maparch

MAP Archaeological Practice

Shaw House Farm, Apperley Bridge, Leeds, West Yorkshire

MAP 5-10-2016

Building Recording and Dendrochronological Dating

SE 19650 37781

12/03381/FU

Shaw House Farm
Calverley Cutting/Parkin Lane
Apperley Bridge
Leeds
West Yorkshire

MAP 5.10.2016

Planning Ref. 12/03381/FU

SE 19650 37781

Building Recording and Dendrochronological Dating

Contents

Appendices

Figure List **Page**

Plate List

Shaw House Farm
Calverley Cutting/Parkin Lane
Apperley Bridge
Leeds
West Yorkshire

MAP 5.10.2016

Planning Ref. 12/03381/FU

SE 19650 37781

Building Recording and Dendrochronological Dating

Non Technical Summary

This report has been undertaken by MAP Archaeological Practice Ltd under the instruction of David Murgatroyd, of MNB Project Solutions to record Shaw House Farm, Parkin Lane/Calverley Cut, Apperley Bridge, Leeds, West Yorkshire; in advance of the partial demolition and the renovation and conversion of the barn, farm buildings and cottage to sixteen residential apartments (Application Number: 2011/93368).

Shaw House Farm is a collection of seventeenth to twentieth century farm buildings and dwellings, which included a cottage, a barn (incorporating a seventeenth century house and part of an aisled barn), stables and a dairy. The Photographic Record comprising Medium and 35mm format black and white negatives and prints and digital photographs to provide a comprehensive record of the buildings prior to demolition, alteration and conversion into residential dwellings.

Additional exterior photographs of the barn were taken once the twentieth century lean-to had been demolished.

The Dendrochronological Dating was undertaken by the University of Nottingham. Reused timbers (crucks used as purlins) dated to sixteenth century and roof trusses in the aisled barn dated to the late seventeenth century.

1. Introduction

1.1 The Building Recording and Dendrochronological Dating has been commissioned by David Murgatroyd of MNB Project Solutions to record the cottage, barn and farm buildings, prior to the partial demolition of buildings and renovation and conversion of the buildings to form a residential dwellings and to fulfil a condition on the planning permission (Ref. 12/03381/FU; SE 19650 37781 : Fig. 1).

1.2 The Photographic Record was undertaken in compliance with the Specification for Building Recording and Dendrochronological Dating produced by David Hunter of the West Yorkshire Archaeological Advisory Service on behalf of Leeds City Council (March 2016).

1.3 The Building Record and Dendrochronological Dating was undertaken on March, April and May 2016.

1.4 This report was funded by Russell Wilson.

1.5 All maps within this report have been produced from Ordnance Survey with the permission of the Controller of Her Majesty's Stationery Office, Crown Copyright. License No. AL 50453A.

2. Site Description

2.1 Shaw House Farm is located c. 15km north-west of Leeds city centre and c. 1km north-east of Apperley Bridge in the Township of Caverley and Farsley in Leeds City District in West Yorkshire (Fig. 1). The Site is accessed from Parkin Lane, under the Calverley Cut and the Farm is located south of the River Aire and north of the Leeds-Liverpool Canal (Fig. 2).

2.2 The site comprises an area of c. 380m^2 and stands at heights of between c. 181-187 AOD.

2.3 The Proposed Development comprised the demolition of the barn, cottage and stables (Fig. 3).

3. Historical Background

3.1 Shaw House Farm is a small post-medieval farm located the Township of Calverley and Farsley. This farmstead at Apperley Bridge, located on the edge of the Township on the southern bank of the River Aire, probably dates from in the late medieval or early post-medieval periods.

3.2 Calverley was first documented in the Domesday book in 1086 as three carucates of land taxable, owned by Arnketil before 1066 and by Ilbert de Lacey after the Norman Conquest. The Manor of Calverley passed to the Calverley family, who held it until 1755, when sold to Thomas Thornhill.

3.3 In the late eighteenth century, the Leeds Liverpool Canal cut through Calverley and Apperley Bridge, directly south of Shaw House Farm.

Construction of the Canal began in 1770 and the segment from Skipton and Gargrave joined the Aire and Calder Navigation in Leeds by 1777.

3.4 The Specification produced by WYAAS details the reasons Shaw House Farm is of Historical Interest:-

- The buildings at Shaw House Farm represent evidence of the changing scale and form of farming in the Aire Valley from the 17th century. Whilst the remains of the timber framed barn at Shaw House Farm could date to the early 17th century this is doubted on the grounds of its relationship with the later, but still early, farm house. However the barn's encasing in stone and the construction of the two bay house are characteristic of the later 17th and early 18th centuries.
- The house's symmetrical and polite façade suggests it owner had some pretentions of status. The lack of characteristic weaver's windows may reinforce this assumption (although the building's ground floor was obscured by a lean-to building during WYAAS' site visit and such evidence may be revealed).
- However, The construction and opening of the Leeds Liverpool Canal in 1772 must have impacted on the working of the farm and its declining fortunes are illustrated by the addition of a cottage to its eastern gable and its ultimate annexation as an extension to the barn. The latter most likely occurring in the late 19th century when the present farm house was constructed.
- The early 19th century form of the farm is illustrated on the Calverley and Farsley tithe map of around 1840 when the buildings comprised a linear group of barn, house and cottage with two smaller buildings to north-east and south-west.

- The new farm buildings erected after this date show a change of emphasis towards keeping cattle and, it is assumed, supplying dairy produce to the growing industrial settlements to the north of Leeds and Bradford.

3.5 The tithe award map and apportionment for Calverley and Farsley dates to 1845 and depicted Shaw House Farm as the cottage and barn with two other outbuildings including the stable block by the canal towpath (Plot 1147; Fig. 3). The 1851 First Edition Edition Map depicted the barn/cottage with stables to the south-west but no other outbuildings (Fig. 4). By the 1893 Edition Ordnance Survey map, the barn had been extended into its present layout with the new farmhouse to the north (Fig. 5). The 1956 Edition Ordnance Survey map depicted Shaw House Cottage and the lean-to attached to the north elevation of the barn.

3.6 The 1901 Census recorded two families living at Shaw House Farm and one family at Shaw House Cottage. Shaw House Farm was noted as Plot 235, where Alfred and Emma Simpson were living with two visitors and Plot 236, where Arthur and Elizabeth Newby and two daughters were living. Alfred Simpson and Arthur Newby were both listed as Market Gardeners. In Shaw House Cottage, Plot 237, George a d Emily Ward lived with their six children; he was listed as a General Farm Labourer.

3.7 The 1911 Census recorded the Casson family at Shaw House Farm, Wiliam Casson as Farmer, and the Poole family at Shaw House Cottage, with John Poole as a horse man for a Market Gardener.

4. Aims and Objectives

4.1 The proposed building work will demolish the barn, cottage and stables on Shaw House Farm and rebuilding within the footprint of the barn and cottage using the reclaimed stone and timbers.

4.2 The Aim of the Building Record identify and record by means of photographs and drawing.

- to identify and objectively record by means of photographs and annotated measured drawings any significant evidence for the original and subsequent historical form and functions of the farm complex.
- The buildings should be analysed and interpreted as an integrated system intended to perform a specialised function.
- The archaeologist on site should give particular attention to reconstructing as far as possible the functional arrangements and division of the building type. The roles of historical plan form, technical layout and circulation should all be considered in this process of interpretation.
- This archaeological record should be placed in the public domain by depositing it with the WY Historic Environment Record (Registry of Deeds, Newstead Road, Wakefield WF1 2DE).

4.3 All relevant timbers in the building to be assessed for dendrochronological dating by the University of Nottingham.

4.4 The farmhouse at Shaw House Farm was not part of the redevelopment proposals and external record shots were only taken at this time.

5. Methodology

5.1 The interior and exterior of the barn, cottage and stable/outbuildings were observed and notes taken on the layout, construction materials and architectural details. Stephen Haigh was subcontracted to undertake the photography of the exterior of all buildings and interior

of the aisled barn and cottage using a medium format camera with perspective shift lens using Ilford HP5 Plus film. A photographic record of the later the interior of the later barn was taken using an 35mm SLR Nikon camera with perspective shift lens using Ilford HP-5 35mm monochrome film and in a full record was taken on a digital 14 megapixel digital camera.

5.2 The photographic record for the building assessment comprised 47 medium format monochrome print film exposures (Films 1, 2, 3 & 4), 46 35mm monochrome print film exposures (Films 5 & 6) and 137 digital shots. The Photographic Record of all exposures included a film register noting film number, shot number, location of shot, direction of the shot, and a brief description of the subject (Appendix 1).

6. Results

6.1 The Building Record was undertaken on the 14th March and the 18th May 2016. The Dendrochronological assessment and record was undertaken on the 29th March 2016.

6.2 Barn and Cottage Exterior (Figs. 7-11; Pls. 1-11)

6.2.1 The barn and cottage comprised a single, multi-phase range constructed of stone with stone tile roofs, parts of the barn were in a very poor condition (Pls.1-11). The buildings were constructed of sandstone blocks of various sizes with some later brick infill to the north elevation of the barn.

6.2.2 The Aisled Barn formed the western main part of the main barn complex with a former house forming the eastern part of the barn. The floor plan and roof heights differ between the former house body to

the east and the aisled barn to the west, which proved that two separate buildings were only later joined to form one large agricultural building (Figs. 8-9; Pls. 5, 9, 11-14).

6.2.3 The barn had gabled roof and a low pitched catslide outshut to the north extended to incorporate the passage, which formerly separated the house and barn. There are two large openings into the south elevation, both dating to the later larger barn, one in the filled in passage with a flat arch and the second taller opening into the former house, suggesting the change of use for larger farm machinery (Pl. 8). The south elevation of the Aisled Barn has a later two storey stable butted to it.

6.2.4 The eastern part of the barn, formerly the farm house, was slightly taller than the aisled barn (Figs. 8-9; Pls. 5, 9, 11-14). The house has a gabled roof. There are no indications of a chimney in the surviving gable or anywhere else in the roof, suggesting the barn was reroofed after its incorporation into the barn. The north elevation still retains three mullion windows on the first floor and a kneeler to the west. The demolition of the twentieth century lean-to on the north elevation revealed two blocked windows and a blocked door. The southern elevation has a possible blocked window on the ground floor and a string course, suggesting this was the front of the house, which would correspond with the later barn and the cottage. On the eastern elevation, south of the cottage is a blocked window, on the ground floor, possibly an inserted opening for a later lean-to attached to the cottage.

6.2.5 The cottage was added to the eastern gable of the former farm house and was a two storey structure on a narrower footprint and lower roof height (Pls. 15-18). The rear of the cottage was on the same alignment as the north elevation of the former farmhouse. There was a central chimney and another in the eastern gable. The main elevation was to the south, with entrance to the east then three windows on the ground floor and two windows on the first floor (Fig. 8). The north elevation had three windows on the ground floor and a single window on the first floor. The western window on the ground floor of the north elevation was inserted into a blocked door. There was one larger window on the western side of the first floor of the cottage's south elevation, which may suggest this room was used for weaving. All other windows were small on the southern elevation and only the hall and ground floor rooms have small windows on the northern elevation.

6.2.6 The later barn to the north of the Aisled Barn was a two storey structure dating to the late eighteenth or early nineteenth century with gabled roof (Figs. 8-9: Pls. 5-7 & 10). This structure had been modified in the later nineteenth century to accommodate the dairy to the west, as the upper elevation to the west had been rebuilt in brick. This building had a central entrance on the east elevation at ground floor level and two windows inserted into two blocked doors to the north and south, suggesting this building was formerly a stable (Fig. 9; Pls. 5 & 10). There were two windows into the first floor, which were later insertions. The access to the first floor was via an external wooden set of stairs on the south elevation; with a possible blocked door on the ground floor beneath the first floor access. The last phase of this building was the large single storey extension to the west, a twentieth century dairy. The western elevation of this building also has two windows inserted into

blocked doors, with additional fenestration of a central window on the ground floor and a smaller window above on the first floor level (Fig. 9; Pls. 1 & 7).

6.3 *Farmhouse and Stables Exterior (Figs. 10; Pls. 19-24)*

6.3.1 Photographs were taken of the eastern and southern elevations of the later 19th century Farmhouse (Pls. 19-20), no internal inspection was undertaken as this building as it was no part of the planning application.

6.3.2 The Stable Block was located directly north-west of the canal tow path, built into the embankment. Its main entrances were to the south-east into the farm yard. This building was a stone built stable/outbuilding with gable roof covered in stone tile (Pls. 21-24). There were a garage door, two doors, three windows and two blocked doors with inserted windows in the south-east elevation and (Fig. 10; Pls. 21 & 22).

6.4 Barn Interior (Figs. 3, 12, 13 & 15; Pls. 25-59)

6.4.1 The Barn floor plan can be split between the large east-west aligned barn with later dairy and stables to the south (Figs. 3, 12, 13 & 15 and Pls. 25-59).

6.4.2 The aisled barn formed the central part of the large east-west barn, with the dairy to the west and the earlier house structure to the east. The aisled barn was c. 6m in height and open floor to ceiling with two king post roof trusses, one aisle post and reused crucks used as purlins (Pls. 26-28 & Pls. 39-51). The aisle post was located between the main roof truss and the outshut cat slide-roof to the north (Pls. 39 -44). The outshut roof to the east of the aisle post was supported by a short

length of wall (Pl. 39). There was a central entrance to the south and enclosed cat-slide to the north of this passage (Pl. 38).

6.4.3 The arched doorway in the south elevation (Pl. 9) was probably from when the aisled barn and former farmhouse were joined together to form the later larger barn.

6.4.4 The dendrochronological dates from the timbers in the early barn form two groups. The reused timbers, the purlins F09, F03 and the wall plate F05 dating to the late 14th to early 16th centuries (Appendix 2). The second dates were from the kingpost roof trusses F01 and F02, dating to the late sixteenth to late seventeenth century (Appendix 2). This suggests the barn dates from the later seventeenth century.

6.4.5 The conversion of the former farmhouse to large barn in the late 18th or early nineteenth centuries had removed all internal walls, all clues to the floor plan and any trace of an internal chimney. There were no remains of a chimney on the eastern gable. There were blocked windows visible on both the ground and first floors on the northern elevation and the remnant of the western gable in the interior of the barn (Pls. 31-36). The insertion of a bathroom for the cottage into the interior of the barn had masked internal traces of the blocked door (Pls. 30). On the eastern gable wall, remnants of internal plaster were decorated with two daisy wheels (witch's marks; Pl. 37).

6.4.6 The next addition to the barn was the two storey stable block located south of the Aisled Barn (Figs. 3, 12 & 13; Pls. 54-59). There was the remains of a line shaft on the first floor (Fig. 13 & Pl. 59).

6.4.7 To the west of the stable block is the single storey dairy (Pls. 52-55). The construction of the dairy altered the earlier stable block with the removal of the western wall on the ground floor, supported by a steel RSJ and the rebuilding of the wall above in brick.

6.5 Cottage Interior (Figs. 11, 12 & 13; Pls. 60-65)

6.5.1 The cellar was accessed from the stairs on the western gable of the cottage into the rear (north) hallway, west of the parlour. There were a series of shelves above the stairs and six stone alcoves on the southern wall of the cellar and a blocked light/access on the northern wall (Fig. 11; Pls. 60-61). The room had a series of hooks in the ceiling from its use for cold storage of provisions.

6.5.2 The ground floor comprised two rooms, the kitchen with the main entrance to the east and the main room/parlour with stone fireplace (Pl. 62) to a central chimney to the west. In the parlour, above the doorway onto the kitchen, was a wall plate timber (Pl. 63). To the west of the living room to the north was the access to the cellar stairs and the bathroom extension and to the south was the small hall and stairs to the first floor. The kitchen had a chimney breast on the gable end wall.

6.5.3 On the first floor landing to the west was a blocked doorway into the former farmhouse (Pl. 64), so at one point the barn or the earlier house and cottage were joined. Off a small hall along the southern wall were two rooms. The western one had a large long, four part, multipane window (Pl. 65) and was possibly used for weaving in the past.

6.6 Stables Interior (Fig. 14 & Pl. 66)

6.6.1 The interior of the Stables had been unused for some time and was split into workshops/storage.

7. Conclusions

7.1 The building survey at Shaw House Farm clearly shows a farm that has been in constant use between the seventeenth and twentieth centuries and for both agriculture and possibly providing livery as the farm had two stable blocks. The earliest focus of the farm was the original farmhouse and adjacent barn, used for mixed agriculture in the late seventeenth century. The cottage was then added to the east of the house, probably after its conversion into a larger barn. The two stable blocks were then constructed and lastly the dairy was added. The larger upper storey window in the cottage may indicate its used for weaving in the eighteenth century. The stables and the extension to the barn in the late eighteenth century could possibly show that the farm was used for livery, when horses were needed for the canal transportation. The barn was later modified, extended and converted into a dairy in the mid-late nineteenth century.

7.2 The barn at Shaw House Farm can be classified as a Type III Aisled Barn in Michelmore's typology of Pennine Aisled Barns with King Post Roofs (Michelmore 1974, 17); which states this was a 'degenerate' type of aisled barn dating to the early 18th century. The main truss of the king post is similar to a Type II Aisled Barn with a diagonally set ridge but with the aisle roof supported by a purlin set on an aisle tie as seen for Truss 1 at the western end of the barn with the supported purlin to the north of the aisle post (Pls. 39-44). One post and outshot to the north is all that survives of the aisled barn, which may suggest the barn had

been cut down in size by the later stables and the building of the farmhouse. It is more likely that the barn is degenerate form with outshut to the north which has been extended in the eighteenth or nineteenth centuries to include the house to the east enclosing the former passage between, as suggested by the windows in the west gable of the house (Pls. 34 & 36).

7.3 The overall plan of the aisled barn to the west of the earlier farmhouse to the east, may indicate a laithe style plan. The house plan can only be guessed at due to the lack of internal walls or a chimney and may indicate a lobby entry plan from the position of the blocked door on the north elevation as the later use as a barn has removed any trace of entry points to the south. Mullion windows to the north-west in the interior suggest the house and barn were separate. The string course on the southern elevation may indicate this was the main elevation, as is suggested by the orientation of the cottage to the east.

7.4 The house may predate the Type III barn, if it dated to the eighteenth century as Michelmore's typology suggests. However, the dendrochronological dates from the timber tie beam truss 1 and principal rafters suggest a date for the late seventeenth century for the aisled barn, making it separate and contemporary with the house to the west. The dating of the barn to this period corresponds with the Type III barn at Wycoller Barn in Lancashire.

7.5 The dating of the reused timbers in the aisled barn roof to the fifteenth century suggest that there was an earlier cruck building in the vicinity.

7.6 Therefore the house may be earlier than the late seventeenth century barn. The reused cruck timbers in the barn may have been from this farmhouse. Cruck construction was the norm in the second half of the sixteenth century (RCHME 1986, 36). There are only sixty-one buildings with cruck buildings known from West Yorkshire, of which eighteen were houses, all located in the western upland half of the county. The farmhouse building was a two storey construction, which suggests this building was dated between the mid sixteenth century and the late seventeenth century.

7.7 Phasing of buildings at Shaw House Farm (Fig. 16)

7.7.1 Phase 1 (late 17th century) – Aisled Barn and Original Farmhouse

7.7.2 Phase 2 (mid 18th century) – addition of Cottage

7.7.3 Phase 3 (late 18th century) – creation of large barn incorporating the Phase 1 aisled barn and Farmhouse and the construction of two Stable Blocks

7.7.4 Phase 4 (late 19th century) – construction of new Farmhouse and Dairy

8. Bibliography

CIfA 2014a Code of Conduct. Chartered Institute for Archaeologists.

CIfA 2014b Standards and Guidance for the Archaeological Recording of Buildings and Structures. Chartered Institute for Archaeologists.

Historic England 2016 Understanding Historic Buildings. A Guide to Good Recording Practice. English Heritage Publishing.

Hunter, D. 2016 Specification for Drawn and Photographic Recording Archaeological Building Recording and Dendrochronological Dating at Shaw House Farm, Apperley Bridge, West Yorkshire (419650 439981). West Yorkshire Archaeological Advisory Service.

Michelmore, D.J.H., 1974 '*A preliminary typology for Pennine aisled barns with king-post roofs*' in The Brigantian, 3, pp. 15-17.

RCHME 1986 Rural Houses of West Yorkshire 1400-1830. West Yorkshire Metropolitan County Council and the Royal Commission on the Historical Monument of England. Supplementary Series: 8. HMSO London.

9. List of Contributors

Photographers	Stephen Haigh and Kelly Hunter
Report	Kelly Hunter
Illustrations	Kelly Hunter
Plates	Kelly Hunter
Archiving	Kelly Hunter

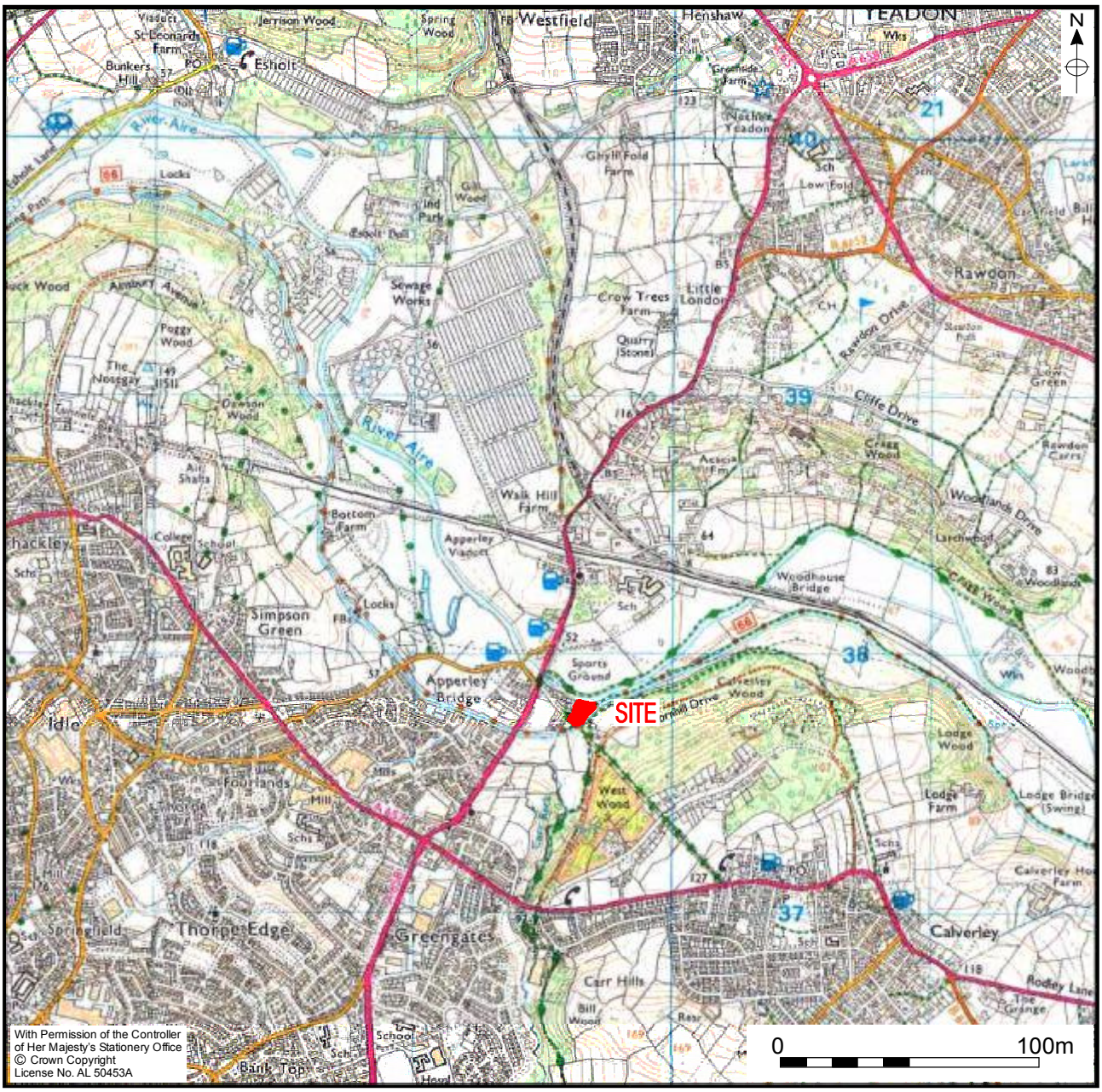


Figure 1. Site Location.

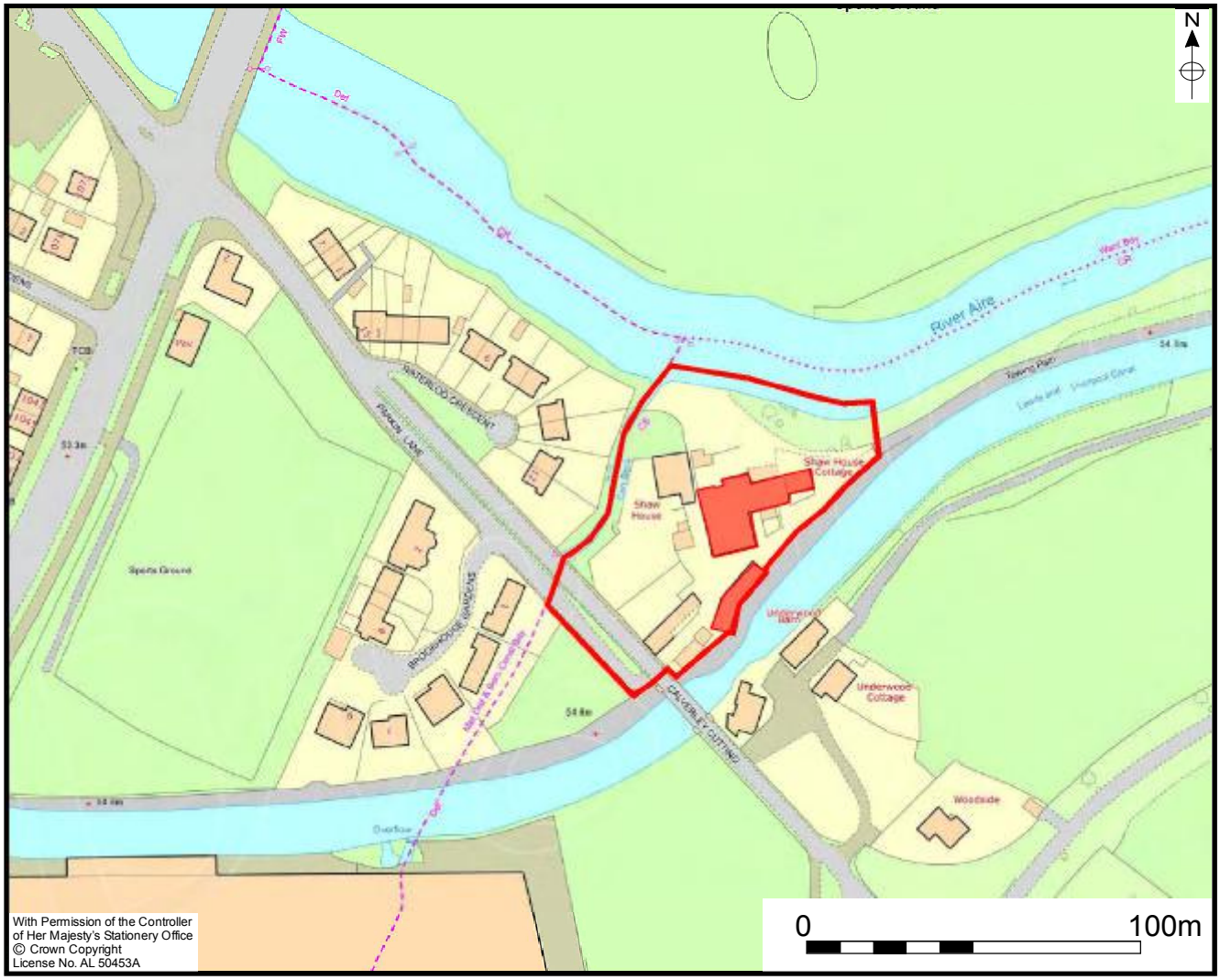


Figure 2. Development Area and Buildings Recorded.

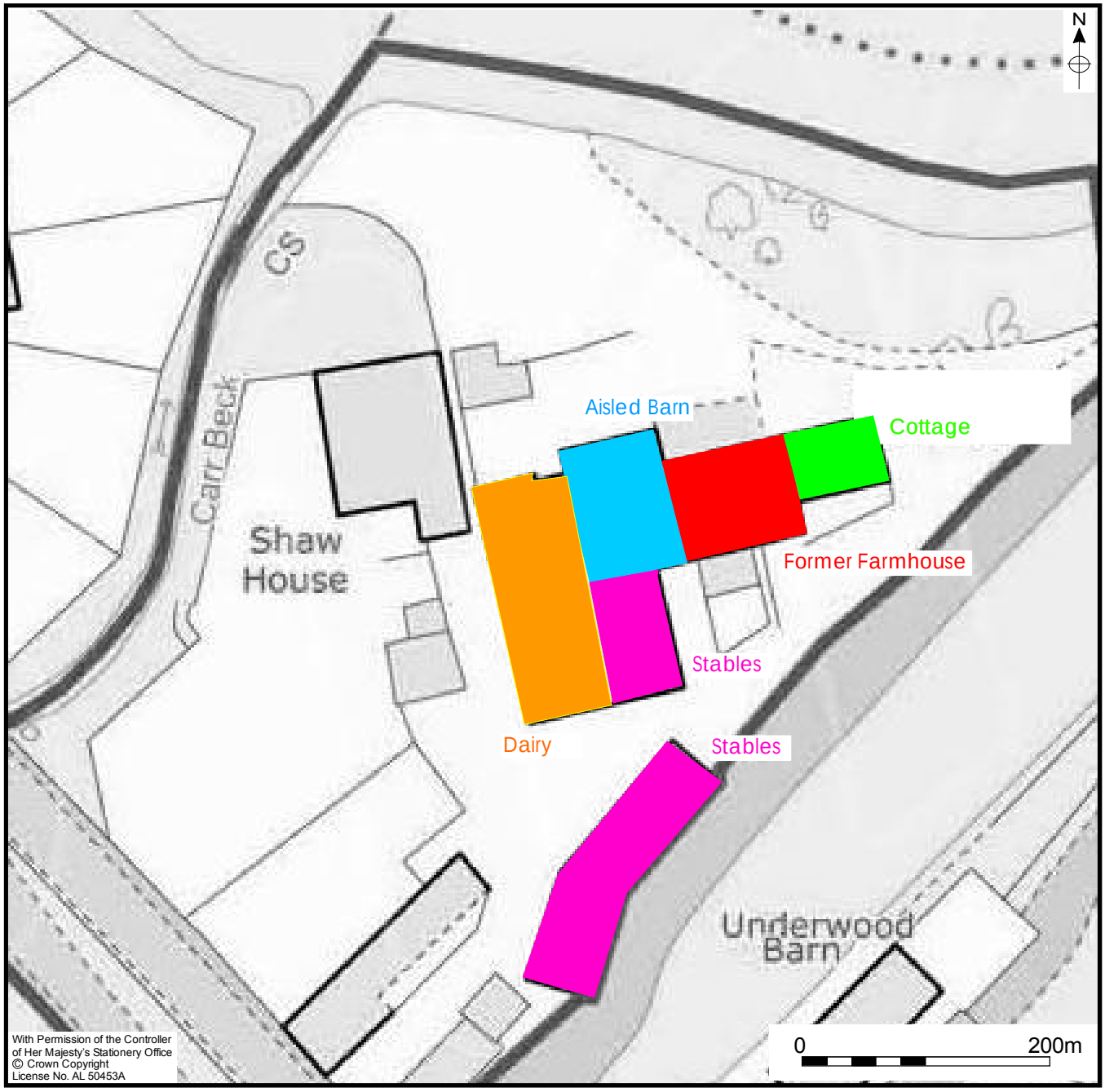


Figure 3. Buildings by Type.

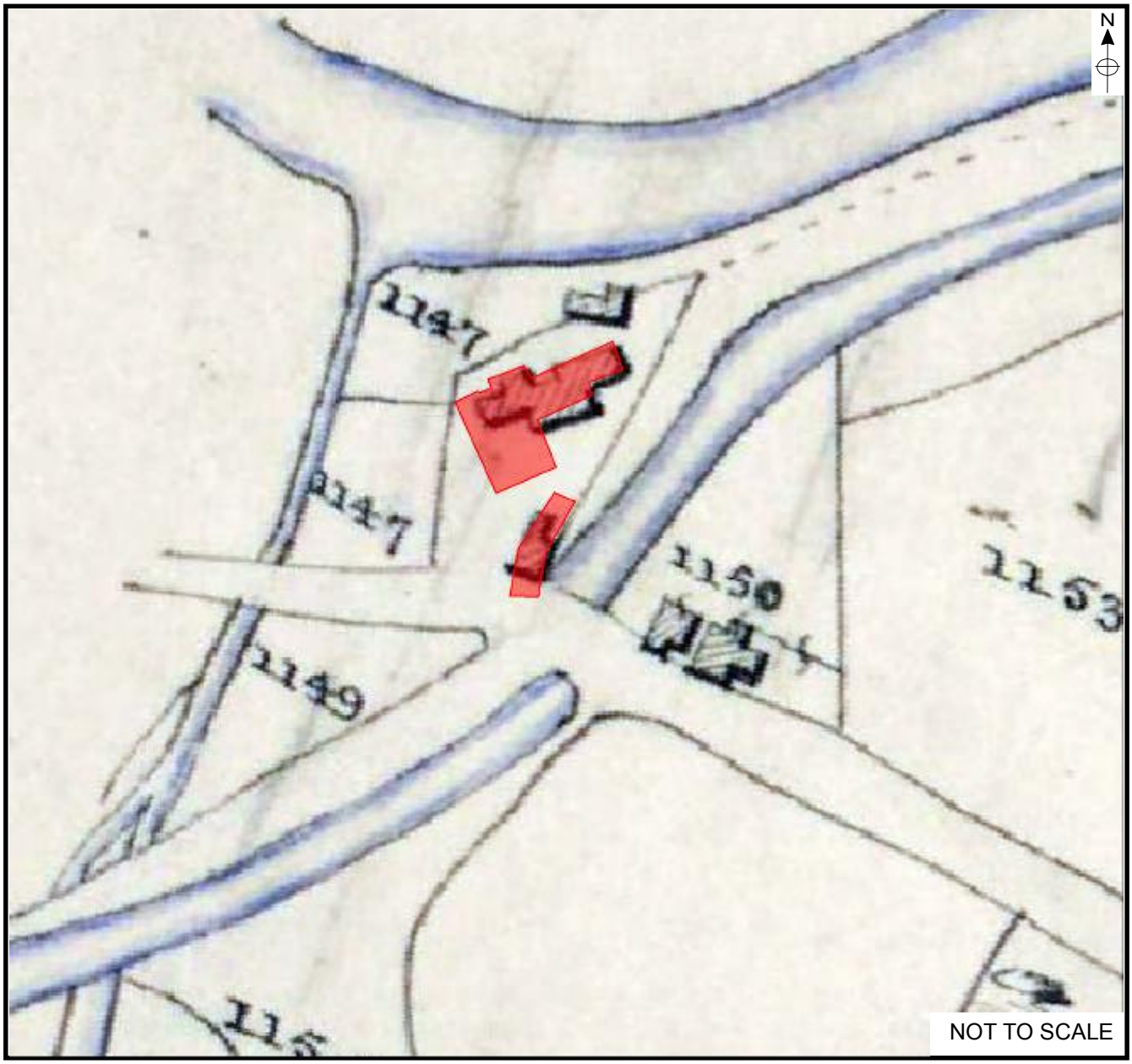


Figure 4. Extract from the Calverley and Farsley Tithe Award (1845) .

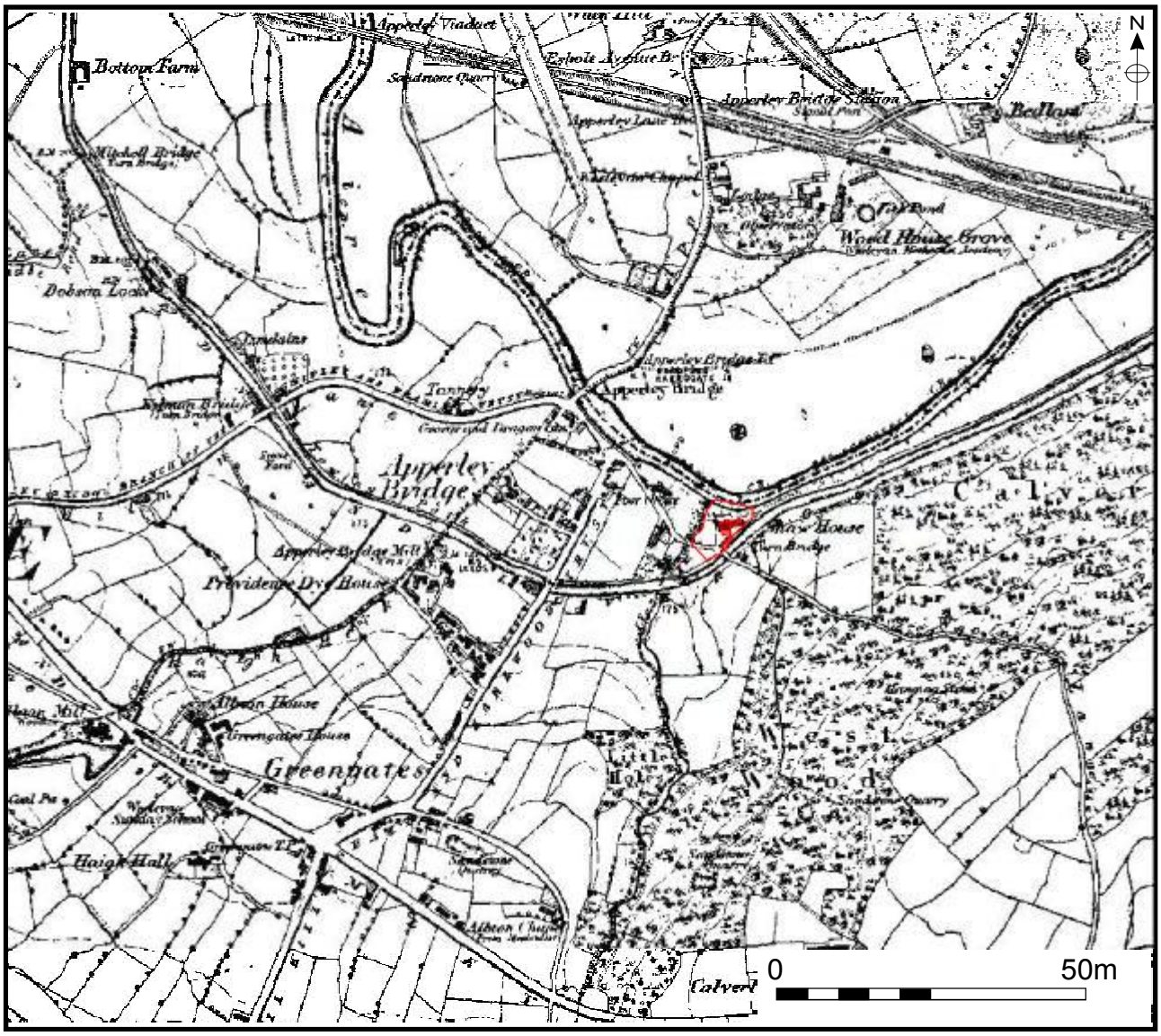


Figure 5. Extract from the 1851 First Edition Ordnance Survey Map.

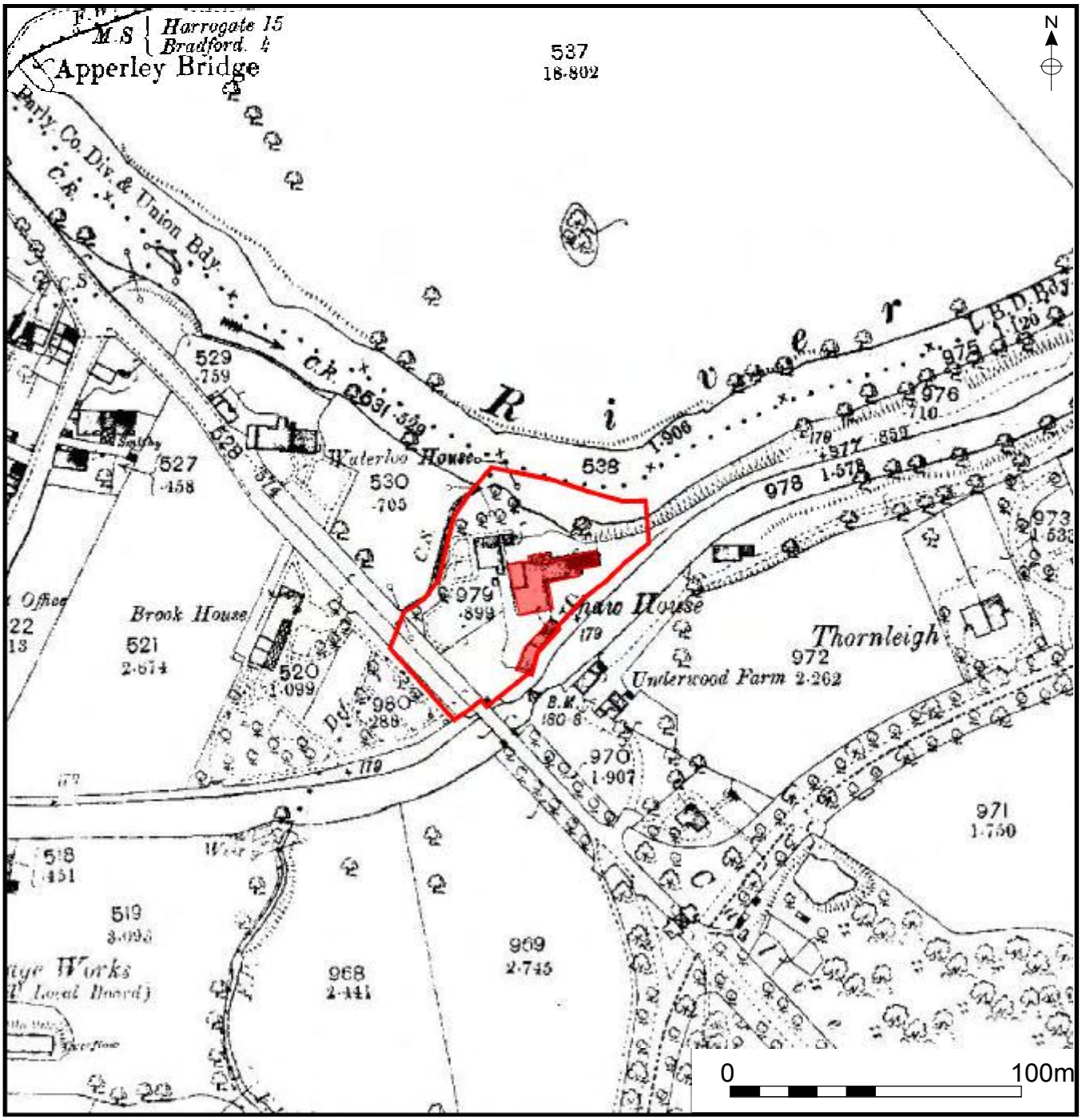


Figure 6. Extract from the 1893 Edition Ordanace Survey map.

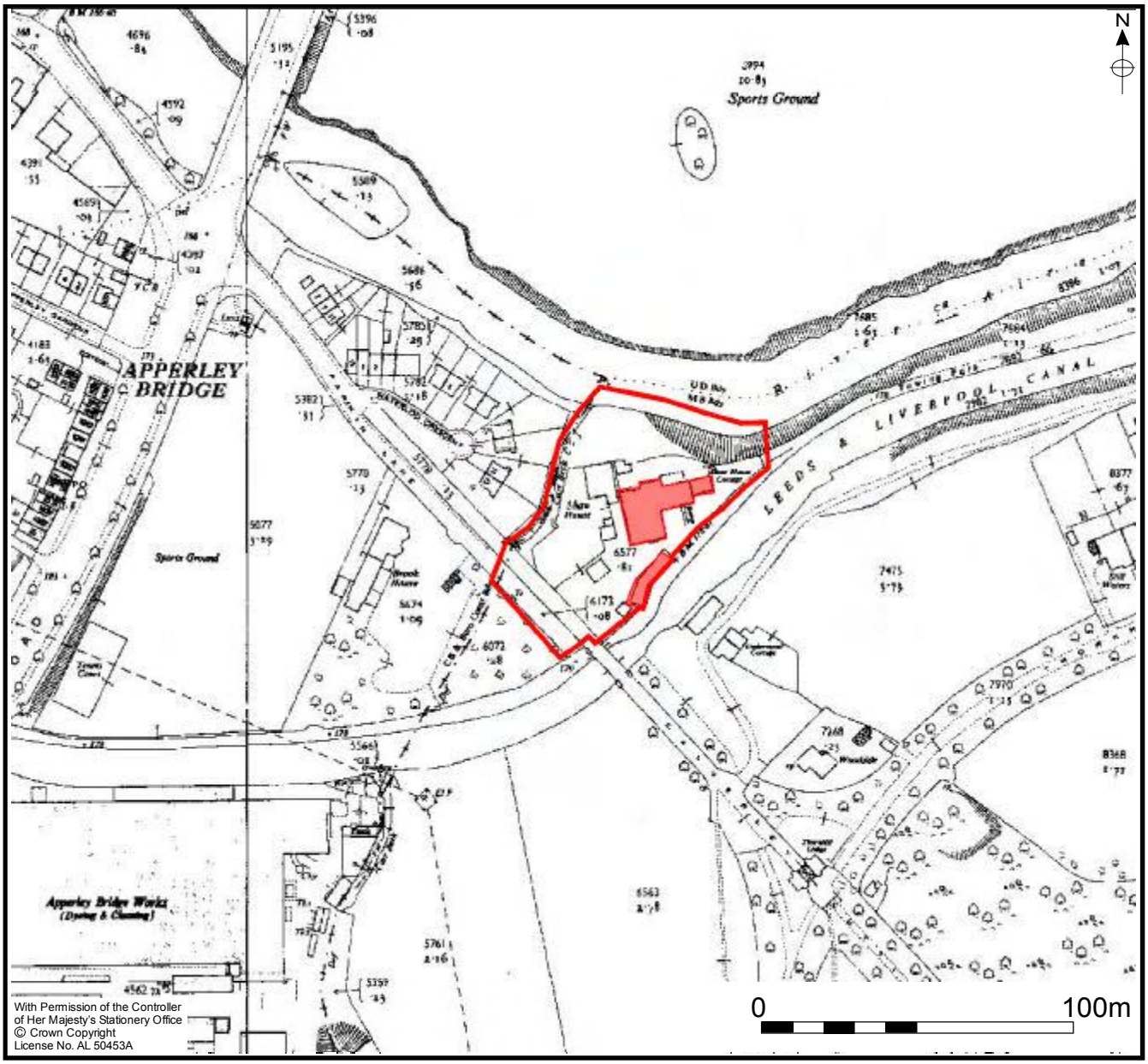
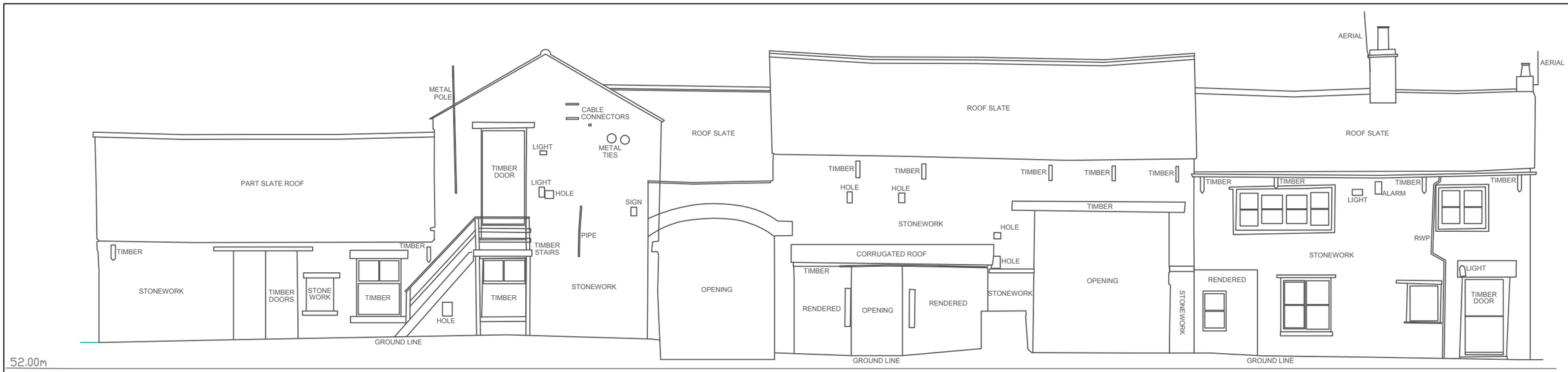
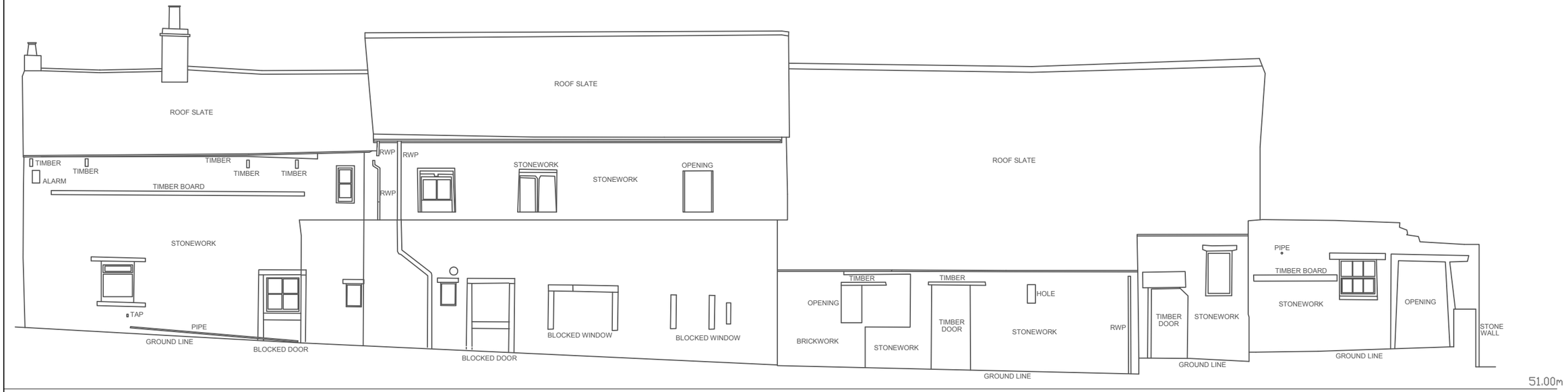


Figure 7. Extract from the 1956 Edition Ordanace Survey map.



SOUTH ELEVATION

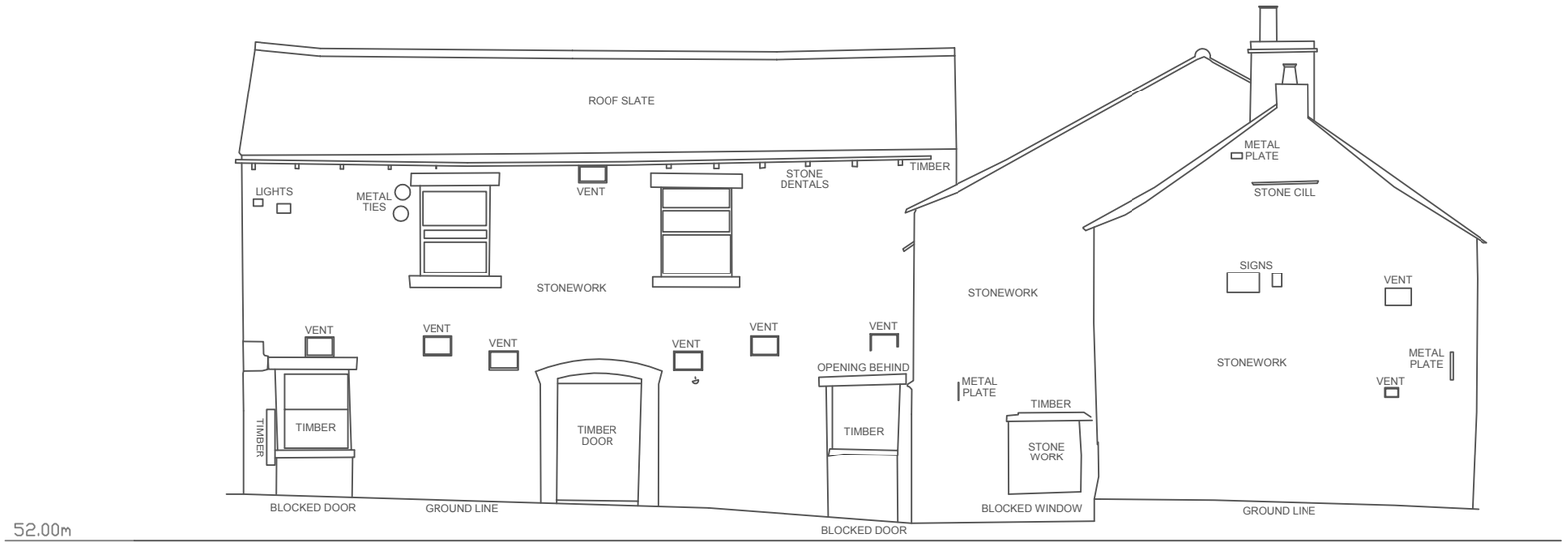


NORTH ELEVATION

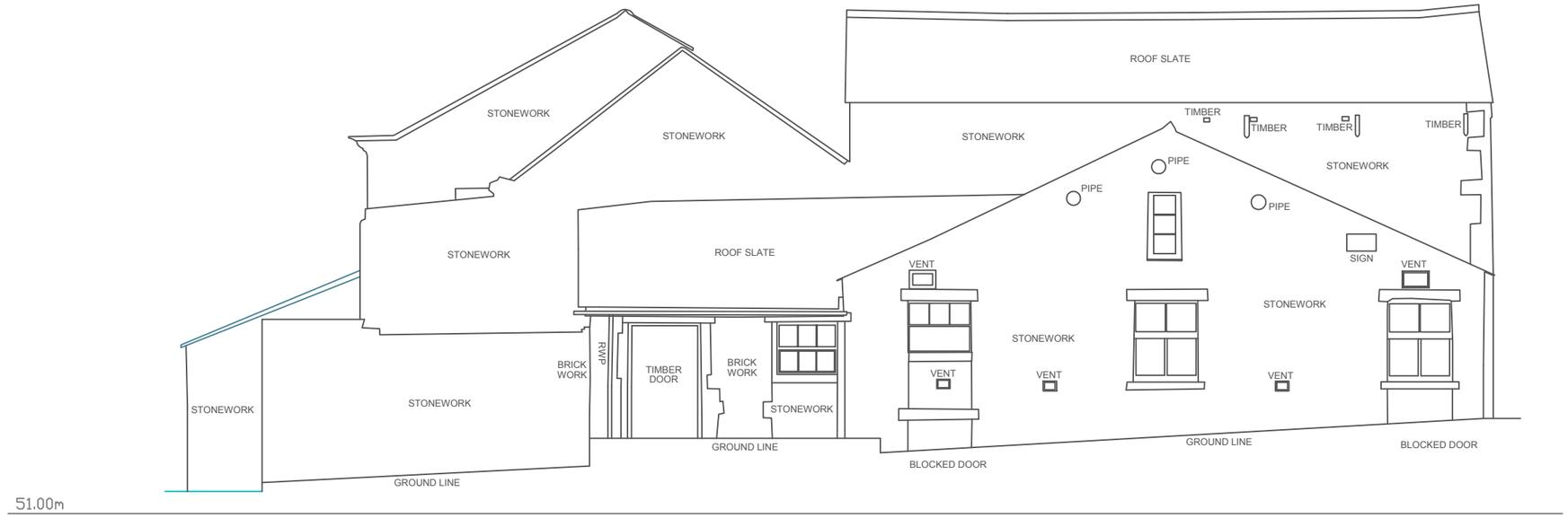
0 5m

Scale 1:100

Figure 8. Shaw House Farm: Barn and Cottage North and South Elevations.



EAST ELEVATION

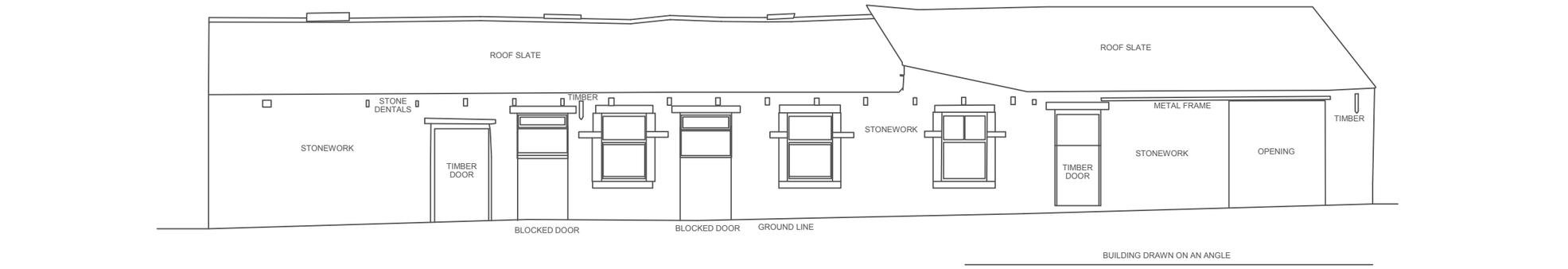


WEST ELEVATION

0 5m

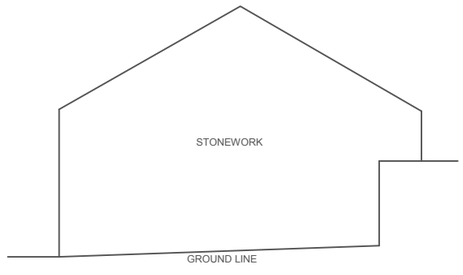
Scale 1:100

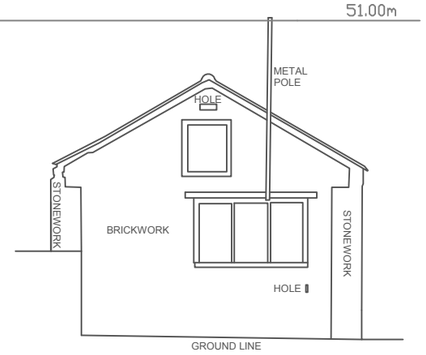
Figure 9. Shaw House Farm: Barn and Cottage East and West Elevations.



51.00m 51.00m

NORTH ELEVATION



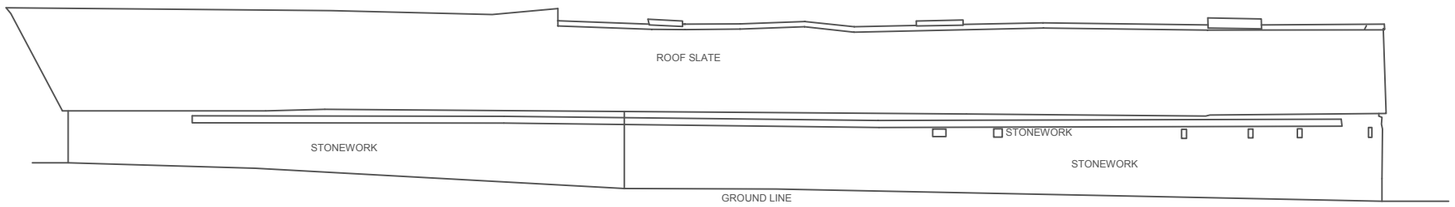


51.00m

WEST ELEVATION

51.00m

EAST ELEVATION



51.00m

SOUTH ELEVATION

0 5m

Scale 1:100

Figure 10. Shaw House Farm: Stable Block Elevations.

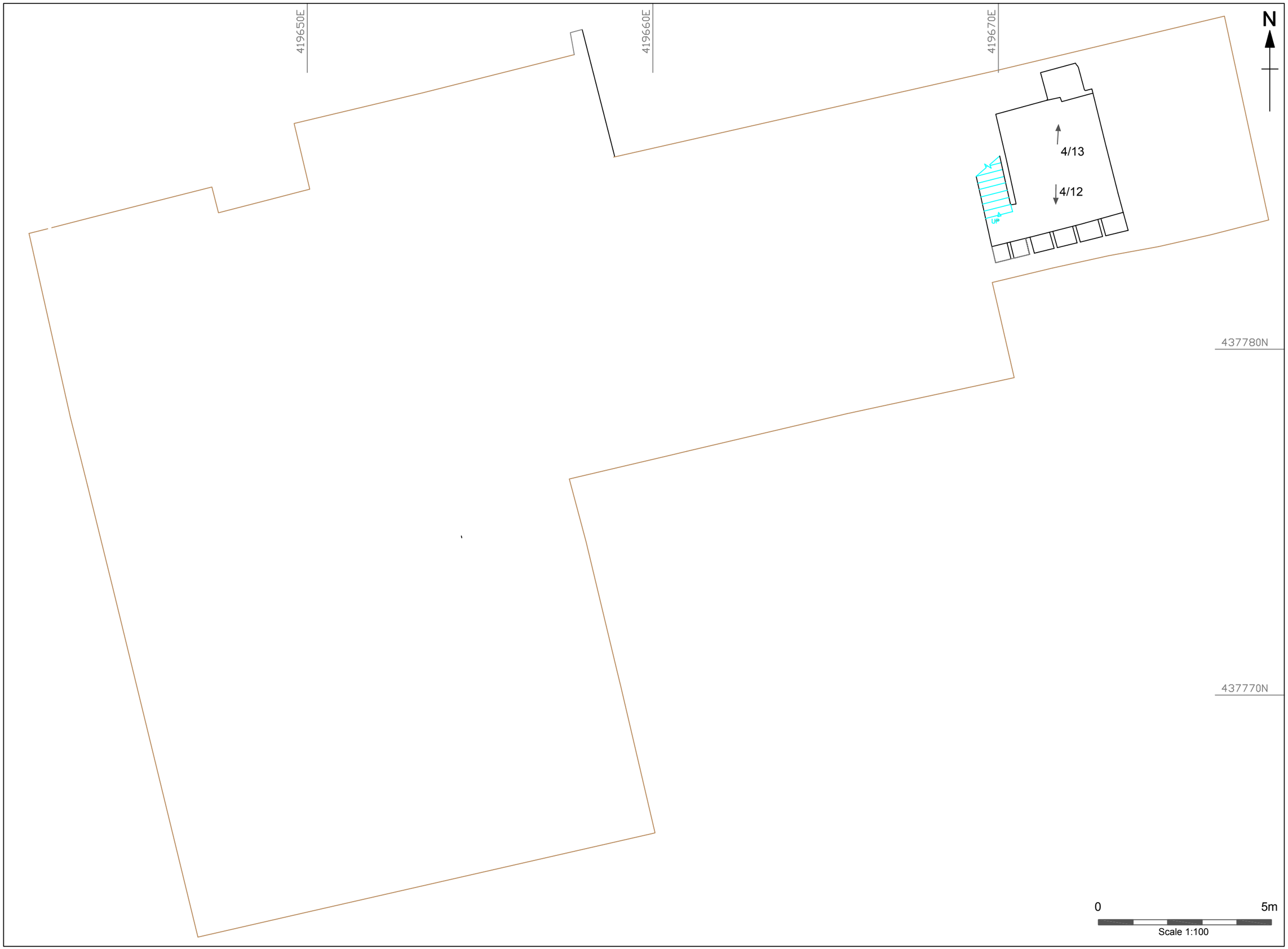


Figure 11. Shaw House Farm: Barn and Cottage Cellar Plan.

Figure 12. Shaw House Farm: Barn and Cottage Ground Floor Plan.

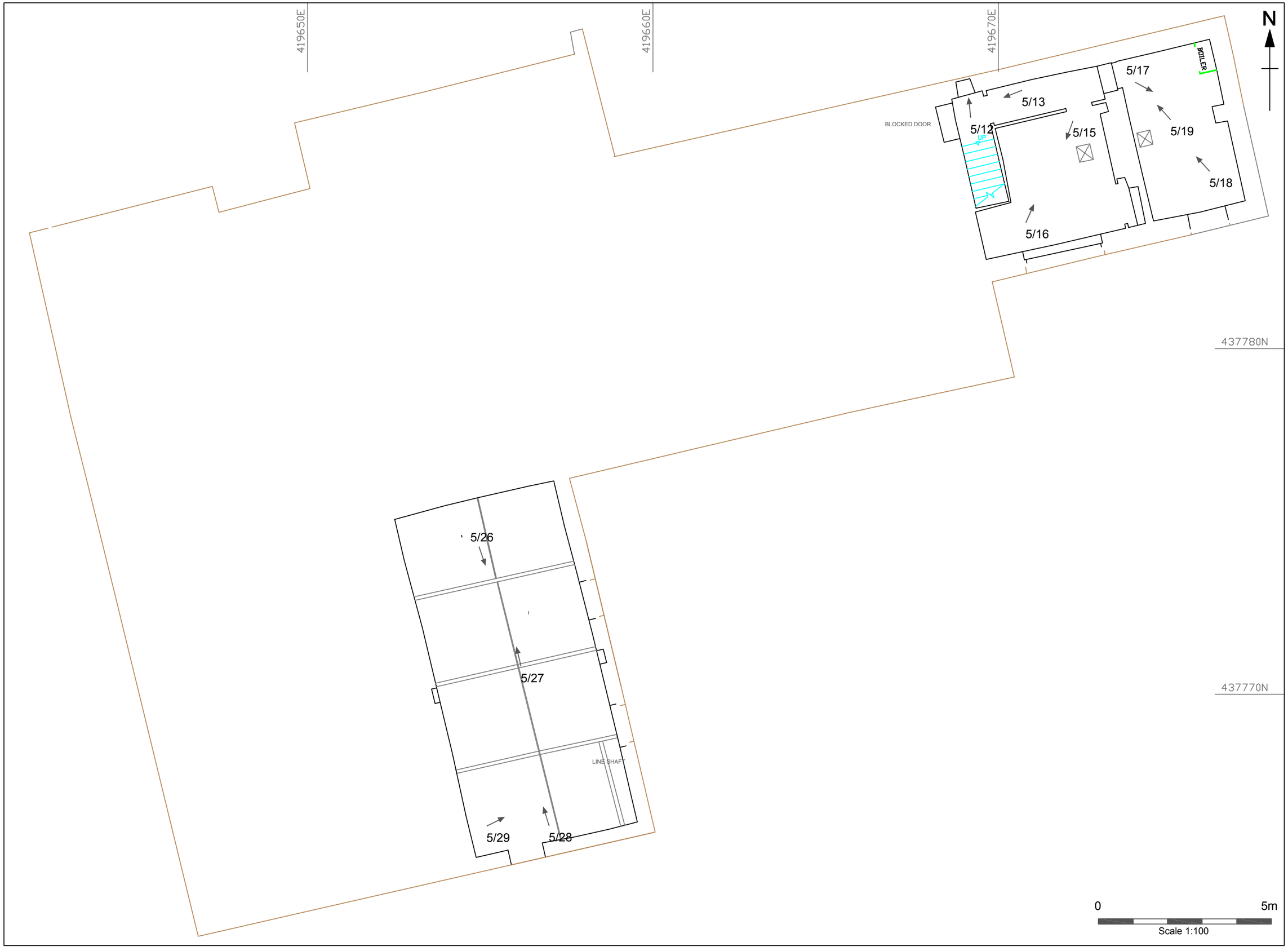


Figure 13. Shaw House Farm: Barn and Cottage First Floor Plan.

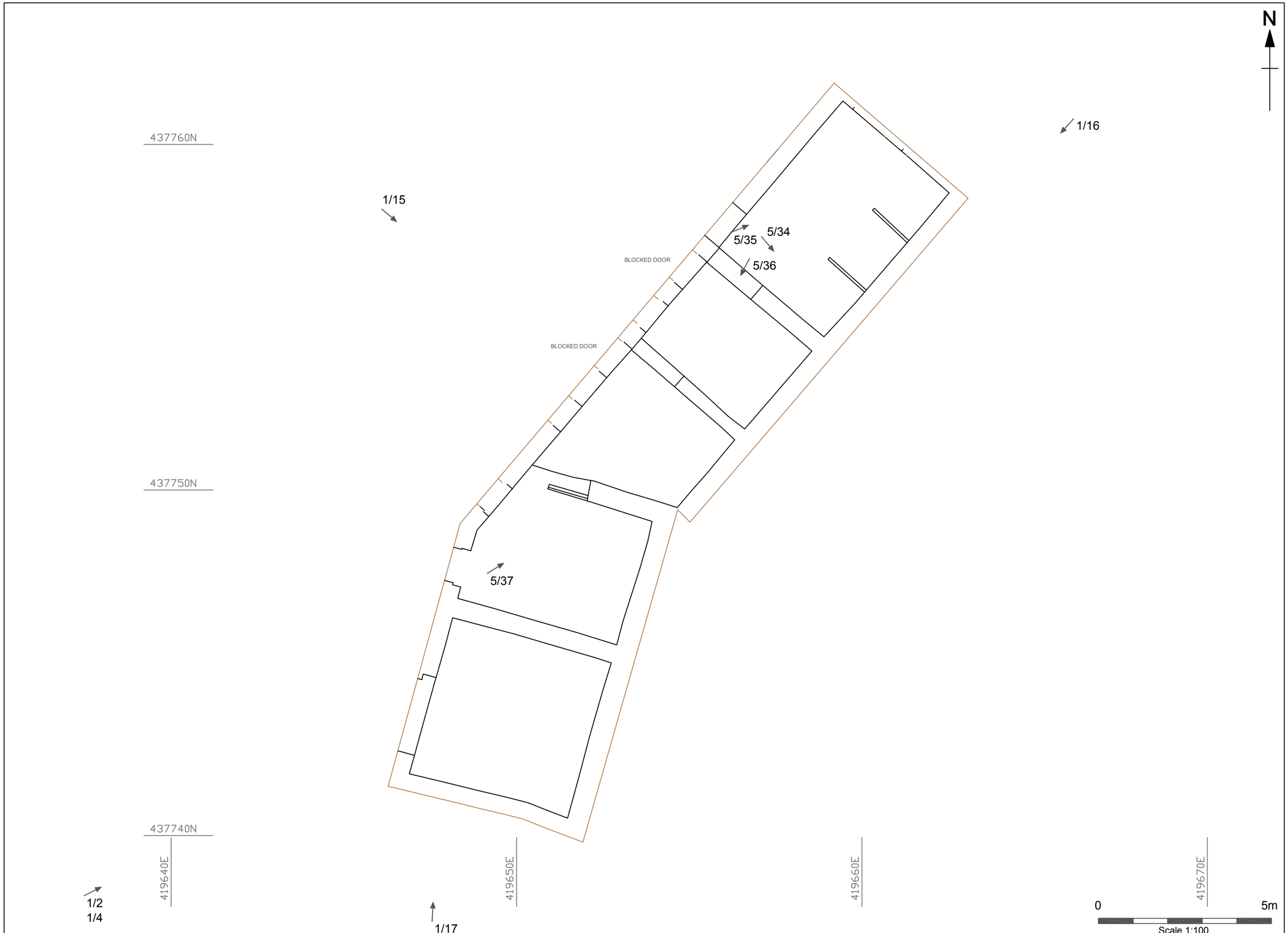
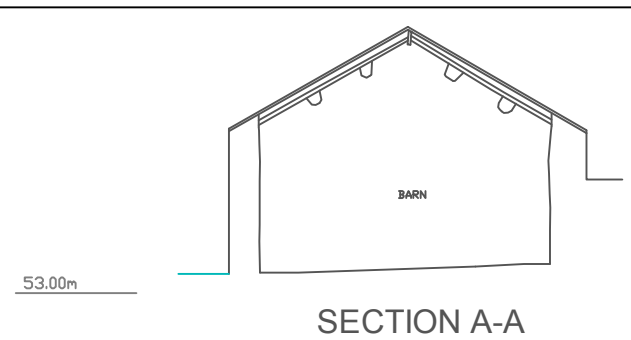
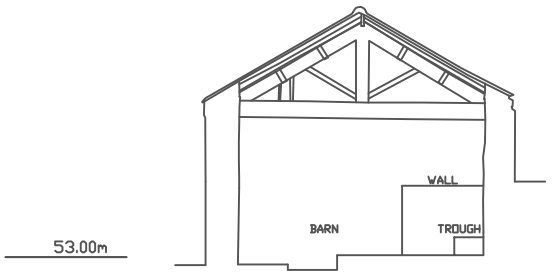


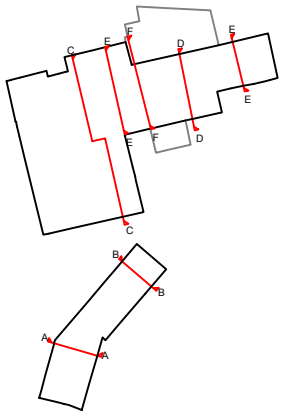
Figure 14. Shaw House Farm: Stable Ground Floor Plan.

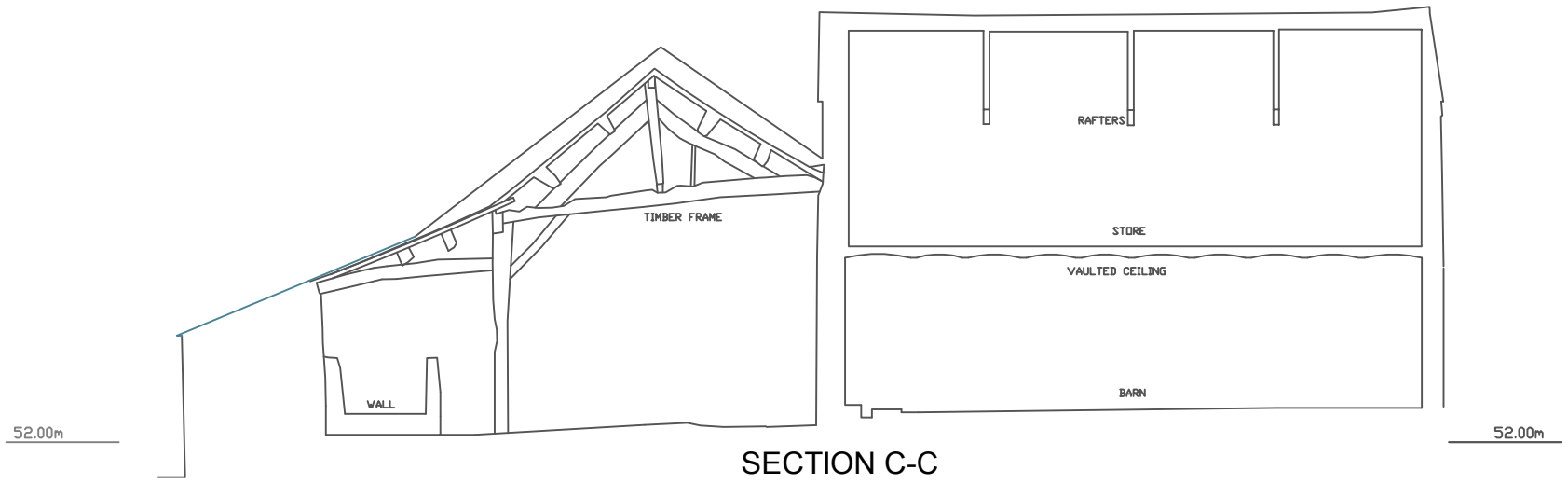


SECTION A-A

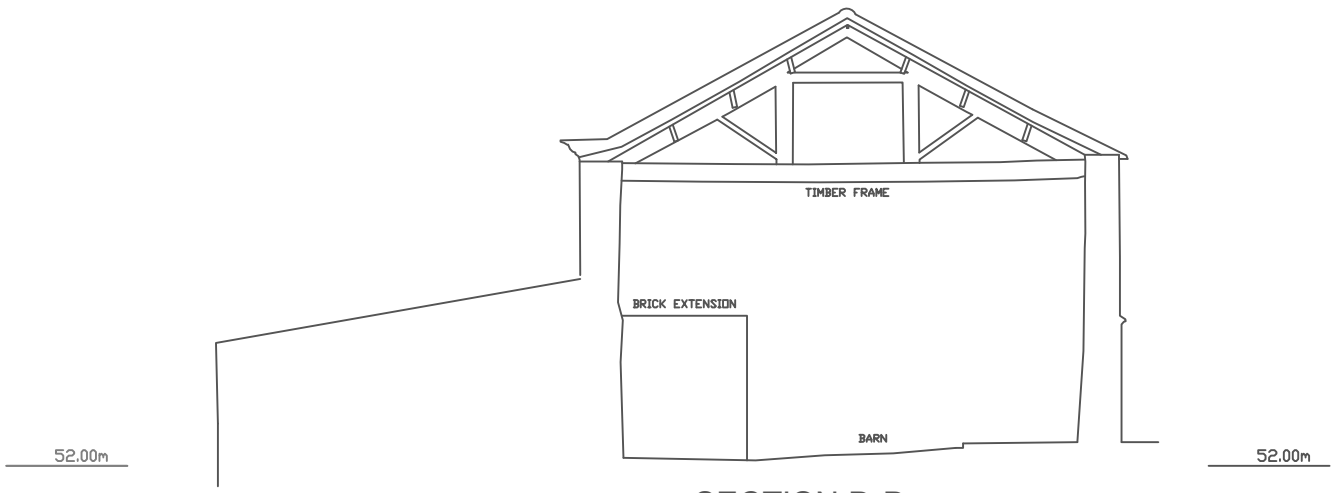


SECTION B-B



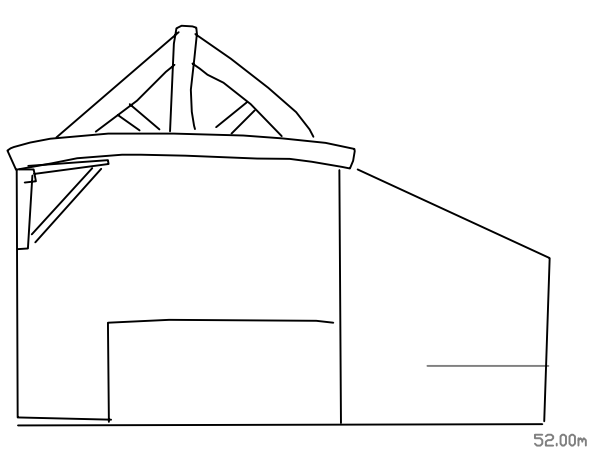


SECTION C-C

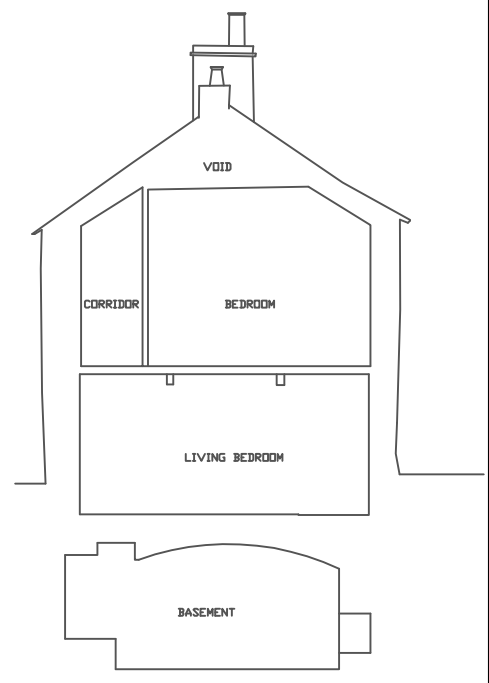


SECTION D-D

SECTION F-F



SECTION E-E



SECTION E-E

Figure 15. Shaw House Farm: Sections.

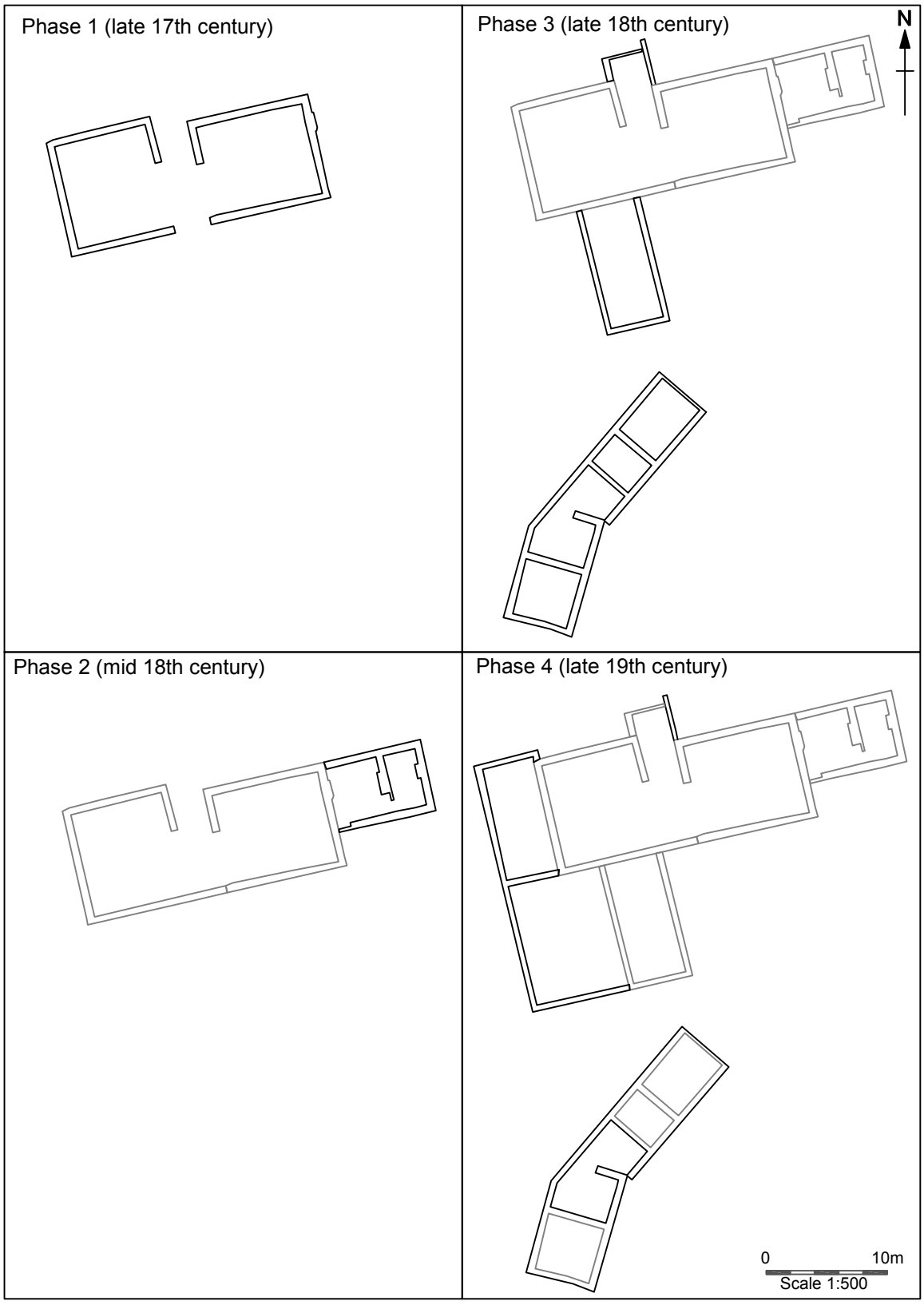


Figure 16. Shaw House Farm: Phases 1-4.

Plate 1. Shaw House Farm. Facing North-east.

Plate 2. Shaw House Farm. Facing West.

Plate 3. Shaw House Farm: Barn Exterior. Facing North.

Plate 4. Shaw House Farm: Barn Exterior. Facing North-west.

Plate 5. Shaw House Farm: Barn Exterior. Facing West.

Plate 6. Shaw House Farm: Barn Exterior. Facing North.

Plate 7. Shaw House Farm: Barn Exterior. Facing North-west.

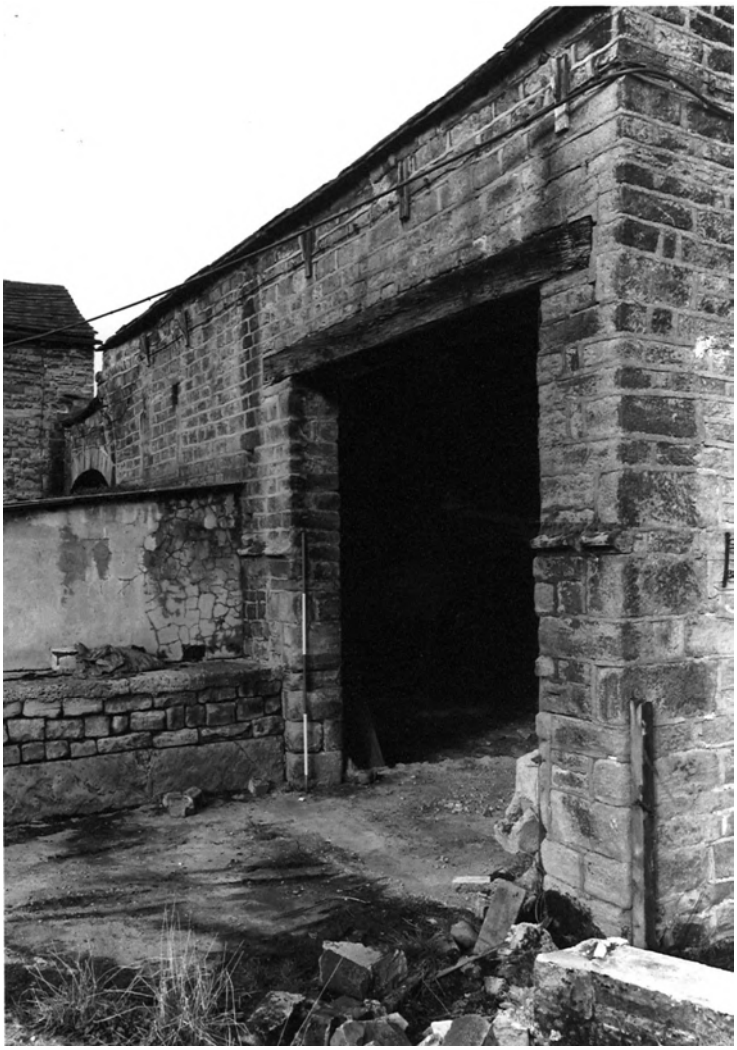


Plate 8. Shaw House Farm: Barn Exterior. Facing North-west.

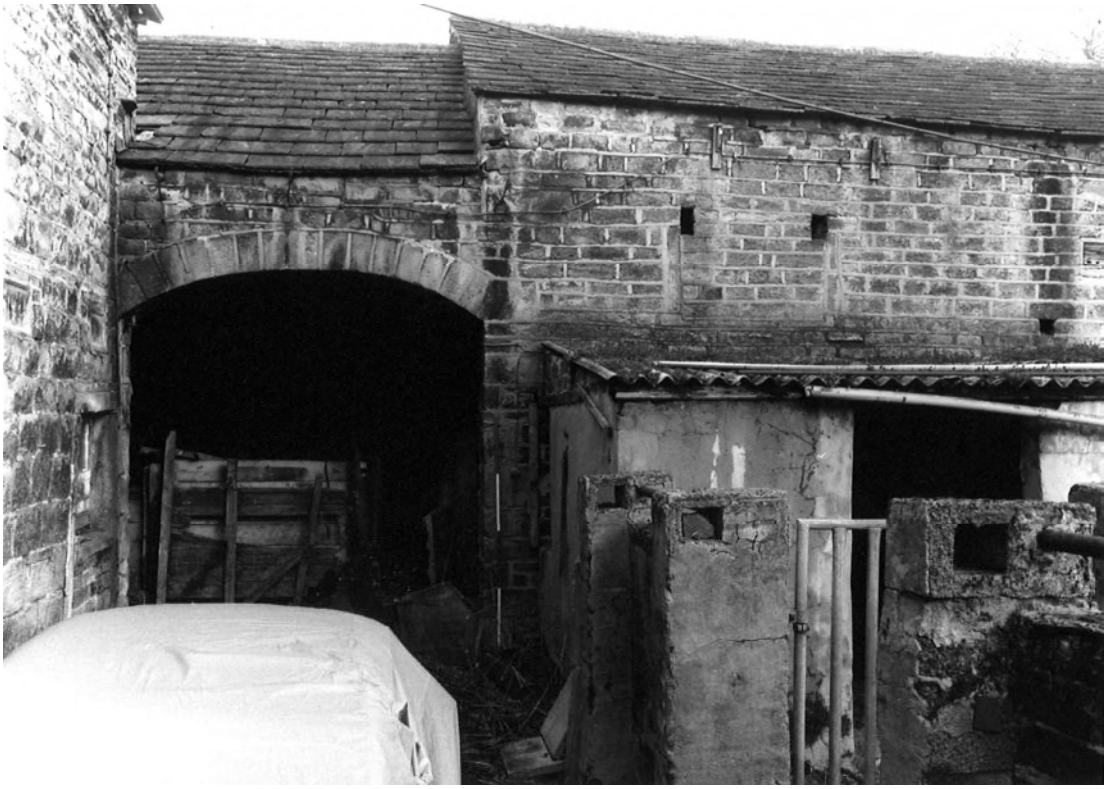


Plate 9. Shaw House Farm: Barn Exterior. Facing North.

Plate 10. Shaw House Farm: Barn Exterior. Facing North-west.

Plate 11. Shaw House Farm: Barn Exterior. Facing South.

Plate 12. Shaw House Farm: Barn Exterior. Facing South-east.

Plate 13. Shaw House Farm: Barn Exterior. Facing South-west.

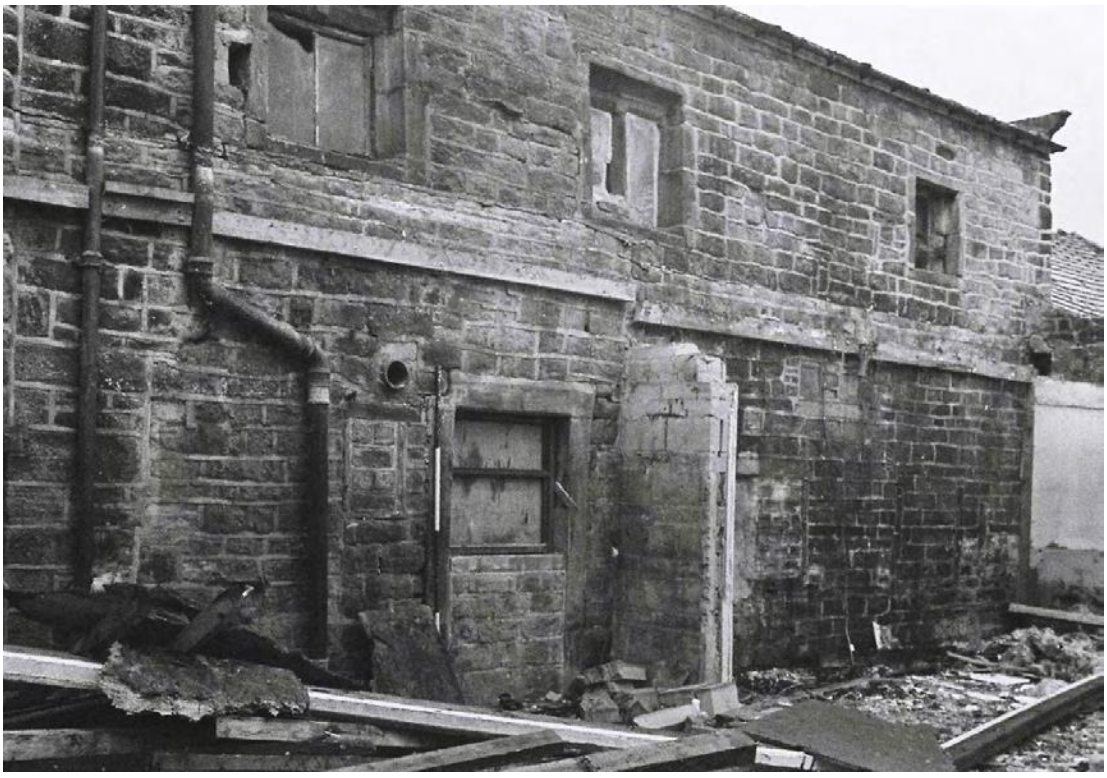


Plate 14. Shaw House Farm: Barn Exterior (after demolition of Lean-to). Facing South-west.

Plate 15. Shaw House Farm: Barn and Cottage Exterior (after demolition of Lean-to). Facing South.

Plate 16. Shaw House Farm: Cottage Exterior. Facing North-west.

Plate 17. Shaw House Farm: Cottage Exterior. Facing North.

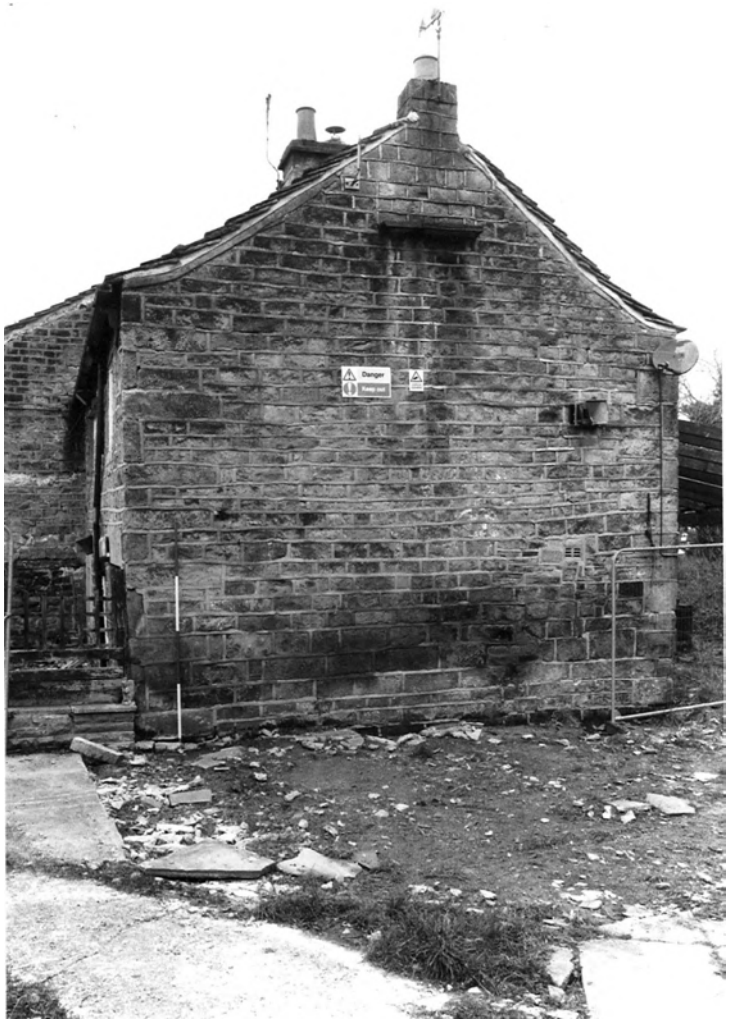


Plate 18. Shaw House Farm: Cottage Exterior. Facing West.

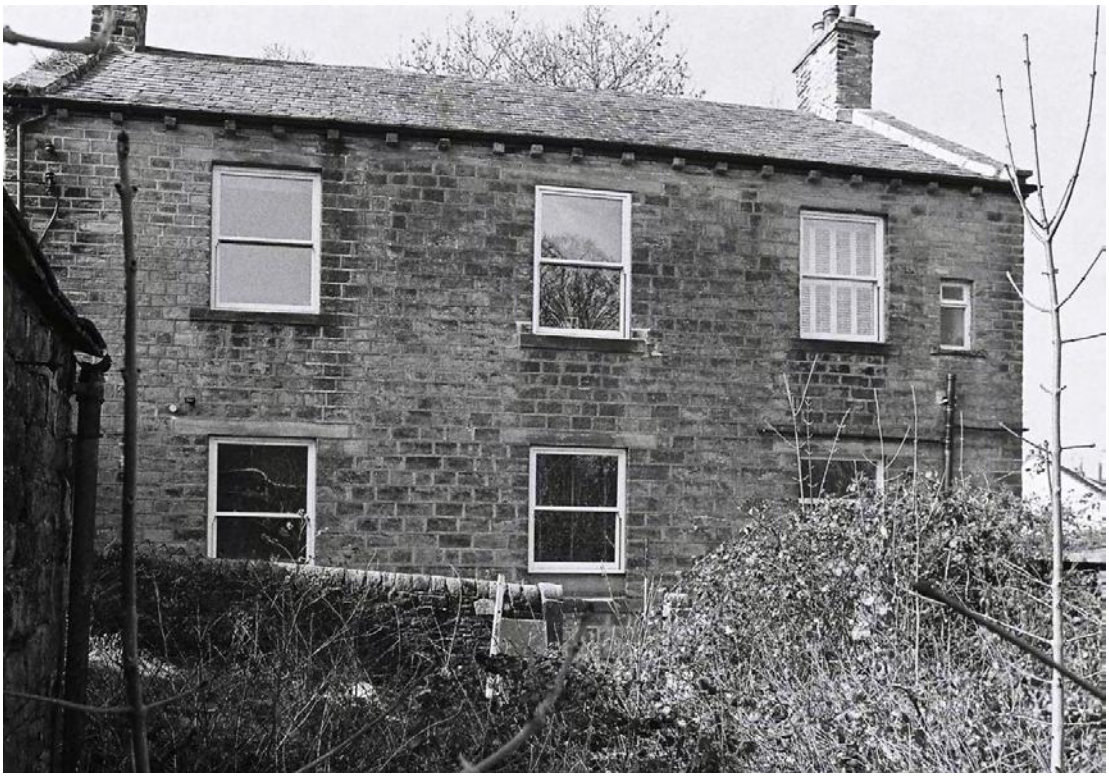


Plate 19. Shaw House Farm: Farmhouse Exterior. Facing West.

Plate 20. Shaw House Farm: Farmhouse Exterior. Facing North.

Plate 21. Shaw House Farm: Stables Exterior. Facing South.

Plate 22. Shaw House Farm: Stables Exterior. Facing South-east.

Plate 23. Shaw House Farm: Stables Exterior. Facing West.

Plate 24. Shaw House Farm: Stables Exterior. Facing East.

Plate 25. Shaw House Farm: Aisled Barn Interior. Facing East.

Plate 26. Shaw House Farm: Aisled Barn Interior. Facing West.

Plate 27. Shaw House Farm: Aisled Barn Interior. Facing West.

Plate 28. Shaw House Farm: Aisled Barn Interior. Facing North.

Plate 29. Shaw House Farm: Aisled Barn Interior. Facing East.

Plate 30. Shaw House Farm: Aisled Barn Interior. Facing North-east.

Plate 31. Shaw House Farm: Aisled Barn Interior. Facing North.

Plate 32. Shaw House Farm: Aisled Barn Interior. Facing North.

Plate 33. Shaw House Farm: Aisled Barn Interior. Facing North.

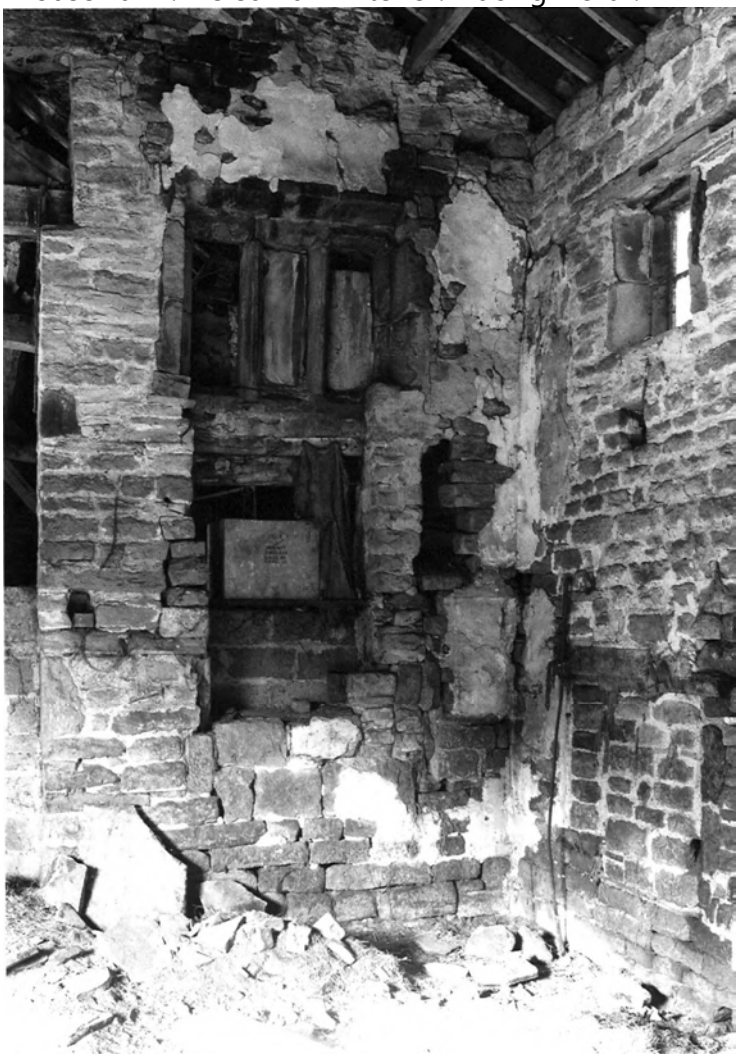


Plate 34. Shaw House Farm: Aisled Barn Interior. Facing West.

Plate 35. Shaw House Farm: Aisled Barn Interior. Facing South-west.

Plate 36. Shaw House Farm: Aisled Barn Interior. Facing North-east.

Plate 37. Shaw House Farm: Aisled Barn Interior Witches Marks. Facing East.

Plate 38. Shaw House Farm: Aisled Barn Interior. Facing North.

Plate 39. Shaw House Farm: Aisled Barn Interior. Facing North-east.

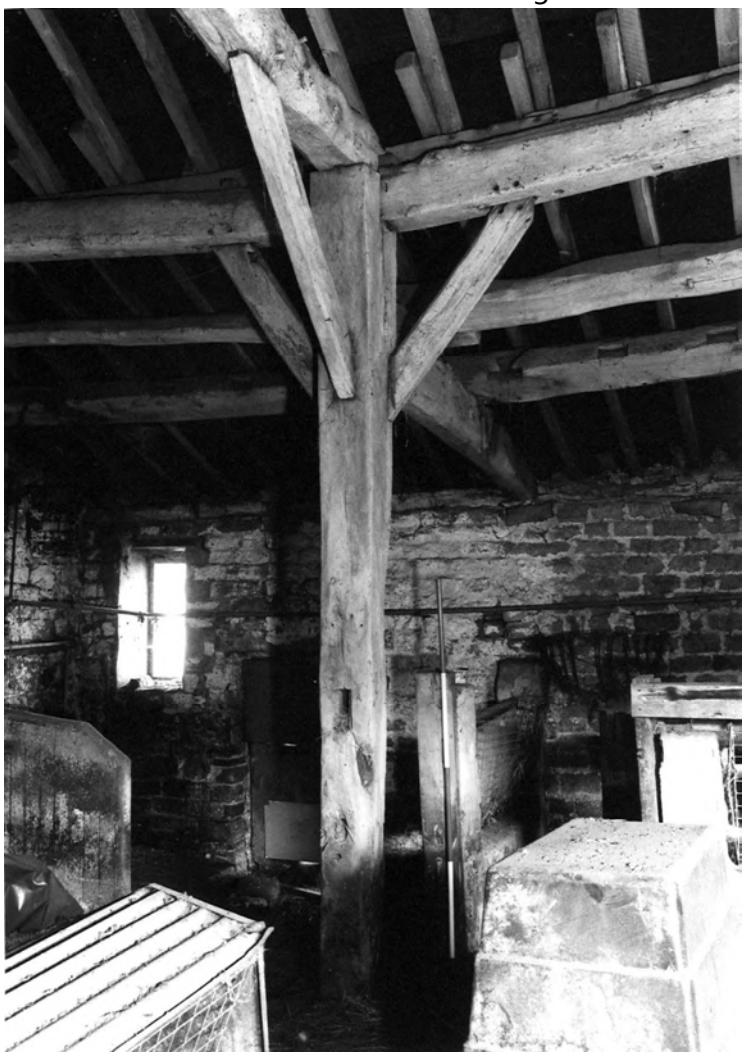


Plate 40. Shaw House Farm: Aisled Barn Interior. Facing North.

Plate 41. Shaw House Farm: Aisled Barn Interior Roof Truss. Facing South-east.

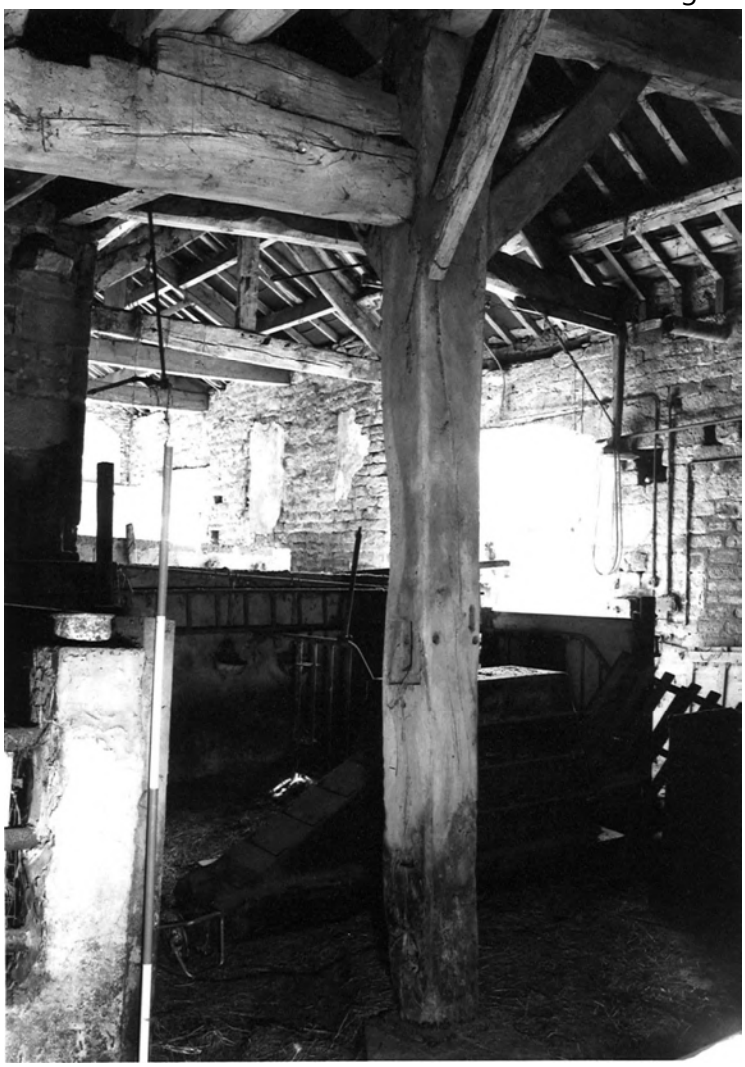


Plate 42. Shaw House Farm: Aisled Barn Interior Post. Facing South-east.

Plate 43. Shaw House Farm: Aisled Barn Interior Post. Facing South-east.

Plate 44. Shaw House Farm: Aisled Barn Interior Post. Facing East.

Plate 45. Shaw House Farm: Aisled Barn Interior Roof Truss. Facing East.

Plate 46. Shaw House Farm: Aisled Barn Interior Roof Truss. Facing East.

Plate 47. Shaw House Farm: Aisled Barn Interior Roof Truss. Facing West.

Plate 48. Shaw House Farm: Aisled Barn Interior Roof Truss. Facing West.

Plate 49. Shaw House Farm: Aisled Barn Interior Roof Truss. Facing West.

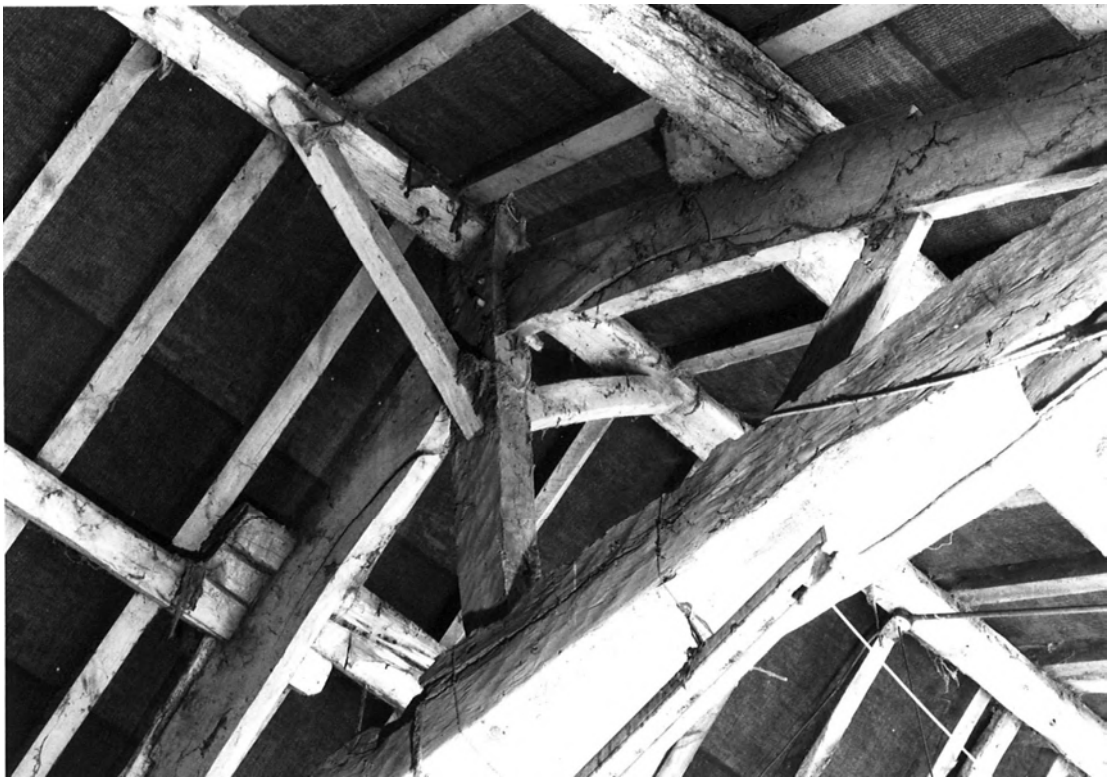


Plate 50. Shaw House Farm: Aisled Barn Interior Roof Truss. Facing North-west.

Plate 51. Shaw House Farm: Aisled Barn Interior Reused Cruck. Facing South.

Plate 52. Shaw House Farm: Later Barn Interior Ground Floor. Facing North.

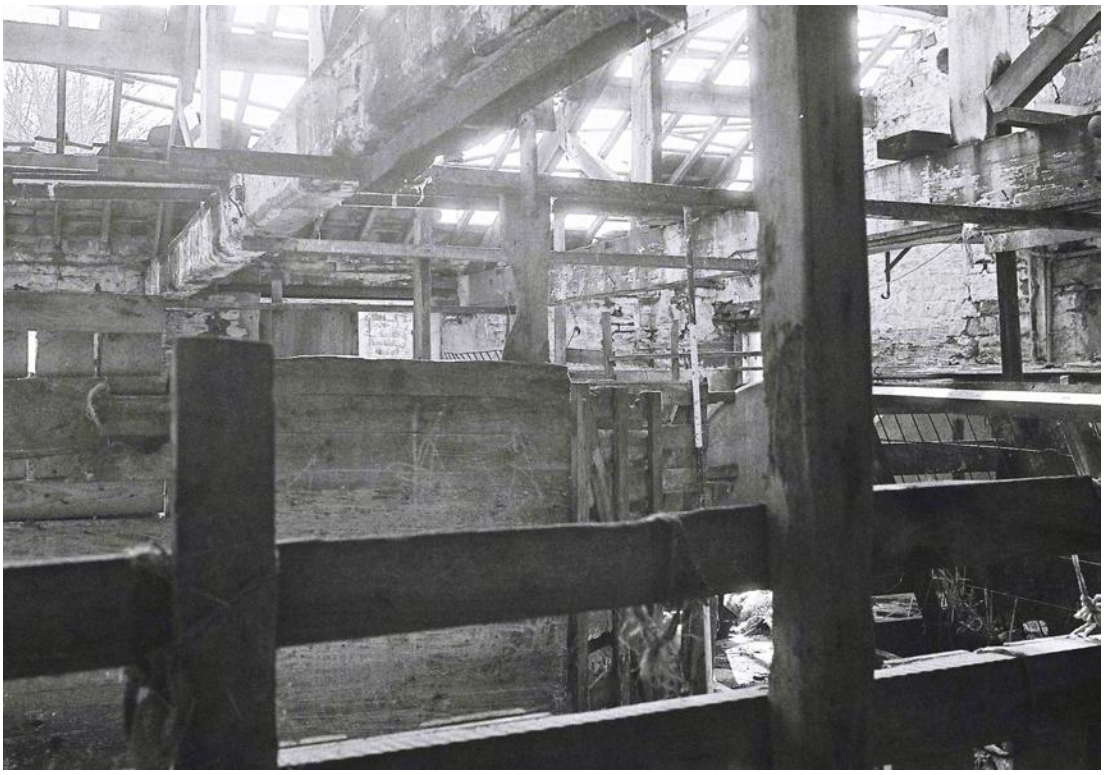


Plate 53. Shaw House Farm: Later Barn Interior Ground Floor. Facing South.

Plate 54. Shaw House Farm: Later Barn Interior Ground Floor. Facing North.

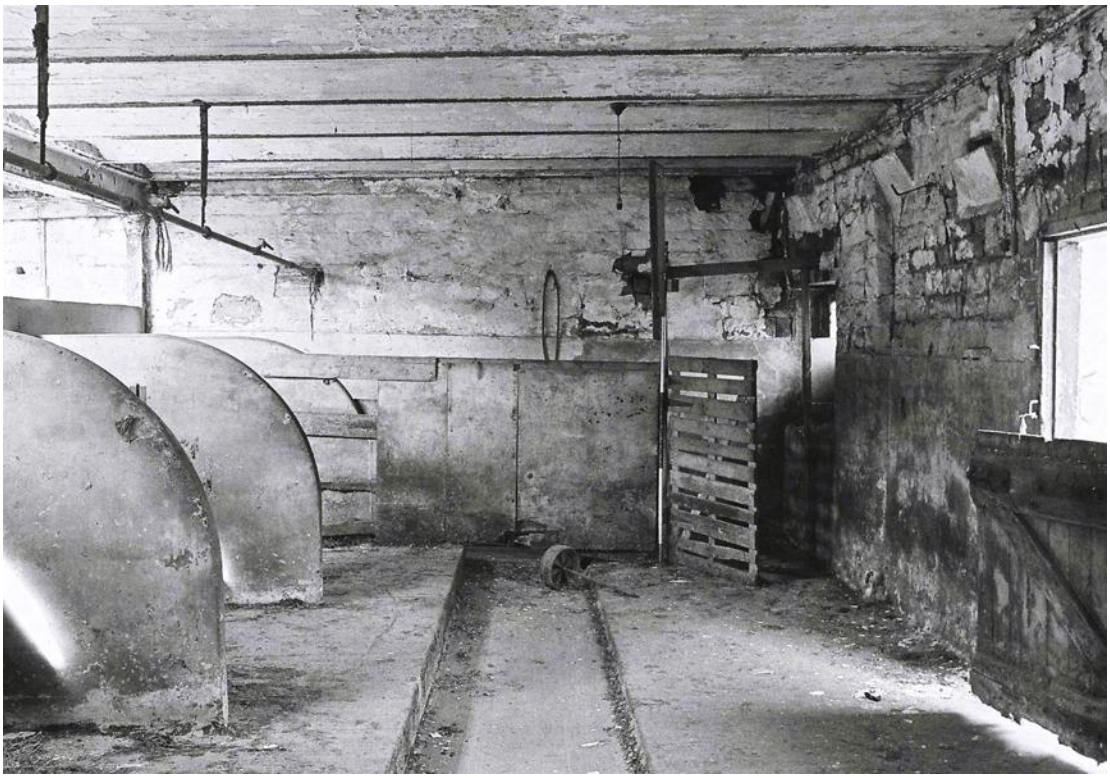


Plate 55. Shaw House Farm: Later Barn Interior Ground Floor. Facing South.

Plate 56. Shaw House Farm: Later Barn Interior First Floor. Facing South.

Plate 57. Shaw House Farm: Later Barn Interior First Floor. Facing North.

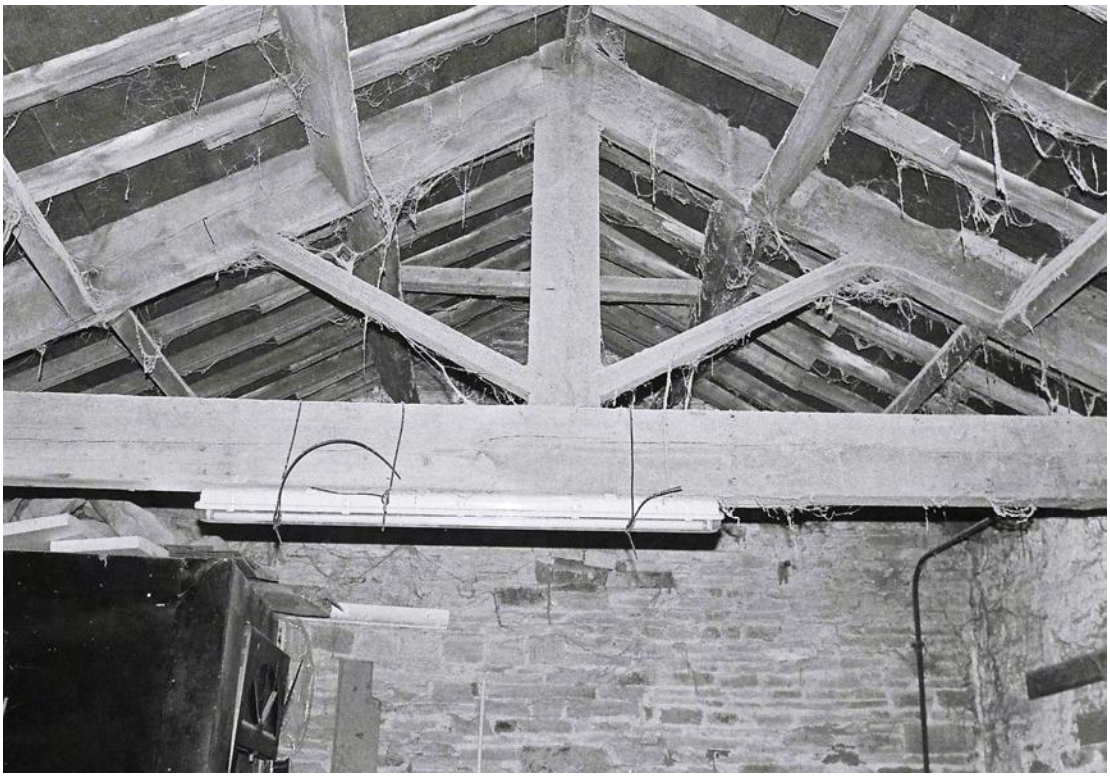


Plate 58. Shaw House Farm: Later Barn Interior First Floor. Facing South.

Plate 59. Shaw House Farm: Later Barn Interior First Floor. Facing East.

Plate 60. Shaw House Farm: Cottage Interior Cellar. Facing South.

Plate 61. Shaw House Farm: Cottage Interior Cellar. Facing North.

Plate 62. Shaw House Farm: Cottage Interior Ground Floor. Facing East.

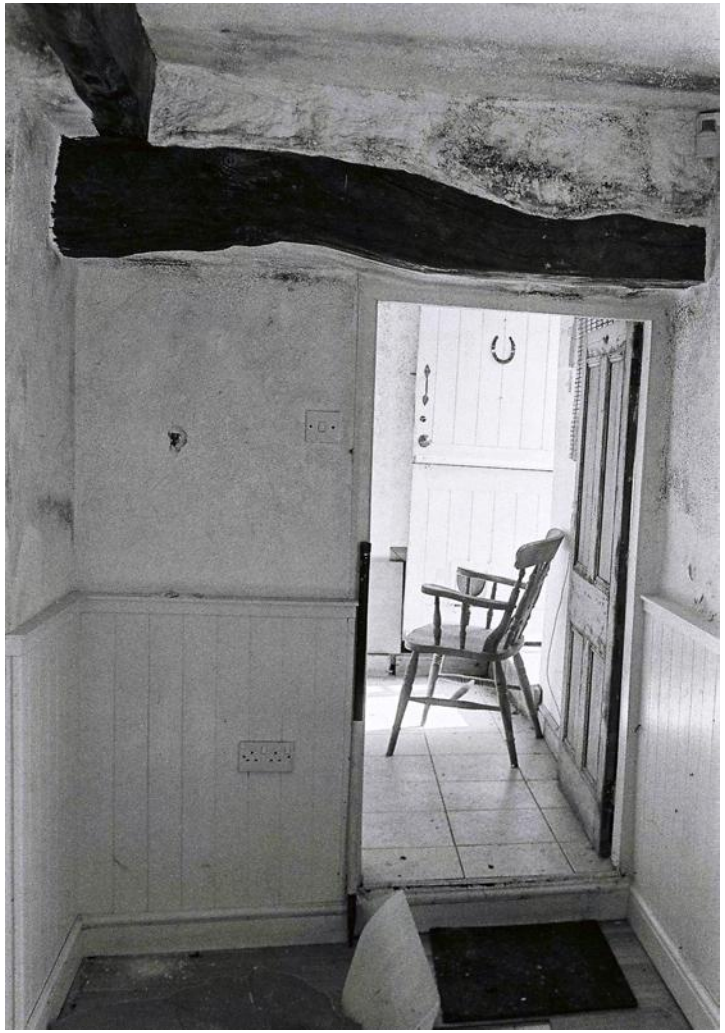


Plate 63. Shaw House Farm: Cottage Interior Ground Floor. Facing East.

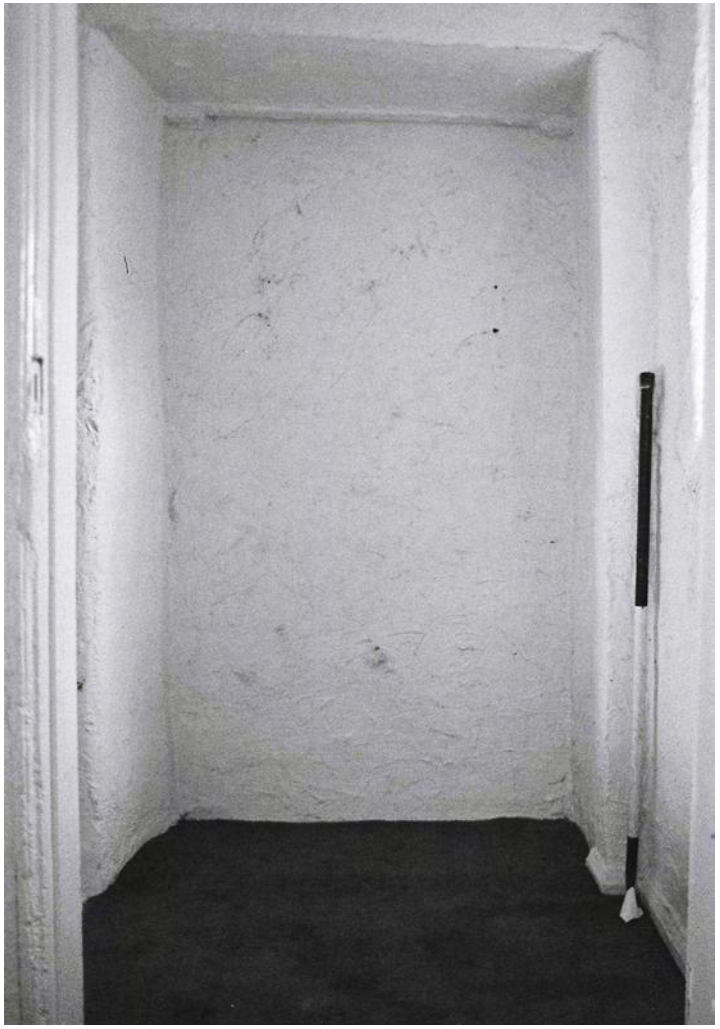


Plate 64. Shaw House Farm: Cottage Interior First Floor. Facing West.

Plate 65. Shaw House Farm: Cottage Interior First Floor. Facing South.

Plate 66. Shaw House Farm: Stables Interior. Facing South-west.

APPENDIX 1

Sude Hill Mill, Sude Hill, New Mill, West Yorkshire (MAP 5.13.2015)
Planning Ref. 2011/93386
SE 16727 08621

Photographic Archive Listing

Monochrome Print (Ilford HP5 Plus 400ASA)
Medium Format - Stephen Haigh Buildings Archaeologist

File	Date	Description	Facing
Film 1/1	14/03/2016	Shaw House Farm and Barn: Exterior	North
Film 1/2	14/03/2016	Shaw House Farm Stables/ Workshop: Exterior	East
Film 1/4	14/03/2016	Shaw House Farm Stables/ Workshop: Exterior	East
Film 1/5	14/03/2016	Shaw House Farm Stables/ Workshop: Exterior	North-east
Film 1/6	14/03/2016	Shaw House Farm Barn: Exterior	North-east
Film 1/7	14/03/2016	Shaw House Farm Barn: Exterior	North
Film 1/8	14/03/2016	Shaw House Farm Cottage and Barn: Exterior	West
Film 1/10	14/03/2016	Shaw House Farm Cottage: Exterior	North-west
Film 1/11	14/03/2016	Shaw House Farm Barn: Exterior	South-west
Film 1/12	14/03/2016	Shaw House Farm Barn: Exterior	West
Film 1/13	14/03/2016	Shaw House Farm Barn: Exterior	North-west
Film 1/15	14/03/2016	Shaw House Farm and Barn: Exterior	South
Film 1/16	14/03/2016	Shaw House Farm Stables/ Workshop: Exterior	South-west
Film 1/17	14/03/2016	Shaw House Farm Stables/ Workshop: Exterior	North
Film 1/18	14/03/2016	Shaw House Farm Cottage: Exterior	West
Film 2/1	14/03/2016	Shaw House Farm Cottage: Exterior	South
Film 2/2	14/03/2016	Shaw House Farm Barn: Exterior	South-west
Film 2/4	14/03/2016	Shaw House Farm Barn: Exterior	South
Film 2/5	14/03/2016	Shaw House Farm Barn: Exterior	South-east
Film 2/6	14/03/2016	Shaw House Farm Barn: Exterior	South-east
Film 2/7	14/03/2016	Shaw House Farm Barn: Exterior	South
Film 2/8	14/03/2016	Shaw House Farm Barn: Exterior	North-east
Film 2/10	14/03/2016	Shaw House Farm Barn: Exterior	North
Film 2/11	14/03/2016	Shaw House Farm Cottage: Exterior	West
Film 2/12	14/03/2016	Shaw House Farm Barn: Exterior	North-west
Film 2/13	14/03/2016	Shaw House Farm Barn: Interior	West
Film 2/14	14/03/2016	Shaw House Farm Barn: Interior	North
Film 2/16	14/03/2016	Shaw House Farm Barn: Interior	North-east
Film 2/17	14/03/2016	Shaw House Farm Barn: Interior	East
Film 2/18	14/03/2016	Shaw House Farm Barn: Interior	West

Film 3/1	14/03/2016	Shaw House Farm Barn: Interior	South
Film 3/2	14/03/2016	Shaw House Farm Barn: Interior	West
Film 3/3	14/03/2016	Shaw House Farm Barn: Interior	East
Film 3/5	14/03/2016	Shaw House Farm Barn: Interior	West
Film 3/6	14/03/2016	Shaw House Farm Barn: Interior	North
Film 3/7	14/03/2016	Shaw House Farm Barn: Interior	North-east
Film 3/8	14/03/2016	Shaw House Farm Barn: Interior	North
Film 3/9	14/03/2016	Shaw House Farm Barn: Interior	South-west
Film 3/11	14/03/2016	Shaw House Farm Barn: Interior	West
Film 3/12	14/03/2016	Shaw House Farm Barn: Interior	West
Film 3/13	14/03/2016	Shaw House Farm Barn: Interior	North-west
Film 3/14	14/03/2016	Shaw House Farm Barn: Interior	East
Film 3/15	14/03/2016	Shaw House Farm Barn: Interior	East
Film 3/17	14/03/2016	Shaw House Farm Barn: Interior	South-east
Film 3/18	14/03/2016	Shaw House Farm Barn: Interior	North-east
Film 4/1	14/03/2016	Shaw House Farm Barn: Interior	East
Film 4/3	14/03/2016	Shaw House Farm Barn: Interior	West
Film 4/4	14/03/2016	Shaw House Farm Barn: Interior	West
Film 4/5	14/03/2016	Shaw House Farm Barn: Interior	South
Film 4/6	14/03/2016	Shaw House Farm Barn: Interior	South-east
Film 4/7	14/03/2016	Shaw House Farm Barn: Interior	East
Film 4/9	14/03/2016	Shaw House Farm Barn: Interior	South-east
Film 4/10	14/03/2016	Shaw House Farm Barn: Interior	South
Film 4/11	14/03/2016	Shaw House Farm Barn: Interior	South-east
Film 4/12	14/03/2016	Shaw House Farm Cottage: Interior	South-west
Film 4/13	14/03/2016	Shaw House Farm Cottage: Interior	North-east
Film 4/14	14/03/2016	Shaw House Farm Cottage: Interior	North-east

Monochrome Print (Ilford HP5)
35mm Format - Kelly Hunter MAP Archaeological Practice Ltd

Negative	Date	Description		Exposure	Aperture
Film 5/01	14/03/2016	ID Shot	South	60	f5.6 (Flash)
Film 5/01	14/03/2016	Shaw House Farm Cottage: Interior	South	60	f5.6 (Flash)
Film 5/02	14/03/2016	Shaw House Farm Cottage: Interior Cellar	West	60	f5.6 (Flash)
Film 5/03	14/03/2016	Shaw House Farm Cottage: Interior Ground Floor	South	60	f5.6 (Flash)
Film 5/04	14/03/2016	Shaw House Farm Cottage: Interior Cellar	East	60	f5.6 (Flash)
Film 5/05	14/03/2016	Shaw House Farm Cottage: Interior Cellar	South	60	f5.6 (Flash)
Film 5/06	14/03/2016	Shaw House Farm Cottage: Interior Cellar	West	60	f5.6 (Flash)
Film 5/07	14/03/2016	Shaw House Farm Cottage: Interior Cellar	North	60	f5.6 (Flash)
Film 5/08	14/03/2016	Shaw House Farm Cottage: Interior Cellar	South	60	f5.6 (Flash)
Film 5/09	14/03/2016	Shaw House Farm Cottage: Interior Ground Floor	East	60	f5.6 (Flash)
Film 5/10	14/03/2016	Shaw House Farm Cottage: Interior Ground Floor	East	125	f5.6 (Flash)
Film 5/11	14/03/2016	Shaw House Farm Cottage: Interior Ground Floor	East	60	f5.6 (Flash)

Film 5/12	14/03/2016	Shaw House Farm Cottage: Interior First Floor	North	60	f5.6 (Flash)
Film 5/13	14/03/2016	Shaw House Farm Cottage: Interior First Floor	West	60	f5.6 (Flash)
Film 5/14	14/03/2016	Shaw House Farm Cottage: Interior First Floor	South	60	f5.6 (Flash)
Film 5/15	14/03/2016	Shaw House Farm Cottage: Interior First Floor	South	60	f5.6 (Flash)
Film 5/16	14/03/2016	Shaw House Farm Cottage: Interior First Floor	North-east	60	f5.6 (Flash)
Film 5/17	14/03/2016	Shaw House Farm Cottage: Interior First Floor	East	60	f5.6 (Flash)
Film 5/18	14/03/2016	Shaw House Farm Cottage: Interior First Floor	North-west	60	f5.6 (Flash)
Film 5/19	14/03/2016	Shaw House Farm Cottage: Interior First Floor	West	60	f5.6 (Flash)
Film 5/20	14/03/2016	Shaw House Farm Cottage: Interior Ground Floor	South	60	f5.6 (Flash)
Film 5/21	14/03/2016	Shaw House Farm Cottage: Interior Ground Floor	North	60	f5.6 (Flash)
Film 5/22	14/03/2016	Shaw House Farm Cottage: Interior Ground Floor	South	60	f5.6 (Flash)
Film 5/23	14/03/2016	Shaw House Farm: Exterior	West	250	f32
Film 5/24	14/03/2016	Shaw House Farm: Exterior	North	250	f28
Film 5/25	14/03/2016	Shaw House Farm Barn: Interior Ground Floor	West	60	f8 (flash)
Film 5/26	14/03/2016	Shaw House Farm Barn: Interior First Floor	South	60	f8 (flash)
Film 5/27	14/03/2016	Shaw House Farm Barn: Interior First Floor	North	60	f8 (flash)
Film 5/28	14/03/2016	Shaw House Farm Barn: Interior First Floor	North	60	f8 (flash)
Film 5/29	14/03/2016	Shaw House Farm Barn: Interior First Floor	East	60	f8 (flash)
Film 5/30	14/03/2016	Shaw House Farm Barn: Interior Ground Floor	North	60	f8 (flash)
Film 5/31	14/03/2016	Shaw House Farm Barn: Interior Ground Floor	South	60	f8 (flash)
Film 5/32	14/03/2016	Shaw House Farm Barn: Interior Ground Floor	South	60	f8 (flash)
Film 5/33	14/03/2016	Shaw House Farm Barn: Interior Ground Floor	North	60	f8 (flash)
Film 5/34	14/03/2016	Shaw House Farm Stables: Interior	East	60	f8 (flash)
Film 5/35	14/03/2016	Shaw House Farm Stables: Interior	West	60	f8 (flash)
Film 5/36	14/03/2016	Shaw House Farm Stables: Interior	South-west	125	f22
Film 5/37	14/03/2016	Shaw House Farm Stables: Interior	East	125	f22
Film 6/30	18/05/2016	Shaw House Farm Cottage & Barn: Exterior	South	125	f22
Film 6/31	18/05/2016	Shaw House Farm Cottage & Barn: Exterior	South	125	f22
Film 6/32	18/05/2016	Shaw House Farm Cottage & Barn: Exterior	South	60	f22

Film 6/33	18/05/2016	Shaw House Farm Cottage & Barn: Exterior	South	60	f22
Film 6/34	18/05/2016	Shaw House Farm Cottage & Barn: Exterior	South	125	f16
Film 6/35	18/05/2016	Shaw House Farm Cottage & Barn: Exterior	West	125	f16
Film 6/36	18/05/2016	Shaw House Farm Cottage & Barn: Exterior	West	125	f16
Film 6/37	18/05/2016	Shaw House Farm Cottage & Barn: Exterior	West	125	f16

Digital Shots

Camera: Pentax WG-1 (14 Megapixel)

File	Date	Description	Facing
P1070984	14/03/2016	Shaw House Farm Cottage: Interior Cellar	South
P1070985	14/03/2016	Shaw House Farm Cottage: Interior Cellar	South
P1070986	14/03/2016	Shaw House Farm Cottage: Interior Cellar	South
P1070987	14/03/2016	Shaw House Farm Cottage: Interior Cellar	South
P1070991	14/03/2016	Shaw House Farm Cottage: Interior Cellar	North-east
P1070992	14/03/2016	Shaw House Farm Cottage: Interior Cellar	South
P1070994	14/03/2016	Shaw House Farm Cottage: Interior Cellar	South-west
P1070995	14/03/2016	Shaw House Farm Cottage: Interior Cellar	North-east
P1070996	14/03/2016	Shaw House Farm Cottage: Interior Cellar	North-east
P1070997	14/03/2016	Shaw House Farm Cottage: Interior Cellar	South-east
P1070998	14/03/2016	Shaw House Farm Cottage: Interior Cellar	South
P1070999	14/03/2016	Shaw House Farm Cottage: Interior Ground Floor	East
P1080001	14/03/2016	Shaw House Farm Cottage: Interior Ground Floor	South-east
P1080002	14/03/2016	Shaw House Farm Cottage: Interior Ground Floor	East
P1080003	14/03/2016	Shaw House Farm Cottage: Interior Ground Floor	North-east
P1080004	14/03/2016	Shaw House Farm Cottage: Interior First Floor	West
P1080005	14/03/2016	Shaw House Farm Cottage: Interior First Floor	West
P1080006	14/03/2016	Shaw House Farm Cottage: Interior First Floor	South-west
P1080007	14/03/2016	Shaw House Farm Cottage: Interior First Floor	South-west
P1080008	14/03/2016	Shaw House Farm Cottage: Interior First Floor	North-east

P1080009	14/03/2016	Shaw House Farm Cottage: Interior First Floor	South-east
P1080010	14/03/2016	Shaw House Farm Cottage: Interior First Floor	North
P1080011	14/03/2016	Shaw House Farm Cottage: Interior First Floor	West
P1080012	14/03/2016	Shaw House Farm Cottage: Interior Ground Floor	South
P1080013	14/03/2016	Shaw House Farm Cottage: Interior Ground Floor	North
P1080014	14/03/2016	Shaw House Farm Cottage: Interior Ground Floor	North
P1080015	14/03/2016	Shaw House Farm Cottage: Interior Ground Floor	South
P1080016	14/03/2016	Shaw House Farm Cottage: Exterior	North
P1080017	14/03/2016	Shaw House Farm Cottage: Exterior	West
P1080018	14/03/2016	Shaw House Farm Cottage: Exterior	West
P1080019	14/03/2016	Shaw House Farm Cottage: Exterior	West
P1080020	14/03/2016	Shaw House Farm Cottage: Exterior	South
P1080021	14/03/2016	Shaw House Farm Cottage: Exterior	South
P1080023	14/03/2016	Shaw House Farm Barn: Exterior	South
P1080024	14/03/2016	Shaw House Farm Barn: Exterior	South
P1080025	14/03/2016	Shaw House Farm Barn: Exterior	South
P1080027	14/03/2016	Shaw House Farm Barn: Exterior	South-west
P1080028	14/03/2016	Shaw House Farmhouse: Exterior	West
P1080029	14/03/2016	Shaw House Farmhouse: Exterior	West
P1080030	14/03/2016	Shaw House Farm Barn: Exterior	South-east
P1080031	14/03/2016	Shaw House Farmhouse: Exterior	North
P1080032	14/03/2016	Shaw House Farm Barn: Exterior	East
P1080033	14/03/2016	Shaw House Farm Barn: Exterior	East
P1080034	14/03/2016	Shaw House Farm Barn: Exterior	East
P1080035	14/03/2016	Shaw House Farm Barn: Exterior	East
P1080036	14/03/2016	Shaw House Farm Barn: Exterior	East
P1080037	14/03/2016	Shaw House Farm Barn: Exterior	East
P1080038	14/03/2016	Shaw House Farm Barn: Exterior	East
P1080039	14/03/2016	Shaw House Farm Barn: Exterior	East
P1080040	14/03/2016	Shaw House Farm Barn: Exterior	East
P1080041	14/03/2016	Shaw House Farm Barn: Exterior	North
P1080042	14/03/2016	Shaw House Farm Barn: Exterior	North
P1080043	14/03/2016	Shaw House Farm Barn: Exterior	North
P1080044	14/03/2016	Shaw House Farm Barn: Exterior	West
P1080045	14/03/2016	Shaw House Farm Barn: Exterior	West
P1080046	14/03/2016	Shaw House Farm Barn: Exterior	West
P1080047	14/03/2016	Shaw House Farm Barn: Exterior	North
P1080048	14/03/2016	Shaw House Farm Barn: Exterior	North
P1080049	14/03/2016	Shaw House Farm Barn: Exterior	North
P1080050	14/03/2016	Shaw House Farm Barn: Exterior	West
P1080051	14/03/2016	Shaw House Farm Barn: Exterior	North
P1080052	14/03/2016	Shaw House Farm Barn: Exterior	North
P1080053	14/03/2016	Shaw House Farm Barn: Interior	West

P1080054	14/03/2016	Shaw House Farm Barn: Interior	North
P1080055	14/03/2016	Shaw House Farm Barn: Interior	North
P1080056	14/03/2016	Shaw House Farm Barn: Interior	North
P1080057	14/03/2016	Shaw House Farm Barn: Interior	North
P1080058	14/03/2016	Shaw House Farm Barn: Interior	East
P1080059	14/03/2016	Shaw House Farm Barn: Interior	East
P1080060	14/03/2016	Shaw House Farm Barn: Interior	East
P1080061	14/03/2016	Shaw House Farm Barn: Interior	East
P1080062	14/03/2016	Shaw House Farm Barn: Interior	South
P1080063	14/03/2016	Shaw House Farm Barn: Interior (Witches mark in Plaster)	East
P1080064	14/03/2016	Shaw House Farm Barn: Interior (Witches mark in Plaster)	East
P1080065	14/03/2016	Shaw House Farm Barn: Interior	West
P1080066	14/03/2016	Shaw House Farm Barn: Interior	West
P1080067	14/03/2016	Shaw House Farm Barn: Interior	North
P1080068	14/03/2016	Shaw House Farm Barn: Interior	North
P1080069	14/03/2016	Shaw House Farm Barn: Interior	East
P1080070	14/03/2016	Shaw House Farm Barn: Interior	East
P1080071	14/03/2016	Shaw House Farm Barn: Interior	South
P1080072	14/03/2016	Shaw House Farm Barn: Interior	South
P1080073	14/03/2016	Shaw House Farm Barn: Interior	West
P1080074	14/03/2016	Shaw House Farm Barn: Interior	West
P1080075	14/03/2016	Shaw House Farm Barn: Interior	West
P1080076	14/03/2016	Shaw House Farm Barn: Interior	East
P1080077	14/03/2016	Shaw House Farm Barn: Interior	East
P1080078	14/03/2016	Shaw House Farm Barn: Interior	East
P1080079	14/03/2016	Shaw House Farm Barn: Interior	East
P1080080	14/03/2016	Shaw House Farm Barn: Interior	East
P1080081	14/03/2016	Shaw House Farm Barn: Interior	West
P1080082	14/03/2016	Shaw House Farm Barn: Interior	East
P1080083	14/03/2016	Shaw House Farm Barn: Interior	East
P1080084	14/03/2016	Shaw House Farm Barn: Interior	North-east
P1080085	14/03/2016	Shaw House Farm Barn: Interior	North
P1080086	14/03/2016	Shaw House Farm Barn: Interior	North
P1080087	14/03/2016	Shaw House Farm Barn: Interior	West
P1080088	14/03/2016	Shaw House Farm Barn: Interior	West
P1080089	14/03/2016	Shaw House Farm Barn: Interior	West
P1080090	14/03/2016	Shaw House Farm Barn: Interior	West
P1080091	14/03/2016	Shaw House Farm Barn: Interior First Floor	South
P1080092	14/03/2016	Shaw House Farm Barn: Interior First Floor	South
P1080093	14/03/2016	Shaw House Farm Barn: Interior First Floor	North
P1080094	14/03/2016	Shaw House Farm Barn: Interior First Floor	North
P1080095	14/03/2016	Shaw House Farm Barn: Interior First Floor	East
P1080096	14/03/2016	Shaw House Farm Barn: Interior First Floor	East
P1080097	14/03/2016	Shaw House Farm Barn: Interior Ground Floor	North
P1080098	14/03/2016	Shaw House Farm Barn: Interior Ground Floor	South

P1080099	14/03/2016	Shaw House Farm Barn: Interior Ground Floor	South
P1080100	14/03/2016	Shaw House Farm Barn: Interior Ground Floor	North
P1080101	14/03/2016	Shaw House Farm Barn: Interior Ground Floor	South
P1080102	14/03/2016	Shaw House Farm Barn: Interior Ground Floor	South
P1080103	14/03/2016	Shaw House Farm Barn: Interior Ground Floor	North
P1080104	14/03/2016	Shaw House Farm Barn: Interior Ground Floor	North
P1080105	14/03/2016	Shaw House Farm Stables: Interior	North-east
P1080106	14/03/2016	Shaw House Farm Stables: Interior	South-west
P1080107	14/03/2016	Shaw House Farm Stables: Interior	South-east
P1080108	14/03/2016	Shaw House Farm Stables: Interior	North-west
P1080109	14/03/2016	Shaw House Farm Stables: Exterior	South-east
P1080110	14/03/2016	Shaw House Farm Stables: Exterior	South-east
P1080111	14/03/2016	Shaw House Farm Stables: Exterior	East
P1080112	14/03/2016	Shaw House Farm Stables: Exterior	South-west
P1080113	14/03/2016	Shaw House Farm Stables: Exterior	South-west
P1080114	14/03/2016	Shaw House Farm: Exterior	South-west
P1080115	14/03/2016	Shaw House Farm Stables: Exterior	South-west
P1080116	14/03/2016	Shaw House Farm Stables: Exterior	South-west
P1080117	14/03/2016	Shaw House Farm Stables: Exterior	South-west
IMGP6554	18/05/2016	Shaw House Farm Barn: Exterior after demolition of later lean-to.	South
IMGP6555	18/05/2016	Shaw House Farm Barn: Exterior after demolition of later lean-to.	South
IMGP6556	18/05/2016	Shaw House Farm Barn: Exterior after demolition of later lean-to.	South
IMGP6557	18/05/2016	Shaw House Farm Barn: Exterior after demolition of later lean-to.	South
IMGP6558	18/05/2016	Shaw House Farm Barn: Exterior after demolition of later lean-to.	West
IMGP6559	18/05/2016	Shaw House Farm Barn: Exterior after demolition of later lean-to.	South
IMGP6560	18/05/2016	Shaw House Farm Barn: Exterior after demolition of later lean-to.	South
IMGP6561	18/05/2016	Shaw House Farm Barn: Exterior after demolition of later lean-to.	South-west
IMGP6562	18/05/2016	Shaw House Farm Barn: Exterior after demolition of later lean-to.	North
IMGP6563	18/05/2016	Shaw House Farm Barn: Exterior after demolition of later lean-to.	North

ntrdl the nottingham tree-ring dating laboratory

SHAW HOUSE FARM BARN
PARKIN LANE/CALVERLEY CUT
APPERLEY BRIDGE
WEST YORKSHIRE

TREE-RING ANALYSIS OF TIMBERS

Alison Arnold and Robert Howard

NGR: SE 19650 37781
April 2016

NTRDL, 20 Hillcrest Grove, Sherwood, Nottinghamshire NG5 1FT
Telephone 0115 960 3833 (Office); 07980 305583 (Mobile)

TREE-RING ANALYSIS OF TIMBERS FROM SHAW HOUSE FARM BARN, PARKIN LANE/CALVERLEY CUT, APPERLEY BRIDGE, WEST YORKSHIRE

ALISON ARNOLD
ROBERT HOWARD

SUMMARY

Dendrochronological analysis undertaken on timbers of this barn resulted in the successful dating of five of them. A tiebeam and principal rafter, both thought to be primary were felled in AD 1695, whilst two purlins and a small section of wall plate, presumably reused, date to AD 1518–43.

These results suggest construction occurred in or shortly after felling of primary timbers in AD 1695 and incorporated reused timber from the first half of the sixteenth century.

TREE-RING ANALYSIS OF TIMBERS FROM SHAW HOUSE FARM BARN, PARKIN LANE/CALVERLEY CUT, APPERLEY BRIDGE, WEST YORKSHIRE

INTRODUCTION

Shawhouse Farm is located in the village of Apperley Bridge, about 6.5km north east of Bradford and 11km north west of Leeds (Figs 1 & 2). It comprises a farmhouse, a cottage, barn, and associated ancillary buildings (Fig 2). Despite not being listed, this complex is considered a non-designated heritage asset.

The farmhouse itself is not of any great age, believed to date to the late-nineteenth century. However, the range containing the barn, mistal, granary, and cottage are thought to be somewhat older (Fig 3). Surviving within this range are the remains of an aisled, timber-framed barn, currently forming the western portion of the present barn. The eastern portion of the present barn occupies part of a modified cottage; this cottage thought to be late seventeenth or early-eighteenth century in date.

The roof

The roof over the present barn consists of five trusses. The three westernmost trusses (trusses 1–3) are of king post construction with principal rafters, tiebeams, and queen struts. Between these are common rafters, a ridge, and two tiers of purlins to each slope (Fig 4). A number of these purlins can be seen to have redundant mortices suggesting an earlier use for the timbers before their incorporation into the barn (Fig 5). Only one aisle post and aisle tie, that of truss 1, survives (Fig 6). Trusses 4 and 5 are more modern in appearance and were not part of this investigation.

PRINCIPLES OF TREE-RING DATING

Tree-ring dating relies on a few simple, but fundamental, principles. Firstly, as is commonly known, trees (particularly oak trees) grow by adding one, and only one, growth-ring to their circumference each, and every, year. Each new annual growth-ring is added to the outside of the previous year's growth just below the bark. The width of this annual growth-ring is largely, though not exclusively, determined by the weather conditions during the growth period (roughly March to September). In general, good conditions produce wider rings and poor conditions produce narrower rings. Thus, over the lifetime of a tree, the annual growth-rings display a climatically determined pattern. Furthermore, and importantly, all trees growing in the same area at the same time will be influenced by the same growing conditions and the annual growth-rings of all of them will respond in a similar, though not identical, way.

Secondly, because the weather over any number of consecutive years is unique, so too is the growth pattern of the tree. The pattern of a short period of growth, 20 or 30 consecutive years, might conceivably be repeated two or even three times in the last one thousand years. A short pattern might also be repeated at different time periods in different parts of the country because of differences in regional micro-climates. It is less likely, however, that such problems would occur with the pattern of a longer period of growth, that is, anything in excess of 60 years or so. In essence, a short period of growth, anything less than 40 rings, is not reliable, and the longer the period of time under comparison the better.

The third principal of tree-ring dating is that, until the early-to mid-nineteenth century, builders of timber-framed houses usually obtained all the wood needed for a given structure by felling the necessary trees in a single operation from one patch of woodland or from closely adjacent woods. Furthermore, and contrary to popular belief, the timber was used "green" and without seasoning, and there was very little long-term storage as in timber-yards of today. This fact has been well established from a number of studies where tree-ring dating has been undertaken in conjunction with documentary studies. Thus, establishing the felling date for a group of timbers gives a very precise indication of the date of their use in a building.

Tree-ring dating relies on obtaining the growth pattern of trees from sample timbers of unknown date by measuring the width of the annual growth-rings. This is done to a tolerance of 1/100 of a millimetre. The growth patterns of these samples of unknown date are then compared with a series of reference patterns or chronologies, the date of each ring of which is known. When a sample "cross-matches" repeatedly at the same date against a series of different relevant reference chronologies the sample can be said to be dated. The degree of cross-matching, that is the measure of similarity between sample and reference is denoted by a "*t*-value"; the higher the value the greater the similarity. The greater the similarity the greater is the probability that the patterns of the samples and references have been produced by growing under the same conditions at the same time. The statistically accepted fully reliable minimum *t*-value is 3.5.

However, rather than attempt to date each sample individually it is usual to first compare all the samples from a single building, or phases of a building, with one another, and attempt to cross-match each one with all the others from the same phase or building. When samples from the same phase do cross-match with each other they are combined at their matching positions to form what is known as a "site chronology". As with any set of data, this has the effect of reducing the anomalies of any one individual (brought about in the case of tree-rings by some non-climatic influence) and enhances the overall climatic

signal. As stated above, it is the climate that gives the growth pattern its distinctive pattern. The greater the number of samples in a site chronology the greater is the climatic signal of the group and the weaker is the non-climatic input of any one individual.

Furthermore, combining samples in this way to make a site chronology usually has the effect of increasing the time-span that is under comparison. As also mentioned above, the longer the period of growth under consideration, the greater the certainty of the cross-match. Any site chronology with less than about 55 rings is generally too short for satisfactory analysis.

SAMPLING STRATEGY

A total of 12 samples was taken from the timbers of this building. Each sample was given the code SHW-F and numbered 01–12. The location of all samples was noted at the time of sampling and has been marked on Figures 7 and 8. Further details relating to these samples can be found in Table 1. Trusses have been numbered from west to east (Fig 3).

ANALYSIS & RESULTS

All 12 samples were prepared by sanding and polishing and their growth-ring widths measured. These growth-ring widths were then compared with each other resulting in four samples matching to form two groups.

Firstly, two samples matched each other and were combined at the relative offset positions to form SHWFSQ01, a site sequence of 101 rings (Fig 9). This site sequence was compared against a series of relevant reference chronologies for oak where it was found to match securely and consistently at a first-measured ring date of AD 1396 and a last-measured ring date of AD 1496. The evidence for this dating is given by the *t*-values in Table 2.

Two further samples matched each other and were combined at the relevant offset positons to form SHWFSQ02, a site sequence of 83 rings (Fig 10). Attempts to date this site sequence by comparing it against a series of relevant reference chronologies for oak were unsuccessful and it remains undated.

Attempts to date the remaining ungrouped samples resulted in SHW-F01 matching the reference chronologies at a first-ring date of AD 1605 and a last-measured ring date of AD 1695 (Table 3), SHW-F02 to the period AD 1577–1677 (Table 4), and SHW-F03 to AD 1457–1509 (Table 5). Although some tentative matches were noted for some of the

other samples these are not secure and, therefore, these samples must remain undated at present.

INTERPRETATION

Tree-ring dating has resulted in the successful dating of five of the samples (Fig 11), some of which appear to be reused and some primary. All felling date ranges have been calculated using the estimate that 95% of mature oak trees in this region have 15–40 sapwood rings.

Reused timbers

Three of the samples taken from timbers thought to be reused have been dated. Two of these samples, both taken from purlins with redundant mortices, retain the heartwood/sapwood boundary, which is broadly contemporary and suggestive of a single felling. The average heartwood/sapwood boundary ring date is AD 1503, allowing an estimated felling date to be calculated for the two timbers represented to within the range AD 1518–43. The third sample, taken from a small section of wall plate, does not have the heartwood/sapwood boundary ring and so an estimated felling date cannot be calculated for it, except to say that with a last-measured heartwood ring date of AD 1462, this would be estimated to be AD 1478 at the earliest and so not inconsistent with this timber having been felled at the same time as the other two timbers (AD 1518–43).

Primary timbers

Two of the samples taken from timbers without any signs of reuse have also been dated. One of these, SHW-F01, taken from the tiebeam of truss 1 has complete sapwood and the last-measured ring date of AD 1695, the felling date of the timber represented. The other sample, SHW-F02, taken from a principal rafter, has the heartwood/sapwood boundary ring date of AD 1677, allowing an estimated felling date to be calculated for the timber represented to within the range AD 1692–1717, consistent with this sample also having been felled in AD 1695.

DISCUSSION

The dendrochronological analysis undertaken on the timbers of this barn has identified beams of two separate fellings. The earliest of these, represented by two purlins and a wall plate, dates to AD 1518–43. The two purlins concerned are very obviously reused,

having redundant mortices, whilst the third timber, being a short section of wall plate, could very easily have had any such signs removed and, therefore, may also be reused.

The second felling is represented by a tiebeam and a principal rafter from truss 1, with these two beams thought to have both been felled in AD 1695. No obvious signs of reuse were noted on either of these timbers at the time of sampling.

These results could suggest construction occurred in or soon after felling of the later timbers in AD 1695, also utilising some reused beams of the first half of the sixteenth century. This would make the barn broadly contemporary with the cottage which was later incorporated into the eastern end of the present barn, stylistically dated to the late seventeenth/early-eighteenth century. The caveat to this would be that as only two timbers have been dated to AD 1695 it is possible that these two beams simply represent modifications undertaken to an existing structure at this time.

Less than half of the samples taken from this building have been dated, a rather disappointing result, especially given that, with the exception of SHW-F03 and SHW-F09, the samples have reasonably long growth width sequences. This lack of dating is most likely due to the poor *intra-site* matching between samples. The poor grouping could suggest several sources of timber having been utilised in the barn's construction and/or of more than the two identified dates.

Although the second site sequence is undated, it is possible to say, by looking at the relative heartwood/sapwood boundary ring positions (Fig 10) that the two samples making up this sequence (the north and south principal rafters of truss 3) were felled at the same time as each other, even if it is not possible to say when this might have been.

As mentioned above, a number of tentative matches were noted for some of the other samples and for SHWFSQ02, and it would be hoped that at some point in the future, further work undertaken in the region will add to our databank of reference chronologies and it will be possible to confirm these.

BIBLIOGRAPHY

Arnold, A J and Howard, R E, 2005 *Tree-ring Analysis of Timbers from the Main Guard, Pontefract Castle*, English Heritage Centre for Archaeol Rep, 48/2005

Arnold A J and Howard, R E, 2006 unpubl Tree-ring Analysis of Timbers from Old Hall Farmhouse, Mayfield, Staffordshire, unpubl computer file *MAYASQ01/02*, NTRDL

Arnold, A J and Howard, R E, 2006 *Kingsbury Hall, Kingsbury, Warwickshire; Tree-ring Analysis of Timbers,* English Heritage Centre for Archaeol Rep, 53/2006

Arnold, A J and Howard R E, 2007a *Tree-ring Analysis of Timbers from All Hallows Church, Kirkburton, West Yorkshire*, English Heritage Res Dep Rep Ser, 49/2007

Arnold, A J and Howard, R E, 2007b *Leicester's Gatehouse, Kenilworth Castle, Kenilworth, Warwickshire; Tree-ring Analysis of Timbers*, English Heritage Centre for Archaeol Rep, 8/2007

Arnold, A J and Howard, R E, 2009 *Bentley Hall, Derby Lane, Hungry Bentley, Near Ashbourne, Derbyshire, Tree-ring Analysis of Timbers*, English Heritage Res Dep Rep Ser, 33/2009

Arnold, A J and Howard, R E, 2012 unpubl Tree-ring Analysis of Timbers from The Ship Inn, 14 Market Place, Cockermouth, Cumbria, unpubl computer file *CKMBSQ01*, NTRDL

Arnold, A J and Howard, R E, 2013 *Auckland Castle, Bishop Auckland,County Durham: Tree-ring Analysis of Timbers*, English Heritage Res Dep Rep Ser, 48/2013

Arnold, A J and Howard R E, 2014a *Dandra Garth, Garsdale, Cumbria; Tree-ring Analysis of Timbers*, English Heritage Res Dep Rep Ser, 22/2014

Arnold, A J and Howard, R E, 2014b *Groby Old Hall, Markfield Road, Groby, Leicestershire, Tree-ring Analysis of Timbers*, English Heritage Res Dep Rep Ser, 23/2014

Arnold, A J and Howard, R E, 2014c *Canons Garth, Helmsley, North Yorkshire; Tree-ring Analysis of Timbers,* English Heritage Res Dep Rep Ser, 39/2014

Arnold, A J, Howard RE, Laxton, R R, and Litton, C D, 2001 Nottingham University Tree-ring Dating Laboratory results, *Vernacular Architect*, 32, 92–8

Arnold, A J, Howard, R E, Laxton, R R, and Litton, C D, 2002 *The Urban Development of Newark-on-Trent: A Dendrochronological Approach*, Centre for Archaeol Rep, 95/2002

Arnold, A J, Howard, R E, and Litton, C D, 2003 unpubl Meeting House Cottage, Carlton in Lindrick, Nottinghamshire, unpubl computer file *NCLASQ01*, NTRDL

Arnold, A J, Howard, R E, and Litton, C D, 2004 *Tree-ring Analysis of Timbers from Ordsall Hall, Taylorson Street, Salford, Greater Manchester*, English Heritage Centre for Archaeol Rep, 49/2004

Arnold, A J, Howard, R E, and, Litton, C D, 2008a Additional dendrochronology dates from Nottingham Tree-ring Dating Laboratory, No.6, *Vernacular Architect*, **39**, 107–11

Arnold, A J, Howard, R E, and Litton, C D, 2008b *The Old Standard (Nos 1 and 2) Little Keigwin (No 5) and Keigwin (No 7), Keigwin Place, Mousehole, Cornwall, Tree-ring Analysis of Timbers*, English Heritage Res Dep Rep Ser, **10/2008**

Arnold, A J, Howard, R E, and Tyers, C, 2015 *The Great Tythe Barn, Bolton Abbey, North Yorkshire: Tree-ring Analysis of Timbers*, Historic England Res Rep Ser, **48/2015**

Arnold, A J, Howard, R E, and Dawson, G, forthcoming a *The Bellframe, All Saints' Church, Misterton, Nottinghamshire: Survey, Recording and Tree-Ring Analysis of Timbers*, forthcoming NTRDL rep

Arnold, A J, Howard, R E, and Dawson, G, forthcoming b *The Bellframe, St Katherine's Church, Teversal, Nottinghamshire: Survey, Recording and Tree-Ring Analysis of Timbers*, forthcoming NTRDL rep

Howard, R E, Laxton, R R, Litton, C D, and Simpson, W G, 1991 Nottingham University Tree-Ring Dating Laboratory: general list, *Vernacular Architect*, **22**, 40–3

Howard, R E, Laxton, R R, and Litton, C D, 1996 Nottingham University Tree-Ring Dating Laboratory: Sherwood Forest Oak; a dendrochronological Survey, *Vernacular Architect*, **27**, 87–90

Howard, R E, Laxton, R R, and Litton, C D, 2000, *Tree-ring Analysis of Timbers from the buildings and living trees at Stoneleigh Abbey, Stoneleigh, Warwickshire*, Anc Mon Lab Rep, **80/2000**

Howard, R E, Laxton, R R, and Litton, C D, 2002 *Tree-ring Analysis of Timbers from Stonehouse, High Street, Stanhope, County Durham*, English Heritage Centre for Archaeol Rep, **60/2002**

Howard, R E, Laxton, R R, and Litton, C D, 2003 *Tree-ring Analysis of Timbers from Combermere Abbey, Whitchurch, Cheshire*, Anc Mon Lab Rep, **83/2003**

ACKNOWLEDGEMENTS

The Laboratory would like to thank Kelly Hunter of MAP Archaeological Practice for commissioning this research on behalf of the owner of the building. The tree-ring analysis was undertaken to fulfil planning conditions.

Table 1: Details of samples taken from Shaw Farm House Barn, Parkin Lane/Calverley Cut, Apperley Bridge, West Yorkshire

Sample number	Sample location	*Total rings	**Sapwood rings	First measured ring date (AD)	Last heartwood ring date (AD)	Last measured ring date (AD)
SHW-F01	Tiebeam, truss 1	91	23C	1605	1672	1695
SHW-F02	North principal rafters, truss 1	101	h/s	1577	1677	1677
SHW-F03	North upper purlin, west wall – truss 1	53	h/s	1457	1509	1509
SHW-F04	South upper purlin, west wall – truss 1	68	31C	----	----	----
SHW-F05	South upper purlin, truss 1–2	101	h/s	1396	1496	1496
SHW-F06	North aisle post, truss 1	77	15	----	----	----
SHW-F07	North aisle tie, truss 1	111	26C	----	----	----
SHW-F08	North lower aisle purlin, bay 2	85	14	----	----	----
SHW-F09	North wall plate, bay 2 (east)	45	--	1418	----	1462
SHW-F10	Tiebeam, truss 2	82	16	----	----	----
SHW-F11	North principal rafter, truss 3	79	h/s	----	----	----
SHW-F12	South principal rafter, truss 3	83	h/s	----	----	----

**h/s = the heartwood/sapwood boundary is the last-measured ring on the sample

C = complete sapwood retained on sample, last-measured ring is the felling date

Table 2: Results of the cross-matching of site sequence SHWFSQ01 and relevant reference chronologies when the first-measured ring date is 1396 and the last-measured ring date is 1496

Reference chronology	*t*-value	Span of chronology	Reference
Nether Levens Hall, Kendal, Cumbria	9.0	AD 1395–1541	Howard *et al* 1991
All Hallows Church, Kirkburton, West Yorkshire	7.6	AD 1306–1633	Arnold and Howard 2007a
Ordsall Hall, Salford, Greater Manchester	7.7	AD 1368–1534	Arnold *et al* 2004
Combermere Abbey, Cheshire	7.7	AD 1363–1564	Howard *et al* 2003
Tithe Barn, Bolton Abbey, West Yorkshire	7.3	AD 1350–1518	Arnold *et al* 2015
Seaton Holme, Easington, County Durham	7.2	AD 1375–1489	Arnold *et al* 2008
Kingsbury Hall, Kingsbury, Warwickshire	7.0	AD 1391–1564	Arnold and Howard 2006

Table 3: Results of the cross-matching of sample SHW-F01and relevant reference chronologies when the first-measured ring date is 1605 and the last-measured ring date is 1695

Reference chronology	*t*-value	Span of chronology	Reference
Southwell Minster (North Chancel Aisle roof), Southwell, Nottinghamshire	5.5	AD 1573–1716	Howard *et al* 1996
All Saints' Church (bellframe), Misterton, Nottinghamshire	5.3	AD 1587–1697	Arnold *et al* forthcominga
37/39 Kirkgate, Newark, Nottinghamshire	4.9	AD 1603–1694	Arnold *et al* 2002
Old Hall, West Auckland, County Durham	4.7	AD 1425–1698	Arnold and Howard 2013
Potterdike House, Lombard Street, Newark, Nottinghamshire	4.5	AD 1603–1740	Arnold *et al* 2002
St Katherine's Church (bellframe), Teversal, Nottinghamshire	4.5	AD 1606–1732	Arnold *et al* forthcomingb
Kenilworth Castle (Gatehouse), Kenilworth, Warwickshire	4.1	AD 1623–1727	Arnold and Howard 2007b

Table 4: Results of the cross-matching of sample SHW-F02 and relevant reference chronologies when the first-measured ring date is 1577 and the last-measured ring date is 1677

Reference chronology	*t*-value	Span of chronology	Reference
Pontefract Castle, Pontefract, West Yorkshire	6.1	AD 1507–1656	Arnold and Howard 2005
Yews Farmhouse, Styrrup, Nottinghamshire	6.1	AD 1548–1656	Arnold *et al* 2001
Nevill Holt, Leicestershire	6.1	AD 1570–1638	Arnold *et al* 2008a
St Katherine's Church (bellframe), Teversal, Nottinghamshire	5.9	AD 1606–1732	Arnold *et al* forthcoming b
Meeting House Cottage, Carlton-in-Lindrick, Nottinghamshire	5.9	AD 1502–1651	Arnold *et al* 2003 unpubl
Ship Inn, Cockermouth, Cumbria	5.8	AD 1584–1698	Arnold and Howard 2012 unpubl
Bentley Hall, Hungry Bentley, Derbyshire	5.7	AD 1444–1675	Arnold *et al* 2009

Table 5: Results of the cross-matching of sample SHW-F03 and relevant reference chronologies when the first-measured ring date is 1457 and the last-measured ring date is 1509

Reference chronology	*t*-value	Span of chronology	Reference
Dandra Garth, Garsdale, Cumbria	5.5	AD 1373–1635	Arnold and Howard 2014a
Old Farmhouse, Mayfield, Nottinghamshire	5.2	AD 1437–1622	Arnold and Howard 2006 unpubl
Keigwins, Mousehole, Cornwall	5.1	AD 1374–1613	Arnold *et al* 2008b
Groby Old Hall, Groby, Leicestershire	5.0	AD 1321–1516	Arnold and Howard 2014b
Stoneleigh Abbey, Stoneleigh, Warwickshire	4.9	AD 1398–1658	Howard *et al* 2000
Canons Garth, Helmsley, North Yorkshire	4.7	AD 1381–1668	Arnold and Howard 2014c
Stonehouse, Stanhope, County Durham	4.7	AD 1416–1533	Howard *et al* 2002

Figure 1: Map to show the general location Shaw House Farm, arrowed (based on the Ordnance Survey map with permission of the Controller of Her Majesty's Stationery Office, ©Crown Copyright)

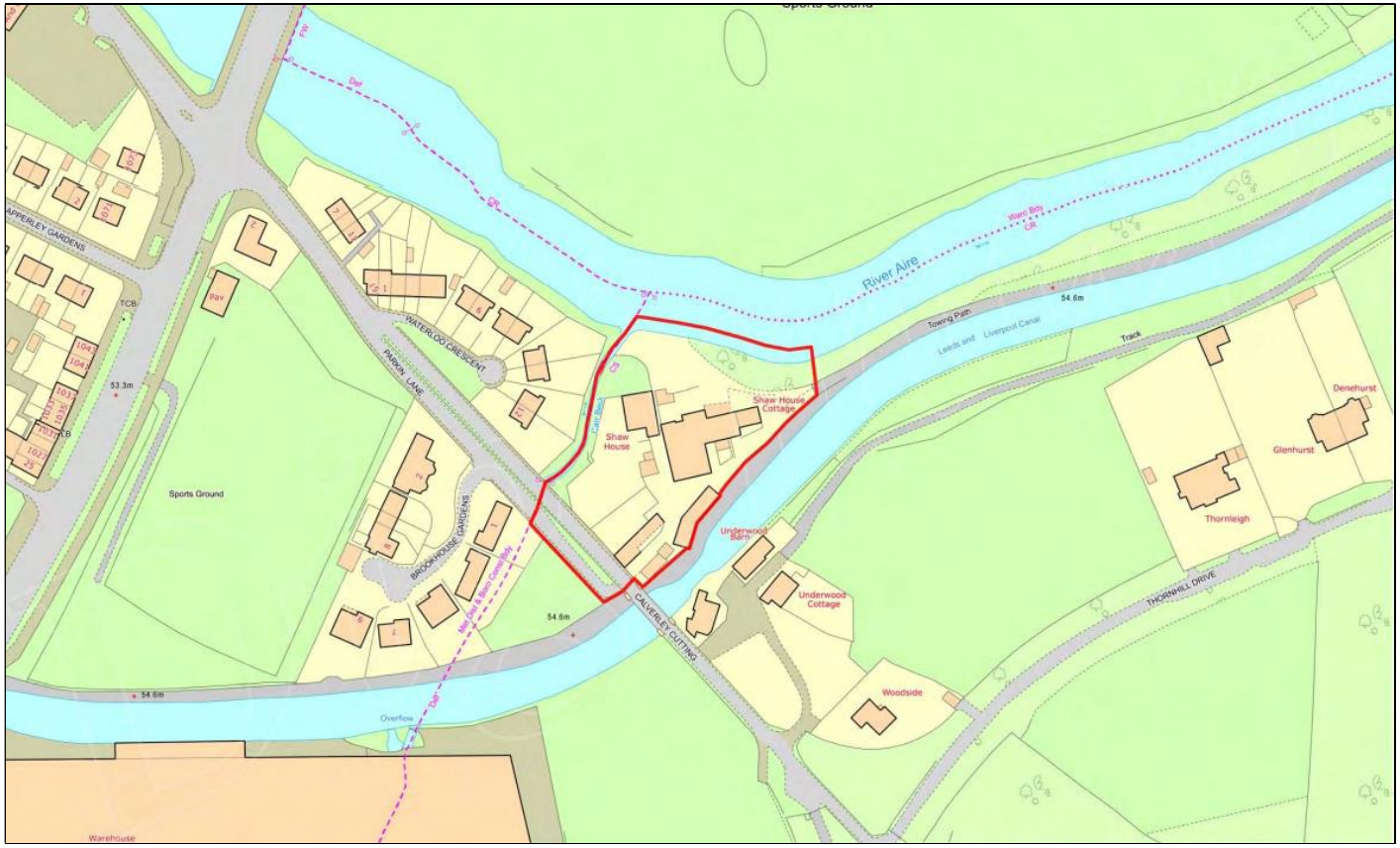


Figure 2: Map to show the Shaw House Farm complex, outlined in red (based on the Ordnance Survey map with permission of the Controller of Her Majesty's Stationery Office, ©Crown Copyright)

Figure 3: Plan showing the of range of buildings with the barn outlined in red and the trusses marked and numbered (Bennett-Ings Developments Limited)

Figure 4: Barn roof with truss 1 in the foreground, photograph taken from the west

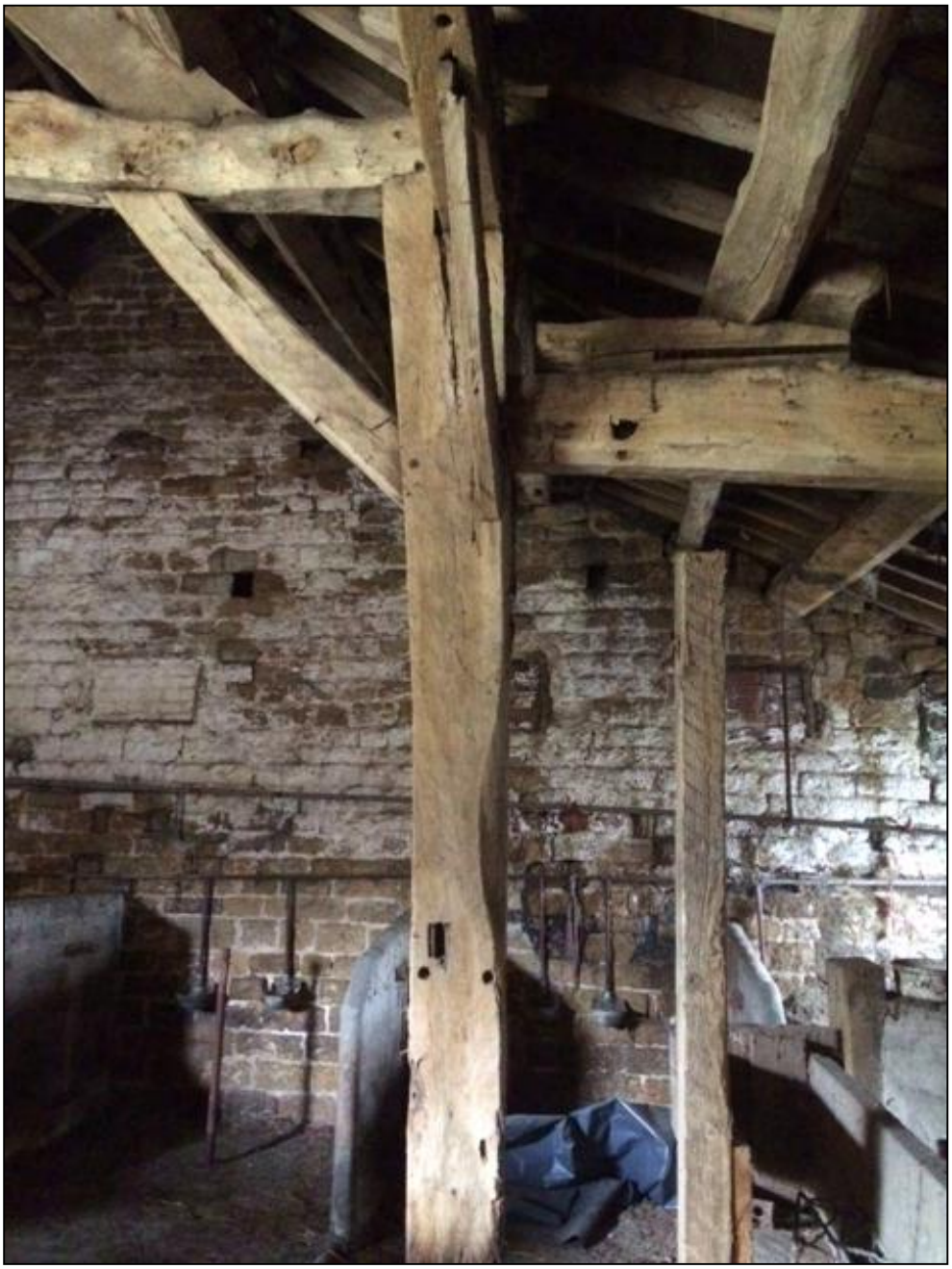


Figure 5: North aisle post of truss 1, photograph taken from the east

Figure 6: Bay 1 (south side), showing the purlins with redundant mortices, photograph taken from the north

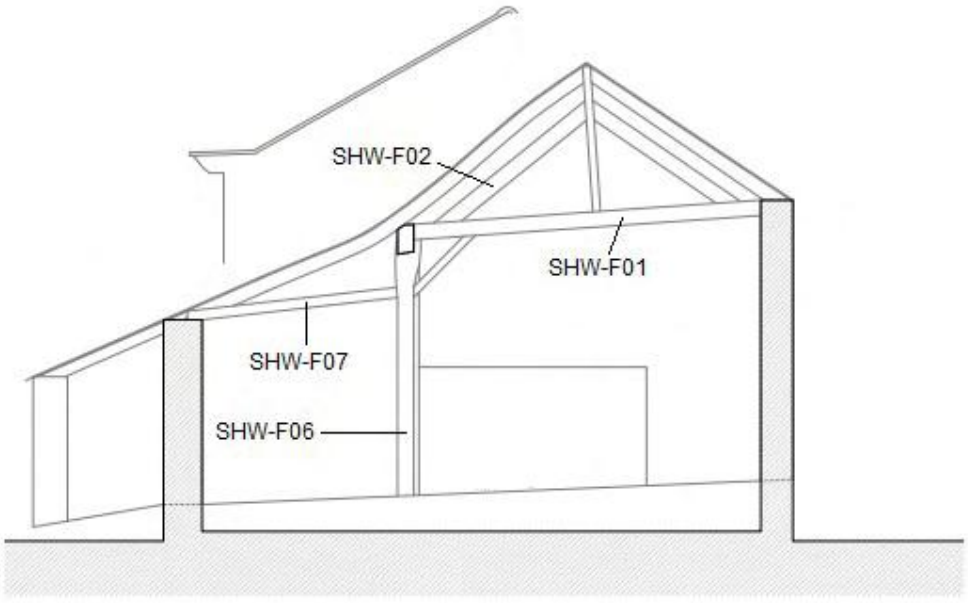


Figure 7: Section through truss 1, showing the location of samples SHW-F01, SHW-F02, SHW-F06, and SHW-F07 (Bennett-Ings Developments Limited)

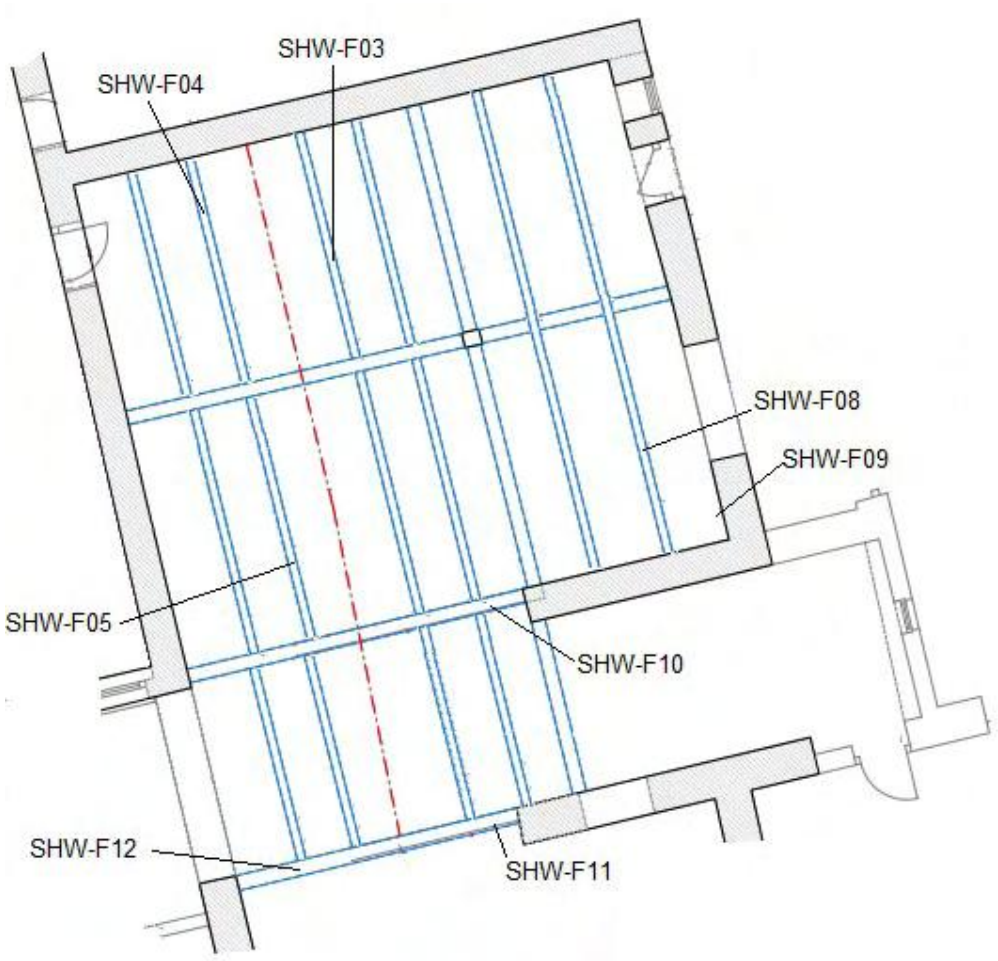


Figure 8: Plan of barn, showing the location of samples SHW-F03-05 and SHW-F08-12 (based on Bennett-Ings Developments Limited)

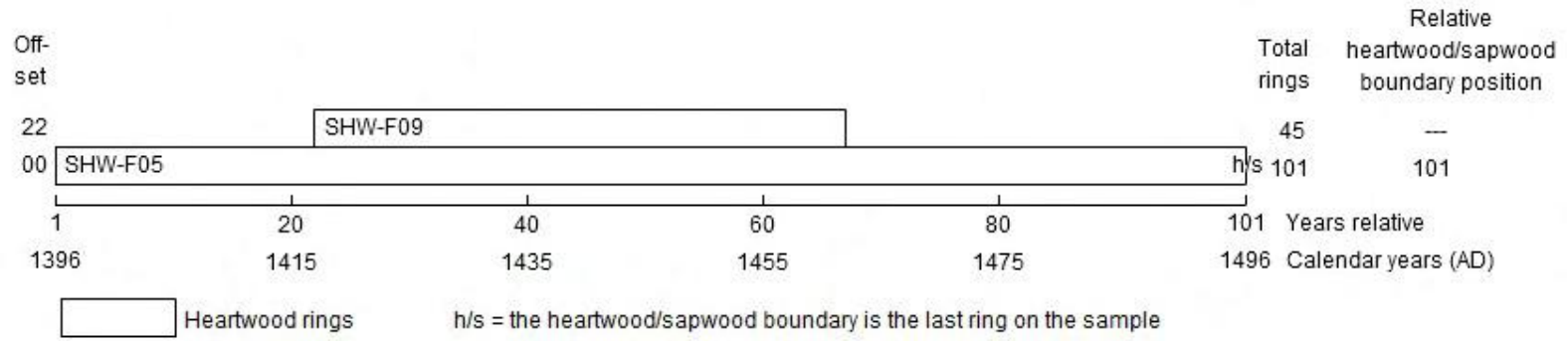


Figure 9: Bar diagram of samples in site sequence SHWFSQ01

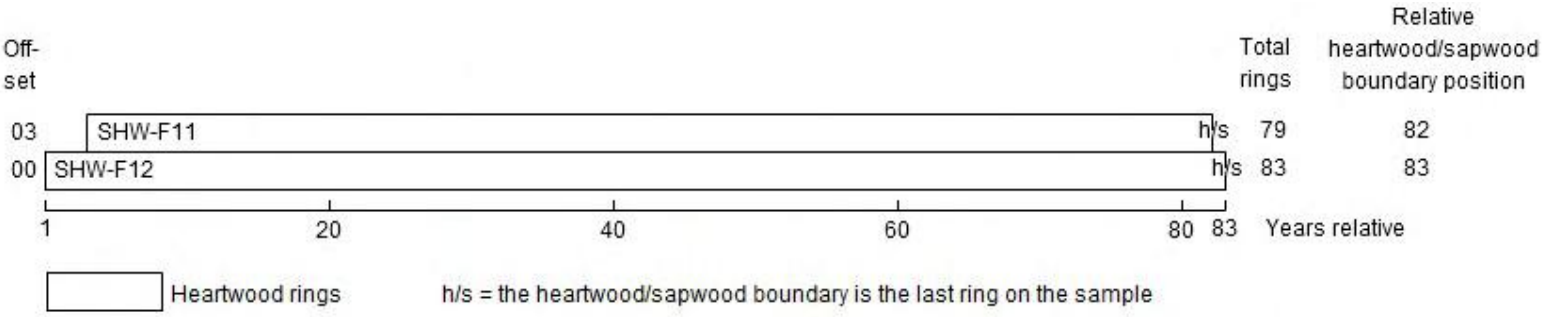


Figure 10: Bar diagram of samples in undated site sequence SHWFSQ02

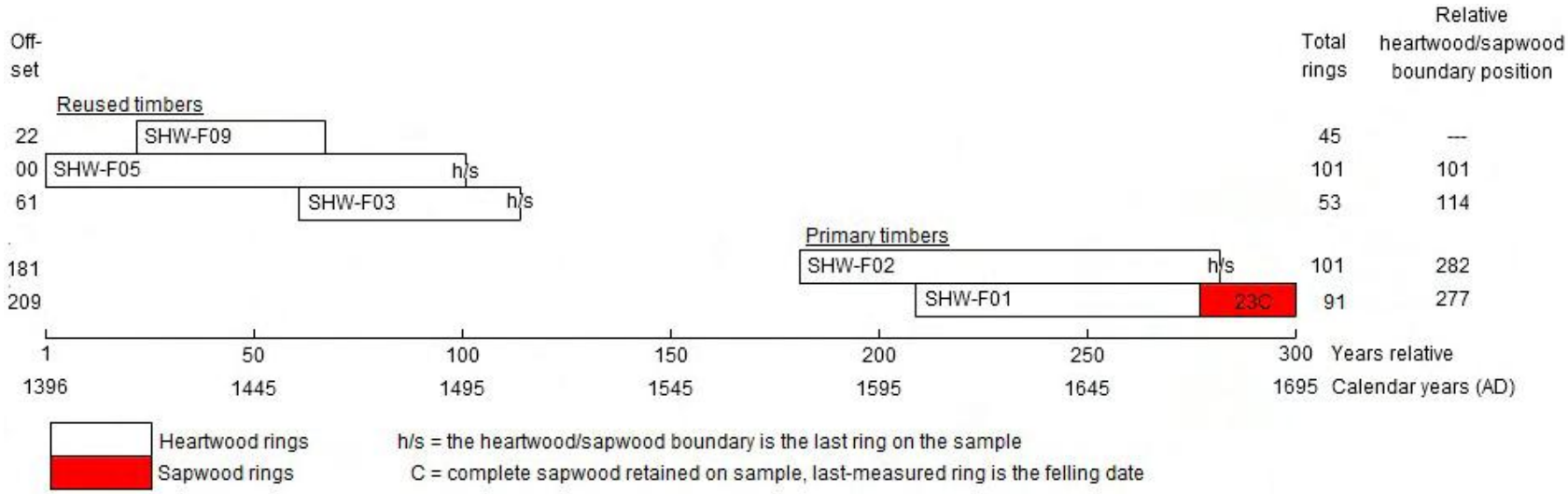


Figure 11: Bar diagram of dated samples

SPECIFICATION FOR DRAWN AND PHOTOGRAPHIC ARCHAEOLOGICAL BUILDING RECORDING AND DENDROCHONOLOGICAL DATING AT SHAW HOUSE FARM, APERLEY BRIDGE, LEEDS (419650 437781)

Specification prepared at the request of the Sophie Coy of MAP Archaeological Practice Ltd. on behalf of Leeds City Council (Planning Permission 12/03381/FU)

1 Summary

A building record (drawn and photographic survey) is required to identify and document items of archaeological and architectural interest prior to the conversion and change of use this group of 17th to 19th century agricultural buildings to dwellings.

This specification for the necessary work has been prepared by the West Yorkshire Archaeology Advisory Service, the curators of the West Yorkshire Historic Environment Record.

NOTE: The requirements detailed in paragraphs 6.1.1 to 6.1.5 inclusive, 8.2 are to be met by the archaeological contractor **prior** to the commencement of fieldwork by completing and returning the attached form to the WY Archaeology Advisory Service.

2 Site Location and Description

2.1 Location

(Grid ref. **SE19650 37781**) Shaw House Farm is located off Parkin Lane on the south bank of the River Aire and northern bank of the Leeds Liverpool Canal. It lies c. 1Km to the north-east of Apperley Bridge in the north-western most part of the historic township of Calverley and Farsley (Leeds City District).

2.2 Description

Shaw House farm comprises a collection of building which on visible evidence date from the 17th century to the late 19th century. These include the remains of an east – west aligned timber framed aisled barn; a stone two bay house with stone mullioned windows, kneelers and stone coping and a cottage which forms the western most building of the group. A 19th century granary over stables or cow house and a later cow house were added to this group and along with various other small detached sheds and stables and the present Shaw House are of 19th century date.

Materials employed include timber, in the barn's structure, stone and brick. Brick jack vaults have been inserted in to the granary and surviving line shafting in its upper room suggests it was either a feed preparation area or workshop.

Reused timber sections in the aisled barn exhibit empty mortices and evidence of close studding. The latter, perhaps, indicating the barn's original form prior to encasing in stone whilst its king post and braced roof trusses are typical of late 16th and 17th century buildings in the county.

The linear arrangement of barn, house and cottage suggest Shaw House Farm originated as a laithe house. However, the observation that a first floor window in the early house's western gable is interrupted by a purlin in the barn's roof structure makes such an origin difficult to reconcile.

The early two bay house's roof structure has been replaced with a 19th century queen post trusses. It is not currently clear if the house's rear wall was removed at this time and extended to the south.

3 Planning Background

The WYYAS were contacted by Sophie Coy of MAP Archaeological Practice Ltd. (Showfield Lane, Malton YO17 6BT Tel. 01653697752) and asked to prepare this specification for building recording in advance of demolition and conversion work and is secured by condition 16 of planning permission 12/03381/FU.

4 Archaeological Interest

4.1.1The buildings at Shaw House Farm represent evidence of the changing scale and form of farming in the Aire Valley from the 17th century. Whilst the remains of the timber framed barn at Saw House Farm could date to the early 17th century this is doubted on the grounds of its relationship with the later, but still early, farm house. However the barn's encasing in stone and the construction of the two bay house are characteristic of the later 17th and early 18th centuries.

4.1.2 The house's symmetrical and polite façade suggests it owner had some pretentions of status. The lack of characteristic weaver's windows may reinforce this assumption (although the building's ground floor was obscured by a lean-to building during WYAAS' site visit and such evidence may be revealed).

4.1.3 However, The construction and opening of the Leeds Liverpool Canal in 1772 must have impacted on the working of the farm and its declining fortunes are illustrated by the addition of a cottage to its eastern gable and its ultimate annexation as an extension to the barn. The latter most likely occurring in the late 19th century when the present farm house was constructed.

4.1.4 The early 19th century form of the farm is illustrated on the Calverley and Farsley tithe map of around 1840 when the buildings comprised a linear group of barn, house and cottage with two smaller buildings to north-east and south-west.

4.1.5 The new farm buildings erected after this date show a change of emphasis towards keeping cattle and, it is assumed, supplying dairy produce to the growing industrial settlements to the north of Leeds and Bradford.

4.2 Impact of proposed development

It is proposed to convert the barn, original farm house and later farm buildings to three dwellings. A free standing stable building and the present farm house will contribute a further two dwellings. Selective demolition and removal of original fabric will be necessary to achieve this.

5 Aims of the Project

5.1 The first aim of the proposed work is to identify and objectively record by means of photographs and annotated measured drawings any significant evidence for the original and subsequent historical form and functions of the farm complex. The buildings should be analysed and interpreted as an integrated system intended to perform a specialised function. The archaeologist on site should give particular

attention to reconstructing as far as possible the functional arrangements and division of the building type. The roles of historical plan form, technical layout and circulation should all be considered in this process of interpretation. This archaeological record should be placed in the public domain by depositing it with the WY Historic Environment Record (Registry of Deeds, Newstead Road, Wakefield WF1 2DE).

5.2 The second aim of the proposed work is to identify and characterise those elements, features and characteristics of the complex which either determine or contribute to the building's special archaeological, architectural and historic interest. This work should be done with a view to providing sufficient information on the survival and significance of the original and historic elements of the building to enable informed decisions to be made with regard to its appropriate and sensitive repair, conservation or refurbishment.

5.3 The WYAAS have produced a research agenda for the study of historic buildings in West Yorkshire (Giles C. 2014 Historic Buildings in West Yorkshire: Medieval to 1914) and the relevant section of this document dealing with farmsteads, rural houses and rural workers' houses should be referred to in the course of recording the farm complex (pages 78, 92 and 99) (http://www.archaeology.wyjs.org.uk/wyjs-archaeology-research.asp).

5.4 The barn should be placed within the overall context of the development of Pennine aisled barns with reference to the published typology for these buildings (see D Michelmore A Preliminary Typology for Pennine Aisled Barns with King-Post Roofs in Brigantian issue 3, 1974).

6 Recording Methodology

6.1 General Instructions

6.1.1 Health and Safety

The archaeologist on site will naturally operate with due regard for Health and Safety regulations. Prior to the commencement of any work on site (and preferably prior to submission of the tender) the archaeological contractor may wish to carry out a Risk Assessment in accordance with the Health and Safety at Work Regulations. The archaeological contractor should identify any contaminants which constitute potential Health and Safety hazards (e.g. asbestos) and make arrangements with the client for decontamination/making safe as necessary and appropriate. The WY Archaeology Advisory Service and its officers cannot be held responsible for any accidents or injuries which may occur to outside contractors engaged to undertake this survey while attempting to conform to this specification.

6.1.2 Confirmation of adherence to specification

Prior to the commencement of any work, the archaeological contractor must confirm in writing adherence to this specification (using the attached form), or state in writing (with reasons) any specific proposals to vary the specification. Should the contractor wish to vary the specification, then written confirmation of the agreement of the WY Archaeology Advisory Service to any variations is required prior to work commencing. Unauthorised variations are made at the sole risk of the contractor (see para. 8.3, below). Modifications presented in the form of a re-written project brief will not be considered by the West Yorkshire Archaeology Advisory Service.

6.1.3 Confirmation of timetable and contractor's qualifications

Prior to the commencement of *any work*, the archaeological contractor must provide WYAAS in writing with:

- a projected timetable for the site work
- details of project staff structure and numbers
- names and *CVs* of key project members (the project manager, site supervisor, any proposed specialists, sub-contractors *etc.*)
- details of any specialist sub-contractors

All project staff provided by the archaeological contractor must be suitably qualified and experienced for their roles. In particular, staff involved in building recording should have proven expertise in the recording and analysis of agricultural and domestic buildings. The timetable should be adequate to allow the work to be undertaken to the appropriate professional standard, subject to the ultimate judgement of WYAAS.

6.1.4 Site preparation

Prior to the commencement of work on site the archaeological contractor should identify all removable modern material such as hay bales and farm machinery, and obviously modern extensions etc. which may significantly obscure material requiring an archaeological record and should contact the developer in order to make arrangements for their removal (if necessary, under archaeological supervision). It is not the intention of this specification that large-scale removal of material of this type should take place with the archaeological contractor's manpower or at that contractor's expense.

6.1.5 Documentary research

Prior to the commencement of work on site, the archaeological contractor should undertake a rapid map-regression exercise based on the readily-available map and photographic evidence held by the relevant Local History Library (Leeds Central Library) and the West Yorkshire Archive Service (WYAS Leeds, Nepshaw Lane South, Morley, Leeds LS27 7JQ Tel: 0113 393 9788 Email: leeds@wyjs.org.uk), and a rapid examination of the available 19th- and 20th-century Trades and Postal directories, the appropriate census returns and all other available primary and relevant secondary sources. This work is intended to inform the archaeological recording by providing background information with regard to function and phasing. Please note that this exercise is not intended to be a formal desk-based assessment, and should not represent a disproportionate percentage of the time allowed for the project overall.

6.1.6 Use of existing plans

If appropriate drawings exist then these plans may be used as the basis for the drawn record and for any annotation relative both to the historic and photographic record. Additional information relevant to the historic record should be indicated on the plans, which shall be re-drawn as necessary. It is the responsibility of the archaeological contractor to check the accuracy of these drawings and to make any necessary adjustments or corrections. Contractors are therefore advised to determine prior to the submission of tender whether major re-survey/re-drawing will be necessary. For this purpose, the WY Archaeology Advisory Service would suggest that the tendering contractor check a small number of randomly selected measurements across the site, e.g. a few long face measurements, the position and size of a selection of doors and windows, and a random series of internal diagonals (it is accepted that the contracting

archaeologist will not be able to identify isolated and unpredictable errors by using this method). It is the archaeological contractors' responsibility to obtain the appropriate copyright permissions for any original material employed as a basis for further work.

6.2 Sequence of recording

6.2.1 Initial record

The structures should initially be recorded as extant, with due provision made for the removal of any debris or modern material, partitions etc. which may obscure fabric or features requiring an archaeological record (para 6.1.4 above).

6.3 Written Record

The archaeologist on site should carefully examine all parts of each building prior to the commencement of the drawn and photographic recording, in order to identify all features relevant to its original use and to obtain an overview of the development of the building and of the site as a whole. As part of this exercise, the archaeologist on site should produce written observations (e.g. on phasing; on building function) sufficient to permit the preparation of a report on the structure. This process should include the completion of a Room Data Sheet or similar structured recording pro-forma[1] for each room or discrete internal space within the volume of the structure. The crucial requirement is that each room should be examined individually, that the results of that examination should be noted in a systematic fashion, and that these objective observations should be used to inform an analytical interpretation of the overall development and operation of the site.

6.4 Drawn Record

6.4.1 Drawings required

A drawn record is require of the aisled barn, original farm house and cottage. The drawn record should comprise:

- Floor plans with reflected ceiling/roof detail of the aisled barn and original farm house which now forms its eastern end.
- A sectional elevation of the aisled barn showing a typical original roof truss.
- A phase plan of the barn, farm house and cottage

Drawings should be made at an appropriate scale (not smaller than 1:100 for plans; not smaller than 1:50 for sections). The structures should be recorded as existing, but a clear distinction should be made on the final drawings between surviving as-built features and all material introduced in the structure during the 19th and 20th-centuries. Where significant areas of original fabric appear to be masked under modern fittings or structural material, this should be noted.

6.4.2 Provision for Additional Drawings

6.4.2a The recording requirements outlined above are based on a brief inspection of the site by the WY Archaeology Advisory Service. However, detailed examination and analysis of the site by the archaeological contractor may reveal features which merit detailed recording beyond what has been specifically required. In addition to what is

[1] The WY Archaeology Advisory Service would recommend the employment of the attached pro-forma, but will consider any suitable alternative which the archaeological contractor may wish to submit (Note that agreement for the employment of an alternative *schema* must be obtained in writing from the WY Archaeology Advisory Service prior to the commencement of work on site).

requisite to complete the work specified above, the archaeological contractor should tender for a contingency period of one days recording on site (with one days drawing-up time off site – two days in total) in order that features so identified may be adequately recorded. This contingency should be clearly and separately identified in any tender document.

6.4.2b If features requiring additional drawing are identified during the course of work on site, the WY Archaeology Advisory Service should be contacted as soon as possible, and should be provided in writing with a schedule of proposed additional work. A site visit will then be arranged by the WYAAS to examine the features in question and to assess the need to apply the contingency (this visit will usually be combined with a routine monitoring visit). Implementation of the contingency will be at the decision of the West Yorkshire Archaeology Advisory Service, which will be issued in writing, if necessary in retrospect after site discussions.

6.4.3 Scope of record

All features of archaeological and architectural interest identified during the process of appraisal should be incorporated into, and clearly identified in, the final drawn record. The archaeologist on site should also identify and note:

- Original access arrangements
- Evidence of original and subsequent fenestration
- All original structural elements, including roof structure/truss form and arrangement (note that timber type should be identified in each instance, and that all timber structural elements should be examined for re-use)
- Evidence for joints in the roof timbers, wall plate, reused timbers etc. and mortise holes, which may indicate an alteration to the original structure of the building or the re-use of timbers (including clear identification of the type of scarf joint)
- Any carpenters' marks, setting out marks, merchants' marks or apotropaic marks visible on the timbers
- Any masons' marks on the stone parts of the barn and houses
- Evidence for original lighting arrangements such as candle recesses
- Evidence for original and subsequent historical arrangement of the interior of the building
- Evidence for original/historic staircases, peg ladders etc. illustrating means of vertical access
- Evidence for date-stones and initials or any historic graffiti or decoration to stone work
- Original floor surfaces and the materials use
- Evidence of drainage and the locations of stalls to house animals, mangers etc.
- Evidence for storage and food preparation in the cottage's cellar
- Any evidence for the introduction of mechanical power during the 19th and 20th centuries.

6.4.4 Dimensional accuracy

Dimensional accuracy should accord with the normal requirements of the Historic England's Architecture and Survey Branch (at 1:20, measurements should be accurate to at least 10mm; at 1:50, to at least 20mm; at 1:100, to at least 50mm). Major features such as changes in structural material may be indicated in outline. The recording of

individual stones or stone courses is not required unless greater detail is needed in order to adequately represent a particular feature of interest.

6.4.5 Drawing method

The survey may be executed either by hand or by means of reflectorless EDM as appropriate. In accordance with national guidelines[2], drawings executed on site should be made either on polyester-based film (minimum thickness 150 microns) with polymer-bonded leads of an appropriate thickness and density, or on acid-free or rag paper.

4.6.6 If finished drawings are generated by means of CAD or a similar proven graphics package, recorders should ensure that the software employed is sufficiently advanced to provide different line-weight (point-size); this feature should then be used to articulate the depth of the drawings. CAD repeats or cloning of features should **not** be used. What is required as an end product of the survey is a well-modelled and clear drawing; ambiguous flat-line drawings should be avoided. Drawing conventions should conform to English Heritage guidelines as laid out in English Heritage 2006, *Understanding Historic Buildings – a guide to good recording practice,* and the WYAAS would recommend that the CAD layering protocol detailed in the same volume (8.3, Table 2) should be adhered to.

6.5 Photographic Record

6.5.1 External photographs

An external photographic record should be made of all elevations of the entire farm complex from vantage points as nearly parallel to the elevation being photographed as is possible within the constraints of the site. The contractor should ensure that all visible elements of each elevation are recorded photographically; this may require photographs from a number of vantage points. A general external photographic record should also be made which includes a number of oblique general views of the farm buildings from all sides, showing them and the complex as a whole in their setting. In addition, a 35mm general colour-slide survey of the buildings should also be provided (using a variety of wide-angle, medium and long-distance lenses). While it is not necessary to duplicate every black-and-white shot, the colour record should be sufficiently comprehensive to provide a good picture of the form and general appearance of the complex and of the individual structures. The colour slide record should include some internal shots.

6.5.2 Internal photographs

A general internal photographic record should be made of the aisled barn, original farm house, cottage and later farm buildings. It is not necessary to carry out an internal record of the present farm house. General views should be taken of *each room* or discrete internal space from a sufficient number of vantage points to adequately record the form, general appearance and manner of construction of each area photographed. In areas which are wholly modern in appearance, character and materials, a single shot to record current appearance will suffice.

6.5.3 Detail photographs

In addition, detailed record shots should be made of all individual elements noted in section 6.4.3 above. Elements for which multiple examples exist (e.g. each type of roof

[2] English Heritage 2006, *Understanding Historic Buildings – a guide to good recording practice*, 7.1.1ff

truss, column or window frame) may be recorded by means of a single representative illustration. **N.B.** Detail photographs must be taken at medium-to-close range and be framed in such a way as to ensure that the element being photographed clearly constitutes the principal feature of the photograph.

6.5.4 Equipment

General photographs should be taken with a Large Format camera (5" x 4" or 10" x 8") using a monorail tripod, or with a Medium Format camera which has perspective control, using a tripod. The contractor must have proven expertise in this type of work. Any detail photographs of structural elements should if possible be taken with a camera with perspective control. Other detail photographs may be taken with either a Medium Format or a 35mm camera. All detail photographs must contain a graduated photographic scale of appropriate dimensions (measuring tapes and surveying staffs are not considered to be acceptable scales in this context). A 2-metre ranging-rod, discretely positioned, should be included in a selection of general shots, sufficient to independently establish the scale of all elements of the building and its structure.

6.5.5 Film stock

All record photographs to be black and white, using conventional silver-based film only, such as Ilford FP4 or HP5, or Delta 400 Pro (a recent replacement for HP5 in certain film sizes such as 220). Dye-based (chromogenic) films such as Ilford XP2 and Kodak T40CN are unacceptable due to poor archiving qualities.

6.5.6 Digital photography

Digital photography: as an alternative for colour slide photography, good quality digital photography may be supplied, using cameras with a minimum resolution of 10 megapixels. Digital photography should follow the guidance given by Historic England in Digital Image Capture and File Storage: Guidelines for Best Practice, July 2015. Note that conventional black and white print photography is still required and constitutes the permanent record. Digital images will only be acceptable as an alternative to colour slide photography if each image is supplied as both a JPEG and a TIFF versions. The latter as an uncompressed 8-bits per channel TIFF version 6 file of not less than 25Mbs (See section 2.3 of the Historic England guidance). The contractor must include metadata embedded in the TIFF file. The metadata must include the following: the commonly used name for the site being photographed, the relevant centred OS grid coordinates for the site to at least six figures, the relevant township name, the date of photograph, the subject of the photograph, the direction of shot and the name of the organisation taking the photograph. Any digital images are to be supplied to WYAAS on gold CDs by the archaeological contractor accompanying the hard copy of the report.

6.5.7 Printing

6.5.6a Record photographs should be printed at a minimum of 5" x 7". In addition, a small selection of photographs (the best of the exterior setting shots and interior shots and relevant structural details) should be printed at 10" x 8". It is envisioned that 3 larger prints will be required. Bracketed shots of identical viewpoints need not be reproduced, but all viewpoints must be represented within the report.

6.5.6b Prints may be executed digitally from scanned versions of the film negatives, and may be manipulated to improve print quality (but **not** in a manner which alters

detail or perspective). All digital prints must be made on paper and with inks which are certified against fading or other deterioration for a period of 75 years or more when used in combination. If digital printing is employed, the contractor must supply details of the paper/inks used in writing to the WY Archaeology Advisory Service, with supporting documentation indicating their archival stability/durability. Written confirmation that the materials are acceptable must have been received from the WYAAS prior to the commencement of work on site.

6.5.7 Documentation

A photographic register detailing (as a minimum) location, direction and subject of shot must accompany the photographic record; a separate photographic register should be supplied for any colour slides or for colour digital photographs. The position and direction of each photograph and slide should be noted on a copy of a plan of each building, which should also be marked with a north pointer; separate plans should be annotated for each floor of each building.

6.6 Dendrochronological Assessment & Analysis

The potential of the roof trusses for dendrochonological dating should be assessed. If suitable timbers are present then dendrochronological dating of the timbers should be undertaken by a recognised dendrochronologist.

6.6.1 The dendrochronological analysis should be undertaken by a recognised dendrochronologist who has extensive experience with work on historic standing buildings and has widespread access to relevant reference data. The analysis should follow the procedures and outputs outlined in 'Dendrochronology: guidelines on producing and interpreting dendrochronological dates' published by English Heritage (1998) and available on their website (http://www.english-heritage.org.uk/publications/dendrochronology-guidelines/). Provision should be made for the dendrochronologist to undertake an initial site visit to assess the timbers and discuss an appropriate sampling strategy with the archaeologist.

6.6.2 For the convenience of the dendrochronologist it is initially recommended that a small number of digital photographs are taken by the archaeological contractor of the surviving timber-framing within the building. These photographs should aim to show the general form of the extant timber-work and the general character of the timbers and their scantling. These should be supplied to the dendrochronologist by email. The objective of this is to inform the dendrochronologist of the general nature of the structures and extant timber-work, prior to their initial assessment visit to site. The dendrochronologist should also be provided with basic background information relating to the history and development of the building and any relevant plans on which timbers sampled can be subsequently recorded and incorporated into the dendrochronological report.

7. Post-Recording Work and Report Preparation

7.1 After completion of fieldwork

Prior to the commencement of any other work on site, the archaeological contractor should arrange a meeting at the offices of the WY Archaeology Advisory Service to present a draft of the 1st- stage drawn record (fully labelled and at the scale specified above), a photo-location plan, and photographic contact prints adequately referenced to this plan (material supplied will be returned to the contractor). Copies of the slides

or digital photographs should also be brought in for checking. **N.B**. if full-sized prints or digital versions of contact sheets are supplied for this purpose, they must be accompanied by a sample of the processed negatives. If appropriate, the WY Archaeology Advisory Service will then confirm to District Planning Services that fieldwork has been satisfactorily completed and that other work on site may commence. Please note that as of the 1st April 2011, the WYAAS will charge the archaeological contractor a fee for each fieldwork verification meeting.

7.2 Report Preparation

7.2.1 Report format and content

A written report should be produced. This should include:

- an executive summary including dates of fieldwork, name of commissioning body, and a brief summary of the results including details of any significant finds, the planning reference number and condition number.
- an introduction outlining the reasons for the survey
- a brief architectural description of the buildings correlated to the drawn and photographic record, presented in a logical manner, (as a walk around and through the buildings, starting with setting, then progressing to all sides of the farm buildings in sequence, and finally to the interior from the ground floor up) and correlated/fully referenced to the drawn and photographic record.
- a discussion placing the farmstead in its local, regional and national, historical and technological contexts, describing and analysing the development of individual structures and of the complex as a whole. This analysis should consider the farm as an integrated system intended to perform a specialised function, with particular attention being given to historical plan form and technical layout.
- Any specialist reports, including the dendrochronological report, in full.

The architectural description should be fully cross-referenced to the drawn and photographic record, sufficient to illustrate the major features of the site and the major points raised. It is not envisaged that the report is likely to be published, but it should be produced with sufficient care and attention to detail to be of academic use to future researchers. A copy of this specification and a quantified index to the field archive should also be bound into the back of the report. The cover sheet should include a centred eight-figure OS grid reference and the name of the township in which the site is located (Calverley and Farsley).

7.2.2 Report Illustrations

Illustrations should include:

- a location map at a scale sufficient to allow clear identification of the site type in relation to other buildings in the immediate area
- an overall keyed plan of the site showing the surveyed buildings in relation to each other and others buildings on the site
- any relevant historic map editions, with the position and extent of the site clearly indicated
- Any relevant historic plans and photographs
- a complete set of site drawings completed to publication standard, at the scale stipulated in Para. 6.4.1 above (unless otherwise agreed in writing by the West Yorkshire Archaeology Advisory Service)

- a complete set of site drawings at a legible scale, on which position and direction of each photograph has been noted
- any additional illustrations pertinent to the site
- a complete set of good-quality laser copies of all photographs (reproduced at a minimum of 6" by 4").

The latter should be bound into the report in the same logical sequence employed in the architectural description (Para. 7.2.1 above) and should be appropriately labelled (numbered, and captioned in full). When captioning, contractors should identify the individual photographs by means of a running sequence of numbers (e.g. Plate no. 1; Plate no. 2), and it is this numbering system which should be used in cross-referencing throughout the report and on the photographic plans. However, the relevant original film and frame number should be included in brackets at the end of each caption.

7.3 Report deposition

7.3.1 General considerations

7.3.1a The report should be supplied to the client and identical copies supplied to the West Yorkshire HER, the WY Archive Service and to the Oasis project. A recommendation from WYAAS for discharge of the archaeological condition is dependant upon receipt by WYAAS of a satisfactory report which has been prepared in accordance with this specification. Any comments made by WYAAS in response to the submission of an unsatisfactory report will be taken into account and will result in the reissue of a suitably edited report to all parties, within a timescale which has been agreed with WYAAS.

7.3.1bThe report copy supplied to the West Yorkshire HER should include a complete set of photographic prints (see Para. 7.3.2 below). The finished report should be supplied within eight weeks of completion of all fieldwork, unless otherwise agreed with the West Yorkshire Archaeology Advisory Service. A digital copy (on gold compact disc) should also be supplied. The information content of the report will become publicly accessible once deposited with the Advisory Service, unless confidentiality is explicitly requested, in which case it will become publicly accessible six months after deposit.

7.3.1c **Copyright** - Please note that by depositing this report, the contractor gives permission for the material presented within the document to be used by the WYAAS, in perpetuity, although The Contractor retains the right to be identified as the author of all project documentation and reports as specified in the *Copyright, Designs and Patents Act* 1988 (chapter IV, section 79). The permission will allow the WYAAS to reproduce material, including for commercial use by third parties, with the copyright owner suitably acknowledged.

7.3.1.d The West Yorkshire HER supports the Online Access to Index of Archaeological Investigations (OASIS) project. The overall aim of the OASIS project is to provide an online index to the mass of archaeological grey literature that has been produced as a result of the advent of large-scale developer funded fieldwork. The archaeological contractor must therefore complete the online OASIS form at http://ads.ahds.ac.uk/project/oasis/. Contractors are advised to contact the West Yorkshire HER officer prior to completing the form. Once a report has become a public document by submission to or incorporation into the HER, the West Yorkshire HER

may place the information on a web-site. Please ensure that you and your client agree to this procedure in writing as part of the process of submitting the report to the case officer at the West Yorkshire HER.

7.3.1e With the permission of the developer, the archaeological contractor are encouraged to consider the deposition of a copy of the report for this site with the appropriate Local History Library (Leeds Central Library).

7.3.1d A note on the fieldwork should be prepared for inclusion in Post Medieval fieldwork in Britain, Ireland and the Channel Islands which is published annually in Post-Medieval Archaeology by the Society for Post-Medieval Archaeology. A similar note or longer article should also be supplied to the Council for British Archaeology's Yorkshire Forum publication (please contact the editor or CBA's website for more information forum-editor@cba-yorkshire.org.uk).

7.3.2 Deposition with WY Archaeology Advisory Service (West Yorkshire Historic Environment Record)

The report copy supplied to the WY Archaeology Advisory Service should also be accompanied by both the photographic negatives and a complete set of labelled photographic prints (mounted in archivally stable KENRO display pockets or similar, and arranged in such a way that labelling is readily visible) bound in a form which will fit readily into a standard filing cabinet suspension file (not using hard-backed ring-binders). Labelling should be on the *back* of the print in pencil giving film and frame number only and on applied printed labels on the front of the appropriate photographic sleeve which should include:

- film and frame number
- date recorded and photographer's name
- name and address of building
- national grid reference
- specific subject of photograph.

Negatives should be supplied in archivally stable mounts (KENRO display pockets or similar), and each page of negatives should be clearly labelled with the following:

- Township name
- Site name and address
- Date of photographs (month/year)
- Name of archaeological contractor
- Film number

Colour slides should be mounted, and the mounts suitably marked with – 'Calverley and Farsley' (the Township name) with 'Shaw House Farm' under, at the top of the slide; grid reference at the bottom; date of photograph at the right hand side of the mount; subject of photograph at the left hand side of the mount. Subject labelling may take the form of a numbered reference to the relevant photographic register. The slides should be supplied to the WY Archaeology Advisory Service in an appropriate, archivally stable slide hanger (for storage in a filing cabinet).

7.4 Summary for publication

The attached summary sheet should be completed and submitted to the WY Archaeology Advisory Service for inclusion in the summary of archaeological work in West Yorkshire published on the WYAAS website. During fieldwork monitoring visits WYAAS officers will take digital photographs which may be published on the Advisory Service's website as part of an ongoing strategy to enable public access to information about current fieldwork in the county.

7.5 Preparation and deposition of the archive

After the completion of all recording and post-recording work, a fully indexed field archive should be compiled consisting of all primary written documents and drawings, and a set of suitably labelled photographic contact sheets (only). Standards for archive compilation and transfer should conform to those outlined in *Archaeological Archives – a guide to best practice in creation, compilation, transfer and curation* (Archaeological Archives Forum, 2007). The field archive should be deposited with the District Office of the West Yorkshire Archive Service (WYAS, Leeds West Yorkshire Joint Service, Nepshaw Lane South, Morley, Leeds LS27 7JQ Tel: +44 (0)113 393 9788 Email: leeds@wyjs.org.uk), and should be accompanied by a copy of the full report as detailed above. Deposition of the archive should be confirmed in writing to the WY Archaeology Advisory Service.

8 General considerations

8.1 Technical queries

Any technical queries arising from this specification should be addressed to the WY Archaeology Advisory Service without delay.

8.2 Authorised alterations to specification by contractor

It should be noted that this specification is based upon records available in the West Yorkshire Historic Environment Record and on a brief examination of the site by the West Yorkshire Archaeology Advisory Service. Archaeological contractors submitting tenders should carry out an inspection of the site prior to submission. If, on first visiting the site or at any time during the course of the recording exercise, it appears in the archaeologist's professional judgement that

> i) a part or the whole of the site is not amenable to recording as detailed above, and/or
> ii) an alternative approach may be more appropriate or likely to produce more informative results, and/or
> iii) any features which should be recorded, as having a bearing on the interpretation of the structure, have been omitted from the specification,

then it is expected that the archaeologist will contact the WY Archaeology Advisory Service as a matter of urgency. If contractors have not yet been appointed, any variations which the WY Archaeology Advisory Service considers to be justifiable on archaeological grounds will be incorporated into a revised specification, which will then be re-issued to the developer for redistribution to the tendering contractors. If an appointment has already been made and site work is ongoing, the WY Archaeology Advisory Service will resolve the matter in liaison with the developer and the Local Planning Authority.

8.3 Unauthorised alterations to specification by contractor

It is the archaeological contractor's responsibility to ensure that they have obtained the West Yorkshire Archaeology Advisory Service's consent in writing to any variation of the specification prior to the commencement of on-site work or (where applicable) prior to the finalisation of the tender. Unauthorised variations may result in the WY Archaeology Advisory Service being unable to recommend discharge of the archaeological recording condition to the Local Planning Authority and are made solely at the risk of the contractor.

8.4 Monitoring

This exercise will be monitored as necessary and practicable by the WY Archaeology Advisory Service in its role as 'curator' of the county's archaeology. The Advisory Service should receive at least one week's notice in writing of the intention to start fieldwork. A copy of the contractor's Risk Assessment should accompany this notification.

8.5 Valid period of specification

This specification is valid for a period of one year from date of issue. After that time it may need to be revised to take into account new discoveries, changes in policy or the introduction of new working practices or techniques.

Any queries relating to this specification should be addressed to the WY Archaeology Advisory Service without delay.

West Yorkshire Archaeology Advisory Service
David Hunter **March 2016**

West Yorkshire Archaeology Advisory Service
Registry of Deeds
Newstead Road
Wakefield
WF1 2DE

Telephone: (01924) 306 798.
Fax: (01924) 306810
E-mail: david.hunter@wyjs.org.uk

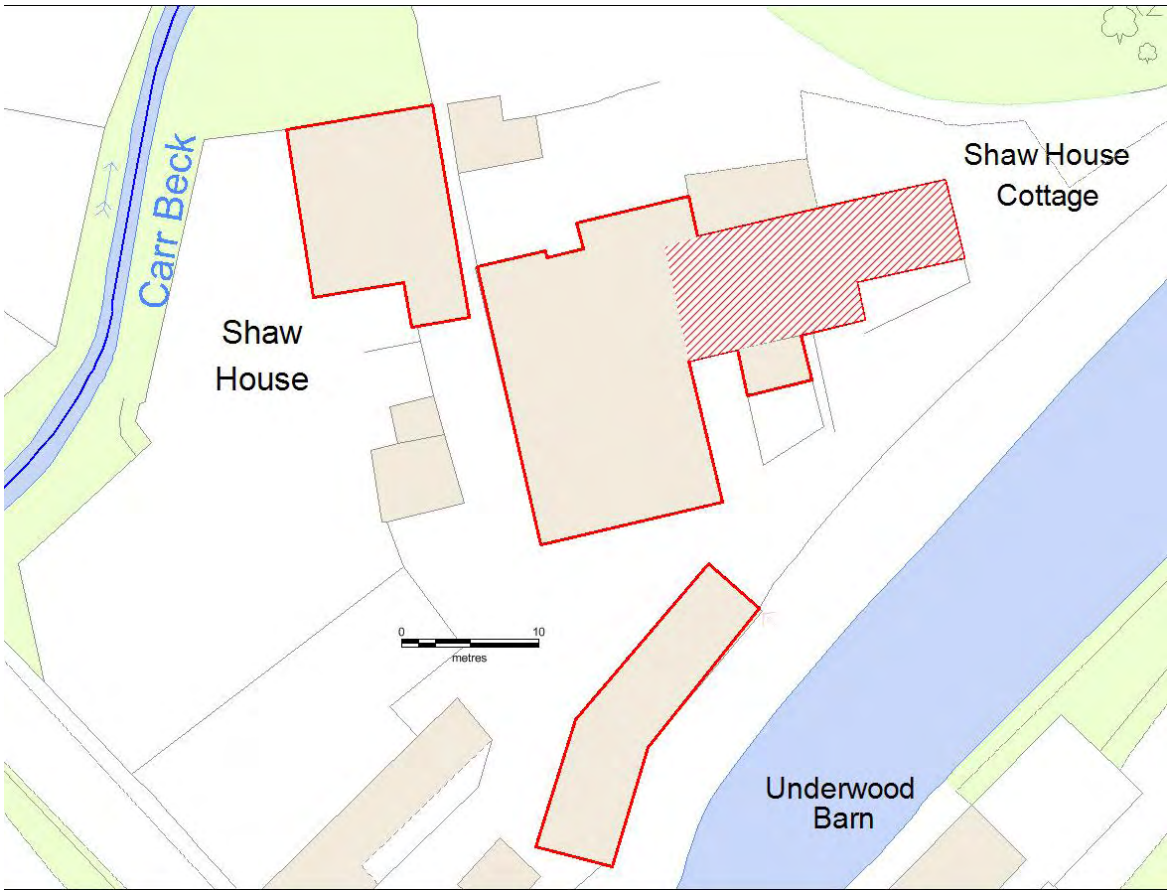


Figure 1 Building location Plan (shaded area shows area of both drawn and photographic recording)