

Report for
Cruck Cottage, Long Wittenham, Oxfordshire
Site Code: LOW-B

from

The Medieval Peasant House in Midland England

by

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Fig. 1. View of the house from the south.

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Oxbow Books

LOW-B: CRUCK COTTAGE, LONG WITTENHAM, OXFORDSHIRE

(formerly called Cruckfields)

Grid reference: SU 5449 9370

Survey Date: 20 Nov. 1989

By: D. Miles

Illustrations:

1. View of the house
2. Ground floor plan
3. Section of truss T2

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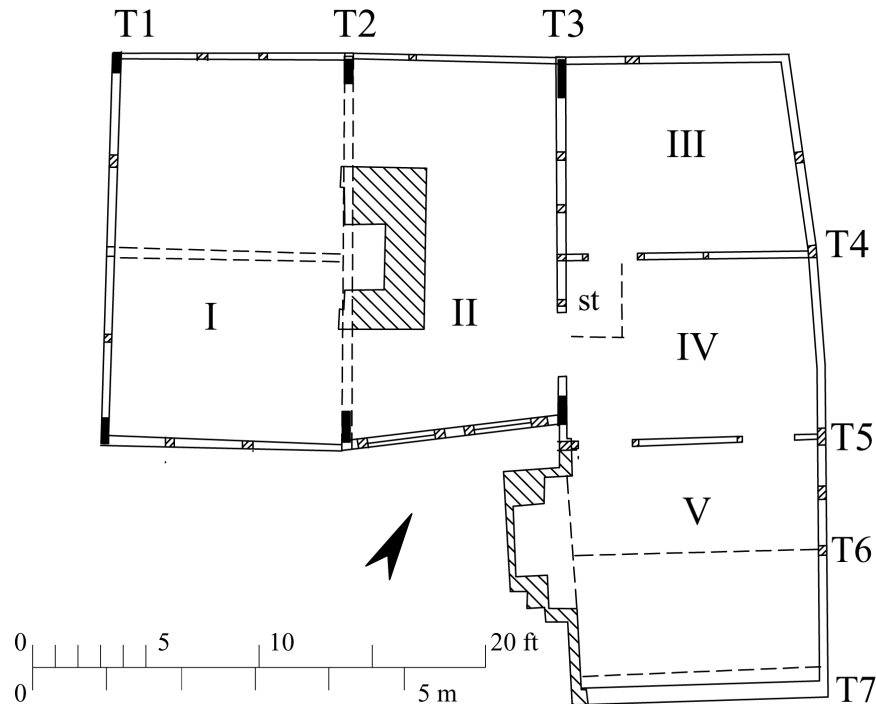
Reference: Portman, Derek (1958) 'Cruck Houses in Long Wittenham', *Berkshire Archaeol. J.* **56**, 35-45.

Fig. 2. Plan, showing truss and bay numbering (based on a plan for alterations made in 1974).

ARCHITECTURAL DESCRIPTION

Note: In this report the street and cruck range are described as if oriented north-south. The house is described in Portman (1958).

SUMMARY AND HISTORICAL DEVELOPMENT

PHASE 1: This is a complex multiphase cruck and box-framed house, with its main range running north-east to south-west parallel to the north side of The Cross. Bays I and II form a two-bay open hall. Of the three cruck trusses, T1 is a half-hipped end truss (type 'V'), T2 is an arch-braced open truss with a type 'F1' apex, and T3 has a type 'D' apex. Original smoke blackened thatch survives in bay I. Bay II is plastered on the underside of the rafters so it is not possible to see any evidence for a louvre, but the open fire is likely to be in the position of the inserted chimney stack, just to the north of the open truss, T2. Presumably a third bay existed to the north, where bay III seems to have been reconstructed as part of phase 2. Because bay III is integrated with T3, it is possible that this truss was also replaced.

Dendrochronology failed to date either the cruck range or the phase 2 work but a date in the early to mid fourteenth century might be postulated for the first phase, from the style of the carpentry.

PHASE 2: BAYS III & IV: The two-bay crosswing appears to provide divided service rooms below, with a staircase to a solar rising just to the north of T3 in bay IV. It is not clear whether this structure continued eastwards on the site of bay V. As already noted, T3 may have been replaced in this phase. As the posts are jowled, a mid-fourteenth- or fifteenth-century date can be proposed.

PHASE 3: BAYS V & VI: The eastern end of the phase 2 wing appears to have been reconstructed with trusses T5, T6 and T7, enclosing two bays. Bay VI was jettied to the east, and it would appear that this

gave additional upper floor accommodation, perhaps with a parlour below. It was probably reached from the bay IV staircase. The use of tension braces in the wall framing suggests a fifteenth century date for this phase.

LATER PHASES: In the late sixteenth or early seventeenth century, judging from the brickwork, a chimney stack was inserted into bay II, presumably on the site of the open fire. This bay was never floored, but bay I was given a very insubstantial floor with many reused timbers, including a forked member. Later, the original stair opening was closed and a staircase brought up at right angles to it in bay IV. Still later, probably in the nineteenth century, the house was divided into separate units and a stair and landing constructed within bay II leading through the centre of T3 into bay III. Work done in 1971 included building a porch on the west side of the hall and the removal of the latest staircase.

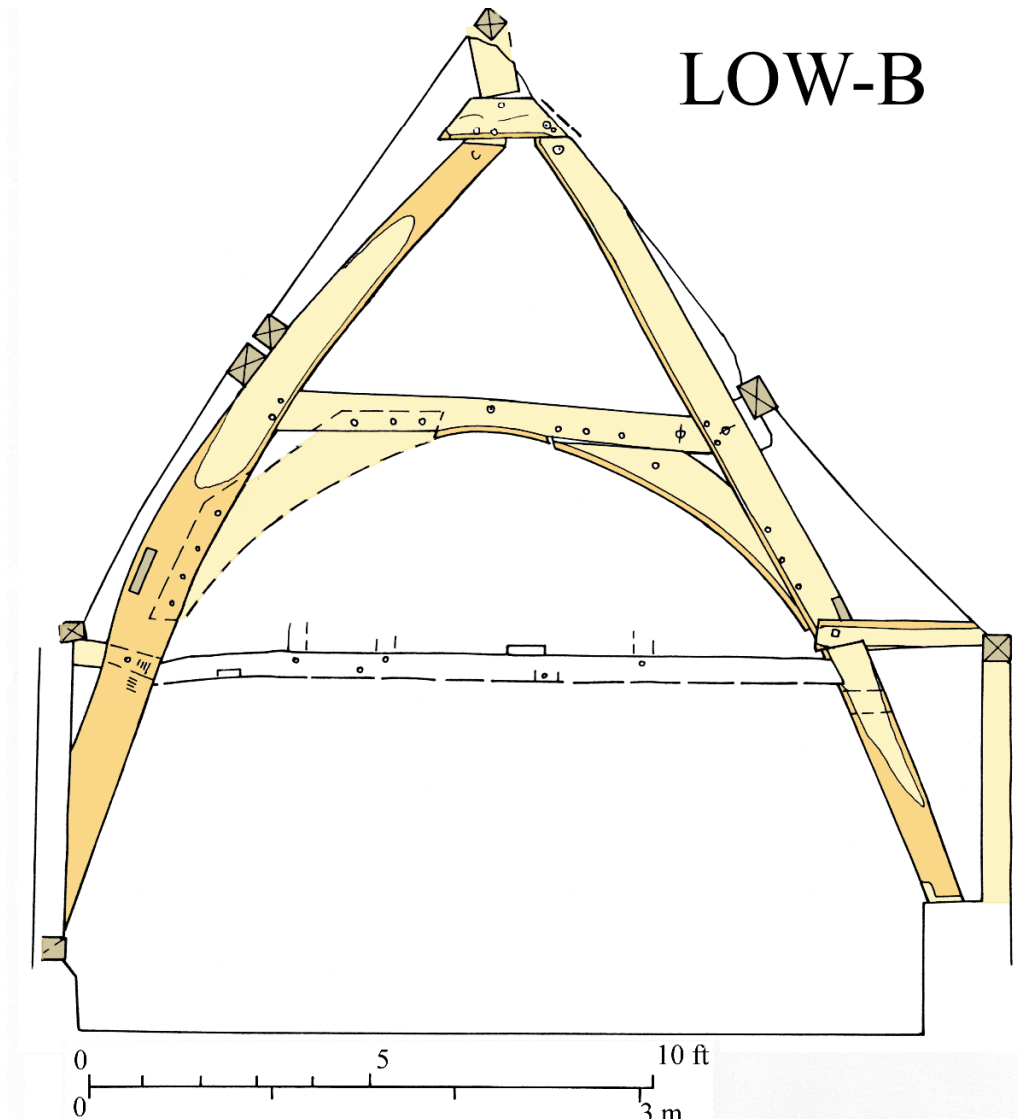


Fig. 3. Section of truss T2.

STRUCTURAL FEATURES

PHASE 1: Truss T1 is a half-hipped (type 'V') cruck, finishing at collar level. The tiebeam and collar are halved over the outside of the crucks and do not appear to be dovetailed in any way. The wall plates are supported on the extended ends of the tiebeam. Only the principal timbers, the crucks, tiebeam, collar, and some of the sill beam survive. All other subsidiary members including the corner posts (cruck studs) have been renewed, sometimes with second-hand material. A couple of stave sockets were noted on the west end of the tiebeam between the corner and the cruck blade. Just above the tiebeam is a small inserted window set between two studs, measuring 1ft 7in wide by 1ft 9in high. Two window-mullion mortises can be seen in the sill.

Truss T2 is an arch-braced open cruck truss with the blades are surmounted by a saddle with a short king post, which carries the diagonally set ridge (‘F1’ apex). The cruck blades are substantial, 9in thick at the base, tapering to 7½in at the top, and are roughly chamfered although they have a fair amount of waney edge. The arch braces are also substantial, 5in thick, forming a semi-circular arch which is continued in the projecting section of the soffit of the collar. The 6in thick collar is chamfered, forming a double chamfer with the arch braces. Cruck spurs measuring 6 by 3in are dovetail lapped to the south side of the blades and appear to have carried the wall plates with a cruck stud below them.

Portman (1958) did not record any assembly or carpenter’s marks on the cruck trusses, but a number of interesting examples are now visible on the south face of T2. At the junction of the cruck, the west arch-brace and the collar, a Ø is scribed. At the top of the west blade and the saddle, a ⊙ is used, with a semicircle at the top of the east blade. A IIII marks the junction of the east cruck spur and the cruck blade. All the main timbers are converted from whole trees, i.e. boxed heart, and have been squared up with an adze. The cruck blades, and the remaining arch-braces of T2 are of elm.

Little remains of the original wall structure, most of the studs having been replaced. Along the east side, the wall plates may be original; they are jointed with a splayed scarf to the north of T2.

The intact roof structure has been left exposed in bay 1 above the purlins. The 5in square diagonally set ridge continues to the south where it terminates about five feet from the end, supported by a very thick yoke on a pair of rafters. Rafters then fan out from this. Portman felt that this arrangement was a later alteration and that T1 had been truncated, but it is all thoroughly smoke blackened and nothing suggests that this is not the original design. In bay II the ridge has been replaced, as it is not sooted. The purlin on the east side measures 8 by 5½in and appears to be original; it is jointed with a splayed scarf on the back of the T2 cruck blade. The west purlin in bay I is also primary, of almost the same size. That in bay II is probably a later replacement; it measures 6½ by 5in and is lodged above the one from bay I. The purlins all carried windbraces which were 3in thick and slightly curved. These were tenoned into the cruck blades and trenched into the backs of the purlins.

The whole of bay I, including T2, has suffered severe structural failure through settling of the feet of the crucks of truss T1, perhaps following decay of the sill beam. This has caused the whole structure to rack by almost two feet at the top. After this settlement had taken place, an inserted floor was constructed in bay I. This is carried on a 6 by 8in axial beam, chamfered below, with joists measuring about 3in square made up of roughly dressed poles and other second-hand material including a forked member.

PHASE 2: BAYS III & IV: This phase is interesting on account of the ingenious manner in which the cruck structure has been rebuilt and extended into a right-angled box-framed wing. Cruck truss T3 is entirely different in character to trusses T1 and T2. It is of elm, sawn rather than adzed, and has a different apex and ridge design. The blades are gently curved and are linked by a tiebeam and collar with skew-pegged lap-dovetails. The blades cross to form a seating for a square set ridge (‘D’ apex). The tiebeam at the west side does not extend to the wall plate. A doorway has been cut through just to the west of centre for access to bay III. The cruck blades measure 5 by 11in, and the tiebeam 9 by 4in. The cruck timbers are all smoke blackened.

Truss T4 stands at right angles to the centre line of T3. The ridge of the hall continues into the wing and its north end is supported by a 4½ by 5½in post. This stands on a 5½ by 9in beam which spans between the north wall plate and the collar of the cruck truss T3 (effectively a tiebeam for T4). Two thin plank-like braces (3in thick) rise from this beam to brace the post. These braces are trenched to carry the purlins of the wing roof, the southern one being 6in square while the northern one measures 6½ by 4in. The latter projects a couple of feet to the west past T4 to help support the corner hip rafter and jack rafter. The northern wall plate is supported by two studs rising from a storey girt.

The west purlin from bay II is lap-jointed to a 6in square timber extending across bay III to rest on the wall plate. The north wall plate of the wing probably continued to T5 originally, but is now cut short between T4 and T5. The north storey girt laps over the west wall plate which is in line with the cruck range. To the east it has a bridled scarf joint a couple of feet to the west of T5, suggesting that this wing

originally continued eastwards past T5. The ridge beam to the wing sits on the ridge beam in T4, and measures 5 by 7in. The rafters are 3½ by 4½-5½in and are both sawn and adzed. The feet of the rafters are birds-mouthed over the wall plates and are finished with chamfered tapers. There do not appear to be any windbraces.

The first floor is carried on a 9½ by 10in transverse beam within T4 which supports 4½in square joists with diminished shoulder and bare faced tenons. This separates the wing into two bays, each 9ft 6in wide, equalling the overall width of the hall range. Two joists have been trimmed to form a stair opening in the south-west corner of bay IV. The joists in bay III are plastered underneath but are probably of the same scantling. The wall post under T4 is jowled and nicely chamfered with a shallow step stop at the point where the chamfer to the axial beam finishes.

Two framed window openings exist, one on the west side measuring 2ft high by 2ft 7in wide with the head 3in below the wall plate, and another on the north wall upstairs 2ft high by 1ft 10in wide. This has mortices for three mullions.

PHASE 3: BAYS V & VI: This eastern extension appears to be a reconstruction of the end bay of the phase 2 structure. Truss T5 replaces the eastern truss of bay IV and the joints to the ridge, purlins, wallplates and storey girts are all visible, these timbers having been cut back to the west of T5. Only the sill beam continues east past T5 (for a couple of feet). Many of the components of bays V and VI are reused timbers, the collars and tiebeams having various redundant lap joints and mortices. Bays V and VI are respectively 5ft 4in and 6ft 8in long.

The roof trusses for trusses T5, T6 and T7 consist of tiebeams 6in wide by 7-9in high with 5½in wide principals diminished *below* the collars. The 6 by 5in purlins are clasped within the collars and principals. Curved windbraces, 3in thick, form an arcaded pattern below the purlins and the feet of the windbraces extend below the top of the T6 tiebeam. This tiebeam has been severed to merge bays V and VI into one room. The southern windbraces to bay VI are straight rather than curved. All these timbers are chamfered. The square-set ridge is carried on small yokes on each set of principal rafters. The rafter feet are birds-mouthed like those of phase 2 but are finished with curved scallops, with the foot the same thickness as the rest of the rafter. They are also chamfered.

The floor joists measure 6 by 5in, set at 1ft 6in centres and run axially from T5 to T7. T6 has a housing in the north storey girt for a removed beam which gave intermediate support for the joists. At T7, the joists were originally jettied 12in; the centre joist has a mortice for a brace rising from a post below. The jetty has now been under-built. The floor level in these bays is about 12in lower than in bays III and IV.

The wall framing has curved tension braces to the corner posts at T5 and T7. The jetty bressumer appears to have been renewed, as it is crudely jointed and is only 2in thick. The simply-chamfered wall posts are very thin (3½in wide at T6), and are jowled with short heads. The wall plate on the south side in bay 4 has a splayed scarf with undersquinted abutments. Inside, a section of staves is visible on the north wall of bay 5. They are about 3 in wide and probably had laths nailed on the outside for a daub finish.

DENDROCHRONOLOGY

For dendrochronology abbreviations see page facing Introduction.

Sampling Comments: Ten samples were obtained through coring by Robert Howard on 20 November 1989. Samples B01-B05 were taken from the Phase 1 structure, with B06 to B10 coming from the Phase 2 roof. From the first phase timbers, two were of elm and were not processed. The other samples from this phase failed either to match each other or to date individually. Samples from T4 generally had longer ring sequences, but despite two matching together to form a site master, these too failed to date.

TREE-RING SAMPLE RECORD AND SUMMARY OF DATING

Sample	Total Sapwood		FMR	LHR	LMR	Date
LOW-B01 Rear cruck blade truss T1	64	12c	—	—	—	—
LOW-B02 Front cruck blade truss T1	46	19	—	—	—	—
LOW-B03 Rear cruck blade truss T2	Elm	—	—	—	—	—
LOW-B04 Collar truss T2	56	17	—	—	—	—
LOW-B05 Rear purlin bay I	37 Elm	18	—	—	—	—
LOW-B06 Rear cruck blade truss T3	NM	—	—	—	—	—
LOW-B07 Brace to king post right side T3	56	21	—	—	—	—
LOW-B08 Brace to king post left side T3	85	32	—	—	—	—
LOW-B09 King post, truss in wing	60	13	—	—	—	—
LOW-B10 Collar, truss in wing	36 NM	14	—	—	—	—
Not dated.						