22.5cm) with splayed jowls, less deep than those of frames 1 and 2. The external face of the wall posts have visible mortices from a previous use although they are the only reused timbers that are visible in this structure, the west post also has a scaffold mark but correctly orientated for its current use. The transverse beam is morticed into the wall posts at the mid rail height with the lower edge cut into the wall post. The tie-beam is straight with no visible wind bracing. The wall plate and tie-beam joints are of normal construction. The wall is infilled with large panels below the tie-beam. In the centre, below the mid rail there is a large central post, there is also a visible peg for a wall strut below the mid rail. Between the transverse beam and the tie-beam there are three wall studs and a horizontal rail mounted only 2ins (5cm) below the tie-beam. The roof is queen struts (struts rising vertically from the tie-beam to the collar) supporting a wide collar with clasped through purlins. The inside face of the tie-beam has a large scar for an axial girder showing that the adjacent bay had been floored at tie-beam level.

## Bay 2 (frames 4-5)

This bay is floored with a 13ins x 10ins (32.5cm x 25cm) chamfered axial girder with 4ins x 4ins (10cm x 10cm) joists. As discussed in relation to frame 4, there has been a floor at tie-beam level although this no longer remains. The west wall of this bay has later (unpegged) wall struts below the mid rail, however above the mid rail the symmetric large panels seen in frame 4 are visible with the horizontal rail just below the tie-beam. The timbers are numbered on the external face with deep cut Roman numerals. There was a long mullion window in the top centre of the west wall. The east wall shows signs of weathering and continues the symmetric large panelling although it has been disrupted by the insertion of doorways. There is an unusual staggering of the wall struts at the south end of the first floor east wall where the numbered and pegged struts above and below the high horizontal rail are not aligned. The sill beam along the east wall has a continuous groove for infill staves sealing off this wall at ground floor level. The joists are heavy at 5½ins x 4ins (13.75cm x 10cm) with a 24ins (60cm) separation; windbraces are present in the roof but have not been recorded on the drawings. There was no sooting of the roof timbers above the collar. The roof is Horsham slab on the west face and tile on the east side although an early photograph shows that Horsham slabs had existed on the east side of the roof and therefore this was probably the original roofing material.

## Frame 5 (the central dividing frame)

The wall posts are 11ins (27.5cm) wide and 9ins (22.5cm) deep with splayed jowls. The transverse beam is very slightly cambered, whilst the tie-beam remains straight. The outside face of the west wall post has a central scaffold mark. The fireplace bressemer [beam across the hearth of a fireplace] has been inserted below the transverse beam and a doorway has been cut into the south face of this frame against the east wall post. One hinge and the cut away for the latch are still visible, however this is not an original door location as the west door post is not pegged into the frame. There is no evidence that the sill beam [the horizontal timber at the bottom of a wall] extended across the base of the wall posts and thus it is likely that the wall was not infilled beneath the transverse beam. The infill between the transverse beam and the tie-beam is irregular although it still consists of large panels. Above the tie-beam the frame is infilled completely to the apex.

## Bay 3 (frames 5-6)

This bay now contains the chimney which is positioned towards the west side of the bay. The original chimney has two flues one serving the hearth in the north bay and another serving a rectangular bread oven that was

beyond the west wall and has now been removed. Auxiliary flues have later been added to the north and south of the stack to provide hearths in the upper chambers although they are absent from a photograph taken in the early 1900's. The bay is now floored although the girder and joists are contemporary to the date of the chimney as the chamfer is stopped as it enters the stack rather than continuing to the frame beyond. The roof timbers above this bay are all evenly sooted implying that this bay was open to a hearth on the ground floor before the insertion of the chimney. The west wall of the bay has an entrance lobby attached and the ground floor timbers are obscured, the first floor timbers are again symmetrical large panels with a horizontal rail very close to the wall plate. The east wall of this bay was open at the ground floor. There is no continuation of the sill beam between frames 5 and 6, there are no mortices in the underside of the mid rail of this wall and the outside face shows no signs of weathering. Above the east mid rail there are peg holes for struts and a rail to provide symmetrical large panels. These have been removed by the cutting through of a doorway immediately south of frame 5.

#### Frame 6 (south end wall)

This frame is tile hung above the transverse beam. The wall posts are visible down to the sill beam and are 9ins x 9ins (22.5cm x 22.5cm) with splayed jowls. In the centre there is a central post (only up to first floor height), the transverse beam is morticed into the wall posts at the mid rail height with the lower edge cut into the wall post and then morticed into the top of the central wall post. The external face of the central and eastern wall posts have matching mortices for a low structure continuing to the south at least half the width of the frame. The tie-beam is straight with no visible wind bracing. The wall plate and tie-beam joints are of normal construction. The wall is infilled with large panels below the tie-beam. Between the transverse beam and the tie-beam the infill is symmetrical large panels with a horizontal rail just below the tie-beam. There was a mullion window east of the centre immediately below the tie-beam.

#### Outshot east of bay 3

There is an outshot on the east of bay 3 which extends about 3ft (90cm) north of frame 5 and encloses a well which is close to the east wall post of frame 5. The wall post at the south end aligns with frame 6 and the lower edge of the transverse beam is cut into the wall post. The post is taller than the transverse beam in frame 6 affording a greater head clearance at the east end. This post also has mortices on the southern face matching those on the centre and east wall posts of frame 6 for a low structure to the south. The east wall of the outshot is divided into large panels but the second bay from the south end has a pegged rail at a higher height than all the other bays implying that this was the position of a doorway. Early 19<sup>th</sup> century photographs show a doorway in this position, although it would have been original to the build date as the door head is pegged into the wall posts. The roof pitch is lower than that of the main structure and the absence of any partition in the east side of bay 3 strongly indicates that the outshot was contemporary to the construction of the two bay structure.

#### Infill between the two structures

At some point the two structures were joined by infilling, extending the line of frame 4 and the south wall of the single bay structure. The scantling of these timbers is slight and the associated roof is pegged at the apex with no ridge board. There are no other features to provide dating evidence for this infill. The infill now contains a doorway immediately west of the south corner of the outshot on the single bay structure. This area also includes the current staircase although the joists in this position are running north-south and the mortices exist in the north wall mid rail to indicate that they all continued to the north wall completely flooring this area.

#### **Structural summary**

The one bay structure is the oldest standing on this site. It would appear to be a floored end of an open hall house of considerable size. The crown post roof would date it after 1320; however the very low head height has been used to date other properties to pre 1400. The scantling of the timbers and the joist size suggest a date range of 1375-1400 for this bay. The partition below the axial girder and the lack of decoration make it very likely that this was the lower floored end. The presence of a stave slot in the end of the wall plate extending to the east as well as the continuation of the mid rail strongly indicate that the range continued to the east. This is supported by the potential line of the original foundations being shown on the O/S map of 1878.

The outshot on this bay was probably added within 20-50 years after the construction of the range to account for the lack of significant weathering on the outside of frame 2 and it probably provided an improved means of access to the first floor chamber, the original access may have been in the east end of bay 1 where there are no original joists.

The two bay structure is most likely to have been built as a detached kitchen as it meets all of the criteria used to identify these structures summarised as:

- The plan form is non-standard for a house.
- The absence of double height windows and the presence of few windows except for high in the walls.
- The structure is located relatively close to the low end of a house of standard plan sited upon the same holding.
- The building is easily entered from a standard house.
- The 'kitchen' is smaller than the main house.
- There are no indications of internal decoration such as mouldings.

Bay 3 was the open bay with the cooking hearth on the floor, the ground floor was open into bay 2 and the east outshot. The room over bay 2 would have provided accommodation as would the room above the tie-beam in the same bay if it was floored at the time of construction. Access to the first floor could not have been through the floor in bay 2 as this remains intact. It could have been at the east end of frame 5 against the wall post but this would have descended into the open cooking area. It seems more likely that it was a near vertical ladder from the outshot to a small access north of frame 5 and was the main reason that the outshot extended beyond frame 5 when constructed. Detached kitchens were built for dominant properties between 1450 and 1550; the roof design was in use between 1470 and 1550; however the use of splayed jowls declined at the start of the 16<sup>th</sup> century and the joist sizes in bay 2 are consistent with the 15<sup>th</sup> century. It is therefore plausible that this kitchen was constructed in the last quarter of the 15<sup>th</sup> century but possibly stretching into the 16<sup>th</sup> century.

The construction of a detached kitchen would only support a significant dwelling of which the only survival is the single bay. It is likely that it originally had a 2 or 3 bay open hall with a floored solar beyond or a solar crosswing.

The chimney was inserted into bay 3 probably in the mid to late 16<sup>th</sup> century to contain the smoke but still provide a cooking hearth with integrated bread oven, this is provided by the large fireplace opening into bay 2. The building still appears to be utilised as a kitchen as there is no provision for heating any of the other rooms, there is no hearth in the rear of the chimney to heat bay 3 or an original hearth for the upper chamber. As discussed before, bay 3 was floored once the chimney had been inserted and it would be reasonable to consider that these modifications occurred at the same time.

The infill joining the two structures is difficult to date but is probably 18<sup>th</sup> century based upon the roof having no ridge board and the size of the rafters. Based upon the similar replacement roof upon bay 1, it seems likely that the largest portion of the main dwelling was lost at this time. Also, the extended range does not appear on any mapping dating to the late 18<sup>th</sup> century.

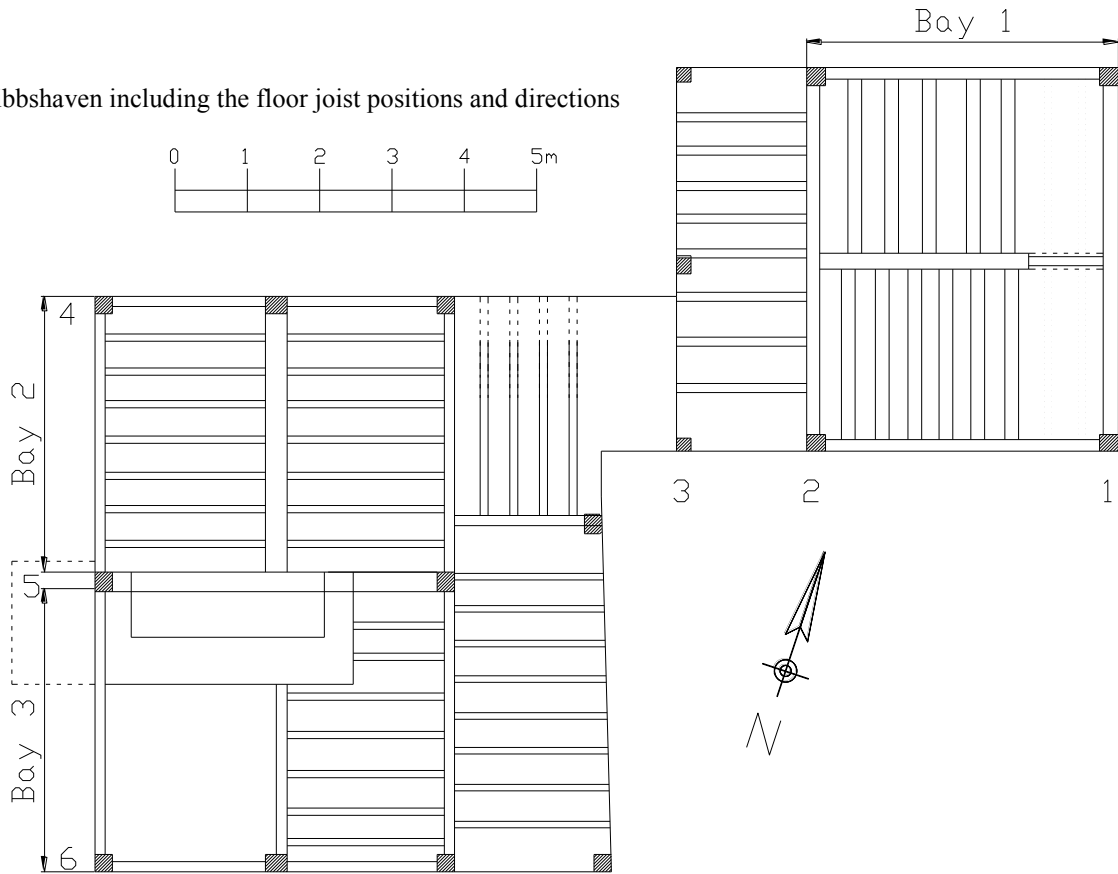
#### **References**

'Detached kitchens in Eastern-Sussex' by David & Barbara Martin, *Vernacular Architecture* 29 (1998), 85-91.

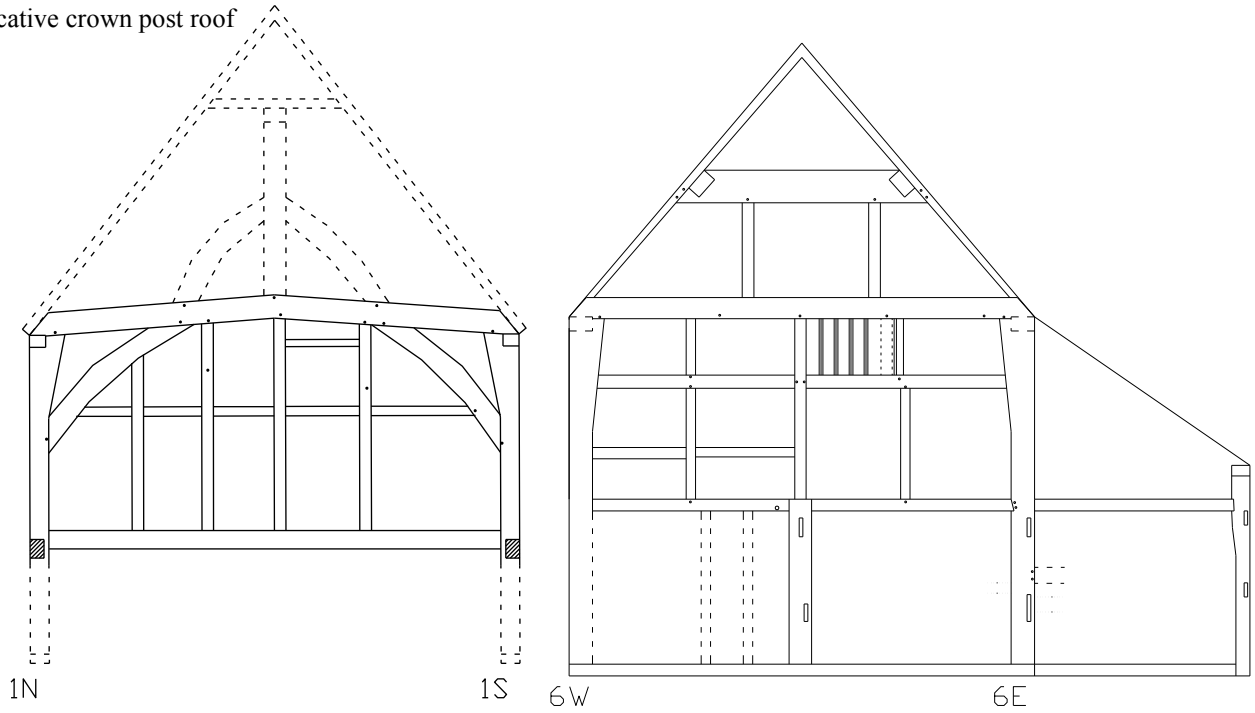
'Detached kitchens or adjoining houses?' by J T Smith, *Vernacular Architecture* 32 (2001), 16-19.

'Detached kitchens or adjoining houses?' - a response' by David & Barbara Martin, *Vernacular Architecture* 32 (2001), 20-33.

Plan of Gibbshaven including the floor joist positions and directions



Indicative crown post roof



Frames from the two structures: Original hall range (left) and Detached kitchen (right)