

An Archaeological Interpretative Survey
of
**OASTHOUSE AT HAZELDEN FARM,
CRANBROOK, KENT**



by
David Martin FSA IHBC MIFA & Jane Clubb BA MA

**AN ARCHAEOLOGICAL
INTERPRETATIVE SURVEY
OF
OASTHOUSE AT HAZELDEN FARM,
CRANBROOK, KENT**

**Commissioned by
CHANTECLAIRE Ltd.**

PROJECT REF. 3806

**by
David Martin FSA IHBC MIFA
&
Jane Clubb BA MA**

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

2009

STANDING BUILDINGS

ARCHAEOLOGICAL INTERPRETATIVE SURVEYS

AN INTRODUCTORY NOTE

ABOUT THESE SURVEYS

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

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

INVESTIGATIVE TECHNIQUE

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

THE WRITTEN REPORT








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

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

THE DRAWINGS

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

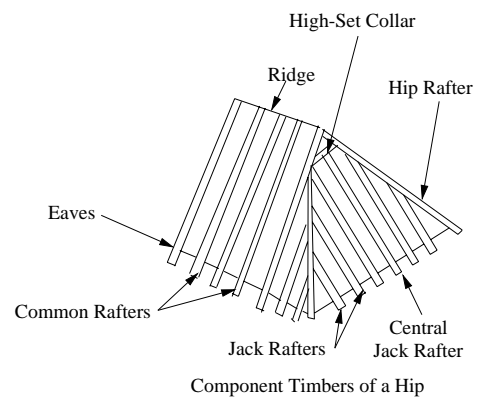
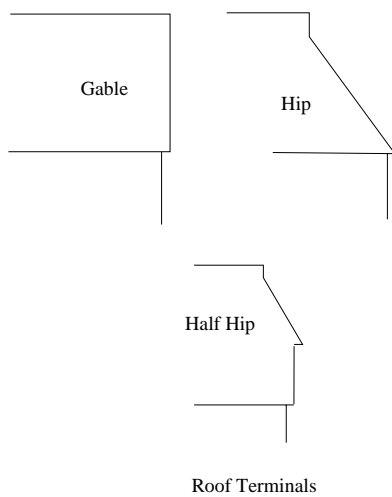
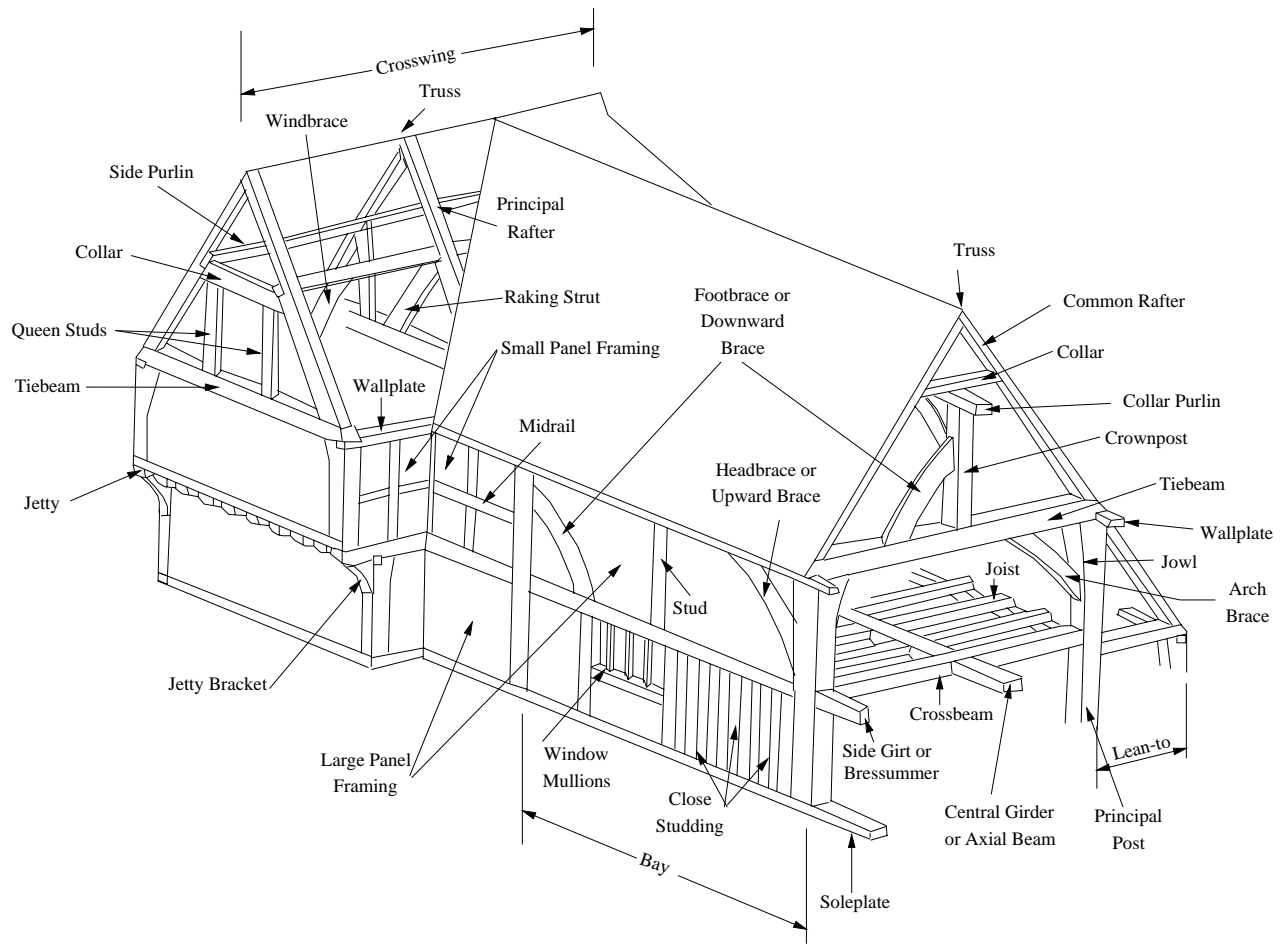
The symbols as used in the drawings attached to this report are as follows:

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

OTHER CONVENTIONS USED -

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

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



GLOSSARY OF PRINCIPAL TERMS

PROJECT NO. 3806

OASTHOUSE AT HAZELDEN FARM, CRANBROOK

NGR TQ 7676 3849

LOCATION

Hazelden Farm lies north of Cranbrook village, 1.5 miles to the NNW of the parish church. The farmhouse, oasthouse and other outbuildings are set some distance from the road, being reached by a track, to which the oasthouse was originally aligned at right angles, on a NW-SE axis (hereafter assumed north-south). The oasthouse is located at the southern end of a 'U' configuration of outbuildings on the north side of the track, which encloses a farm yard.

OVERVIEW OF THE BUILDING [Drawing Nos. 1-2]

A three-bay, two-storeyed, timber-framed structure was built on this site during the 17th century [**Period A**]. The function of this building is unknown, though it appears to have been designed for a specific purpose, having a narrow central bay with larger bays to either side, with high floors over each bay. On the ground floor each area was probably partitioned-off from the central bay, though this point cannot now be proven. The roof was fully hipped and quite shallow, though it was thatched. The structure was accessed via pedestrian doorways at front (west) and rear (east), leading into the central area.

During the 18th or early 19th century [**Period B**] the building was converted to an oasthouse. A conical flue and cowl were inserted into the centre of the roof, and it is probable that the two separate upper floors were removed and replaced by a single drying floor. This period of use must have lasted for some duration, as there was time enough for the tops of the rafters either side of the conical flue to rot and be repaired before the conical flue and associated cowl was removed.

This small oasthouse was enlarged in the mid 19th century [**Period C**] by the addition of two brick-built roundels to the rear (east), and a large lean-to outshut was added at the front (west). The earlier structure, now almost completely enclosed by the new builds, was re-floored, with a staircase just inside the former front wall leading to the first floor and a further fixed ladder leading to a new landing at period-A/B roof level, from which the roundels' high-level drying floors were accessed. Double doors cut through the northern end wall allowed carts to be brought into the structure, and two treading holes were incorporated into the new first floor in order that the hop pockets could be easily filled.

Thus, up to the close of the nineteenth century, the oasthouse continued in its symmetrical form, as can be seen on the 2nd Edition 1:2500 Ordnance Survey (O.S.) map (see Drawing No. 2), with two roundels and plenty of processing and storage space attached. During the early 20th century, greater hop-drying space must have been required, as a third drying floor was built, contained within a brick-built square kiln to the south of the roundels, accessed from a new southwards extension added to the original structure. The extension is capped by a kingpost roof which displays some *ad hoc* elements, especially where the roof turns. In its southern wall it incorporates ground-floor double doors and a first-floor pedestrian opening. The drying floor in the square kiln was originally positioned 4.95 metres (16'3") above ground-floor level, accessed from a high-level door in the structure's western wall and roof slope. In more recent years, this drying floor has been removed, and a new floor built at the same level as the first floor in the earlier structure. The door into the square kiln has been blocked and a new doorway cut through at first-floor level.

Either as part of the extension, or after it had taken place, the ground-floor section of the period-A front wall was rebuilt in brick up to the underside of the side-girt, the brickwork continuing in one phase along the western wall of the 20th-century extension. The furnaces have been removed from all three kilns, though some gas/oil pipework from the late 20th century replacement burners remain.

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

For analyses of the farmhouse to the west and the historic barn to the north of the oasthouse, see separate reports.

LISTED STATUS OF THE BUILDING

The farm house, Hazelden, was listed grade II on 19th May 1986, its listed building reference being TQ 73 NE 3/77. The description in the list entry is purely for the purpose of recognition and is normally, therefore, primarily based on external appearance. The date for the house is given as C16. [Source: English Heritage, Images of England - website]. The description must not be treated as a comprehensive schedule of those elements which are legally protected as, no matter what the grade, the legislative cover not only relates to both the interior and exterior, but also extends to any building within the curtilage which predates the 1st July 1948. Thus, although the oasthouse is not listed in its own right, it is protected as a curtilage building.

DETAILED ARCHITECTURAL DESCRIPTION

PERIOD A (17th C) [Drawing No. 3]

NOTE REGARDING DATE

The surviving period-A features do not allow a close date to be offered for the initial build. Although a construction date during the 17th century is highly likely, a date at the very end of the 16th century cannot be ruled out. Similarly, if conservative in its use of constructional techniques, a date during the opening years of the 18th century is not impossible.

LAYOUT

The initial structure in this location was a relatively small, three-bay, timber-framed building measuring 8.50 metres (27'10") long and 6.00 metres (19'8") wide, with its principal elevation facing west. The three bays of the building's box frame do not correspond with the three bays of the roof: those in the roof are of almost equal length, whereas the central bay of the main frame is much narrower than the areas to either side. The reason for this very unusual configuration is not known, but there must have been a particular purpose for offsetting the principal posts from the tiebeams. One reason may have been that the crossbeams jointed into the principal posts were required to support the heads of ground-floor partitions, forming a central area linking the front and rear doorways. The tiebeams are framed to respect the roof configuration. The height of the building is 3.95 metres (12'11") from the underside of the soleplate to the top of the wallplate, but the ground floor may have been lowered, as suggested by an original length of soleplate which now stands 590 mm above ground level, on a low brick wall.

WALL DESIGN

As the internal, cambered tiebeams are not positioned above the principal posts of each internal truss, these posts are jowl-less, but the tiebeams are still held in normal assembly over the wallplate. The surviving posts in the north elevation (truss A-A) have splay-cut jowls, and all four corner posts were braced by externally-visible footbraces, of which two survive. In the front elevation, the longer bays (A-B and C-D) incorporate a central stud; the front ground-floor part of bay B-C also has a stud, but this is set slightly off-centre and acts as the jamb for the front door. A similar arrangement existed in the rear wall. The wall panels were infilled with lath and plaster, which has since been removed.

WINDOWS

No window positions have been identified for this date within the surviving visible parts of the frame: indeed, it can be certain that there were no first-floor windows in the north and west elevations.

DOORWAYS

The two openings evidenced within the frame of this period are both pedestrian doorways, positioned adjacent to truss B-B in the front and rear walls. Their locations can be seen as a lack of stave mortices in the underside of the side-girts in this bay, between the principal post and the slightly off-centre intermediate stud, which acted as the door jamb.

FLOORS AND CEILINGS

The front and rear principal posts in internal trusses B-B and C-C each display a large mortice in their internal faces to take the end of a crossbeam. The position of the mortices in truss B-B are set higher than the mortices in truss C-C, which makes it unlikely (but not impossible) that there was a floor supported between these two timbers of different heights. It therefore seems logical to suggest that there were two floored areas, one between each end wall and the nearest truss, leaving a narrow, un-floored area in the centre. As both of the crossbeams have been removed, this point cannot now be confirmed and no further details of the floors are recoverable.

STAIRS

Because of the loss of the period-A first floor, there are no details for any stairs of this date.

ROOF

The roof to the period-A structure is framed in three, almost equal-length bays. It is of clasped-side-purlin type with diminished principal rafters, which rafters measure 130 mm x 170 mm below the purlin but only 130 mm x 110 mm above. Each end of the roof was hipped: the northern terminal remains, but the southern hip and associated hip and jack rafters have been removed. The surviving central jack rafter rises to a high-set collar jointed into the principal rafters, which gives the hip a very shallow pitch. Indeed, the roof itself is quite low, and has a relatively shallow pitch, especially considering that it was thatched (evidenced by rope stains). The surviving purlins have now been cut just beyond the collars, though they seem originally to have extended to the hip rafters.

FUNCTION

The layout of this structure, including the positions of the first floors (probably leaving the central bay open to the roof) does not point to an oasthouse function during this period. The apparent lack of first-floor windows indicates that no, or very little, human activity took place inside the building, at least at the upper level. This suggests that it was used for storage only. However, there seem to have been only pedestrian doorways giving access to the (possibly partitioned-off) spaces inside, which would result in only hand-transportation of goods/crops into the storage areas, rather than transportation by cart. It is possible that this building was built as a granary, but these buildings are rare within this region, and there are no comparable examples known to the authors.

PERIOD B (Late 18th C/Early 19th C) [Drawing No. 4]

LAYOUT

During this phase, the earlier structure of unknown function was converted to use as an oasthouse. The (possible) two ground-floor partitions were removed in order that the ground floor could house the kiln. A conical flue and cowl were fitted into the roof.

WALL DESIGN, WINDOWS AND DOORWAYS

There were no alterations to these features at this date.

FLOORS, CEILINGS AND STAIRS

Due to the removal of the earlier floor(s) during the next phase (period C), there are no details of the period-B floor surviving, but it is likely that the two separate period-A floors were replaced or modified to give a single first floor which acted as the drying floor. It is not known how the drying floor was accessed.

ROOF

The roof was altered at this date to take a flue and cowl. In order to support the cowl, a collar was sprung-in mid-way along the roof over the tops of the purlins, and in both roof slopes, timbers were fixed at approximately 45 degrees, rising from the end of the new collar, interrupting the three central rafters. This supported the conical flue which

projected through the roof. Both the flue and its cowl have since been removed.

Probably due to the water run-off to which the rafters were now exposed, the ends of the two full-length rafters either side of the conical flue have rotted. This must have occurred after the flue was built, but before the roof was altered again in period C, as, prior to the removal of the flue, repair splints were added to both sides of both rotted rafters. As is indicated by the rope stains which extend across both the original timbers and the new repairs, the roof was still thatched during this period.

PERIOD C (Mid 19th C) [Drawing Nos. 5-6]

LAYOUT

The simpler oasthouse of the previous period was at this date enlarged by the building of two roundels on the eastern side of the structure, and the addition of a large lean-to outshut on its western side. The brick-built roundels are together wider than the original building, each having an internal diameter of 5.10 metres (16'8"), but they are set centrally, maintaining the symmetry of the building. The ground-floor area of the roundels is accessed from within the period-A structure, and in each case they have been stripped of their furnaces and associated firing tunnel. Access to the drying floors is gained via doorways which open onto a high-level landing area between the period-A/B roof void and the upper part of the roundels, which landing area is capped by a pitched roof (see Drawing No. 6).

WALL DESIGN

The roundels are of brick, laid in Sussex bond, rising from a square-topped plinth and capped by a projecting, serrated-brick eaves detail. Just above the plinth are semi-circular-arched vents, with moulded, quarter-circle bricks capping the openings. Internally the vents are closed by sliding wooden shutters.

The walls of the lean-to are of regular stud construction, weatherboarded on their external faces. As these walls are weatherboarded, it was probably at this date too that the walls of the period-A structure which remained external were also weatherboarded, the staves having been replaced by studs in order to give the boarding adequate support.

WINDOWS

There is no evidence for windows within the stowage area at this date. The first-floor window in the north wall of the period-A structure appears to have a modern frame, but

this may replace an earlier window opening on the same site. Apart from a single small opening which gave light to the former firing tunnel in each roundel, there are no windows lighting the roundels or the lean-to.

DOORWAYS

There is one doorway into each roundel on the ground floor, both openings having a segmental-arched head. The doors from these openings have been removed in order that the kilns could be fitted with gas or oil pipes. The doorway into the southern of the two kilns is taller than that into the northern kiln, but the reason for this distinction is not obvious. The wide doors giving access to the drying floor are of one-and-a-half leaves, and are 1.85 metres (6'1") high; as these doorways overlap the slope of the roundel roof, a small ceiling has been incorporated between the doorhead and the roof slope.

Ground-floor double doors were cut into the northern end wall of the period-A part of the oasthouse. As part of this work, the lower section of the intermediate post was removed below crossbeam level, and the door jambs were added in approximately the same area that the period-A studs were located: by this date it seems that the eastern of the two period-A studs had been removed. Possibly at this date, a first-floor pedestrian doorway was cut through the eastern part of the northern wall, allowing direct access onto the cooling floor. The only surviving means of access into the lean-to outshut is via a central door in its western wall.

FLOORS AND CEILINGS

The period-B first floor was rebuilt at this date. The new floor is framed in three bays, not exactly respecting either the roof bays or the bays of the main frame. It is composed of north-south aligned joists jointed into the new crossbeams, approximating to the positions of trusses B-B and C-C. At the northern wall, the ends of the joists are carried on a cleat, as they are positioned too low to joint properly into the crossbeam of truss A-A. It is not known how the southernmost joists were carried at their southern end, as the crossbeam to the southern end wall was removed when the oasthouse was extended in the 20th century. Treading holes are incorporated into the new cooling floor, in the north-western and south-western corners of the period-A part of the structure. This allowed one treading hole per roundel. The drying floors within the roundels are formed of 220 mm-deep joists laid over a girder which crosses the roundel at right angles to the joists. The floors in both roundels are positioned 4.70 metres (15'5") above the modern ground-floor level.

Though there has been some alteration to the ground-floor levels within the kilns, the position of the ground-floor doors into the roundels indicate that by this date the ground floor within the period-A part had reached approximately its present level.

STAIRS

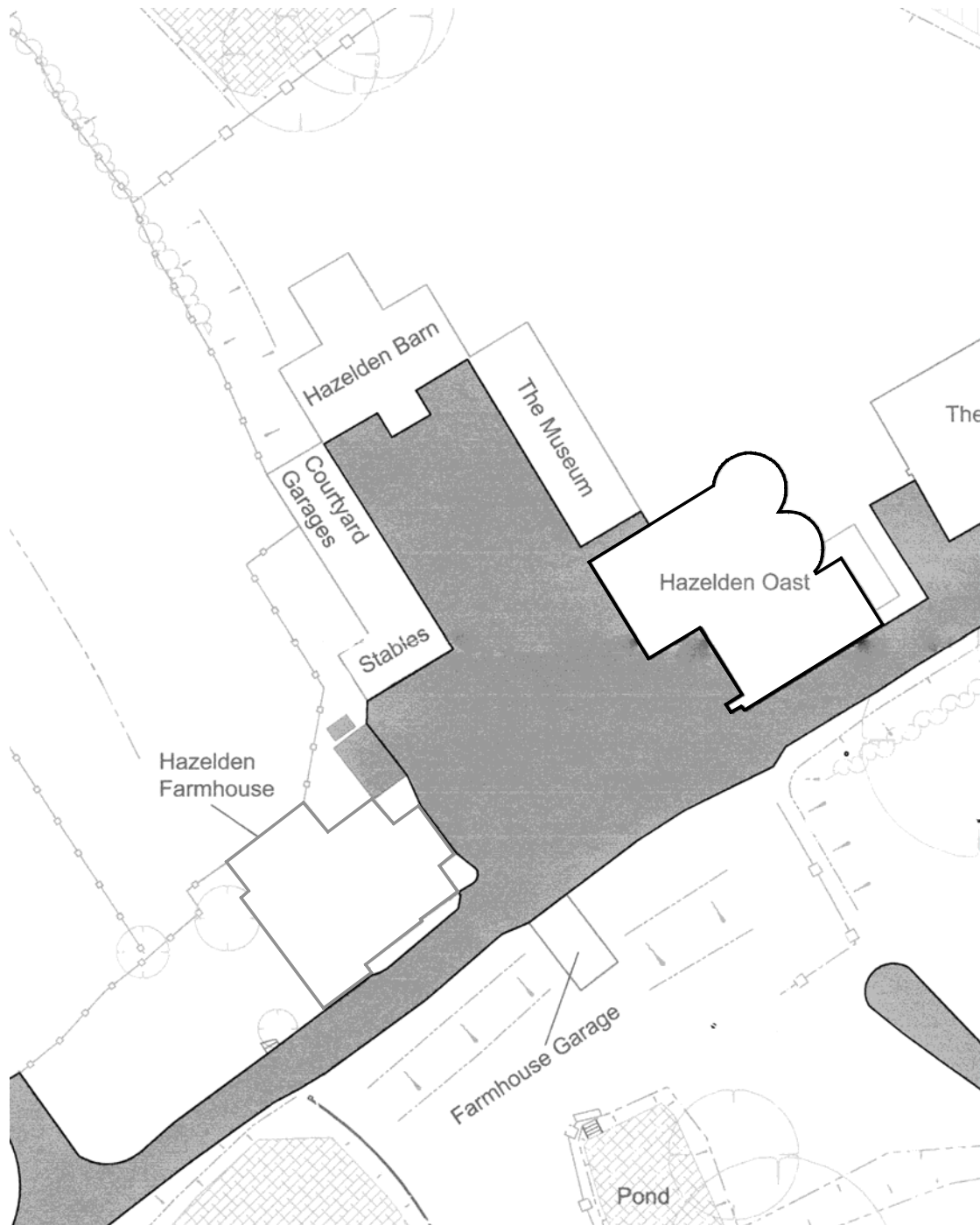
The stairs leading up to the first floor within the main part of the structure rise against the western wall, and are trimmed on the eastern side by an extra joist within the period-C floor. The opening in the first floor for these stairs is bounded by a boarded partition. Access to the roundels' drying floors is via steps which lead from the first floor (cooling floor) to the drying-floor landing. These are in the form of a fixed ladder attached to a cleat on the eastern wall which carries the western end of the landing floor. Neither stairs are precisely datable: they may have been replaced since their initial installation during period C.

ROOF

The period-B conical flue and cowl were removed and the cut rafters were replaced at this period, the period-C timbers being fixed to a ridgeboard inserted between the period-B splinted rafters. The section of roof over the drying-floor landing likewise incorporates a ridgeboard, but has no windbracing or purlins. It rests over the period-A rafters on lay boards.

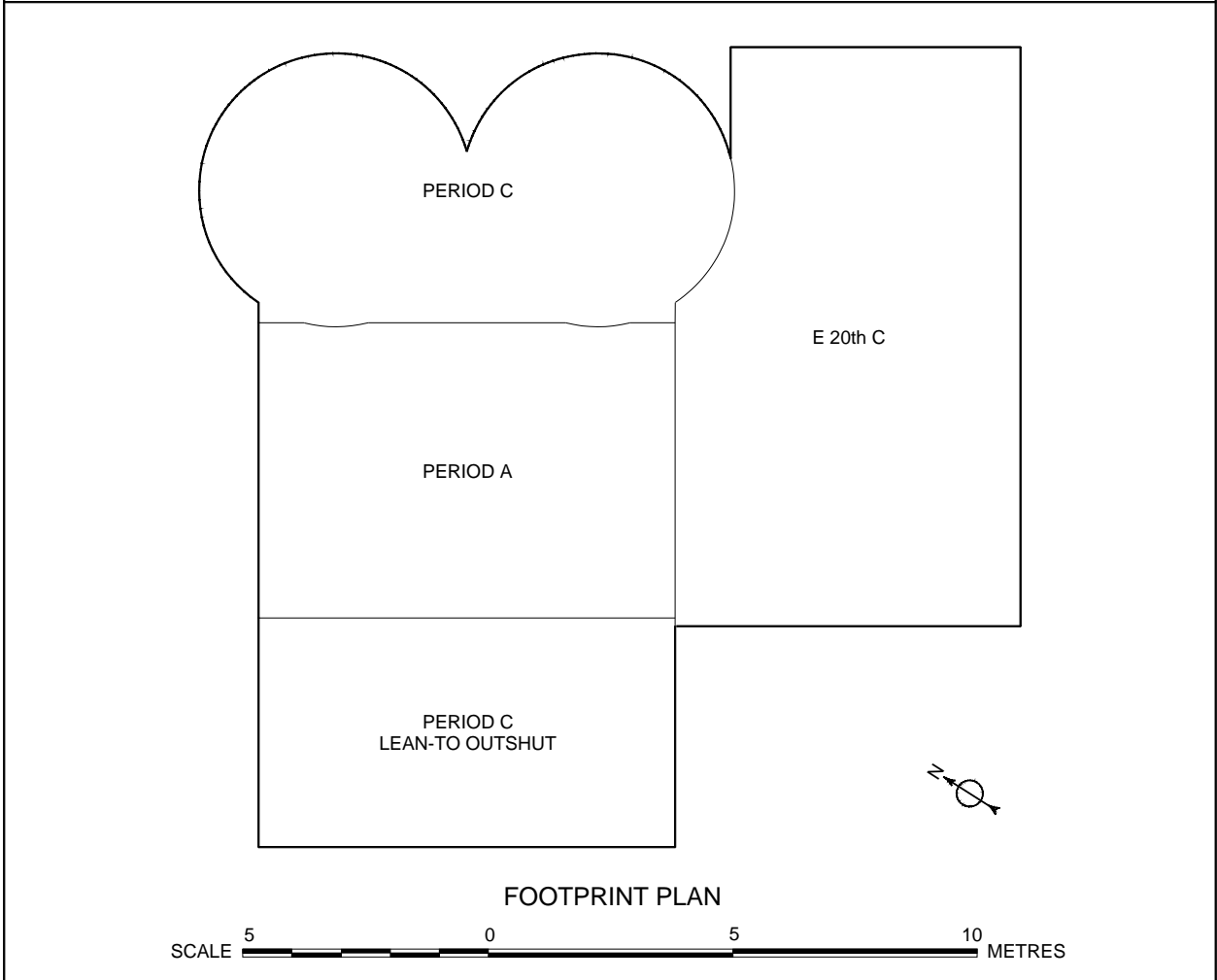
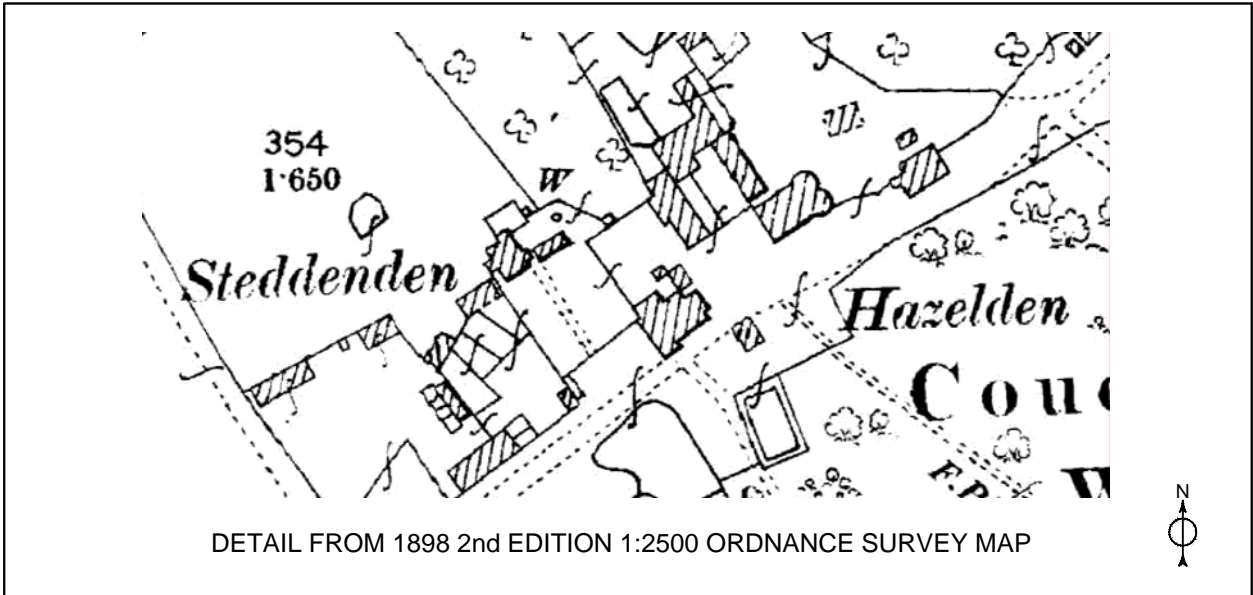
The roundel roofs are formed of long rafters sloping in to a ringbeam at the apex. Cross-timbers are attached 3.45 metres (11'4") above the drying floors, upon which cross-timbers stand the spindles which support the swivelling cowls.

SITE PLAN SUPPLIED BY CHANTECLAIRE PROPERTIES

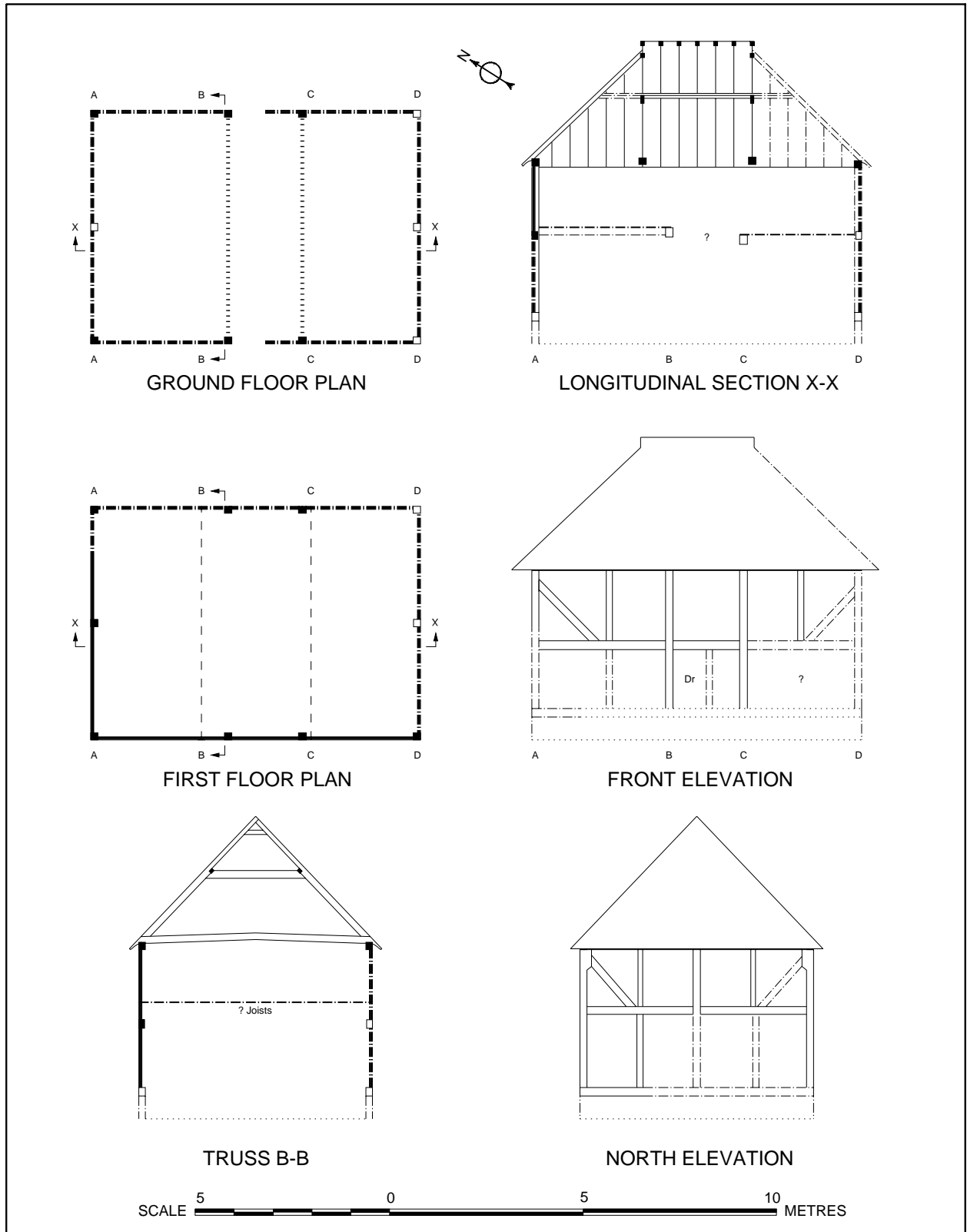


SCALE 5 0 5 10 METRES

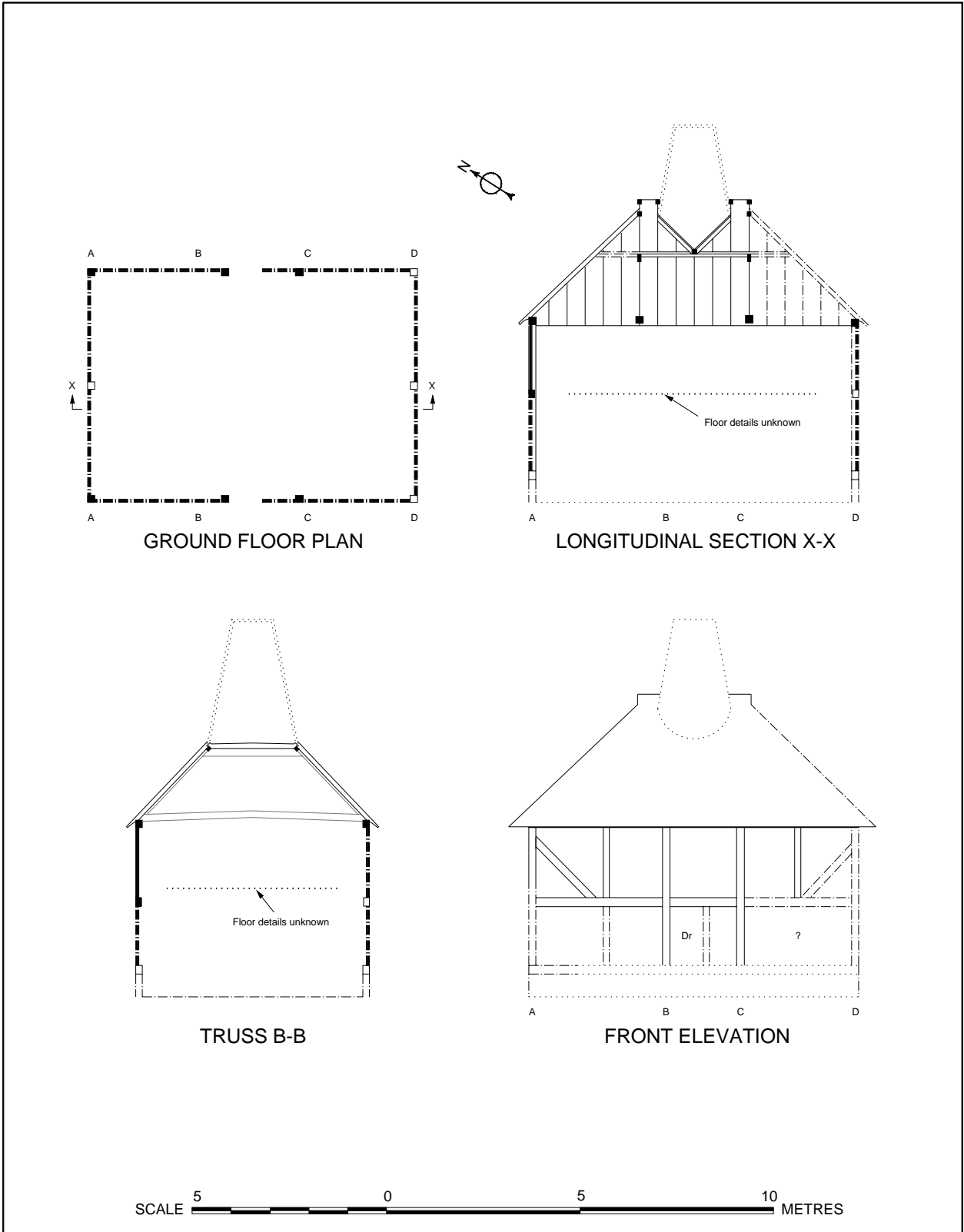
OASTHOUSE AT HAZELDEN FARM, CRANBROOK, KENT				Project Ref	3806
SITE PLAN				Drawing No.	1
Drawn By	J Clubb	Revision No	-	Date of original survey	2009
				Date of this revision	2009



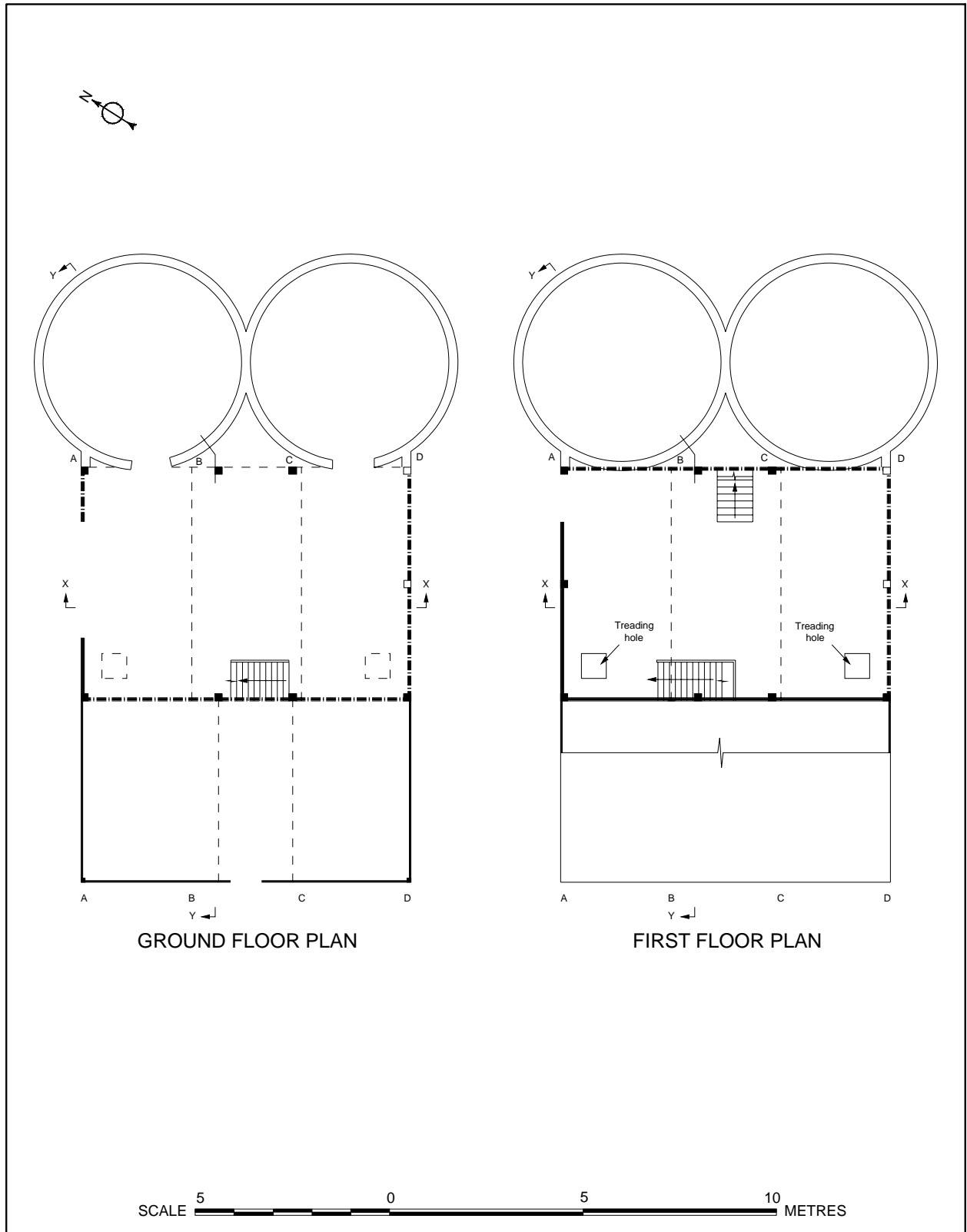
OASTHOUSE AT HAZELDEN FARM, CRANBROOK, KENT OUTLINE PLAN SHOWING SEQUENCE OF DEVELOPMENT				Project Ref	3806
				Drawing No.	2
Drawn By	J Clubb	Revision No	-	Date of original survey	2009
				Date of this revision	2009



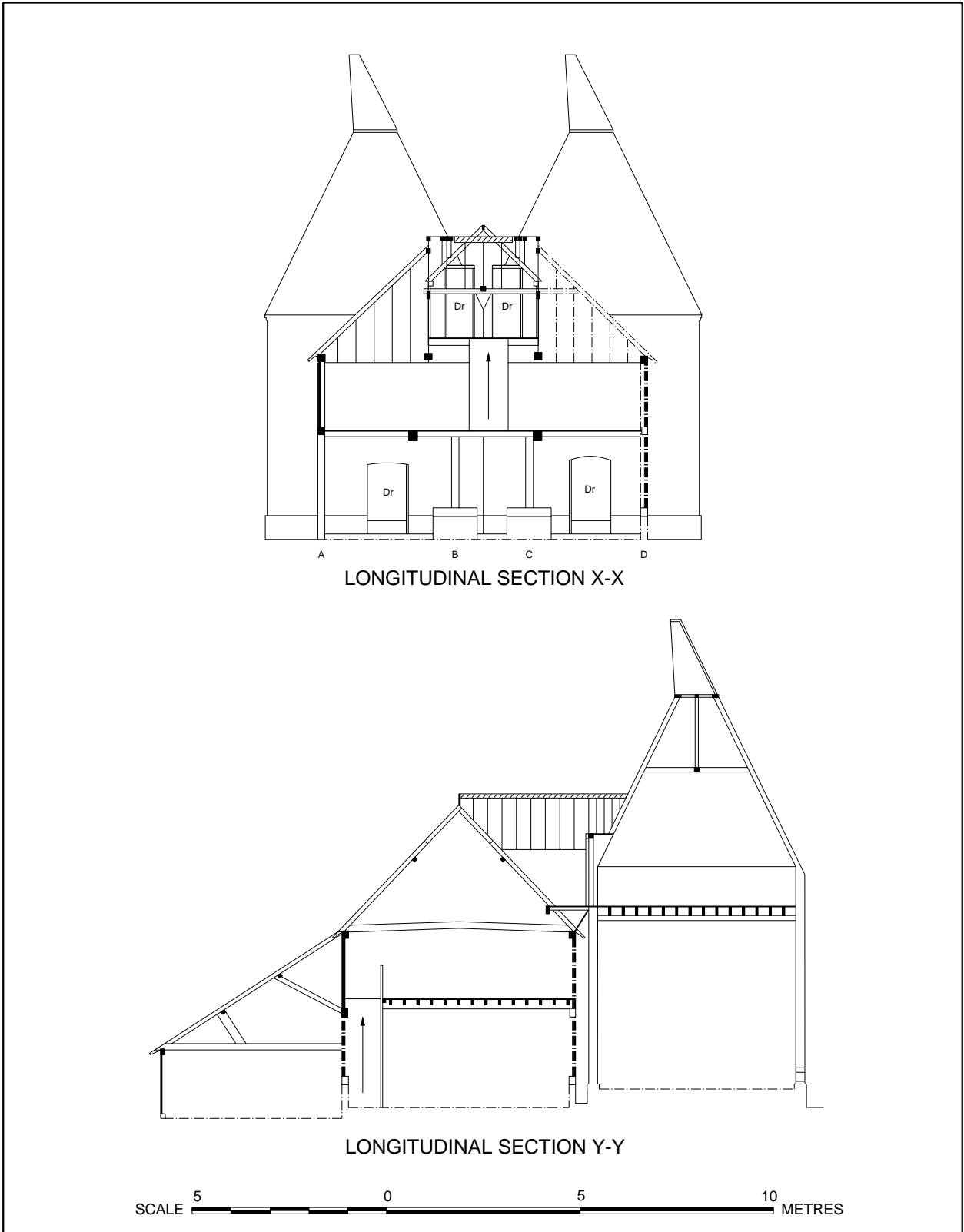
OASTHOUSE AT HAZELDEN FARM, CRANBROOK, KENT PERIOD-A RECONSTRUCTION DRAWINGS				Project Ref 3806
				Drawing No. 3
Drawn By J Clubb	Revision No -	Date of original survey 2009	Date of this revision 2009	



OASTHOUSE AT HAZELDEN FARM, CRANBROOK, KENT PERIOD-B RECONSTRUCTION DRAWINGS				Project Ref 3806
				Drawing No. 4
Drawn By J Clubb	Revision No -	Date of original survey 2009	Date of this revision 2009	



OASTHOUSE AT HAZELDEN FARM, CRANBROOK, KENT PERIOD-C RECONSTRUCTION DRAWINGS				Project Ref 3806
				Drawing No. 5
Drawn By J Clubb	Revision No -	Date of original survey 2009	Date of this revision 2009	



OASTHOUSE AT HAZELDEN FARM, CRANBROOK, KENT PERIOD-C RECONSTRUCTION DRAWINGS				Project Ref	3806
				Drawing No.	6
Drawn By	J Clubb	Revision No	-	Date of original survey	2009
				Date of this revision	2009