

# Barn at Shelland Hall, Rattlesden, Suffolk RAT 038

# **Historic Building Record**

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Leigh Alston MA (Oxon), Architectural Historian on behalf of Suffolk County Council Archaeological Service

> The Archaeological Service (Field Projects Team) Suffolk County Council, Shire Hall Bury St Edmunds IP33 2AR Tel. (01284) 352446

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# Barn at Shelland Hall, Rattlesden, Suffolk

## (TL 994 597)

# **Historic Building Record**

This report provides a record at English Heritage (2006) Level 3 of a grade II-listed redundant barn in the curtilage of a grade II-listed house. It has been prepared to a specification written by Edward Martin of Suffolk County Council's Archaeological Service (ref. SpecHBR(EM)\_ShellandHallBarn\_Rattlesden\_4031\_2008, dated 7<sup>th</sup> September 2011) and is intended to fulfil a condition of planning permission for conversion (Mid Suffolk District Council consents 4131/08 and 4132/08 condition 3).

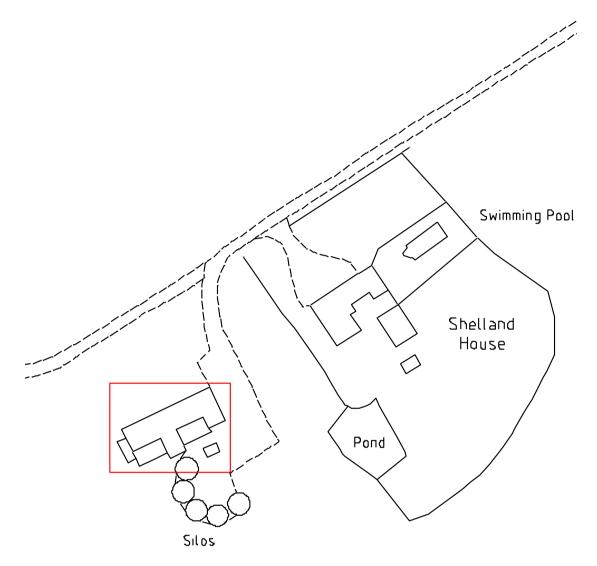
## Introduction

The report is accompanied by a CD containing a full photographic record in the form of 70 digital images of 21 megapixels (Appendix 1), but also includes 12 printed photographs of key features to illustrate the text. Each image is described in a separate schedule and wherever possible includes a scale rod with half-metre divisions in red and white. The site was inspected on 13 October 2011.

#### **Summary**

Shelland Hall is marked on the current Ordnance Survey as Shelland House and lies in open countryside on a ridge of high ground approximately 2 km north-east of Rattlesden village. The site is reached by an unmade track from the boundary with Shelland parish which follows the highway 250 m to the east and gives the farm its name. The timber-framed and rendered former farmhouse is listed at grade II and dated to the 17<sup>th</sup> century in the Schedule but has not been inspected internally and may be earlier. At the time of the tithe survey in 1839 the farm was a middle-sized tenanted holding of 114.5 acres on the estate of the Tyrell family of Gipping Hall who also owned most of Shelland parish.

The barn to the south-west of the house is a substantial timber-framed and rendered structure of six bays which is separately listed at grade II and was built in *circa* 1640. The English Heritage inspector was unable to gain access but rightly suspected it to date from the 17<sup>th</sup> century. Despite the replacement of its original thatch with corrugated asbestos and the insertion of a large vehicle door in its eastern gable, the timber frame is unusually well preserved, with a full complement of wind-braces to its intact clasped-purlin roof and most of its tie-beam braces. Much of the exterior is now rendered in cement but large areas of original wattle-and-daub with external roughcast render survive within a series of later lean-to sheds adjoining the southern elevation. The remains of an inserted partition suggest the eastern bay was converted into a stable during the 18<sup>th</sup> or 19<sup>th</sup> century but the entire barn was employed as a farm vehicle garage at the time of inspection. The contemporary southern porch is unusual as it was designed to extend the length of the threshing floor at the back of the building rather than as its principal entrance (which lay in the opposite wall to the north). Rear porches of this kind are common in the 19<sup>th</sup> century but rare in the 17<sup>th</sup> century, and the barn fully justifies its listed status.



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#### Figure 1 Modern Ordnance Survey Enclosing the grade II-listed barn and attached sheds in red and showing the possibly contemporary grade II-listed hall (labelled Shelland House) to the east.

# **Documentary and Cartographic Evidence**

Shelland Hall (marked on the current Ordnance Survey as Shelland House) lies in open countryside on a ridge of high ground approximately 2 km north-east of Rattlesden village and is reached by an unmade track from the highway 250 m to the east. The boundary with Shelland parish, from which the hall takes its name, follows the same highway. The grade II-listed timber-framed and rendered house is described in the Schedule as a 'former farmhouse and manor house, probably 17<sup>th</sup> century', but was not inspected internally and may be earlier. It is not mentioned in W.A. Copinger's 'Manor of Suffolk' (1909) and it is unclear why the inspector considered the site to be manorial.

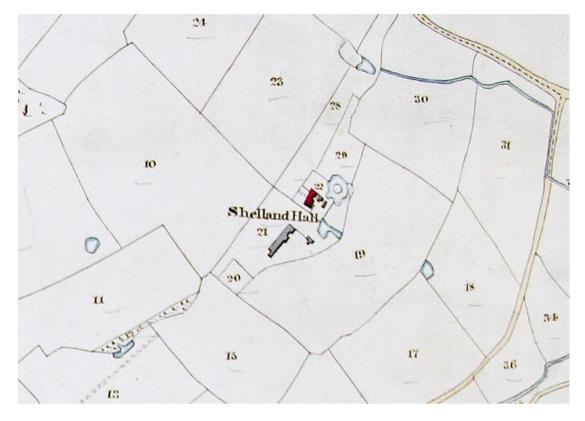
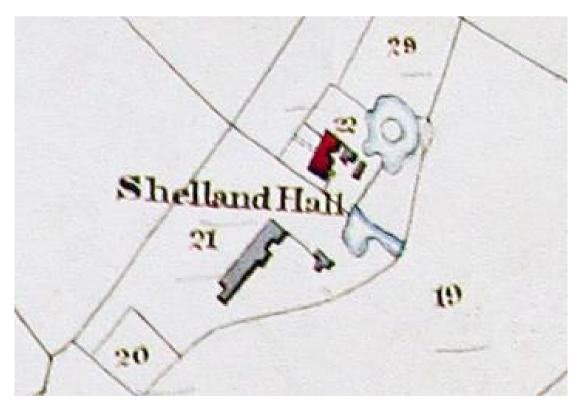


Figure 2

Shelland Hall as depicted on the Rattlesden tithe map of 1839 (with detail below), showing the boundary of Shelland parish following the highway in the top right-hand corner. The hall is shown in red and the barn in grey, with its southern porch and leanto (structures 1a and 2 in figure 5). An additional structure which no longer survives projects from its western gable.



At the time of the Rattlesden tithe survey in 1839 the farm was a middle-sized tenanted holding of 114.5 acres owned by Charles Tyrell Esquire, whose family seat had been at Gipping Hall (a Tudor mansion) since the 16<sup>th</sup> century but who was then living at Polstead Hall. Tyrell also owned all but 20 acres of the adjoining parish of Shelland. The farm was occupied by Mr Candler Bird, who was listed as the tenant at 'Shelland Hall' in White's Trade Directory of 1844. The edition of 1874 names his successor as Frederick Peddar, but the land still appears to have belonged to the Tyrells.

The 1839 tithe map shows the house and barn much as they remain today. The porch and eastern lean-to (2) project from the latter's southern elevation and a structure that no longer survives extends its western gable. The area surround the barn, numbered 21 in figure 2, was named in the contemporary apportionment as a 'barn, pightle and yards', while the site of the hall (no. 22) was 'Shelland hall, offices and yards'. The small enclosure to the west was a 'stackyard' (20) while the large arable fields to the south and north were named as 'Lower Synocks' and 'Old Orchard' (10 and 19 respectively).

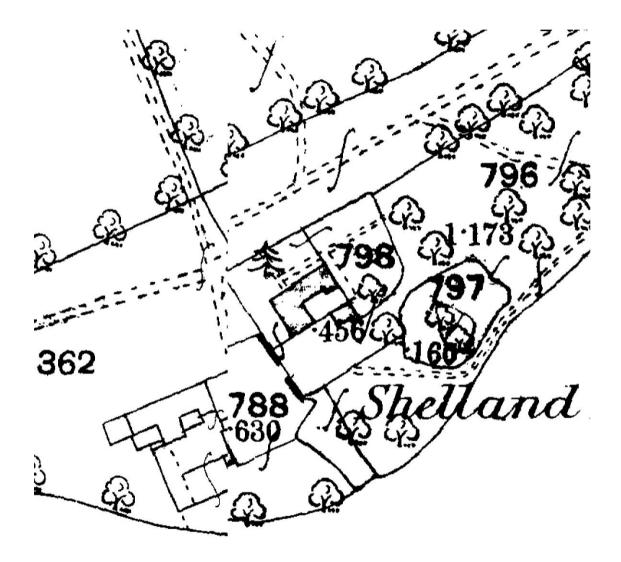


Figure 3 The first edition 25 inch Ordnance Survey of 1885, showing for the first time the central lean-to (building 3 in figure 5) and an enclosed yard to the south of the barn.

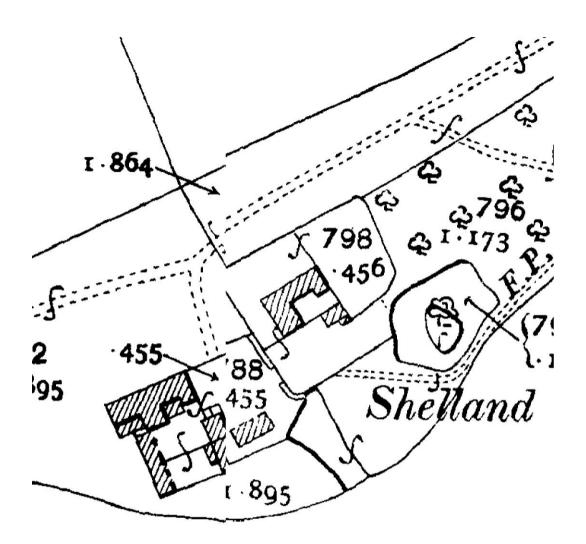


Figure 4 Second Edition 25 inch Ordnance Survey of 1904, showing the outline of the barn as it remains today. The buildings flanking the southern yards have been demolished.

An enclosed yard had been built to the south of the barn by 1885, reflecting the mid-19<sup>th</sup> century preference for keeping cattle in enclosed yards to maximise the production of manure rather than abroad in the fields as hitherto (figure 3). The central shed between the porch and the eastern lean-to (i.e. structure 3 in figure 5) had also appeared, and a further building remained attached to the western gable. Little had changed by 1904 (figure 4), although the western shed had been demolished and the barn's profile was identical to its present outline. The building to the west of the enclosed yards was an open-sided shelter-shed, as indicated by the broken line of its eastern elevation, but no trace remains of the sheds to the east and their purpose is unclear.

# **Building Analysis**

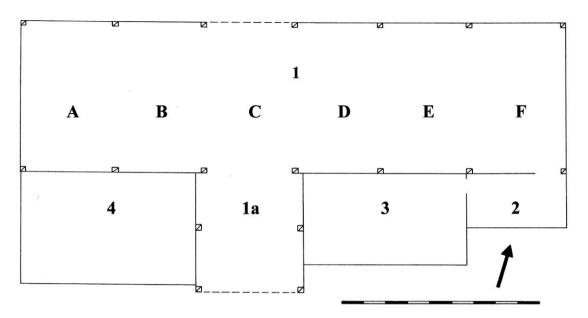


Figure 5 Ground plan of the barn identifying each bay with a letter and each structure with a number for ease of reference in the text and photographs. Scale in metres.

#### Key

- 1. A largely intact early to mid-17<sup>th</sup> century barn in six bays with its entrance in bay C. Clasped-purlin roof with wind-braces, formerly thatched but now covered with corrugated asbestos. Sections of wattle-and-daub and original external clay render extant but the walls now largely rendered in cement. The principal entrance was presumably in the northern elevation, as today, despite the presence of empty stud mortises in the roof-plate. The ostensibly contemporary porch to the south contained only a low doorway beneath its midrail in an unusual manner for the period. Concrete floor throughout.
- 2. An 18<sup>th</sup> or early-19<sup>th</sup> century lean-to shed that appears to have been built as a tack room with bentwood harness hooks when the eastern bay of the barn (F) was partitioned from the rest and converted into a stable. Original brick floor.
- 3. A mid-19<sup>th</sup> century lean-to shed with 20<sup>th</sup> century concrete cattle manger, now largely rebuilt in 20<sup>th</sup> century cement blocks but preserving a section of original external clay daub to the barn.
- 4. A 20<sup>th</sup> century lean-to shed of corrugated iron on the site of an earlier structure shown on historic maps.

#### Structure and Date

The barn at Shelland Hall is a grade II-listed timber-framed and rendered structure on an approximately ENE-WSW axis (simplified to east-west for the purpose of this analysis) which lies some 50 m south-west of the grade II-listed former farmhouse. The building contains six bays, as shown in figure 5, and extends to 24.7 m in length by 6.8 m in overall width (81 ft by 22.25 ft). Its internal walls rise to 4.5 m at their roof-plates (14.7 ft) with midrails interrupting the studs and a shallow brick plinth which appears to have been wholly or largely rebuilt in the 18<sup>th</sup> or 19<sup>th</sup> century. The steep pitch of the roof was designed for thatch but is now covered with corrugated asbestos.

The walls are fully framed with pegged joints and externally trenched braces as shown in figures 6-8, with the exception of the southern brace of the western gable which (curiously, and for no apparent reason) is internal. The opposite eastern gable has been removed beneath the level of its tie-beam beam to accommodate a vehicle entrance with a vertically sliding garage-type door. At the time of inspection the entire barn was employed as a farm vehicle garage and workshop with concrete floors throughout and a combine harvester was in residence. Many timbers show evidence of re-use from one or more earlier structures but the jowled storey posts all appear to be primary. The roof-plates contain numerous face-halved and bladed scarf joints of a type not normally found before the beginning of the 17<sup>th</sup> century and an origin of *circa* 1640 is consistent with the framing and the intact roof of claspedpurlins with symmetrical unidirectional wind-braces to alternate principals. The Schedule of Listed Buildings suggests a probable 17<sup>th</sup> century date on the basis of external evidence (the inspector was unable to gain access). The lower tier of studs to the northern elevation has been encased internally with shuttered concrete and the extent to which the individual timbers survive is unclear; those of the southern elevation are partly hidden by internal boarding and external render but probably remain largely intact, as do the stude of the western gable. The majority of the arch-braces to the tie-beams are also in situ, excepting those of the two outermost trusses (i.e. between bays A and B, and bays E and F), as are the two arch-braces supporting the southern roof-plate of bay C where is abuts the porch (1a).

The two-bay southern porch of 5.4 m in length by 4.9 m in total width (17.75 ft by 16 ft) appears to be contemporary with the main barn, having identical framing to its walls and roof, although the jowls of its corner-posts are notably longer. It too remains largely intact, although the lower studs of its western elevation were replaced by brickwork early in the late- $19^{\text{th}}$  or early- $20^{\text{th}}$  century.

#### **External Cladding**

The present external cladding is of 20<sup>th</sup> century cement, but a substantial area of what appears to be original clay daub survives within the later lean-to sheds of the southern elevation. This roughcast, unpainted daub is secured by horizontal laths nailed to the outer surfaces of the frame and tied with hemp or bast (strips of bark) to narrow coppice poles set between the studs (some whole and some split). The lower section of wall in the central lean-to (3) has been reinforced with 19<sup>th</sup> century boarding. The quality of the individual studs, with irregular scantlings and waney edges, is too poor for them to have been exposed externally.

#### Layout and Function

The barn was built as a traditional threshing barn with an entrance as close to its centre as the provision of an equal number of bays would allow, but is unusual in two respects. The southern porch contained a low doorway of uncertain width beneath its mid-rail in the typical manner of the rear doors found in early barns: until vehicle thoroughfares became common during the 19<sup>th</sup> century most possessed tall entrance doors opposite back doors of standard domestic scale – sufficient only to create a through-draught for threshing and winnowing.

While it is common to encounter rear 'porches' in the 18<sup>th</sup> and 19<sup>th</sup> centuries, whether gabled or built as lean-to structures, intended to increased the length of the threshing floor, the porch here is an exceptionally early example of its kind. The proportions of the original door would be indicated by the pattern of stud mortises in the mid-rail, but this was hidden behind boarding at the time of inspection. The present brick jambs of the wide but low doorway beneath the same mid-rail are additions of the 19<sup>th</sup> or early-20<sup>th</sup> century. The present fullheight entrance to the north is also an alteration, however, as pegged stud mortises are exposed in the relevant section of roof-plate. These suggest the original doorway was significantly lower than the eaves, with a separate lintel as shown in the reconstruction drawing (figure 6): the large outer mortises are close to the storey posts and undoubtedly held door jambs (the present timbers are nailed replacements), but it is unclear why the two central mortises which flank the later door-bar housing are pegged while the two intermediate mortises are not.

The eastern bay of the barn was divided from the rest during the  $18^{th}$  or early- $19^{th}$  centuries, as indicated by the remains of a daubed partition of nailed studs above the tie-beam between bays E and F. This alteration probably relates to the conversion of the end-bay into a stable and hay loft with a lean-to tack room (2) against its southern elevation. The latter retains bentwood harness hooks and a good brick floor, but the loft and other evidence of the conversion has been removed along with the entire eastern gable. The central lean-to of the southern elevation (3) was rebuilt in the  $20^{th}$  century but probably formed an open-sided shelter shed for the adjoining horse or cattle yard; it was added between 1839 and 1882 as it appears in figure 2 but not figure 3. The western lean-to (4) is a  $20^{th}$  century corrugated iron vehicle shed of no historic value.

#### **Historic Significance**

The barn at Shelland Hall is an imposing and unusually well preserved example of the mid-17<sup>th</sup> century, as suspected by the English Heritage inspector who was unable to gain access when drafting the Schedule of Listed Buildings. Despite the loss of its thatch the claspedpurlin roof structure remains completely intact with a full complement of wind-braces and most of its tie-beam braces, together with large areas of original external daub within the later lean-to sheds. The southern porch is an unusually early example of a gabled rear porch with a small doorway opposite the principal entrance, and the building fully justifies its grade II status.

### Frame drawings follow on pages 10-11 Frame Drawings

All scales in metres

#### Figure 6 (page 10)

# Internal elevations: Southern elevation showing access to porch in bay C with northern elevation and roof structure above (omitting common rafters). The southern roof structure is identical.

The wall studs between the ground sills and mid-rails are indicated by broken lines where they either hidden by boarding and render or replaced by shuttered concrete. The arrangement of the original studs in the northern elevation of bay C (i.e. the present entrance) is conjectural as only their pegged mortises survive in the roof-plate.

#### Figure 7 (page 11)

**Typical open truss with internal side elevation of porch (1a).** (Specifically the truss between bays C and D viewed from the west.)

#### Figure 8 (page 11)

#### Internal elevation of southern gable of porch (1a).

It is unusual to find a  $17^{\text{th}}$  century gabled porch without full-height entrance doors. The studwork above the mid-rail is original, but the central section of the mid-rail itself is hidden and the width of the original door beneath is therefore unclear. A  $19^{\text{th}}$  century chamfered brick pier extends by 0.6 m (24 ins) from the right-hand corner post, suggesting the contemporary access was 3.3 m wide (11f t) and approximately 2.1 m high (7 ft).

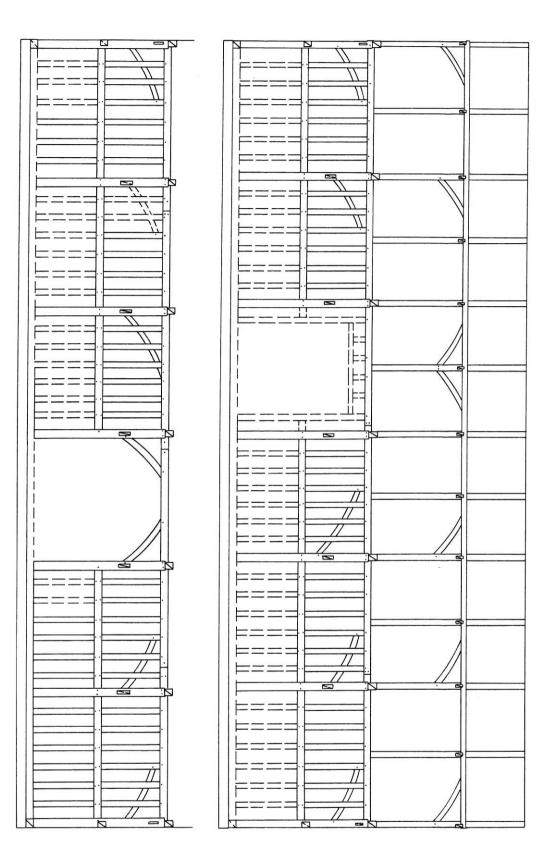


Figure 6

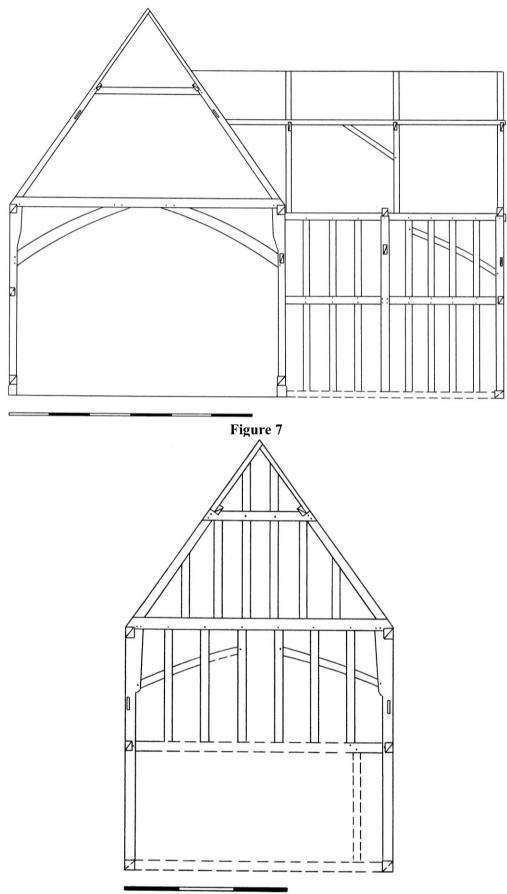


Figure 8

## Appendix 1 (on accompanying CD): Full Photographic Record

#### **Descriptions of Photographs in Appendix 1**

#### Photograph no.

- 1. General view of site from west showing barn to right, entrance track from public road to left and house in centre.
- 2. General view of site from east showing 20th century grain silos to south of barn to left.
- 3. General view of site from north-east showing proximity of barn to right to Shelland House to left.
- 4. Northern facade of Shelland House from entrance track leading to barn (included for site context).
- 5. General view of site from south-west showing 20th century grain silos to right.
- 6. Exterior of barn from south-east showing porch (1a) and lean-to sheds (2 & 3) to left with vehicle door in eastern gable to right.
- 7. Northern exterior showing 20th century corrugated asbestos roof, cement render and central entrance in bay C.
- 8. Exterior from north-east showing 20th century vehicle entrance in gable to left and original entrance in bay C to right.
- 9. Exterior from south-west showing partly collapsed corrugated iron lean-to shed (4) with brickwork of porch (1a) in rear.
- 10. Southern exterior showing porch (1a) to left, lean-to tack room (2) to right and lean-to shed (3) in centre.
- 11. Southern external gable of original porch (1a) showing lean-to shed (3) to right.
- 12. Detail of southern exterior of porch (1a) showing original mid-rail and pegged external wall braces.
- 13. Interior of lean-to tack room (2) from west showing door to barn to left.
- 14. Interior of lean-to tack room (2) from east showing bentwood harness hooks to wall of barn to right.
- 15. Detail of brick floor to lean-to tack room (2) from south-west showing door to barn above.
- 16. Eastern interior of lean-to shed (3) showing internal door to lean-to tack room (2) to left.
- 17. Interior of lean-to shed (3) from east showing render of barn to right and cementblock external wall to left.

- 18. Interior of lean-to shed (3) from south showing original external render to barn.
- 19. Detail of original external wattle-and-daub to south of barn preserved within lean-to shed (3).
- 20. Two-tier cladding of daub above boarding to eastern exterior of porch (1a) seen from the lean-to shed (3).
- 21. Detail from lean-to shed (3) of original external daub to barn showing vertical poles tied to nailed horizontal laths.
- 22. Detail of brick plinth in English bond preserved within lean-to shed (3) showing porch (1a) to left & 20<sup>th</sup> century low concrete cattle trough to right.
- 23. Interior of lean-to shed (3) from north showing external wall of 20th century cement blocks.
- 24. General internal view of barn from north-western corner (bay A) showing its current use as a farm vehicle garage.
- 25. General internal view of barn from east showing original clasped-purlin roof structure with intact arch-braces to tie-beams.
- 26. Southern interior of western bays (B-A) showing empty mortises of re-used midrail in bay B to left.
- 27. Southern interior of bay B showing re-used mid-rail and externally trenched wall brace with missing arch-brace to right.
- 28. Southern interior of intact clasped-purlin roof structure with wind-braces to bay B showing missing arch-brace mortise in tie-beam.
- 29. Southern interior of western bay A showing original wattle-and-daub with wall brace to top right.
- 30. Southern interior of roof structure in western bay A showing vertical gable to right.
- 31. Internal western gable showing unusual combination of internal wall brace to left and external brace to right.
- 32. Upper part of western interior gable showing roof structure and both internally and externally trenched wall braces.
- 33. Northern interior of western bays (A-B) showing missing central arch-brace and externally trenched wall braces.
- 34. Western bays of northern roof structure showing intact wind braces with mortises of missing tie-beam arch-brace to right.
- 35. Internal view of entrance in bay C.
- 36. Northern roof structure showing intact wind braces above entrance in bay C.

- 37. Detail of unusual pattern of stud mortises in northern roof-plate above modern entrance in bay C.
- 38. Detail of northern roof-plate of bay C showing pegging to alternate stud mortises and later jambs to left and right.
- 39. Detail of northern post to west of bay C showing pegged mortise for apparent missing mid-rail in current entrance bay.
- 40. Detail of northern post to east of bay C showing pegged mortise apparently for missing mid-rail in current entrance bay.
- 41. Southern interior showing entrance to porch (1a) in bay C.
- 42. Southern interior of bay C showing interior of contemporary porch (1a) with original arch-braces to roof-plate.
- 43. Southern roof structure showing intact wind braces and junction with porch (1a) in bay C.
- 44. Roof of porch (1a) from south showing intact wind braces and arch-braced open truss with re-used tie-beam.
- 45. Western interior of two-bay porch (1a) showing later brickwork beneath mid-rail and externally trenched wall brace to left.
- 46. Roof structure of two-bay porch (1a) from east showing empty mortises of reused tie-beam.
- 47. Detail of brickwork replacing studwork beneath mid-rail of western interior of porch (1a).
- 48. Interior of southern porch gable (1a) showing original external wall braced to left and right with later diagonal in centre.
- 49. Southern internal gable of porch (1a) showing chamfered brick pier of 19th century doorway beneath mid-rail.
- 50. Southern interior of porch (1a, right) seen from west, showing cladding of corrugated iron.
- 51. Eastern interior of porch (1a, left) seen from north showing cladding of corrugated iron and boarding.
- 52. Eastern interior of porch (1a) showing original studwork with externally trenched brace.
- 53. Eastern interior of porch (1a) showing original studwork with junction of barn to left.
- 54. Detail of roof-plate of bay C from porch (1a) to south showing face-halved & bladed scarf joint of typical 17th century type.
- 55. Eastern bays of barn from entrance bay (C) showing intact roof structure and current use as combine garage.

- 56. Interior of eastern bays of barn from vehicle entrance in eastern gable.
- 57. Southern interior of eastern bay (F) showing intact studwork above mid-rail and door to later tack room (2).
- 58. Northern interior of eastern bay (F) showing intact externally trenched brace and re-used mid-rail.
- 59. Southern interior of eastern bays from east, showing modern cladding beneath mid-rail and brickwork concealing storey post.
- 60. Southern interior of bay E showing face-halved scarf joint and diagonal primary brace.
- 61. Southern interior of bay D showing intact external wall brace with entrance to porch in bay C to right.
- 62. Roof structure of eastern bays from west showing remains of later partition to eastern bay (F) & arch-brace mortise in tie.
- 63. Northern roof structure of bay D showing intact wind braces with roof light in bay E to right.
- 64. Roof structure of eastern bays from south, showing secondary partition to eastern bay F to right.
- 65. Northern interior of bays D and E from east showing shuttered concrete beneath mid-rail.
- 66. Northern interior of bay D showing intact studwork above mid rail with externally trenched wall brace.
- 67. Northern interior of bays D, E and F from west showing shuttered concrete beneath mid-rails & vertical garage door to gable.
- 68. Northern interior of bay E showing intact studwork above mid rail with externally trenched wall brace.
- 69. Roof structure of western bays from east showing intact open truss adjoining entrance bay C in foreground.
- 70. Upper part of roof structure from east, showing pegged collars and wind braces over western bays.

Photographic Appendix 2 follows on pages 16-21



# **Appendix 2 (pp. 16-21): Selected Printed Photographs**

Illus. 1. General view of site from west showing barn to right, entrance track from public road to left and Shelland Hall in centre



Illus. 2. Exterior from north-east showing corrugated asbestos roof (replacing thatch) and cement render to walls, with 20th century vehicle entrance in eastern gable to left and original entrance in bay C to right.



Illus. 3. Southern exterior showing original porch (1a) to left, lean-to tack room (2) to right and lean-to shed (3) in centre.



Illus. 4. Interior of lean-to shed (3) from south showing the original external render to the southern elevation of the barn (consisting of vertical coppice poles tied to nailed horizontal laths.



Illus. 5. General internal view of barn from north-western corner (bay A) showing its largely intact timber frame and current use as a garage for farm vehicles.



Illus. 6. Internal western gable showing the highly unusual original combination of an internally trenched wall brace to the left and external trenching to the right.



Illus. 7. Detail of the northern roof-plate above the current entrance in bay C showing the unusual arrangement of alternately pegged and unpegged stud mortises with a central housing for a door bar. The large outer mortises inside the present nailed jambs appear to have secured the original door posts.



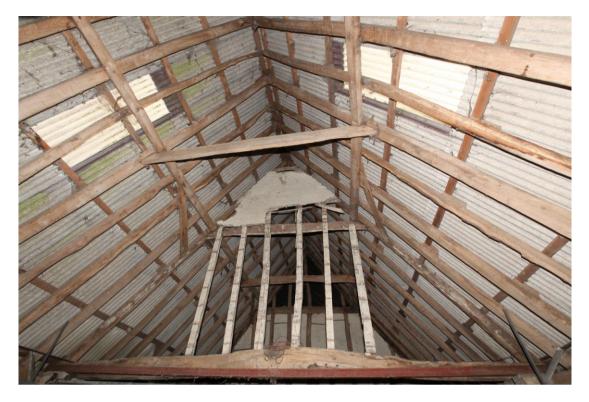
Illus. 8. Roof of porch (1a) from the south, showing its intact wind braces and archbraced open truss with empty mortises in the underside of its re-used tie-beam. The braces of the southern roof-plate in bay C (visible in the rear) are also original.



Illus. 9. The interior of the porch gable (1a) showing its original external wall braces to left and right with a later nailed internal diagonal brace in the centre. The mid-rail is an original feature but any evidence of the original doorway is obscured; the chamfered brick jamb to the right is an addition of the 19<sup>th</sup> century.



Illus. 10. The southern interior of bay D showing its intact external wall brace and wattle-and-daub, with entrance the entrance to the porch (1a) in bay C visible to the right.



Illus. 11. The roof structure of the eastern bays seen from the west, showing the remains of a later partition which divided the eastern bay (F) from the rest of the interior (probably to form a stable). The pegged mortises of the original arch-braces are visible in the tie-beam.



Illus. 12. The clasped-purlin roof structure of the western bays seen from the east, showing its fully intact wind braces and the open truss adjoining the entrance bay (C) in the foreground.