Birmingham University Field Archaeology Unit
Project No. 707
July 2000

Building recording and an archaeological watching brief at the Old Barn, Halesowen, Dudley (SMR 7928)

by
J.HALSTED & E.MACEY

For further information please contact:
Simon Buteux, Iain Ferris or Gwilym Hughes (Directors)
Birmingham University Field Archaeology Unit
The University of Birmingham
Edgbaston
Birmingham B15 2TT
Tel: 0121 414 5513
Fax: 0121 414 5516
E-Mail: BUFAU@bham.ac.uk
Web Address: http://www.bufau.bham.ac.uk

Building recording and an archaeological watching brief at the Old Barn, Halesowen, Dudley (SMR 7928)

Building recording and an archaeological watching brief at the Old Barn, Halesowen, Dudley (SMR 7928)

Contents

Building recording and an archaeological watching brief at the Old Barn, Halesowen, Dudley (SMR 7928)

List of figures

List of plates

Summary

In May and June 2000 Birmingham University Field Archaeology Unit undertook a building survey and watching brief at the Old Barn, Halesowen, Dudley (SMR 7928; NGR SO 978 848). The survey building comprised a three bay, clamped brick, barn with a modern tile roof that was empty after a period of recent small-scale industrial use. The work was commissioned by the owners of the site, Alan and Kate Hall, in order to fulfil a planning condition in advance of demolition. The scope of the archaeological work was defined in a brief prepared by Dudley Metropolitan Borough Council.

The survey revealed that the Old Barn incorporated the northernmost bay of a timber-framed building that was once part of the Old Barn Cottage located immediately to the south of the survey building. The character of the surviving parts of the roof of this structure suggested a construction date range between 1550 and 1650. Subsequently, in the first half of the 18th century, the Old Barn was constructed as a three-bay threshing barn that incorporated the northernmost bay of the earlier building within its southern end. This barn was constructed in clamped brick and employed wall-as-truss supports for the principal trusses. In the last century the building underwent several alterations and repairs, mainly associated with its last phase of use as a small-scale industrial works making creosote, and later as a car-repair workshop.

Building recording and an archaeological watching brief at the Old Barn, Halesowen, Dudley (SMR 7928)

1 Introduction

In May and June 2000 Birmingham University Field Archaeology Unit undertook a building survey and watching brief at the Old Barn, Halesowen, Dudley (NGR SO 978 848; Fig 1). The survey building was set back 20m to the south of Greenhill Road on Mucklow Hill, and comprised a three bay, clamped brick, barn with a tile roof. The building was empty after a period of recent small-scale industrial use, but was also part of a larger structure, the southern half of which had been converted into a cottage (Fig.2). The cottage was not affected by the redevelopment. The work was commissioned by the owners of the site, Alan and Kate Hall, in order to fulfill a planning condition in advance of demolition. The scope of the archaeological work was defined in a brief prepared by Dudley Metropolitan Borough Council.

2 Historical background

The survey building was first depicted on the 1846 Tithe map as part of Greenhill Farm, an isolated farmstead in the township of Hill. The farmhouse and farmyard were situated to the west of the survey building, while a north range, demolished in the early-1980s, was probably cattle-sheds. The landscape of Mucklow Hill, depicted on the First Edition Ordnance Survey map of *c.*1888, comprised several isolated farms set within enclosed fields (Fig.3). This pattern largely originated in the 18th century, along with the nearby Leasowes gardens belonging to the poet William Shenstone. In the medieval period Mucklow Hill lay within the sphere of the Premonstratensian Abbey of Halesowen, that had a grange and rabbit warrens at Hill together with a coalmine nearby at 'La Coombes'.

3 Method

A photographic survey using colour print and black and white print film was undertaken of the north and west external elevations and the interior elevations of the building, together with the timber roof trusses. Neither the south nor the east external elevations were accessible. The interior elevations of the building and a ground plan were drawn at a scale of 1:50. Measured sketch drawings at an approximate scale of 1:50 of the roof trusses were also produced. In addition specific details of the building fabric were noted in order to ascertain the sequence of construction and original function.

4 Results

The survey building (Plate 1) consisted of three bays defined by three timber roof trusses, numbered 1 – 3 from north to south (Fig.4). The main build of the walls was of clamped, orangey-red brick, containing a few white pebble inclusions. Some of the bricks were

unevenly fired, but generally they were of good quality. The bricks were of variable size, but generally measured 8½ by 4¼ by 2½ inches. The bonding of the one-brick-wide walls was irregular with a buff-white lime mortar with ash inclusions.

The following summary of the survey of the building begins with an account of the roof. Discussion is then based upon descriptions of the bay divisions because these are fundamental to an understanding the development of the building as a whole.

The roof

The roof had been extensively repaired, most of the common rafters had been replaced, and modern clay tiles added. The design of the roof over the southern bay was very different to the other two bays, and each roof truss was unique. The purlins were trenched throughout, apart from later repairs, which were cleated or staggered. The scarf joints were simple face-pegged splayed scarfs.

Truss 1, (Fig 5 and Plate 2), had the simplest design with cleanly sawn timber and basic carpentry. The truss consisted of a tiebeam linked by two raking struts to a pair of principal rafters. Two carpenter's marks were visible on the west, south-facing side of the truss and tiebeam. The truss supported a pair of purlins on each side of the roof truss, and a ridge purlin of relatively slight scantling. The truss was further supported by a pair of short wall stubs bonded with the brickwork of the east and the west elevations.

Truss 2 (Fig.5 and Plate 3) was more elaborate, consisting of a tiebeam, three struts and two collar beams. Redundant mortices in the soffit of the tiebeam and the two collars indicate that this was a closed truss. The truss marked a division between two types of roof, the one to the north having two pairs of purlins, and the one to the south a single pair of purlins. The northern purlins had been cut into the principal rafter. The southern ridge purlin was more substantial than that to the north. Various later repairs helped to support the truss, but these were not recorded.

The southern truss, Truss 3 (Fig.5 and Plate 4), was retained as it was incorporated into the north gable of Old Barn Cottage. The truss comprised a tiebeam with curved knee braces, one central strut and a collar-beam. The purlins were originally supported by curved windbraces, but only the pair on the western side of the roof was *in situ*. While constructed as an open truss, the timbers above the tiebeam had been in-filled with clamped brick, while the area under the tiebeam was filled by concrete blocks.

The north bay

The northern gable of the building stood to a height of 6.8m (Fig.6, and Plate 1). Near the apex of this gable were six ventilation holes, and there were a series of brick plinths beneath these holes that projected out from the exterior face of the building. There was also dog-toothed dentilation to the eaves of the external face of the gable. A later window opening had been inserted into this gable end. This had a wooden lintel over and the opening was subsequently blocked with bricks bearing the inprint ?'FOSALSIL SOLID'.

The east wall of the northern bay was of the same brick build as that of the north gable. There was no evidence of any former openings in this section of wall (Fig.7). The west wall of the northern bay had an entrance 2.8m in width and 2.1m in height inserted, with a steel lintel above. A shadow left by the roof of a small cross-wing on the external face of this wall indicated that the survey building had been extended later in its life (Plate 1). The floor of the northern bay was overlain with concrete-screed.

The central bay

The central bay was partially divided from the north bay by the two buttresses which supported Truss 1. The build of these buttresses was one with the earliest brick build of the structure. The bay had a large entrance on its western side *c.*3.2m in width, flanked by two timber uprights that sat on sandstone blocks. The timber jamb on the northern side of the entrance was tied into the wall by two horizontal timbers (Fig.7), indicating that the opening was contemporary with the main build in clamped brick.

In the internal elevation of the east wall there was evidence of a similarly large blocked opening, *c.*3.35m in width. The blocking was made in reddish-orange clamped bricks, and purple-black bricks measuring 9¼ by 4¼ by 3 inches. To the north of the blocked opening, three horizontal wooden beams set into the original brickwork mirrored the arrangement on the opposite wall.

Immediately to the south of the blocked opening in the central bay was a vertical scar left after the removal of a similar buttress here to that under Truss 1. This buttress, together with another on the west wall, had been replaced by recent T-shaped pillars supporting Truss 2. The floor of the central bay was made up of substantial carboniferous mudstone flagstones measuring up to 1m by 0.5m by 0.1m. These flagstones occupied the area between the two large openings.

The south bay

The west wall of the southern bay contained two distinct brick builds. The stretch between the southern jamb of the central opening and the large southern window was made of reddish-orange brick, similar to that of the original build, but bonded with a slightly different mortar. The brickwork under the window consisted of reddish purple clamped bricks measuring 9 by 4½ by 3 inches constructed over a sandstone foundation. To the south of the large window was a narrow entrance, 1m in width.

Internally, the east wall of the southern bay was obscured by heavy creosote staining, which related to a recent phase of use of the building. A small bricked in opening with a wooden lintel above, was visible 1.9m from the floor at the southern end of the wall. A small iron hook 0.9m from the floor surface at the south end of the wall probably also related to the creosote-making phase. At the base of the wall were indications of a sandstone footing. The south wall was modern.

5 Interpretation and phasing

For analytical purposes, the development of the building can be summarized within three main phases. Phase 1 is represented by the timber roof over the southern bay, which is associated with the building now known as the Old Barn Cottage. It would appear that the southern bay of the survey building was originally the northernmost bay of this building, and that Truss 3 was an open truss, and Truss 2 the gable end of that building. The curved wind and knee braces were characteristic of the carpentry of this timber-framed building, which probably also had sandstone sills. There is insufficient evidence to determine the original function of this building, although closer inspection of Old Barn Cottage, if this were possible, may provide further clues.

Phase 2 comprises the main phase of clamped-brick construction throughout the survey building. This is associated with the addition of the roof over the central and southern bays, and the construction of two large, opposed, openings within the central bay. The use of the wall-as-truss to support the tiebeams was a common feature of brick-built barns throughout the Midlands (Peters 1980, 17). These changes clearly indicate that the Phase 2 building was constructed as a threshing barn. On a mixed farm, such as Greenhill Farm, the threshing barn was both a storage, and a processing building for cereal crops such as wheat, barley, oats or rye. At harvest a portion of the crop was usually stored inside and the remainder ricked in the yard. Hand threshing required a smooth floor surface upon which the sheaves could be spread and then flailed. When all the seed had been shaken the grain was winnowed by being tossed in the draught between the open doors of the barn. The threshing floor was generally centrally placed, with storage space for unthreashed corn on one side and threshed straw on the other. Some arrangements included storage areas of unequal size. This traditional layout of a threshing barn began to be superceded in the late-18th and 19th centuries, when mechanised threshing machines became more common. Within this context, the ventilation holes in the north gable may indicate that this side of the threshing barn was used to store the processed corn. Any interpretation of these holes as dove holes is highly unlikely.

Phase 3 is represented by various alterations and repairs made to the Phase 2 barn, generally within a small-scale industrial rather than agricultural setting over the course of the last century. This phase was particularly destructive to the west elevation of the survey building.

6 Dating

Dating of the phases in the development of the building depends upon analysis of the roof and of architectural features such as windows and, for later periods, on the size of bricks. The roof structure may be tentatively dated with reference to other comparative examples that have been dated in the region. Within the parameters of the current survey, it was not possible to undertake much broader research, but a provisional date range of between 1550-1650 may be proposed for the Phase 1 roof. The best dating evidence for Phase 2 is probably the clamped brickwork. The brick size employed was common in the 18th

century, before various brick taxes to finance wars with France were introduced which led to an increase in the size of the average brick. Within an 18th-century context the construction of the clamped brick walling may be best seen within the first half of that century rather than the latter half. Firstly, the employment of a very irregular type of bonding may have been the result of a set of builders still finding their way in terms of brick construction. Secondly, the traditional threshing barn began to be superceded by mechanised designs in the later part of the 18th century. Finally, the use of the wall-as-truss was particularly prominent in the region at this time.

Here, reference may be made to the former infirmary building at Halesowen Abbey. This building was also converted into a threshing barn in the early-18th century, and shared many features in common with the survey building (Litherland and Moscrop, forthcoming). It is tempting to speculate to what extent the alterations to these buildings were an expression of a changing agricultural regime in the region, but this is beyond the scope of the present study.

7 Watching brief

On Wednesday 28th June 2000, a visit was made to the site of Old Barn Cottage, Greenhill Road, Hill, Halesowen. The watching brief monitored the foundation trenches of the new building, which were largely situated within the footprint of the survey building (Plate 5). The foundation trenches consisted of two north-south aligned trenches, which measured 14.6m in length. These were joined by five shorter, 5.6m wide, beam trenches. The depth of the foundation trenches was generally *c.*0.75m. Natural clay subsoil was generally present *c.*0.3m beneath the cleared ground surface. This was overlain by a mixed demolition layer. The only archaeological feature recorded was part of the foundation of one of the walls of the central bay of the survey building (Plate 6). Four courses of clamped brick remained, to a depth of 0.3m. These were set directly into the natural clay.

A full photographic record was kept throughout, which forms part of the overall site archive.

Acknowledgements

The building recording and analysis was undertaken by S.Litherland and J.Halsted. The photographic survey was undertaken by E.Newton, and the watching brief by E.Macey. The report was written by J.Halsted and E.Macey, and the drawings prepared by J.Halsted. The text was edited by S.Litherland. Many thanks are due to Alan and Kate Hall for commissioning the survey work, and to John Hemmingway and Peter Boland of the Planning and Leisure Department of Dudley Metropolitan Borough Council for monitoring the project.

References

Litherland, S, & Moscrop, D, — *Halesowen Abbey: A report on building recording and fieldwork 1987-1995*, forthcoming.

Peters, J.E.C. 1980 — 'The wall as truss in farm buildings', *Vernacular Architecture 11,* 17 – 21.

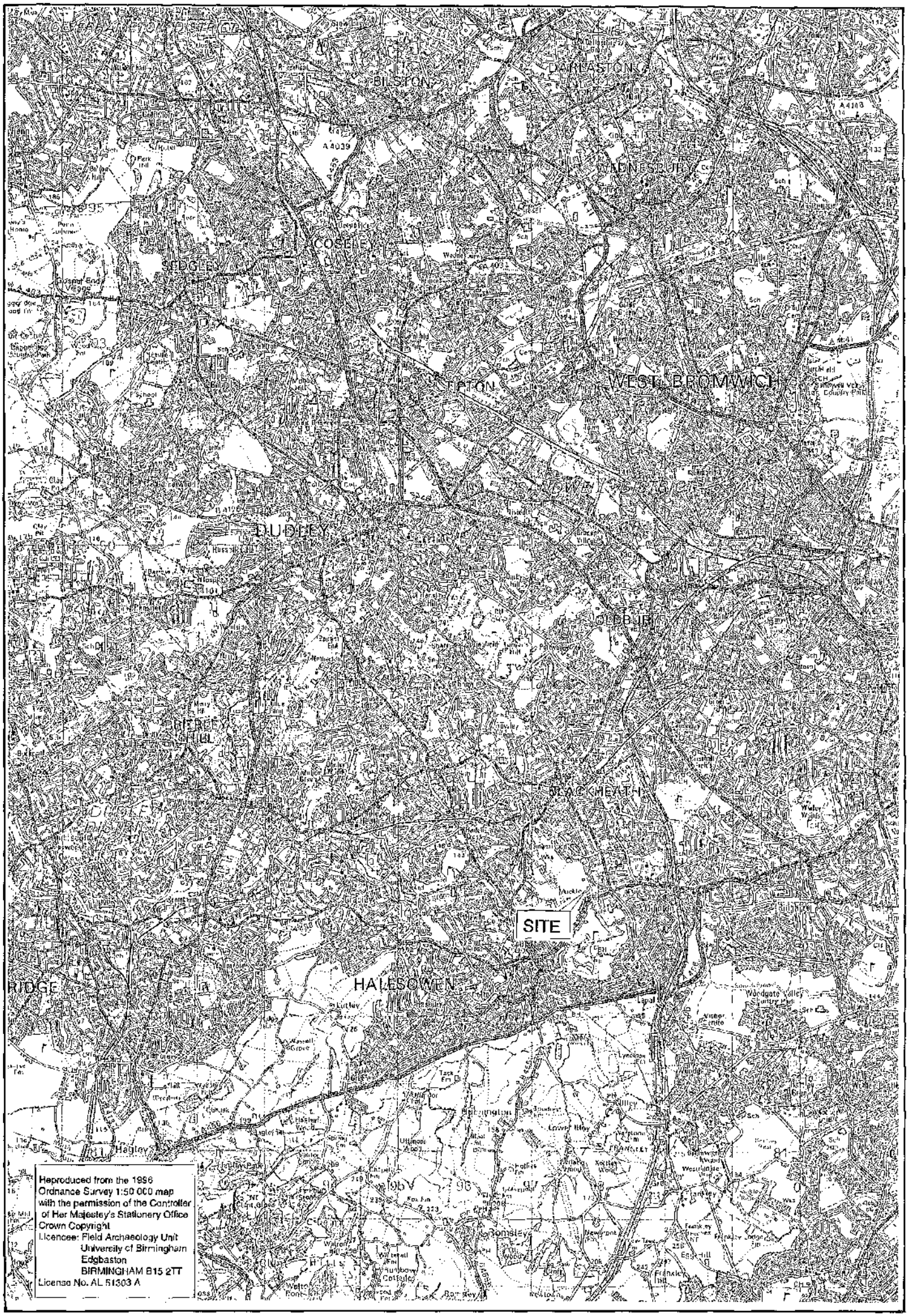

BILSTON
DARLASTON
WALSALL
COSELEY
SEDGLEY
TIPTON
WEST BROMWICH
DUDLEY
OLDBURY
BLACKHEATH
SITE
HALESOWEN
RIDGE
Hagley
Romsley
Reproduced from the 1996 Ordnance Survey 1:50 000 map with the permission of the Controller of Her Majesty's Stationery Office Crown Copyright
Licencee: Field Archaeology Unit
University of Birmingham
Edgbaston
BIRMINGHAM B15 2TT
License No. AL 51303 A

Fig.1

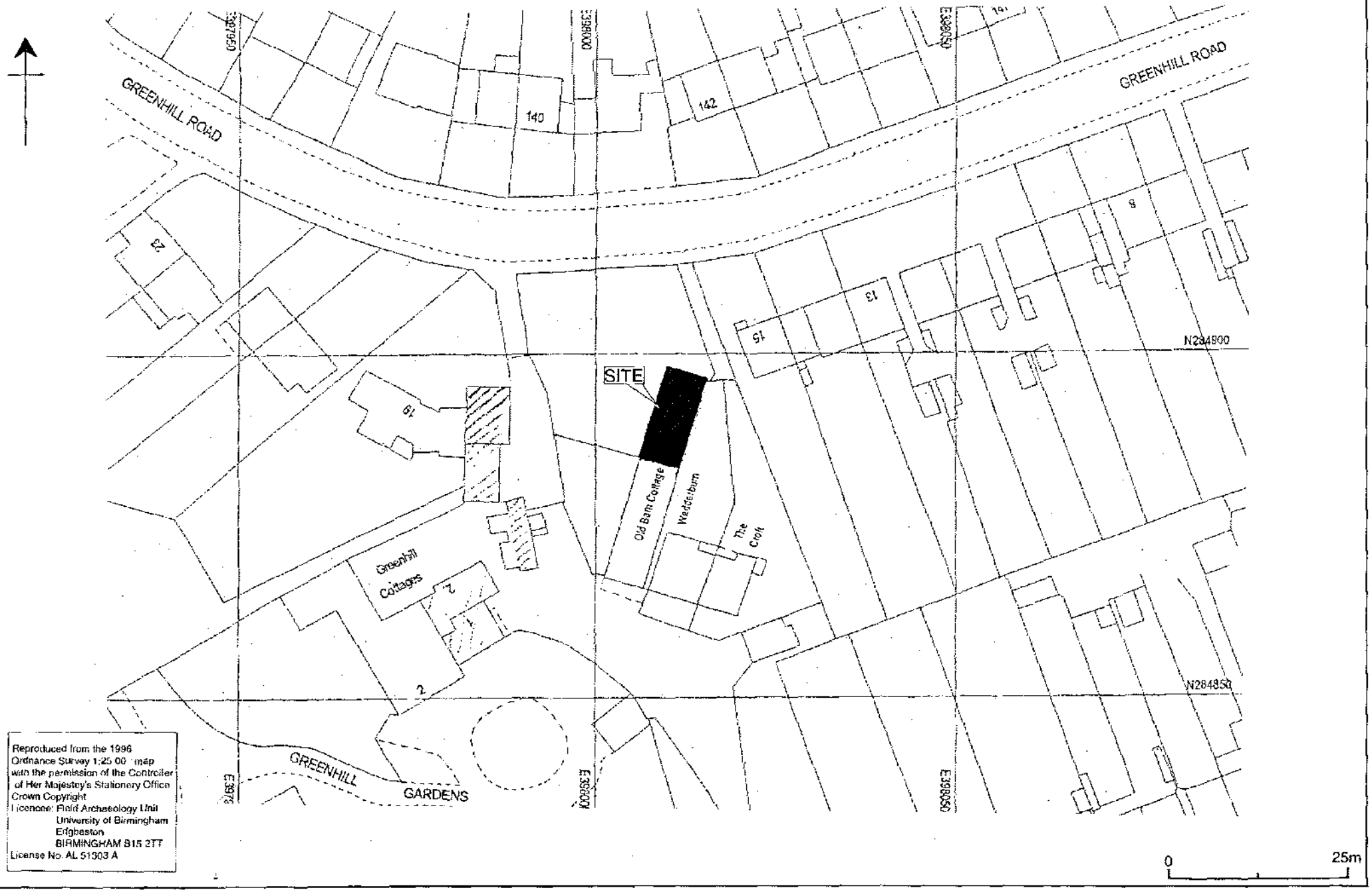
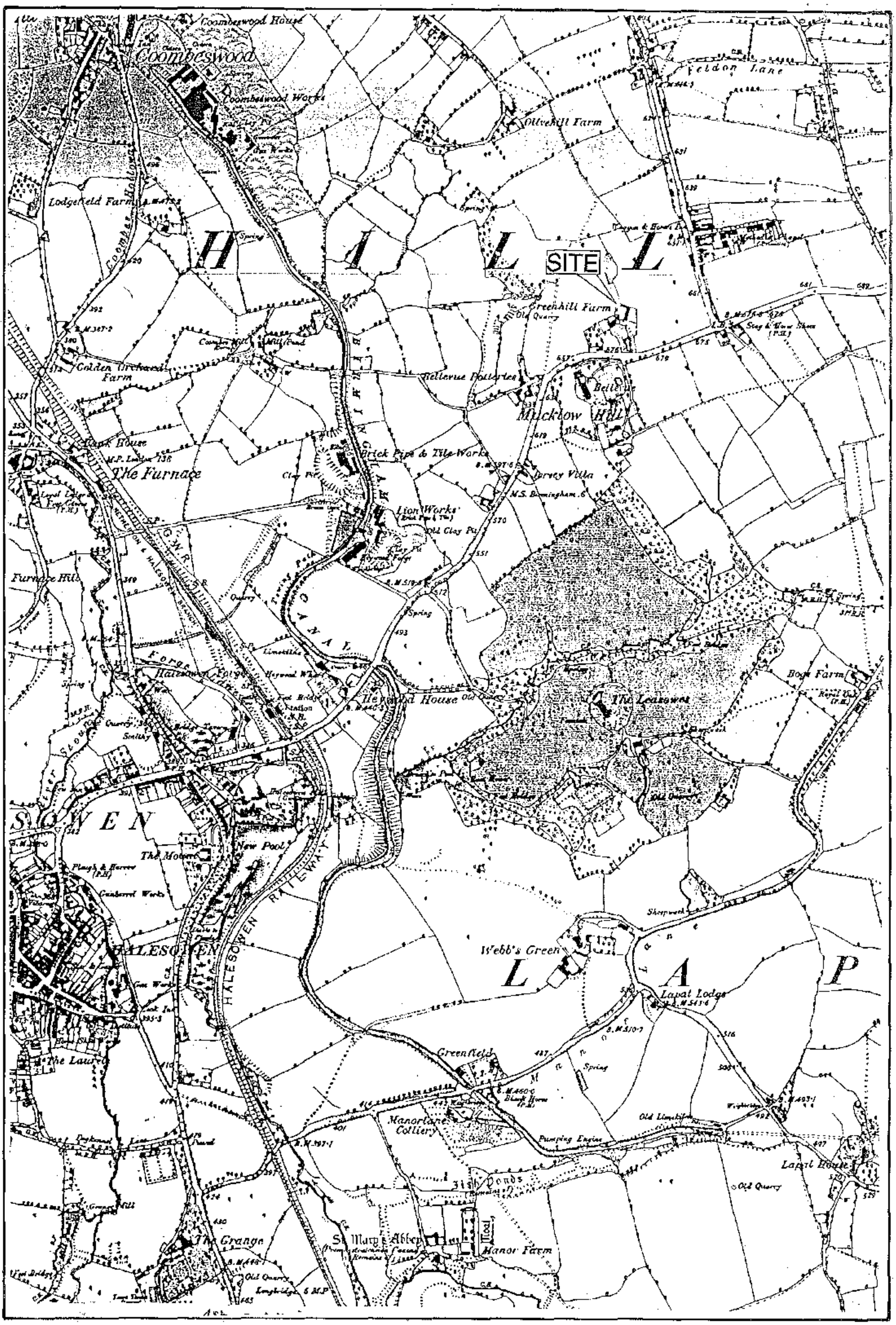

GREENHILL ROAD
GREENHILL ROAD
140
142
23
19
15
13
9
SITE
Old Barn Cottage
Weddarburn
The Croft
Greenhill Cottages
7
2
GREENHILL GARDENS
E398000
E398050
N284900
N284850
Reproduced from the 1996 Ordnance Survey 1:25 000 map with the permission of the Controller of Her Majestey's Stationery Office Crown Copyright
Licencee: Field Archaeology Unit
University of Birmingham
Edgbaston
BIRMINGHAM B15 2TT
License No: AL 51303 A
0
25m

Fig.2



Coombeswood House
Coombeswood
Coombeswood Works
Olivehill Farm
Feldon Lane
Lodgefield Farm
H
A
L
SITE
L
Greenhill Farm
Old Quarry
Golden Orchard Farm
Bellevue Potteries
Mucklow Hill
Bank House
The Furnace
Brick Pipe & Tile Works
Jersey Villa
Lion Works
Old Clay Pit
Furnace Hill
Halesowen Forge
Heywood House
The Leasowes
Bog Farm
New Pool
The Moat
Plough & Harrow (P.H.)
Halesowen
Halesowen Railway
Webb's Green
L
A
P
Lapal Lodge
Greenfield
Manor Lane Colliery
Pumping Engine
Old Limekiln
Lapal House
Old Quarry
The Laurels
Fish Ponds
The Grange
St Mary's Abbey
Manor Farm
Canal

Fig.3

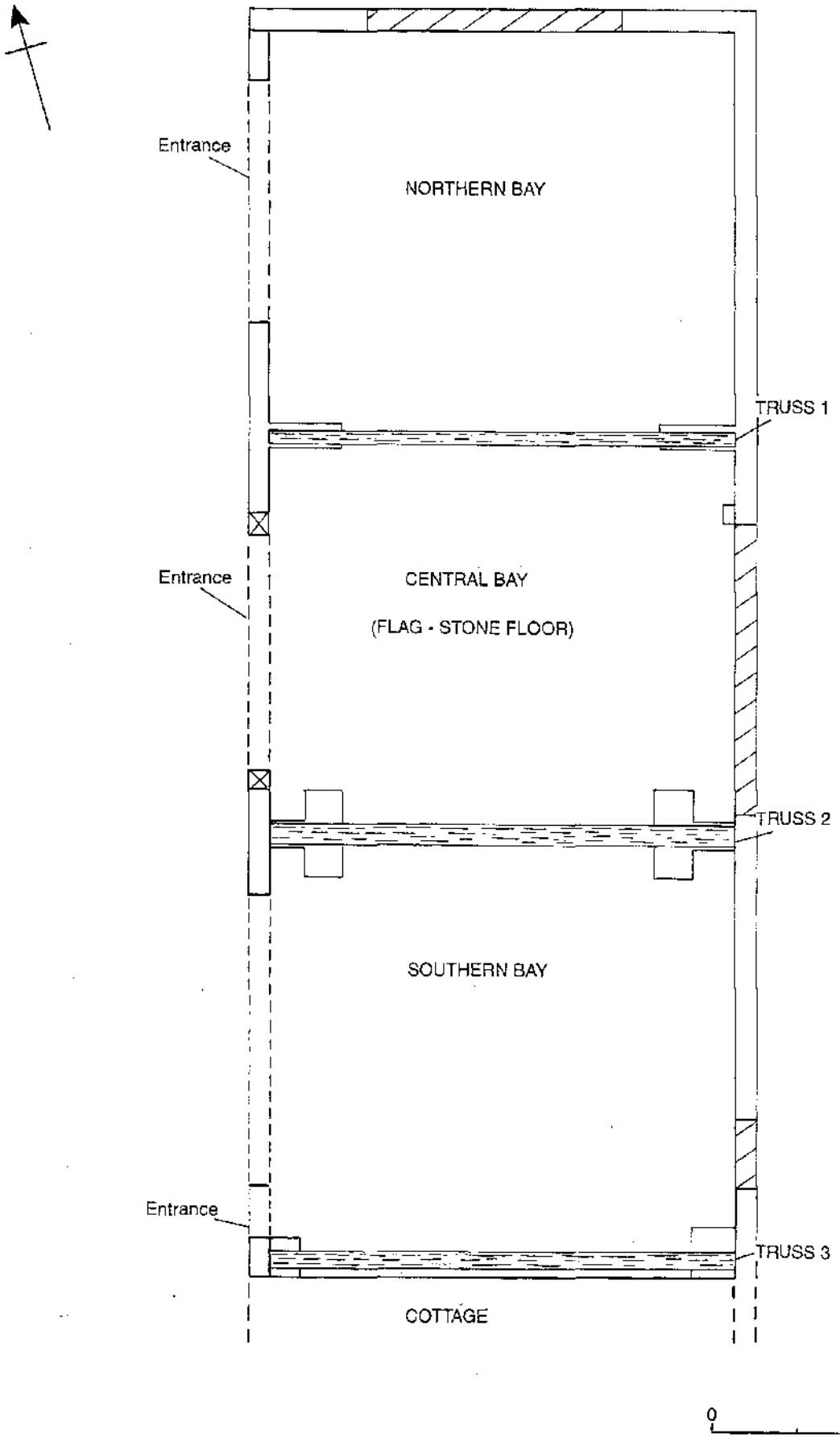
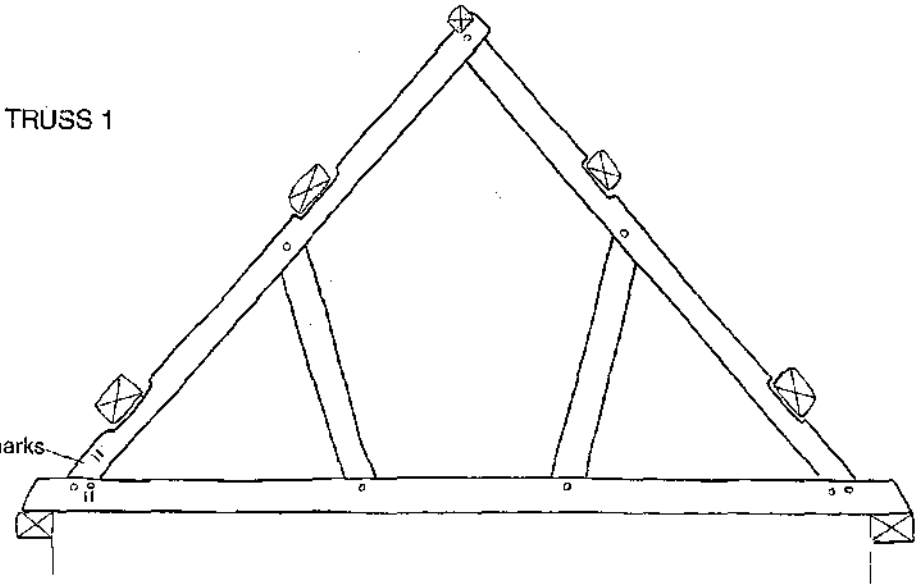

Entrance
NORTHERN BAY
TRUSS 1
Entrance
CENTRAL BAY
(FLAG - STONE FLOOR)
TRUSS 2
SOUTHERN BAY
Entrance
TRUSS 3
COTTAGE
0
2m

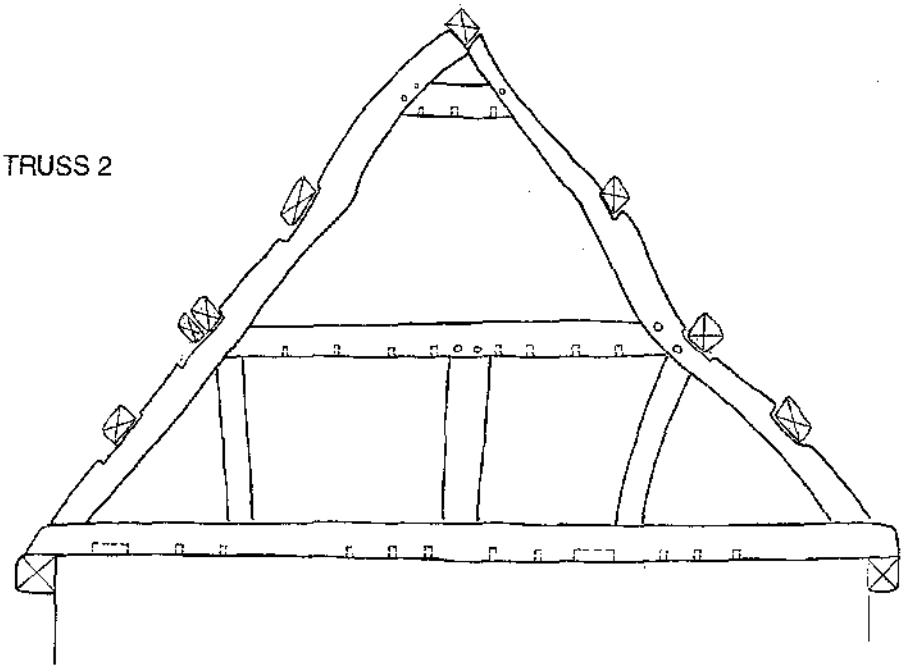
Fig.4

TRUSS 1

Carpenter's marks



TRUSS 2



TRUSS 3

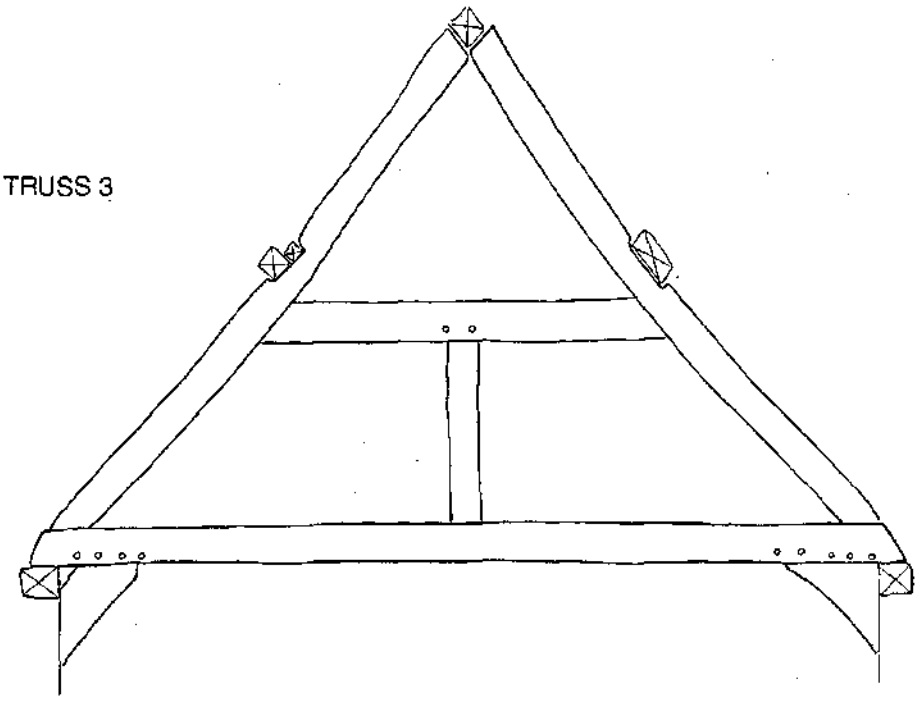


Fig.5

NORTH GABLE INTERNAL ELEVATION

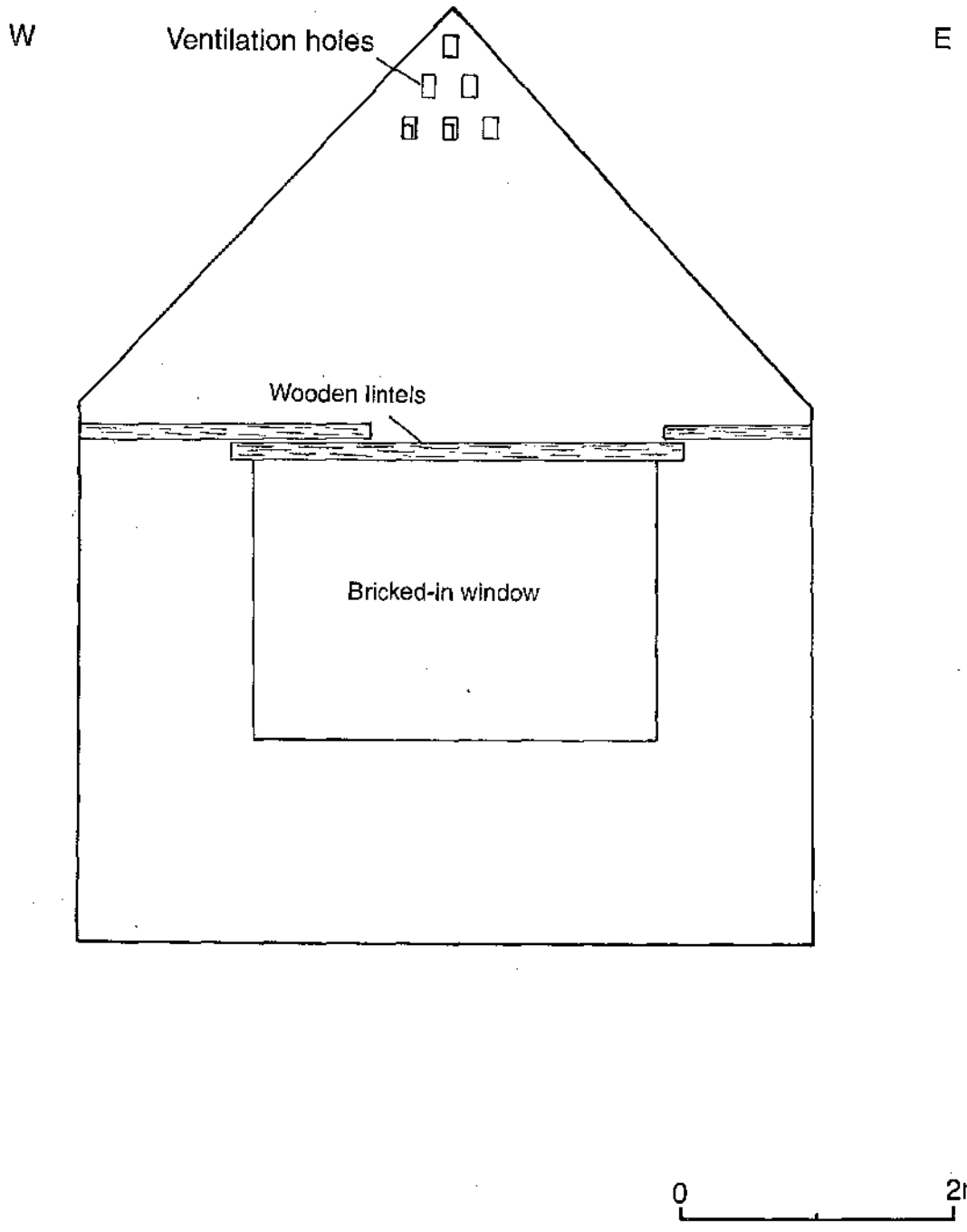


Fig.6

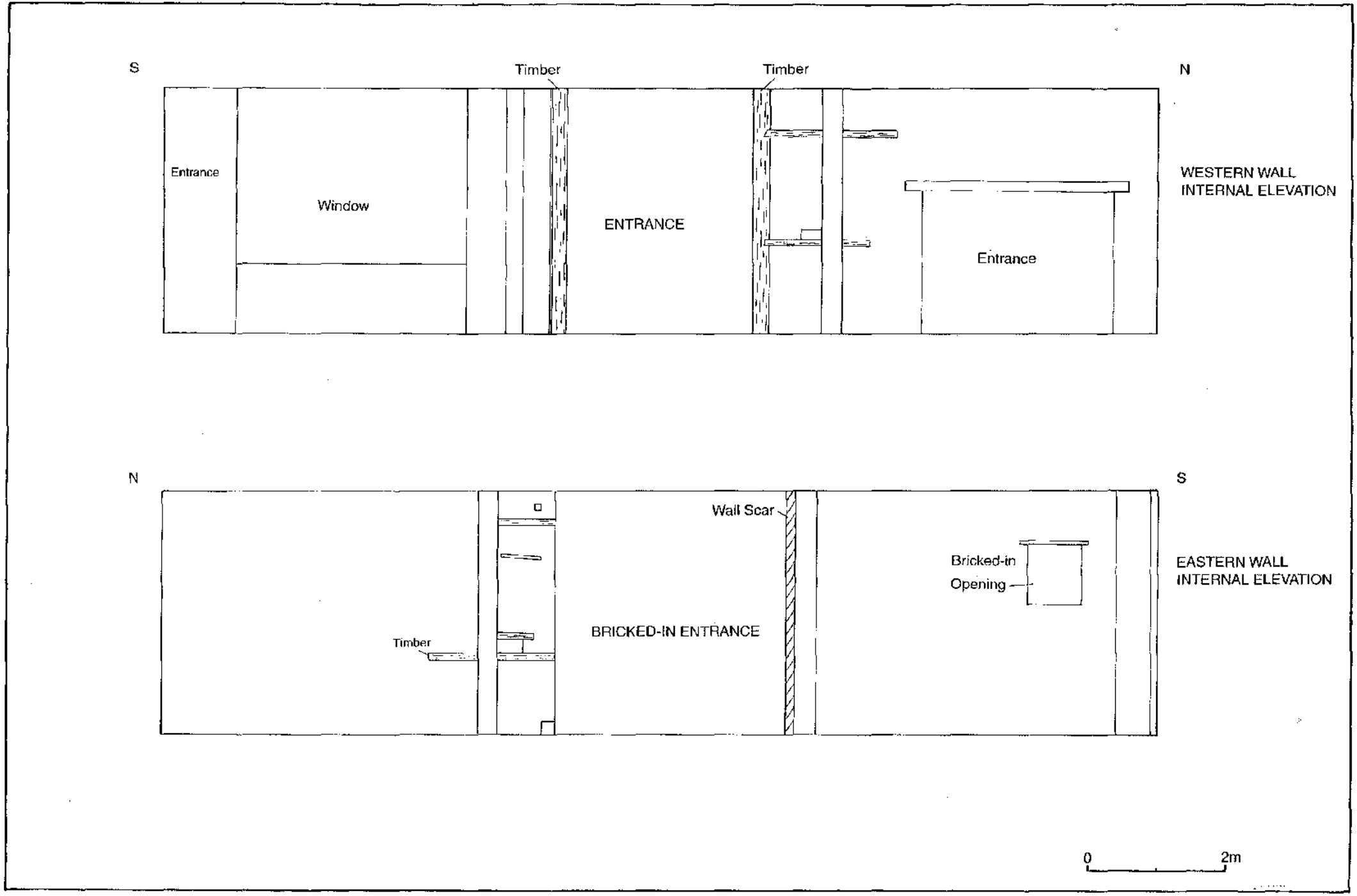

S
Timber
Timber
N
Entrance
Window
ENTRANCE
Entrance
WESTERN WALL
INTERNAL ELEVATION
N
S
Wall Scar
Bricked-in
Opening
Timber
BRICKED-IN ENTRANCE
EASTERN WALL
INTERNAL ELEVATION
0
2m

Fig.7

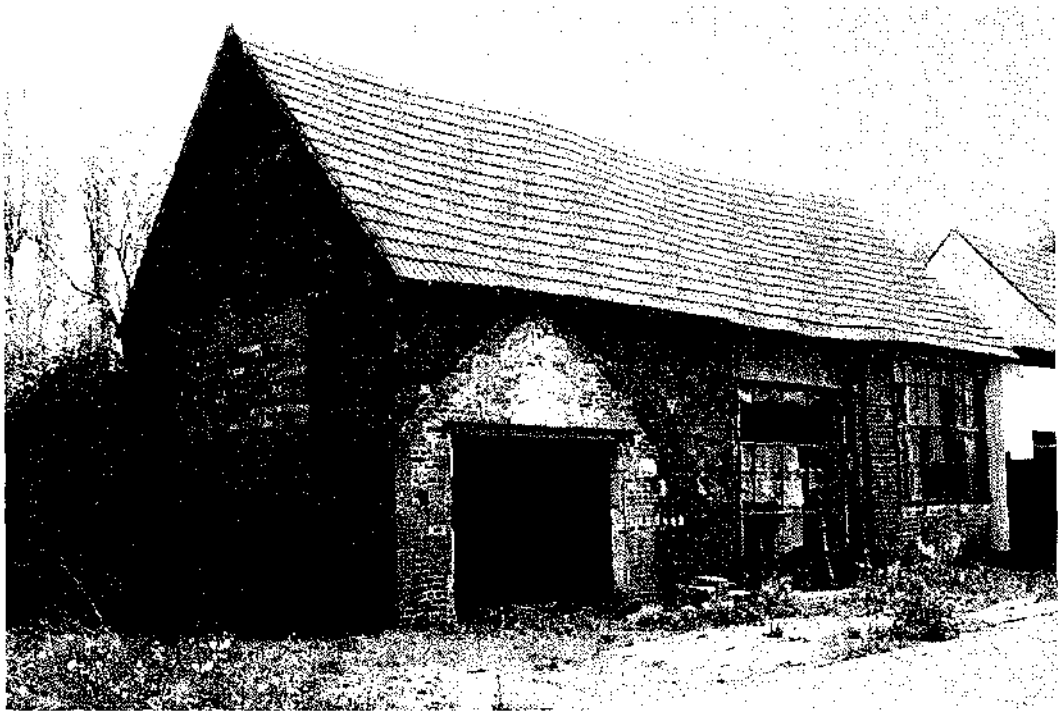


Plate 1

Plate 2: Truss 1, looking south

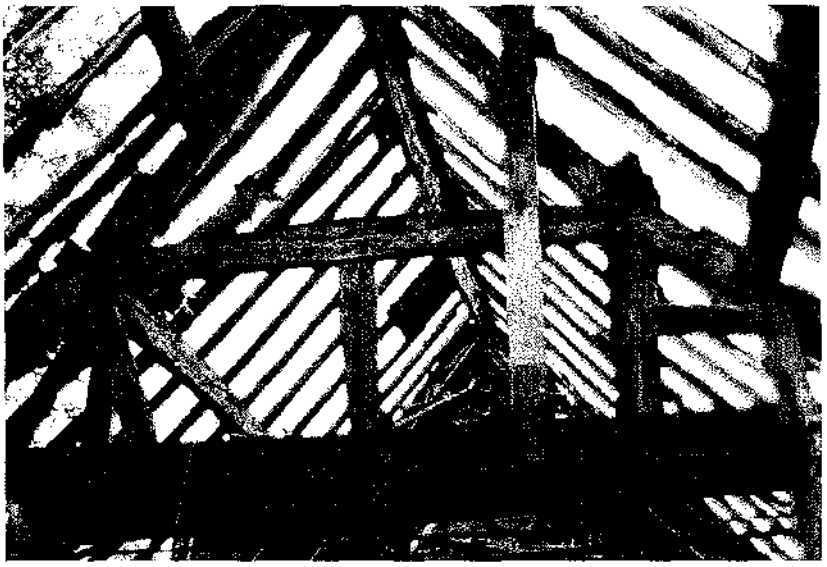


Plate 3: Truss 2, looking south

Plate 4: Truss 3, looking south

Plate 5

Plate 6