



Darganfod Hen Dai Cymreig

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Please note that these reports are being updated as part of an ongoing programme of revision. Older reports sometimes refer to the old names of the Group. Between 2005 and 2012 also known as The Snowdonia Dendrochronology Project, then the N W Wales Dendrochronology Project and then the Dating Old Welsh Houses Group.

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The background image shows a large-scale construction or renovation project. A tall, rectangular stone wall, possibly a chimney or a tower, is the central focus. It is surrounded by a complex network of white metal scaffolding and structural beams. To the left, a sloped roof or wall is partially covered with blue plastic sheeting. The overall scene is one of active engineering and archaeological work.

eas

Engineering Archaeological Services Ltd.

**Bryn Dinas, Cwm Maethlon
Desk Top Study and Building Survey**

I.P. Brooks

EAS Client report 2015/17

Bryn Dinas, Cwm Maethlon
Desk Top Study and Building Survey
Commissioned by
Snowdonia National Park Authority

Fieldwork and Analysis by:
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Registered in England No 286978

Bryn Dinas, Cwm Maethlon
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EAS Client Report 2015/17

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INTRODUCTION

Summary

Bryn Dinas is clearly a locally important building having originally been built in the first half of the sixteenth century as hall house of gentry type. Between 1581 and 1586 the house was converted into a storeyed house with the insertion of a central chimney, partly in the cross passage, and the first floor. A further four phases of major modification have been identified with the house reaching its current form in the first half of the twentieth century. The house and farm is unusual in that it was not incorporated into a large estate, indeed it appears to have remained an independent business until early nineteenth century when it was incorporated into a small portfolio of farms owned by a Miss Morris who lived in Machynlleth. In the eighteenth century there appears to have been an increase in available funds to develop the house and farm, possibly related to the exploitation of the lead deposits in the region.

Location

Bryn Dinas is located approximately 5.3 km south east of Tywyn within Cwm Maethlon (Happy Valley) (Figure 1) at SN 63506 98581 at approximately 67m OD. Whilst the house is part of a complex of farm buildings (Figure 2) it stands alone on the eastern side of the track, aligned approximately east-west. The eastern end of the house is terraced into the end of a ridge of rock which divides the valley at this point (Figure 3), whilst the western end of the house has been slightly built up. Approximately 18 north and west of the house is the Afon Dyffryn-gwyn which run on the northern side of the rock ridge whilst the main area of the Cwm Maethlon runs to the south.

Archaeological Background

Bryn Dinas is a Grade II* listed building listed for its special architectural interest as a late medieval house showing evidence of changes over many centuries, although retaining its 17th century plan and, with the listed farm buildings, forming part of a strong farm group retaining its historical integrity (historicwales.gov.uk). Initial recording by Smith (1988, 2001, 450) documented the basic plan and form of the building and recorded the presence of the central arched collar beam truss with its central boss. In 2014 Oxford Dendrochronology Laboratory attempted to date the house, as part of a study by the Dating Old Welsh Houses Group, however this proved to be unsuccessful. It was only possible to attempt the dating of the middle truss, a purlin and two ceiling beams in 2014 as it was considered too dangerous to attempt the sampling of the eastern truss (Bridge 2014)

The Snowdonia National Park Authority and Cadw are joint funding the repairs to the roof of Bryn Dinas and as part of this work the current study and the further sampling of the house for potential dendrochronological dating have been commissioned by the Snowdonia National Park Authority.

Methodology

The archives of the Gwynedd Archive Service held at Dolgellau, the archives of the University of Bangor, the National Monument Record held by the Royal Commission on the Ancient and Historic Monuments of Wales and of the National Library of Wales were

consulted together with the digital resources of Achwilio, the Historic Wales portal and Coflein.

The plan and elevations (Figures 8 – 12) are based on the existing drawings by Catalina Architecture which have been modified to show the features recorded. The position and size of these modifications were directly measured. Detailed drawing were carried out by hand at a minimum scale of 1:20. Photographs were taken with a Nikon D80 DSLR camera at a resolution of 10.2 mega pixels using a raw (NEF) file format.

RESULTS

Desk Top Study

Sources

Primary sources

- 1592 Rent Roll Ystumanner Manor (National Archives, LR 2/236 ff 63)
- 1738 Bond of Elizabeth Humphreys (National Library)
- 1752-1762 Disbursements of the Bryndinas Mine (National Library 1224D)
- 1754 Agreement between Griffith Pugh of Bryndinas and the Earl of Powys (National Library Powis 21536)
- 1795 Will of Griffith Owen (National Library)
- 1809 Will of Lewis Vaughan (National Library)
- 1819 Will of Lewis Vaughan of Bryndinas. (National Library B/1836/198/W)
- 2/DS/12/169. Indenture between Humphrey Thomas and John Vaughan of Bryndinas 1827 (Merionethshire Archives)
- 1838 Towyn Tithe Schedule (National Library)
- 1841 Towyn Census (Merionethshire Archives)
- 1851 Towyn Census (Merionethshire Archives)
- 1861 Towyn Census (Merionethshire Archives)
- 1881 Towyn Census (Merionethshire Archives)
- 1900 Letter from Hugh Evans, Bryndinas, Towyn to Miss Morris re. Repairs to roof. (Powys Archives M/D/HPA/4195/250)
- 1919 Tithe return for Bryndinas, Dyffryngwyn, Alltllwyd and Tyddyn briddoll (Powys Archives M/D/HPA/4/95/72)

Cartographic Sources

- 1838 Ordnance Survey Surveyors Drawing 339

1838 Towyn Tithe Map

1888 Ordnance Survey Merionethshire XLVIII.3 map

1901 Ordnance Survey Merionethshire XLVIII.3 map

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Wilkes, J. 1817. *Encyclopædia Londinensis or Universal Dictionary of Arts, Sciences and Literature. Volume XV*. Private publication.

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The Cambrian News and Merioneth Standard 15th May 1869

The Cambrian News and Merionethshire Standard. 25th September 1896

The Montgomery County Times and Shropshire and Mid Wales Advertiser 17th October 1896

The Cambrian News and Merionethshire Standard 19th March 1897

The Cambrian and Merioneth Standard 1st October 1897

The Cambrian News and Merionethshire Standard 20th May 1898

The Montgomery County Times and Shropshire and Mid-Wales Advertiser 17th December 1898

Welsh Gazette and West Wales Advertiser 4th January 1900

Welsh Gazette and West Wales Advertiser 19th July 1901

The Cambrian News and Merioneth Standard 24th October 1902

The Cambrian News and Merioneth Standard 25th December 1903

The Cardigan Bay Visitor 30th July 1904

Welsh Gazette and West Wales Advertiser 30th July 1904

The North Wales Chronicle and Advertiser for the Principality 15th December 1916

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<http://historicwales.gov.uk/>

http://www.peter-davies.org/census_files/towyn_1901_07.html

Discussion

Probably the earliest reliable reference to a building at Bryn Dinas is the Land Tax of 1592 which includes “Riceus ap Ieuan Thomas holds freely a tenement with mill called Tyddyn Bryn y Dinas” (NA – LR 2/236 ff 63 Rent Roll Ystumanner Manor). This is somewhat curious given the lack of a mill or obvious remains of a mill currently at Bryn Dinas, however the Afon Dyffryn-gwyn runs only 18 m to the north west of Bryn Dinas and it would not be an unlikely place for a mill. Although Bryn Dinas cannot be identified in the 1662 Hearth Tax (Parry 1955), the 1663 Crown Rental for the township of Kynvel records “A tenement

and messuage called Bryn y Dinas and yr Allt llwyd lands of Rice ap Ieuan Thomas in the tenure of the said Rice” (Jones 1956, 316).

During the late seventeenth and eighteenth centuries Bryn Dinas would appear to be owned and occupied by the Owen family, although they call themselves by a variety of surnames including Pugh and Hugh depending on the context. In 1695 Hugh Owen was recorded as a Church Warden at Tywyn (Passmore 1991) and in 1736 his granddaughter, Margaret Owen, was baptised. She went on to marry William Lloyd of Llanegryn in 1756. Her parents were Griffith Owen (also known as Hugh/Pugh) and Susanna, who had ten children (Passmore 1991). It is highly likely that the initials carved into the structure of the barn are those of Griffith and Susanna. These are dated 1740 and 1762 (Plates 1 - 3) and are well carved suggesting a level of investment in the farm in the mid eighteenth century. There is a little confusion as to the occupier in the late 1730's as there is a bond dated 1738 (<https://syllwr.llyfrgell.cymru/172206#?c=0&m=0&s=0&cv=1&z=0.4881%2C1.0842%2C0.3742%2C0.3856>) referring to the death of Elizabeth Humphrey of Brindinas in the parish of Towyn.

Farming was not the only enterprise for the family in 1752 there is a lease between Griffith Pugh (Owen, Hugh) and John Scott and Henry Brindell allowing the mining for lead at Tydden Briddell together with the common land of Voel Goch and Y Voel Fraith. (Bick 1978, 6). Work continued at Tydden Briddell until about 1762 with the Pugh (Owen, Hugh) family not only being paid for the lease, but also acting carters transporting the ore at between 3/- and 3/6 a ton. (National Library 1224D, Bick 1978). This agreement was not without its challengers as in 1754 the Earl of Powys gained the rights to extract lead from the common land of the district, thereby reducing the potential for Scott and Brindell to exploit the deposits to their full. Griffith Pugh (Owen, Hugh) was paid £15 compensation for the loss of income, however Scott and Brindell were not compensated, indeed it was claimed that they had “raised 60 tons of lead causing damage and trespass to Tythen y Bruiddell the freehold of Griffith Pugh”. (National Library Powis 21536). The lead deposits within the valley were sufficiently significant to be specifically mentioned in a series of general works in the early nineteenth century including Wilkes’ 1817 “*Encyclopædia Londinensis or Universal Dictionary of Arts, Sciences and Literature*” (p 150) and Lewis’ 1833 “*A topographical dictionary of Wales comprising the several counties, cities, boroughs, corporate and market towns, parishes, chapelries and townships with historical and statistical descriptions.*” Both of these references appear to take their information from a report on the agriculture and domestic economy of North Wales, published in 1810, by Rev. W. Davies for the Board of Agriculture and Internal Improvements (p 62)

In 1776 Griffith Owen remarried to Elizabeth Vaughan of Petton, Shropshire and in 1782 he serves on the Grand Jury for the Michaelmas Quarter Sessions held at Dolgellau (<http://discovery.nationalarchives.gov.uk/details/rd/af6e87f0-e5ab-43cd-8241-04e102dff803>). He dies in 1795 leaving personal goods valued at £39 -10-00 in his will (National Library).

By 1798 Bryn Dinas was occupied by Lewis Vaughan. There are three wills under the name of Lewis Vaughan of Bryndinas, Towyn within the National Library of Wales, one dated 1809, a second dated 1831 and a third dated 1836 possibly suggesting up to three generations with the same name. The earliest will includes goods valued at £280 suggesting a level of wealth associated with the farm. The third will is somewhat curious as, after a number of requests, the residue of the estate went to Lewis Vaughan’s brother John, but only after a charge for 22 years of board and lodging had been deducted. It is possible that the farm was sold after the death of the second Lewis Vaughan as the 1838 Tithe records the owners as

Messrs. Evans, Griffith, Evans and John, whilst the occupier was recorded as John Vaughan. At this point the farm covered an area of 242 acres, 1 rod 22 perches (approximately 98 Ha) and was valued at £10-2-0.

Prior to the early nineteenth century the main road linking Machynlleth to Tywyn passed through Cwm Maethlon, including the turnpike road following the Merioneth Turnpike Act of 1775 (Gwyn and Davidson 2007, 3). Indeed it was not until 1808 that a road was started to be constructed along the coastal route to Aberdyfi which was not completed until 1827. The building of the road, although not directly impacting on the farm, would have changed Cwm Maethlon from a major route to a relative backwater.

The 1841 Census records the occupiers of Bryn Dinas as John Vaughan (aged 60) together with his wife Jane (60), their children Lewis (30), David (25), Elizabeth (20), John (20), William (15), Richard (15) and two servant John Jones (20 and Marry Dorry (25). John continued to occupy Bryn Dinas until sometime between the 1851 and 1861 censuses when the tenancy was taken up by his son Vaughan. This was despite the farm being advertised for sale in 1849 (The Welshman 18th May 1849)

The 1851 Census, shows that John Vaughan was still occupying Bryn Dinas at the age of 72 together with his sons' Lewis (38), David (36) and William (28) and two servants; Mary Humphries (24) who is described as a house servant and Mary Parry (16) a general servant. No mention is made of Jane (John's wife), however she reappears in the 1861 Census. At this point Lewis Vaughan had taken over the farm which is recorded as covering 217 acres (87.8 Ha). Other occupants were his mother Jane (82), his brothers David (47) and William (36) and four servants. These were Michael Jones (47), David William (16) (both farm labourers), Jane Williams (23) (dairy maid) and Jane Hughes (20) (a general servant). All of the Vaughan males are recorded as being unmarried and thus it is of no surprise that by the 1871 Census there is a change of tenants.

This census records the occupiers as David Rees (49, from Cardiganshire), his wife Mary A Rees (44) their son David S. Rees (3), daughter Mary A Rees (1), a brother John Rees (55) and a domestic servant Margaret Jones (18). David Rees' occupation of Bryn Dinas only lasted between 1863 and 1873. In 1869 (The Cambrian News and Merioneth Standard 15th May 1869) he was involved in a legal case with one of his farm servant's, Richard Hughes, charged with common assault. The account is a little confused, however it appears that after a minor argument Richard Hughes abandoned his position without notice and when David Rees caught up with him a brawl ensued in which David Rees struck Richard Hughes with a stick and then grappled him to the ground. The magistrates decided to order both men to pay their own costs and to "settle the matter amicably". Although David Rees left Bryn Dinas in 1873 in 1896 he was involved in a further legal dispute, this time over the plot of his wife's grave in Maethlon Cemetery, Towyn (The Montgomery County Times and Shropshire and Mid Wales Advertiser 17th October 1896). The "trespass" took the form of the damage to his wife's grave and head stone by the erection of a monument to a Sergeant Roberts

The 1881 Census records Robert Owen as the occupier of Bryn Dinas together with nine members of his family. These include Margaret (58) his wife, daughters Winifred (28), Maggie (24) sons Edward (26) William (20) and Humphrey (17) and a granddaughter Winifred Owen Thomas aged only 2 months.

Robert Owen's tenure at Bryn Dinas appears to have lasted until 1897, however there is an advert in the Cambrian News and Merionethshire Standard of 25th September 1896

advertising the farm to let. At this point the owner is a Miss Morris of 42 North Parade, (or Norton House) Machynlleth. This advert appears to have been unsuccessful as there are further adverts in 1897 The Cambrian News and Merionethshire Standard of the 19th March 1897 advertises the sale of 30 head of cattle, three horses a sow and litter and the implement of husbandry property of Mr R Owen whilst The Cambrian and Merioneth Standard of the 1st October 1897 advertises “GOOD FARM TO LET, with immediate possession, or from the 25th March, 1898, called Bryndinas. 260 acres, situate in the Happy Valley, about four miles from Towyn two from Aberdovey and seven from Machynlleth, consisting of arable pasture, and meadow lands also superior sheep-walk. Apply to Miss Morris 42 North Parade, Aberystwyth, or Norton House, Machynlleth”

In 1898 there were plans to build a hydro-electric scheme to supply Towyn and Aberdovey to power street lighting. One scheme considered was creating a reservoir on the flat ground above Bryn Dinas with the dam constructed where the valley contracts near the top of the wood above Bryn Dinas. It would have had a limited capacity of 36 kilowatts for five hours at Towyn and 24 kilowatts for five hours at Aberdovey which would give the equivalent of 1800 eight candle power lamps at Towyn and 1200 at Aberdovey (The Montgomery County Times and Shropshire and Mid-Wales Advertiser 17th December 1898). Unfortunately this early and ambitious scheme was never put into effect.

The house at Bryn Dinas was deteriorating by the late 1890's. A report by the Inspector for Aberdovey Urban District Council demanded repairs to Bryn Dinas farmhouse. Of particular interest was the lack of ceilings on any of the bedrooms (The Cambrian News and Merionethshire Standard 20th May 1898). This dispute continued until at least 1900 as is demonstrated by the letter from Hugh Evans, Bryndinas, Towyn to Miss Morris about the repairs to roof. (Powys Archives M/D/HPA/4195/250). The delays were partly because of a builder who was slow to respond and partly because of delay in obtaining a bag of cement in order to secure the ridge tiles. According to the letter there was a supply in Aberdovey, but this had sold out. It is also clear that the cost of the cement was not part of the original estimate and that permission was being sort for the extra costs. The letter then goes on (almost as a footnote) to complain that the rent was due to be increased in a year when “every crop almost has gone failure, the oats has gone failure, no potatoes and roots of all kinds.” It is not certain how this dispute was resolved as Miss Morris died in early in 1900 (Welsh Gazette and West Wales Advertiser 4th January 1900).

It is unknown what happened to Hugh Evans as the 1901 census records John Vaughan as the farmer with other occupants of Bryn Dinas being John Jones and Mary Evans (http://www.peter-davies.org/census_files/towyn_1901_07.html). It is assumed that Mary Evans is Mrs Hugh Evans as in 1901 as a Mrs Hugh Evans, of Bryn Dinas, has a serious accident in her trap after colliding with a stone near to the police station in Towyn (Welsh Gazette and West Wales Advertiser 19th July 1901). She was thrown out of her trap receiving injuries to her head and shoulder and knocking her unconscious.

In 1902 there is an advert for a farm to let at Bryn Dinas which was in the in the occupation of Mrs Evans. (The Cambrian News and Merioneth Standard 24th October 1902). However there are references to a Hugh Evans of Bryn Dinas in a variety of newspaper articles though to 1916. In 1904, the Welsh Gazette and West Wales Advertiser for 30th July 1904 recorded the retirement of Hugh Evans of Bryn Dinas from the Towyn Board of Guardians. In the same year his son (or grandson), R. P. Evans, obtained honours in the London Matriculation examinations (The Cardigan Bay Visitor 30th July 1904) and H. Davies, R.P Evans and H. Evans, all of Bryn Dinas, took place in a competition held at the Maethlon Chapel (Towyn-

on-Sea and Merioneth County Times 3rd March 1904). The Evans' remained as tenants at Bryn Dinas until at least 1916, in that year Hugh Evans applied for a further exemption from conscription for his waggoneer, H. Parry Jones, who was 19 at the time. This application was refused subject to a substitute being found (The North Wales Chronicle and Advertiser for the Principality 15th December 1916).

The tithe returns for 1919 (Powys Archives M/D/HPA/4/95/72) show that the owner of Bryn Dinas is M.L Morris, of Norton House Machynlleth and the tenant is N Evans. Whilst this could be a member of the Evans family it is also possible that the "N" is a badly formed "H" suggesting that Hugh Evans is still the tenant.

Partly because the farm remained in private hands until late in its history, few cartographic sources have been located. Indeed the earliest sources both date to 1838. The Ordnance Survey surveyors drawing for the area (Figure 4) are drawn at a scale of two inches to the mile, thus only limited detail can be determined. Bryn Dinas is marked as "Pen Dinas" on the drawing which is presumably a mistake. Of the same date is the Tithe map for the parish of Tywyn (Figure 5). This map was largely concerned with the agricultural land and thus the buildings tend to be represented in less detail. The map does, however show a range of buildings which include the house and the barns on the site.

The first detailed mapping of the area is the First Edition Ordnance Survey map published in 1888 (Figure 6) drawn at a scale of 1:2500. This map shows that the kitchen extension on the northern side of the house had not yet been built along with the stable range on the western side of the track through the farm. By the Second Edition Ordnance Survey map, published in 1901, (Figure 7) the northern extension had been built, however the stable range is still yet to be built.

Building Recording

Exterior appearance

The house at Bryn Dinas has a main range 14.98 x 7.58 m in size aligned approximately east-west with a later extension, 5.18 x 4.58 m in size, on the northern side towards its western end (Figures 2 and 8). The eastern end of the building is terraced into the hillside by about 1.2 m (Figure 10) with the main range being aligned at right angles to the slope. It is one and a half storey high whilst the later extension is a single storey. The main range was covered by graded-slate roof made of handmade slates (Plates 4 and 5) varying in size between 170 x 240 mm and 420 x 500 mm (Plates 6 -8). The slates were held in place by wooden pegs (Plate 9) with the larger slates having two pegs whilst the smaller slates being held in place by a single peg. The rear extension and the dormers, however were covered in standardised slates. There are two chimneys on the main range and one on the extension. The chimneys on the main range are located on the western gable end and slightly off centre. The western chimney (Plate 10) is rendered with cement render whilst the central chimney (Plate 11) is constructed of irregularly coursed stonework and has decorative corbelling near to the top of the stack. This corbelling is crudely moulded with a cyma recta type moulding. A similar moulding is also found on the parapet on the eastern gable end and on the barn approximately 35 m to the south of the house. The chimney on the gable end of the extension is rendered with a cement render and has a stepped form suggesting it may have been extended at some point in its history.

The houses faces to the south with its front door approximately 3.8 m from the western end (Plate 12). This elevation (Figure 10) was rendered with cement render. There are three ground floor windows and three dormers on this elevation and a single door. Two of the ground floor windows and the dormers have a common window type with four-pane horned sash windows, however the eastern most window is a narrow casement window with a single opening (Plate 13). The door is a relatively modern panelled door in a wooden frame, below a simple canopy. Its position towards the western end of the building would suggest it occupies the original opening, probably marking the position of the cross passage.

The eastern gable has a low parapet the knees of which (Plate 14) have a crude cyma recta moulding similar to that on the central chimney and the barn. The eastern gable end (Plate 15) is partly buried into the hillside and has a doorway set at first floor level which gave access to this end of the building. The opening had a wooded lintel which was later protected by a layer of slates (Plate 16). The door itself is a five plank ledged door with a wooden frame and a simple iron latch with an upright door handle.

The northern elevation is also partly buried into the hillside (Figure 11, Plate 17). It is constructed of roughly coursed stone blocks with lime mortar spread over the surface of the wall, thereby protecting the pointing from leaching (Brunskill 2000, 41). The three windows in this elevation do not appear to have been replaced at the same time as those in the dormers and main rooms of the southern elevation, retaining their earlier forms. The two larger openings, at the eastern end of the building, are of casement type with opening eastern leaves each with three panes and fixed western sections with six panes. These gave light to the main hall and the outer room, once used as a dairy (Smith 2001, 450). The smaller window lights the stair well, although much smaller it retains similar features to the larger windows in this elevation being a casement window with one opening leaf.

The western elevation of the main range consists of the gable end (Figure 12, Plate 18). This is rendered with cement render to protect it from the weather. It is pierced by two openings consisting of a window on each floor of similar design to those on the southern elevation. Both are sash windows, although that on the ground floor is slightly larger.

The northern extension has cement render (Plates 17 – 20) on all of its walls, the western elevation, however has also been scored to represent ashlar block construction in a simple form of pargetting. There is a door and window in the western elevation (Figure 12, Plate 18) together with a recess which appears to be a blocked opening (Plate 19), however given its position it could be a purely decorative feature. The door is a panelled door with a fanlight within a wooden frame, whilst the window is a four paned sash window with moderate horns. The northern gable (Figure 11, Plate 20) has the gable chimney incorporated into its elevation. This has a stepped profile which suggests the chimney may have been extended, possibly when the extension was converted into a kitchen. The eastern elevation (Figure 12, Plate 17) is largely buried into the hillside, however it does include a single window which is a two paned casement in a wooden frame.

Ground Floor (Figure 8)

Inside the front door there is an entrance lobby which runs along the eastern side of the central chimney breast (Plate 21). Its western end is defined by a modern wooden partition which divided the lobby from the parlour. Crossing the lobby is a wooden beam (Plate 22) which has two slots cut into its lower surface (Plate 23). This beam would appear to mark the eastern side of the cross passage with the gap between the slots marking the position of (one

of) the door(s) into the hall. The northern end of the beam is buried within the structure of the chimney breast which is assumed to be a secondary feature.

The chimney breast also protrudes into the parlour (Plate 24) within the space which is assumed to mark the original position of the cross passage. Whilst there is a ceiling beam crossing the parlour which is in the position where the western side of the cross passage would be expected this does not have any mortice slots nor dowel holes suggesting the position of the partition. This beam, however, appears to be a later replacement associated with a range of works which appear to have been carried out at this end of the house. The beam is slightly chamfered and has straight stops (Plate 25).

The hall, (Plates 26 and 27) is dominated by the hearth (Plate 26) which has a large wooden bressumer and includes a circular, brick lined oven (Plate 28). The ceiling has a central axial beam which supports the joists. This beam is deeply chamfered and has distinct bar stops at both ends (Plate 29). Similar stops are also present on beam which line the walls of the room (Plate 30).

The ceiling beam over the chimney breast, extends over the door to the mural stair. Although the current door has a straight top the height of the beam has been reduced over the stairs in order to increase the head space (Plate 31). There are also two short struts (Plates 32 and 33) between the bressumer and this beam which appear to sit on short timbers embedded into the stonework of the chimney breast. The function of these two struts is unknown as they do not appear to be structural. Similarly the insertion of a naturally shaped timber in the south western corner of the room (Plate 34) appears to have been inserted at a later date, possibly to support the ceiling at this point. The use of an unshaped, “natural timber” may suggest a somewhat *ad hoc* approach to this repair.

The plank partition (Plate 27), which marks the eastern end of the hall, is largely constructed of soft wood and is therefore considered to be a relatively recent modification. Indeed, Smith (2001, 450) considered this partition to be of nineteenth century date with the original partition being approximately 300 mm to the east. It does, however sit below the major timber which runs at ceiling level along the eastern side of the hall possibly suggesting the original partition may have been in a similar position.

The eastern room, was reportedly a dairy and it contains a stone topped bench along the northern and eastern walls (Plate 35). There is also a timber attached to the floor suggesting this room may have been further subdivided at some point. Exposed in the north western corner of the room is the lower section of the cruck blade which is part of Truss 3. This extends into the stonework of the house wall (see below). There was no comparable timber for the southern side of Truss 3 exposed in the initial survey, but see below for the full extent of the truss recorded as part of the watching brief.

First Floor (Figure 9)

The first floor is accessed by means of a straight flight of stone stairs which runs along the northern side of the central hearth. This leads to a landing area which runs around the western and northern side of the chimney. Above the stairs the lower, northern purlin is exposed (Plate 36). This has two mortice slots for windbraces on its lower surfacing showing the bracing of the roof to both Trusses 1 and 2 (Plates 37 and 38). The windbraces were held in place, in the purlin, by three pegs (Plate 39). This purlin also was jointed above Truss 1 with

a possible side half joint between the two lengths of the purlin. Also on the landing the north eastern corner of the chimney stack has a distinct shelf (Plate 40) of unknown function.

The bedrooms at the western end of the building are defined by wooden partitions (Plate 41) constructed of vertical planks, however the eastern wall of Bedroom 1 (Plate 42) has one of the principle rafters of Truss 1 (Figure 13) showing as an impression within the plasterwork. The purlin exposed on the landing also extends along the northern side of this bedroom. The window in the western gable wall of Bedroom 1 is a sash window with four panes and moderate horns (Plate 43). The fitting on this window, including the latch have a concentric ring design (Plates 44 and 45). These are unlike the other sash windows in the house which have plain catches.

Truss 1 could not be traced in the eastern wall of Bedroom 2 and there are few architectural features in this room. The exception is the exposed purlin (Plate 46) on the southern side of the room, which would appear to be a later replacement as it has a much less square profile than the purlin with the slot for a windbrace in the landing. This purlin continues into Bedroom 3 (Plate 47) where there is a modern inscription from Psalm 103, verse 8 in felt tip marker on the purlin (Plate 48). Bedroom 3 runs along the southern side of the chimney stack and there is a shelf at a height of about 0.8 m above the floor possibly suggesting the stack is stepped at this height. Above the door to this room fragments of an earlier decorative scheme are preserved (Plate 49) with fragments of a wallpaper with a floral pattern survives.

Bedroom 4 is dominated by the majority of Truss 2 (Figure 14, Plate 50), which also extends beyond the room so that it crosses the landing (Plate 51). Although the truss is heavily plastered it is possible to suggest it is an arch braced truss by the cracks in the plasterwork suggesting the positions of some of the joints. The centre of the arch is marked by a square boss (Plates 52 and 53) demonstrating the level of decoration to this features. This boss has previously been described as octagonal (NMR Parish File 17/8/71), however it is clearly of a square plan. The “support” on the northern side of the truss is of a barely modified branch and is probably a “decorative” addition.

The purlins on both the front and back of the house run between each of the trusses, thus there is an overlap between lengths of the purlins above Truss 2 on both the southern (Plate 54) and northern sides (Plate 55) of the house. Similarly an overlap between two lengths of the purlin is also seen in the eastern end of Bedroom 4 (Plate 56) near to the position of Truss 3 which is exposed in the external chamber.

The eastern and northern walls of Bedroom 4 are constructed of vertical planking similar to those used at the other end of the house to define Bedrooms 1, 2 and 3. Two areas of graffiti were recorded on the walls of Bedroom 4; both of which are in pencil. On the eastern wall (Plate 57) there is:

David Lloyd Jones
Bryndinas
Towyn

David Lloyd Jones is recorded in the 1901 Census as a general farm servant, thereby suggesting a possible date for the graffiti, if not the partition itself. Whilst on the northern wall, near to the door (Plate 58) into the room is:

Miss Maggie Davis
Llwyngwrlil

No record of Maggie Davis has been recovered, however there is an Elizabeth Davis also recorded on the 1901 Census as a servant at Bryn Dinas.

The Bathroom is essentially a modern space with few architectural features, however a roof light has been crudely added. The stub of a common rafter, where roof light has been inserted, is exposed (Plate 59).

The room at the eastern end of the first floor can only be accessed through an external door in the eastern gable end. It has clearly not been used as an active room for some time and the floor is missing many of the floorboards. The room is dominated by Truss 3 (Figure 15, Plates 60 - 62). This is a cruck frame of Alcock “type B” (Alcock 1981, 95) with a vertical joint at the peak. There is a collar morticed into the principal rafters and held by two wooden pegs at each end. Below this collar there was a partition as is demonstrated by the mortice on the lower surface of the collar (Plate 63) and slots in the cruck blades (Plate 64). This is not the current partition which sits on the western side of the truss and is clearly a relatively modern feature, being in part the back of the timber walling defining Bedroom 4. The blades are treenched to hold two pairs of purlins. Whilst the majority of these are rectangular cross sectioned, oak timbers, the lower southern purlin is a replacement soft wood timber.

The internal lintel to the door in the eastern gable is clearly a reused timber (Plate 65) with a series of mortice holes cut into its face. This timber will be described in more detail below.

Watching Brief

The works carried out to repair the roof revealed a number of previously unknown features. These works included the stripping of the roof itself and the removal of the render on the southern elevation of the house. The removal of the render revealed that the front door had been fitted into a slightly larger opening (Plate 66) and the gap filled with brickwork. There is also a wooden lintel over the door (Plate 67) which has the remains of two metal fittings in it which presumably reflect an earlier canopy over the door. There is also a crack in the stonework to the west of the door (Plate 68). Whilst this may be the result of movement it is also possible that this joint is the result of modifications to the western end of the building.

The works to the roof has allowed more detailed to be recorded to the trusses. The top of Truss 1 (Plate 69, Figure 13) was revealed by damage to the ceiling on the landing by falling slates when the roof was stripped. The principal rafters are noticeably lighter than those used for the other trusses, possibly suggesting that this truss has been replaced. The principal rafters are joined with a lap joint held with wooden pegs and the northern principal rafter is treenched to hold the ridge piece. There is also a collar, at ceiling level, linking the principal rafters. The eastern side of the truss has two planks nailed to it, probably suggesting that the partition below this truss was in existence prior to the additions of the ceilings in the early twentieth century.

The removal of the slates from the roof exposed the section of Truss 2 above the ceiling level (Figure 14, Plate 70). Rather unusually there are diagonally set cross bracings above a collar, which given the level of elaboration of the rest of the truss with its arch bracing and boss indicates a level of sophistication to the construction of the original house. Also linked to Truss 2 by a short spur (Figure 14, Plate 71) are wall plates running along the top of the walls. The southern wall plate (Plate 72) has been highly damaged and only survives for a short length (1.2 m) to the east of the middle dormer. There was clearly an overlap between two timbers forming the wall plate as is shown by the peg hole at the eastern end of the

surviving timber (Plate 73). The northern wall plate is better preserved running the whole length of the building (Plate 74). As with the southern wall plate the northern wall plate consists of two timbers with a lap joint over Truss 2 (Plate 75). The western end of the wall plate has a series of trenches to hold the feet of the common rafters. These are clearly from more than one phase of roof with relatively large, widely spaced trenches representing an earlier roof (Plate 76). It is possible that this use of widely spaced, robust, common rafters suggests a thatched roof. The eastern end of the northern wall plate was covered by a deposit derived from a previous roof covering of moss slates (Plate 77). Whilst the majority of the slates were broken there were a few whole moss slates, which were approximately 340 x 160 mm in size (Plate 78). These would indicate a possible second phase of roof covering.

Other details of the roof structure were also revealed by the roof restoration suggesting there have been multiple phases of alteration to the roof structure. The lower purlin at the north eastern end (Plate 79) of the building and the lower purlin on the southern side (Plate 80), between Trusses 2 and 3, have been turned through 90° and probably re-positioned. Both of these purlins have mortice slots, now on their upper surfaces which are assumed to have originally held windbraces. The rotation of these purlins would have increased the pitch of the roof and are presumably related to one of the changes of roof covering. The lower south eastern purlin has also been replaced with a soft wood timber (Plate 81) which is assumed to be a relatively modern modification.

The dormers on the southern side of the house appear to be relatively modern additions/replacements constructed of relatively light, sawn timber (Plate 82). Indeed a paper label (Plate 83) attached to the frame for the sash window in the western dormer reads:

.....HT LTD. BURTON-ON-TRENT

No. 635
Per.
Carr.
Date 38

This would suggest that the dormers were constructed, or at least replaced sometime after 1938.

Whilst the render on the western gable was not removed as part of the project, some chipping of the render at roof level would suggest that there is a layer of slates below the render (Plate 84), presumably to add to the weatherproofing of this exposed gable. The slates would appear to be of a much darker colour than those used on the roof and are probably from the harder, Ordovician, from the Blaenau Ffestiniog area (Gwyn 2015, 29)

Two pieces of re-used timbers were of particular note. From the north western area of the roof a window rail (Figure 17, Plate 85) was recovered. It is not certain whether this was from the head or base of the window, however it has three mortice slots in one surface showing the positions of three mullions, each 100 x 45 mm (4 x 1.7 inches) set 127 mm (5 inches) apart. Each of the mortice slots (Plate 86) had been created by boring either two or three drill holes to define the extent of the mortice slots and then joining the drill holes with a chisel. The remains of the drill holes survive in the base of the mortice slots suggesting a 20 mm (0.8 inch) brace was used.

The lintel to the first floor door in the eastern gable end was clearly a reused timber (Plate 87). Once removed it proved to be more complex than it originally appears to be when in

position. The upper surface (Figure 17, Plates 88) had a circular worn mark, 0.30 m (12 inches) in diameter, flanked by two groups each of six mortice slots. The lower surface (Plate 89) is plainer without the circular impression. The plank was originally at least 1.13 x 0.44 x 0.09 m (45 x 17 x 3.5 inches) and was probably from a robust piece of machinery. An outside possibility is that this timber was derived from the mill recorded in the Land Tax of 1592.

The investigation of the condition of Truss 3 demonstrated that the blades of the cruck frame extend further into the walls of the house (Plates 90 and 91), demonstrating the original timber framing of the house. The work also revealed the daub used as mortar in the wall at this point (Plate 92).

Dendrochronology

Ten cores were taken by Martin Bridge of the Oxford Dendrochronology Laboratory on 15th January 2016 (see Appendix 1). These are in addition to the unsuccessful samples taken in 2014 for the Dating Old Welsh Houses Group. Samples were taken from Truss 3 together with samples from the timber beams in the Dairy, from the inserted floor in the hall and from the beam thought to be part of the cross passage in the entrance lobby. Of these only four were sufficient to provide dates (Bridge 2016). Only one sample from Truss 3 (from the collar) proved to be datable giving a felling date between 1511 and 1541. This date although indicative should be taken with some caution as only one timber within the truss dated. A combination of three datable samples suggest the insertion of the ceiling in the hall of the building took place between 1581 and 1586.

CONCLUSIONS

Bryn Dinas has clearly developed over a long period of time, indeed at least seven phases of major alteration being determined. These are summarised below:

Phase 1: A hall house of some refinement, was constructed in the first half of sixteenth century, partly cut into the valley side. It is likely that this took place between 1511 and 1541, however, this date is only derived from the dendrochronological dating of a single timber. The house had a two bay hall with a refined central truss consisting of an arch braced cruck frame with a decorative boss. West of the cross passage was at least one service room.

Phase 2: Sometime between 1581 and 1586, the first floor was inserted into the building together with the central fireplace. The bar stops on the ceiling timbers in the hall are of a type which became fashionable in the Elizabethan period with early examples dated to about 1577 in Sussex (Hall 2005, 161). Bar stops appear to have gone out of fashion before the end of the seventeenth century (Hall 2005, 162), thus the dates from the dendrochronological samples and the elaboration of the timberworks agree. It is not certain as to the arrangement of the rooms at this phase, however, the basic layout is likely to be similar to that in Phase 1 on the ground floor.

Phase 3: During the eighteenth century the house would appear to have undergone a major refurbishment. The western truss was probably replaced; and the enhanced eastern gable, the fireplace at the western end of the house and the chimney stacks were constructed. It is possible that the doorway in the eastern gable end dates from this period together with the division of the hall to produce a possible dairy at the eastern end of the house. It is likely that this was part of a more radical re-organisation of the house with a parlour created by

removing the western partition of the cross passage and the hall being converted into a kitchen.

This would appear to be part of a major investment in the farm at this period with the construction of the barn and possibly other farm buildings. The finance for this investment is likely to be related to the exploitation of the lead deposits in the area. In rural Wales even within what became the major slate-producing areas slate roofs only spread below the social level of an *uchelwr* in the sixteenth century. (Gwyn 2015, 30), thus it is likely that it is within this phase of activity that a previously thatched roof was replaced with moss slates. It is likely that the slates were quarried locally, indeed a series of small quarries (Plate 93) were located alongside the track to the house which may have served as the source for the slates.

Phase 4: Probably sometime within the nineteenth century, the moss slates were replaced with the ranged handmade slates recorded before the project started. This involve the increasing of the pitch of the roof partly achieved by rotating some of the purlins though 90°. The slates were held in place by wooden peg, a practice which was common from the medieval period into the nineteenth century (Gwyn 2015, 34).

Phase 5: At the end of the nineteenth century and beginning of the twentieth century, largely as a result of the insistence of the Aberdovey Urban District Council a programme of repairs and improvements were initiated. These included the insertion of the ceilings on the first floor and probably the current arrangement of the partitions on the first floor. It is also in this period that the extension in the north western corner of the house was added.

Phase 6: Sometime bout 1938, the dormers were either constructed or, more likely, replaced with the current structures.

Phase 7: There has been a phase of running repairs which presumably took place after the Second World War, including the replacement of the lower, south eastern purlin with a soft wood timber.

Acknowledgements

This work was commissioned by the Snowdonia Nation Park Authority and the help of John G Roberts, Arwel Thomas and Gwilym H Jones is particularly noted. The architect for the project was Larry Jeffreys of Catalina Architects and the contractors were TIR Construction, both of which are thanked for their support. The owners Tywyn Hugh and Merle Jones are also thanked for their interest in the study of the house. The dendrochronological study was carried out by Martin Bridge of the Oxford Dendrochronology Lab. John Townsend of the Dating Old Welsh Houses Group is thanked for supplying a draft of the house history, he is preparing, for comparison.

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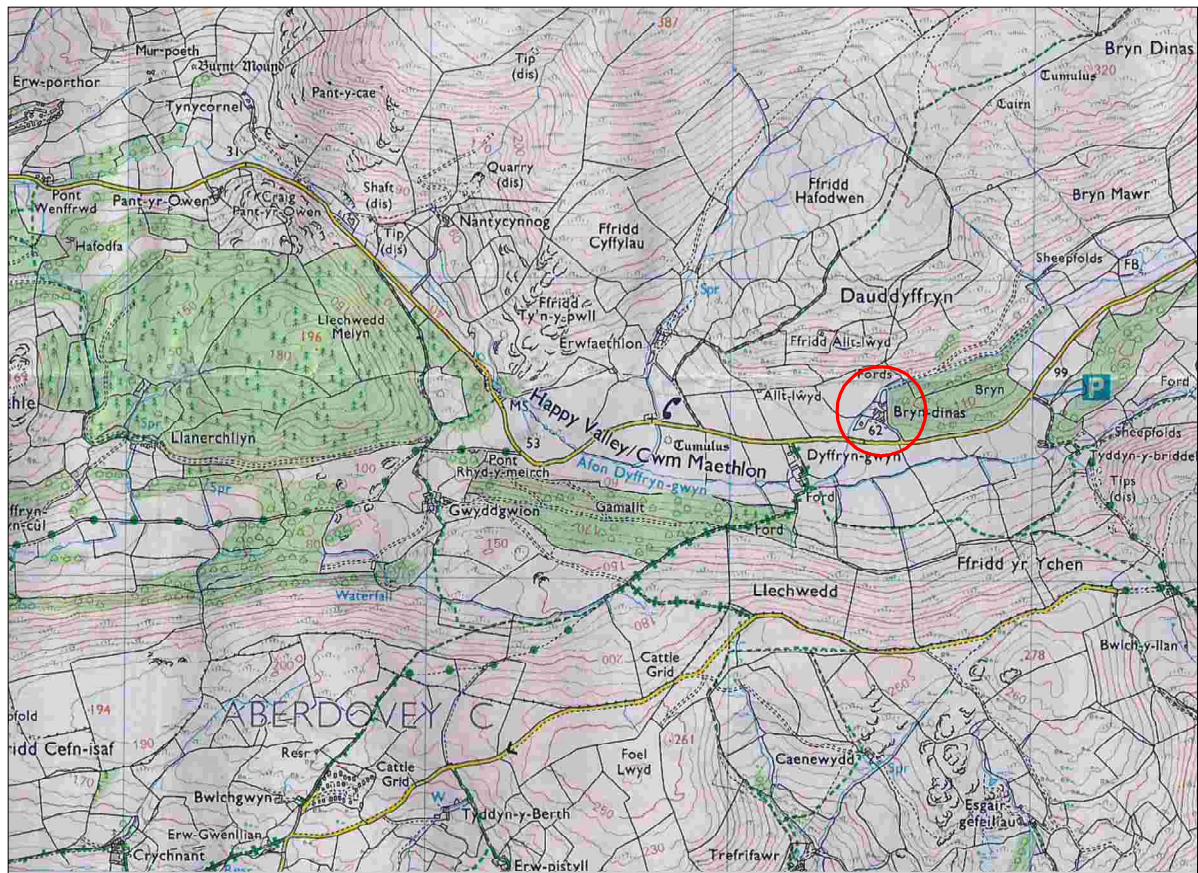


Figure 1: Location
Scale 1:25,000

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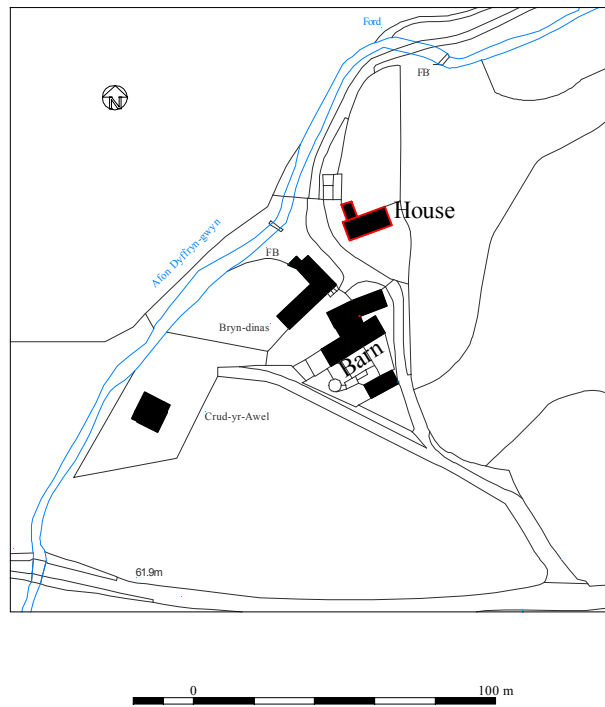


Figure 2: Layout
Scale 1:2500



Figure 4: Extract from the 1838 Ordnance Survey Surveyors Drawing 339
Not to scale

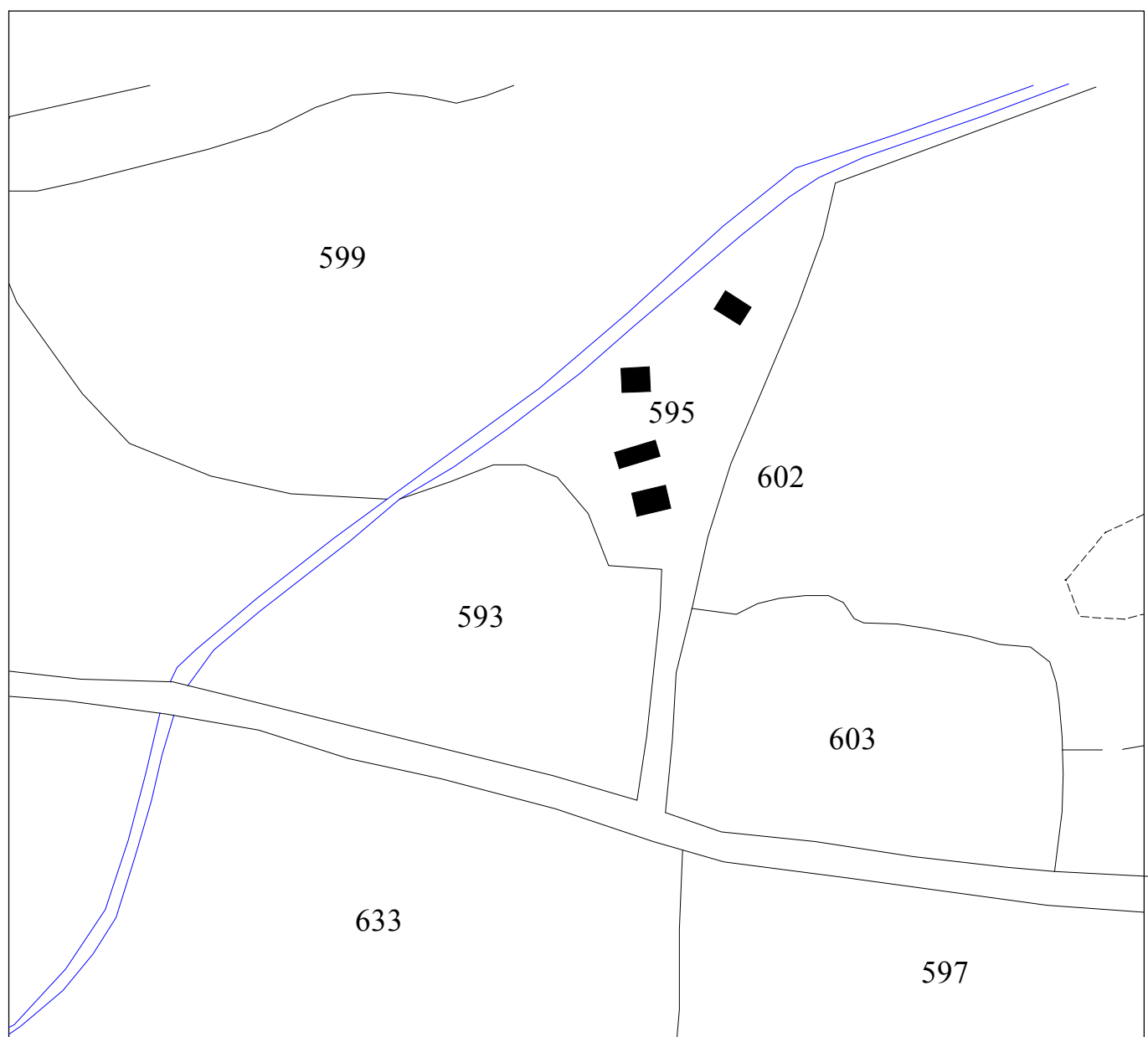


Figure 5: Tracing of the 1838 Tithe Map
Re-scaled to approximately 1:2500

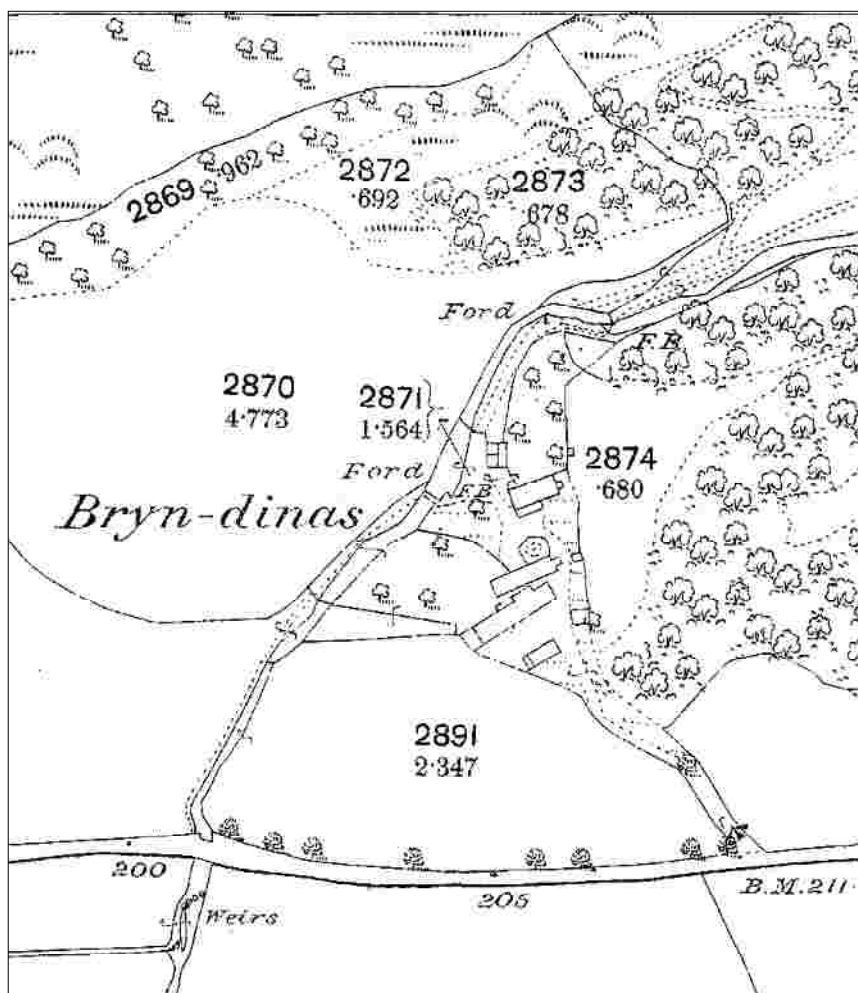


Figure 6: Extract from the 1888 Ordnance Survey
Merionethshire XLVIII.3 map
Scale 1:2500

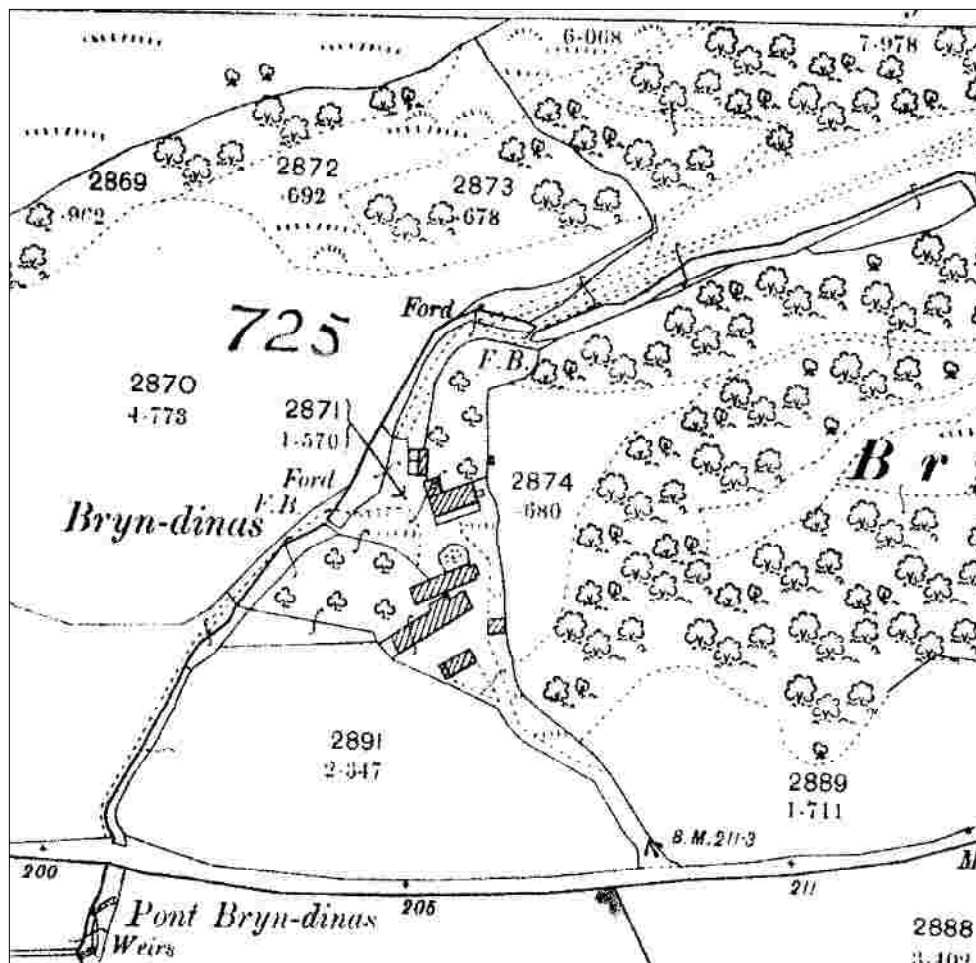


Figure 7: Extract from the 1901 Ordnance Survey
Merionthshire XLVIII.3 map
Scale 1:2500

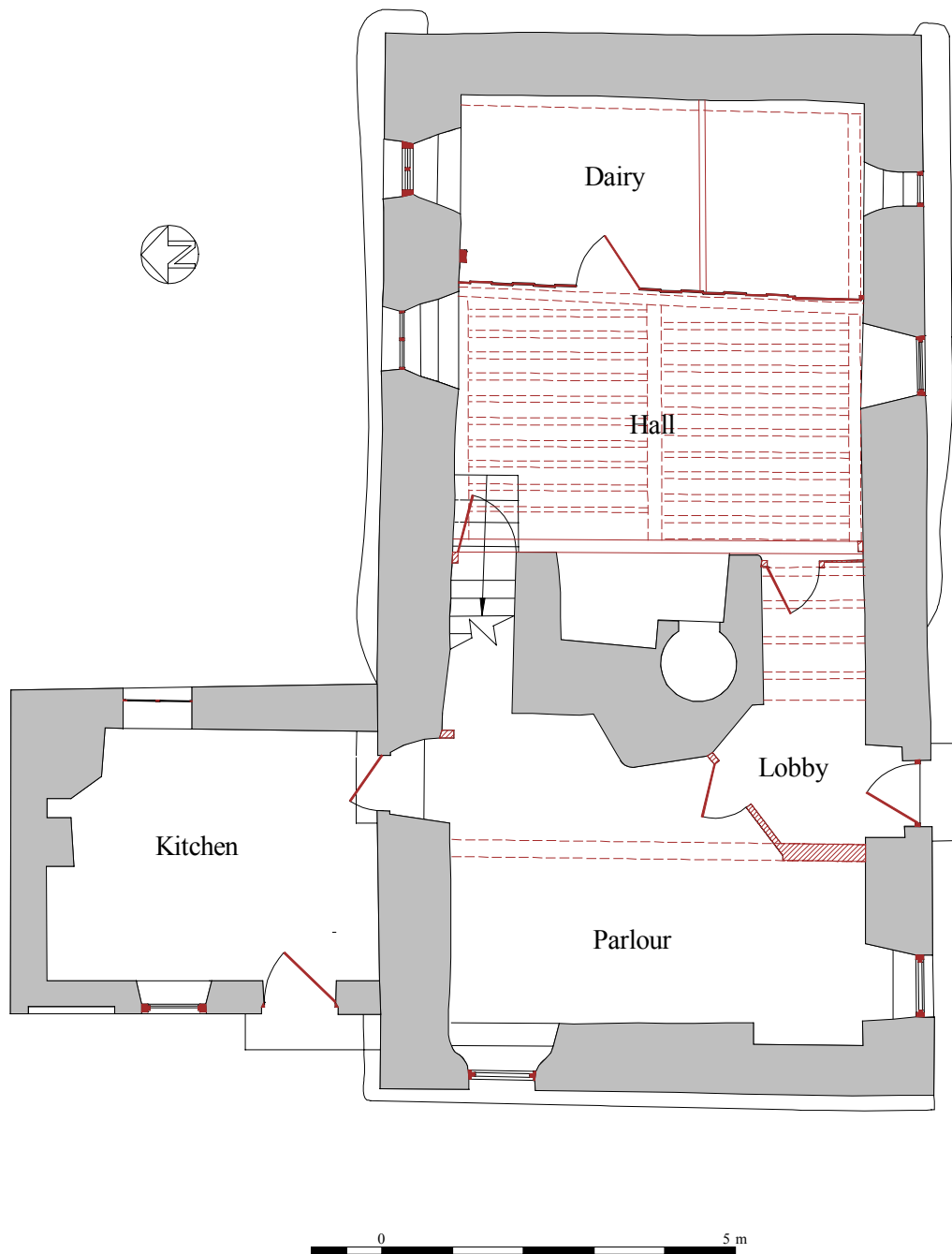


Figure 8: Ground Floor Plan
Scale 1:100

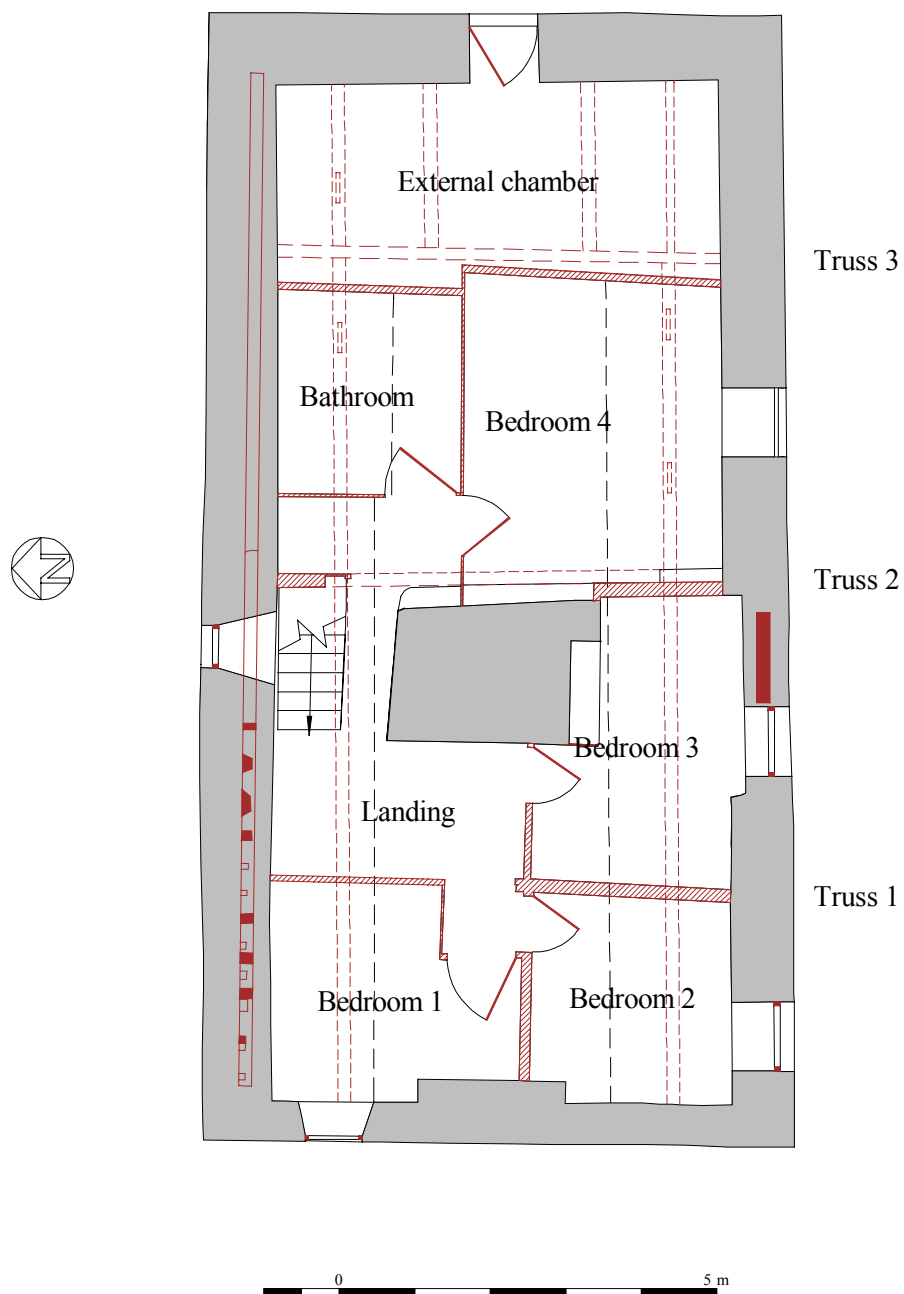


Figure 9: First Floor Plan
Scale 1:100

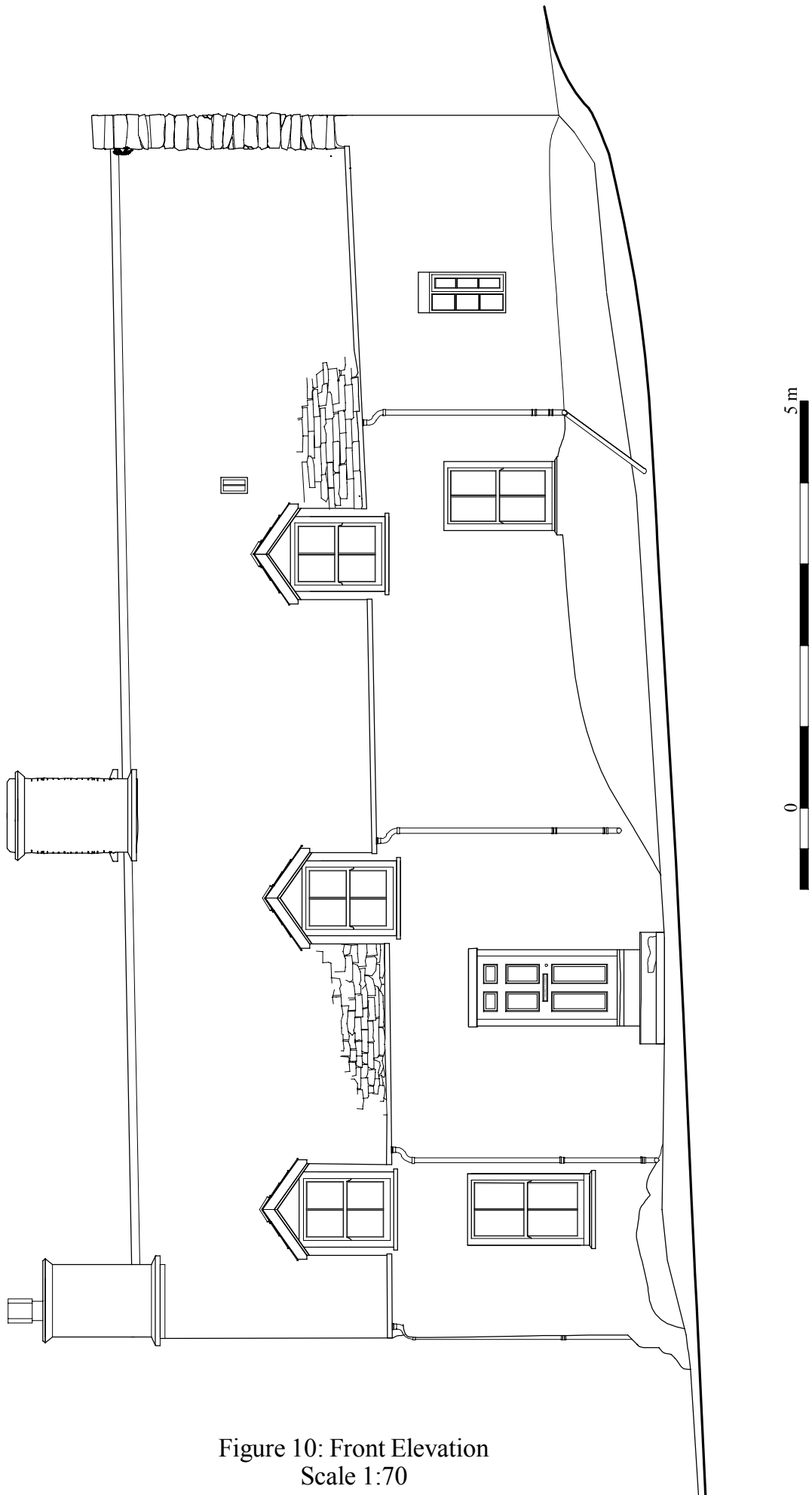


Figure 10: Front Elevation
Scale 1:70

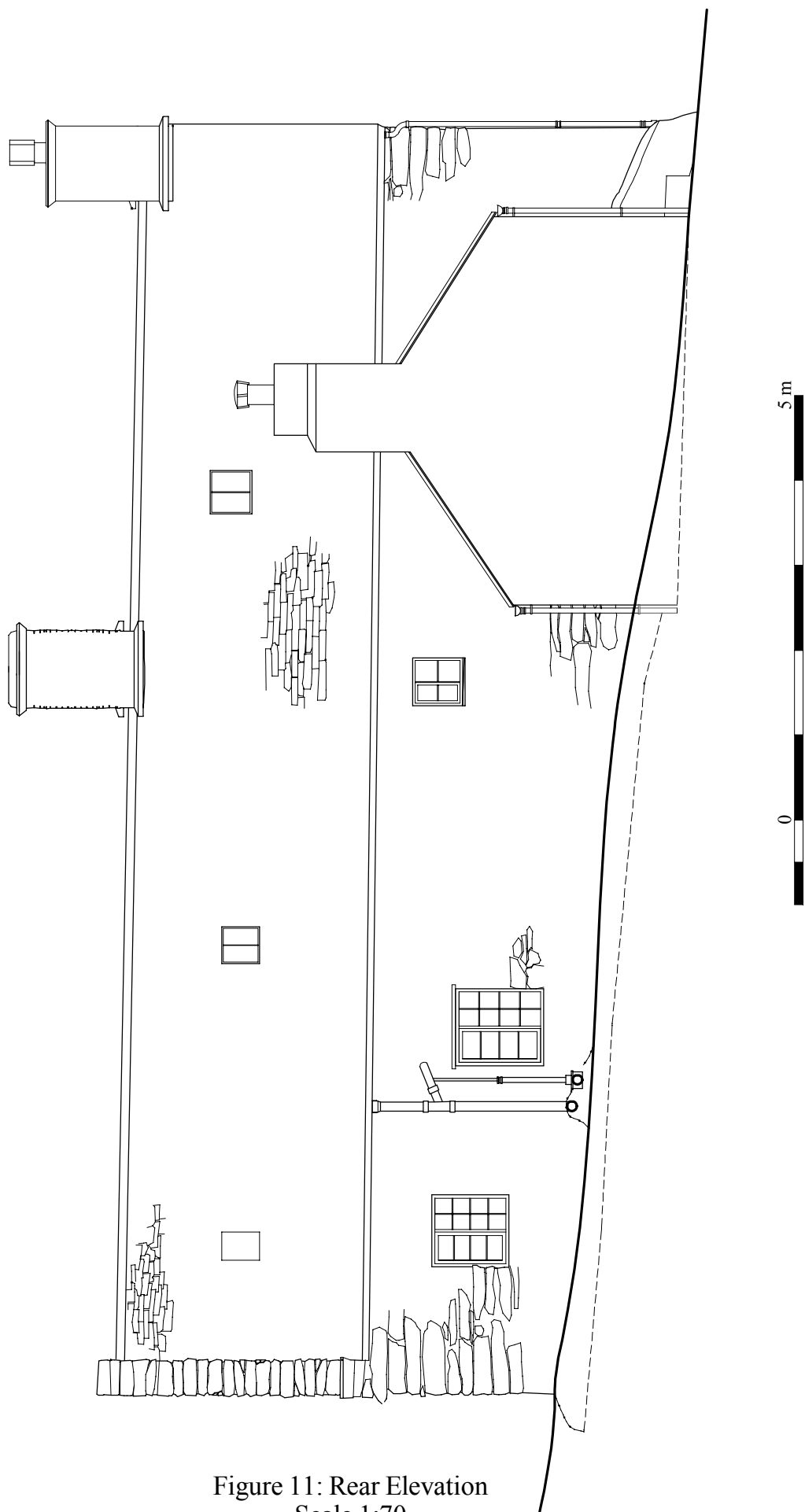


Figure 11: Rear Elevation
Scale 1:70

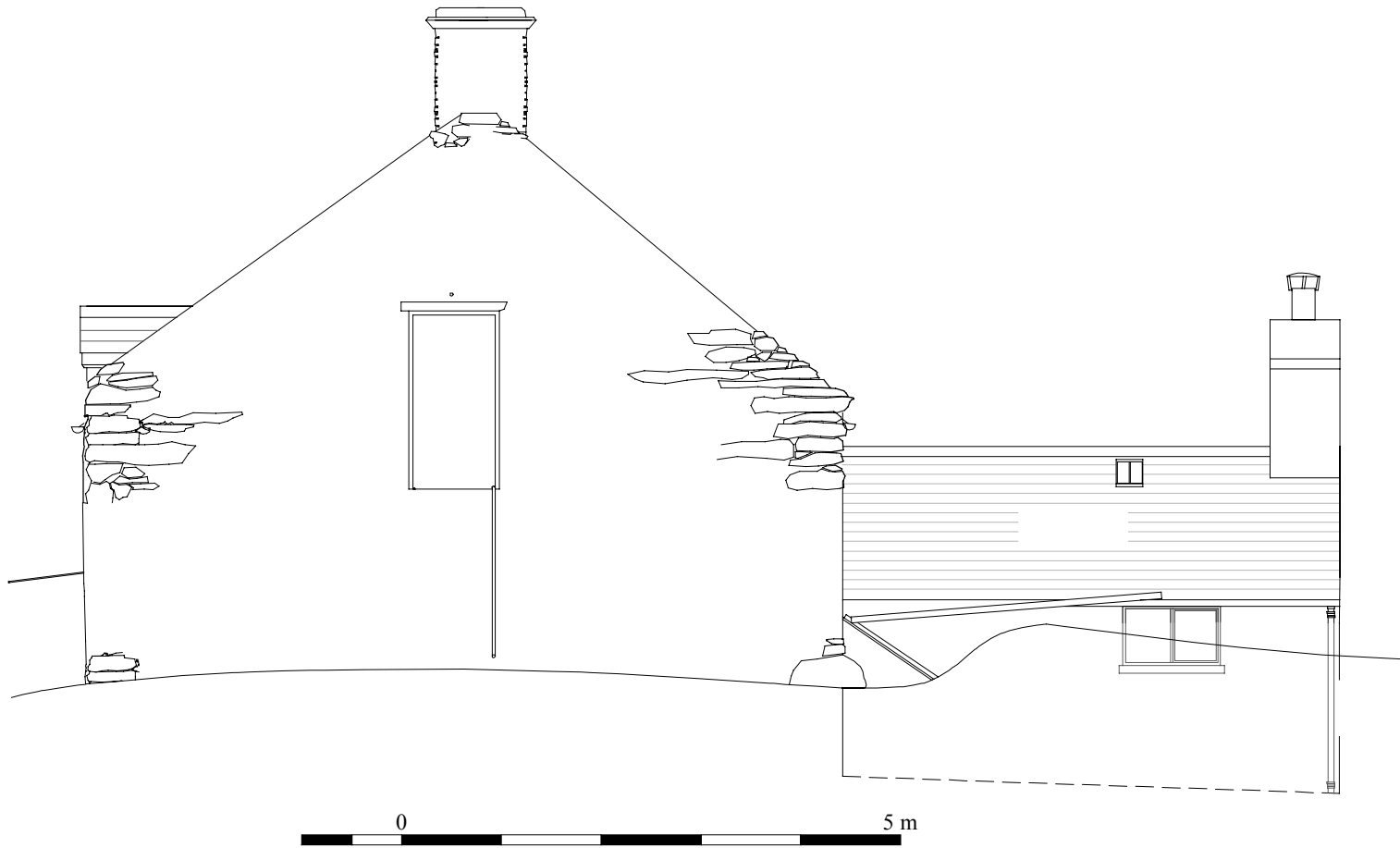


Figure 12: End Elevations
Scale 1:70

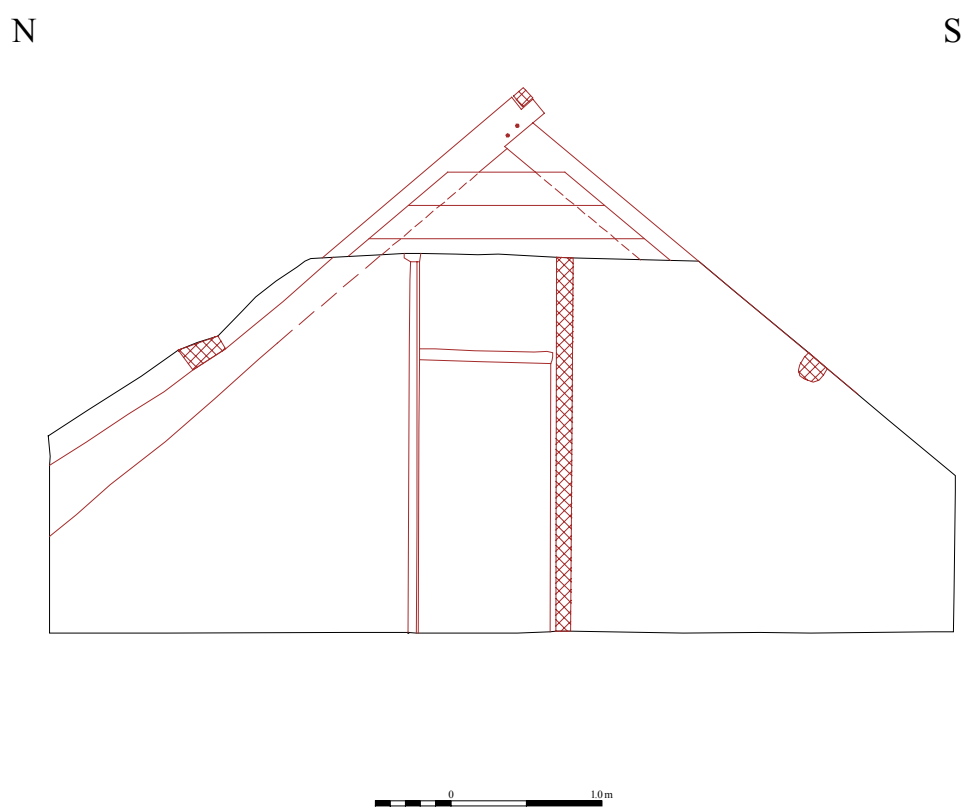


Figure 13: Truss 1
Scale 1:50

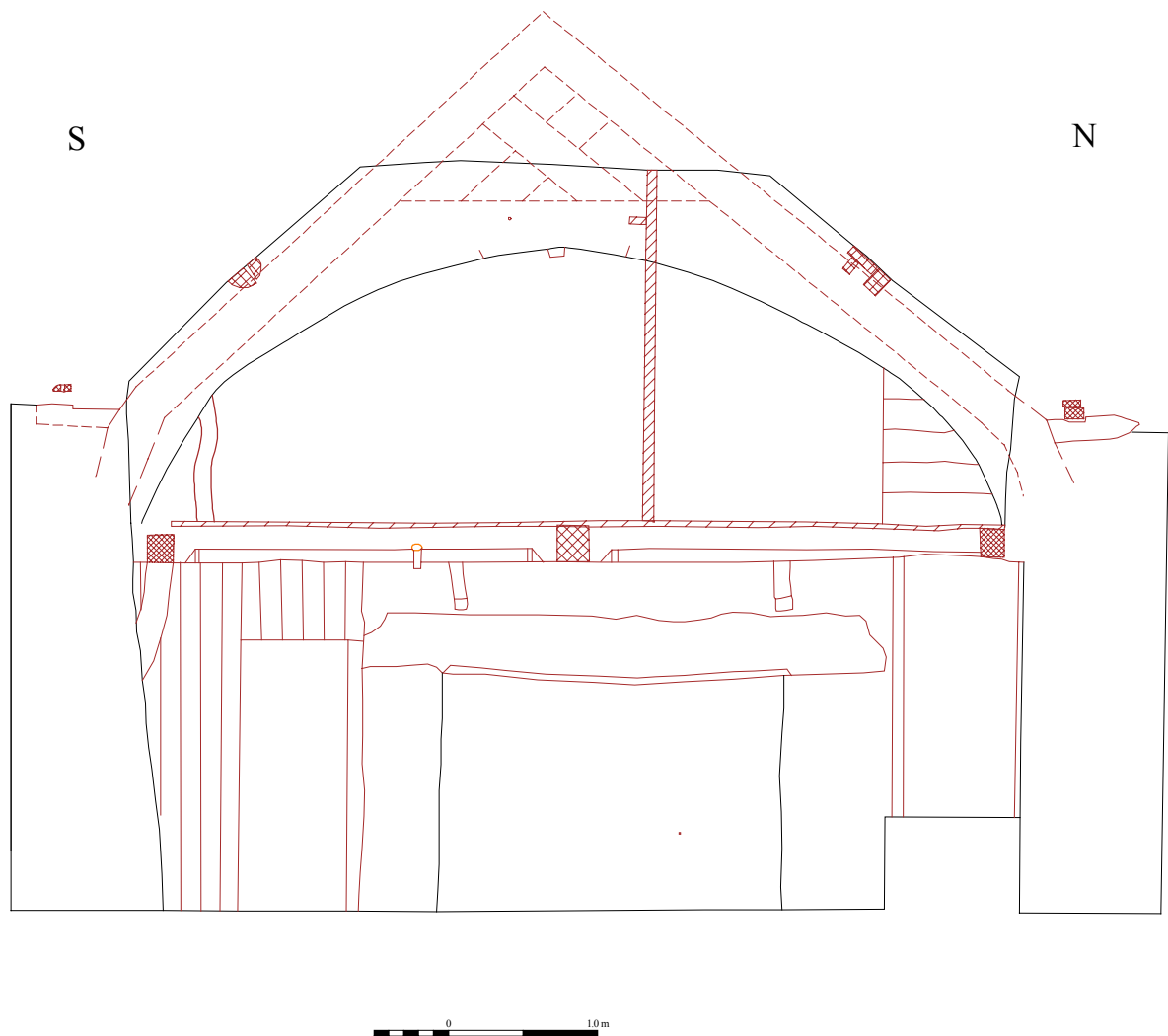


Figure 14: Truss 2
Scale 1:50

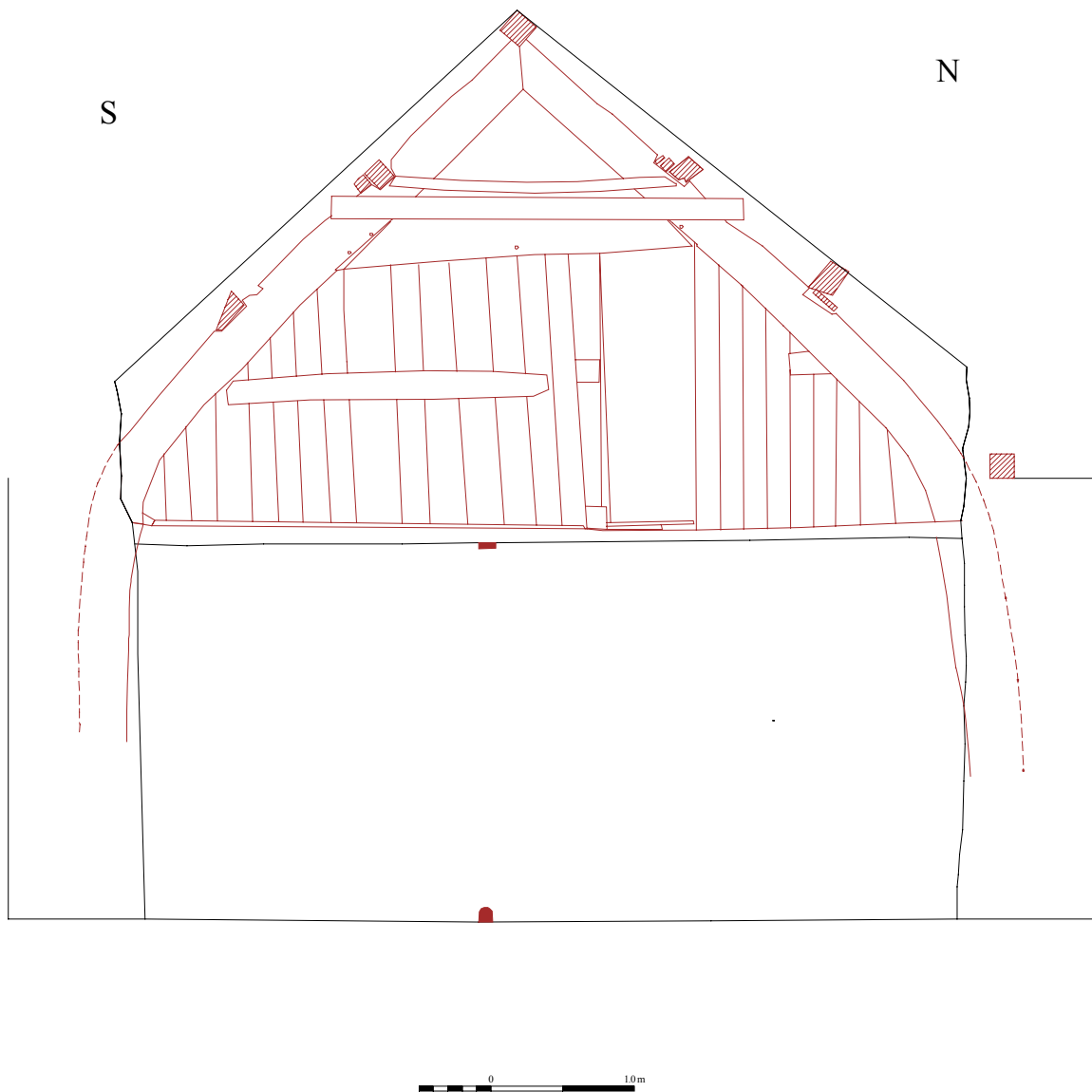
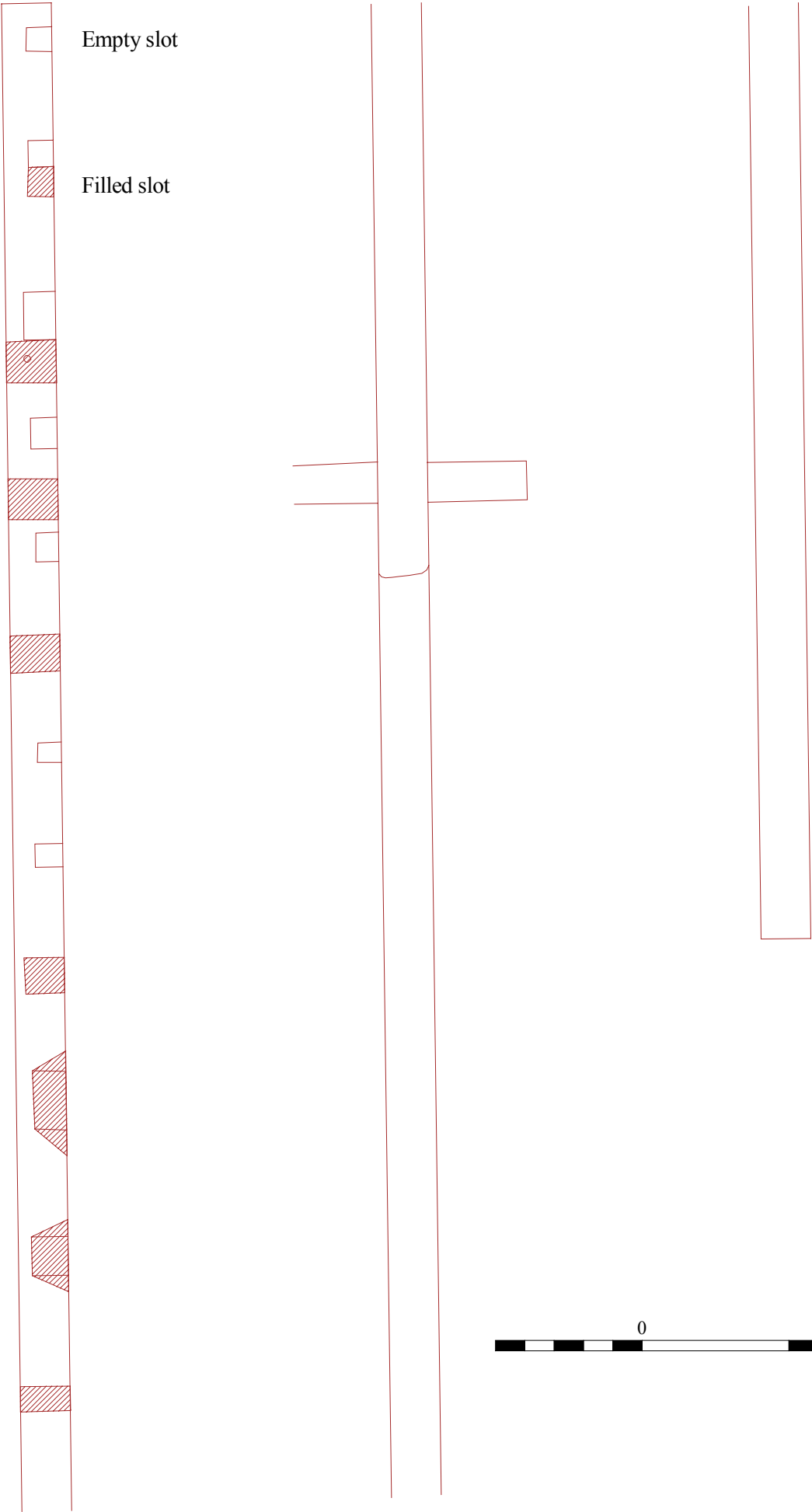


Figure 15: Truss 3
Scale 1:50

W



Empty slot

Filled slot

E

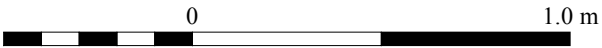


Figure 16: Northern Wall Plate
Scale 1:20

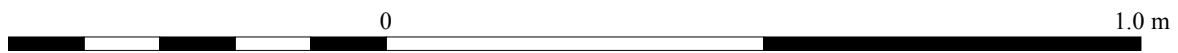
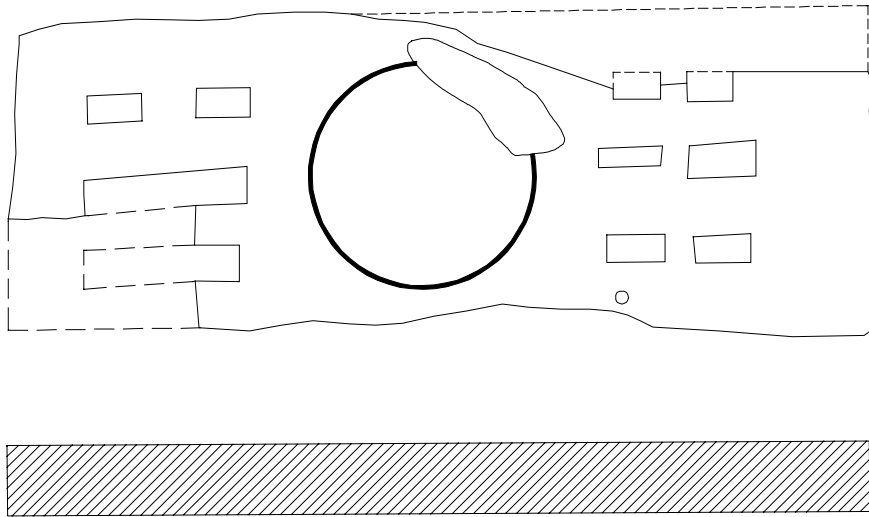
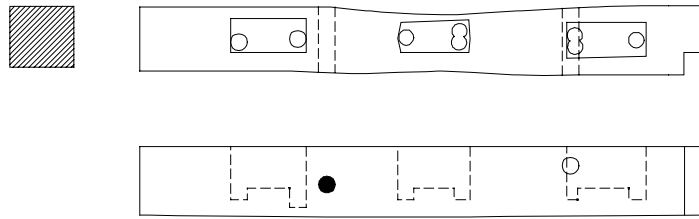


Figure 17: Lintels
Scale 1:10



Plate 1: Carved date on the barn



Plate 2: Carved date on the barn



Plate 3: Carved date on barn



Plate 4: Southern side of the roof



Plate 5: Northern side of the roof



Plate 6: Slate



Plate 7: Slate



Plate 8: Slate



Plate 9: Wooden peg in a slate



Plate 10: The western chimney



Plate 11: The central chimney



Plate 12: Front elevation



Plate 13: Eastern window on the front elevation



Plate 14: Decorative knee on the eastern gable



Plate 15: Eastern gable



Plate 16: Lintel over the door in the eastern gable



Plate 17: Northern elevation



Plate 18: Western elevation



Plate 19: Northern end of the western elevation of the extension



Plate 20: Northern gable of the extension



Plate 21: The lobby



Plate 22: Head rail for the cross passage partition in the lobby



Plate 23: Detail of the slots for the partition.



Plate 24: The position of the cross passage showing the protrusion of the back of the chimney breast



Plate 25: Chamfer and stop on the beam in the parlour



Plate 26: The hall, looking west



Plate 27: The hall, looking east



Plate 28: The oven



Plate 29: Western end of the axial beam in the hall



Plate 30: Bar stops on beams in the north eastern corner of the Hall



Plate 31: Door to the stairs adjacent to the hearth



Plate 32: Northern strut above the hearth bressumer



Plate 33: Southern strut above the hearth bressumer



Plate 34: Inserted strut in the south western corner of the hall



Plate 35: The “dairy” looking north



Plate 36: The landing showing the exposed purlin



Plate 37: Slot for a windbrace below the lower northern purlin



Plate 38: Slot for a windbrace below the lower northern purlin



Plate 39: Peg holes for one of the windbraces in the lower, northern purlin



Plate 40: Shelf on north eastern corner of the chimney breast on the landing



Plate 41: Partition dividing the landing from Bedroom 2



Plate 42: Impression of Truss 1 in Bedroom 1



Plate 43: Window in Bedroom 1



Plate 44: Fitting on the window in Bedroom 1



Plate 45: Latch on window in Bedroom 1



Plate 46: Bedroom 2



Plate 47: Bedroom 3

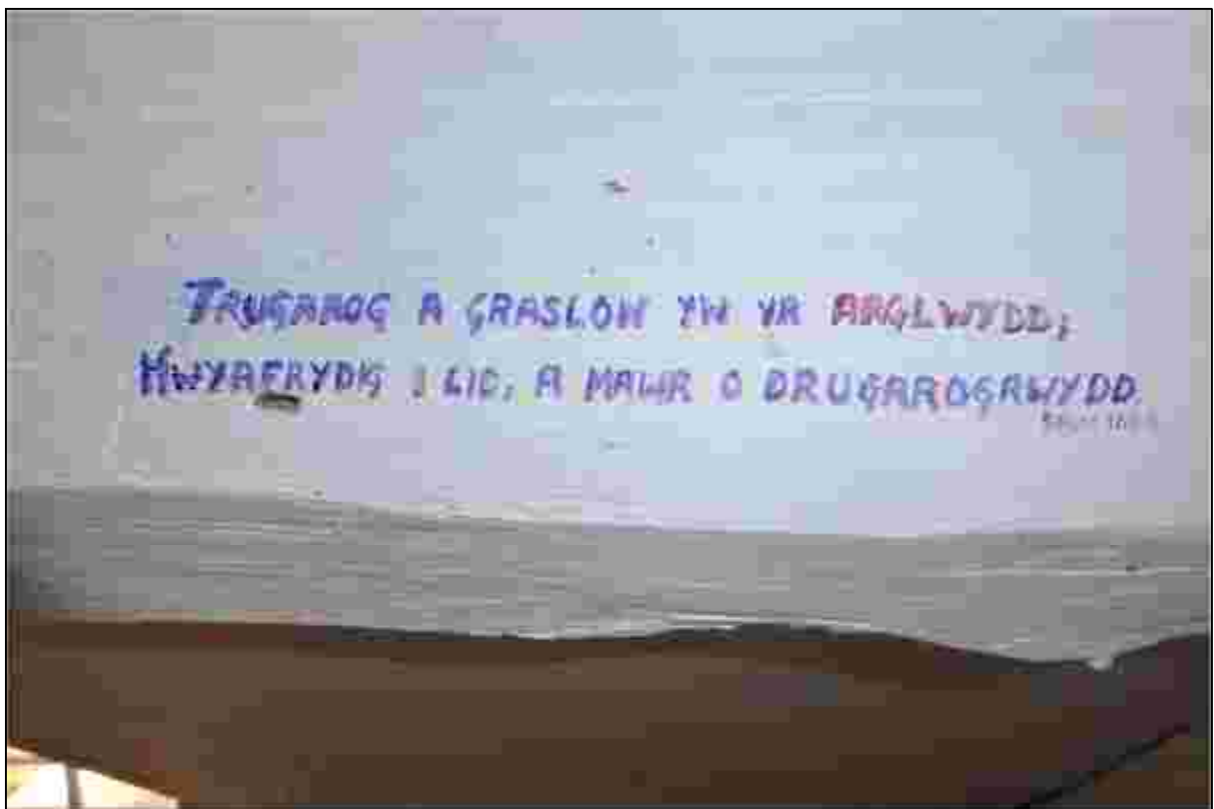


Plate 48: Biblical quote on purlin in Bedroom 3



Plate 49: Fragments of wall paper above the door in Bedroom 3



Plate 50: Truss 2 in Bedroom 4



Plate 51: Extension of Truss 2 across the landing



Plate 52: Profile of the central boss on Truss 2



Plate 53: Central boss on Truss 2 from below



Plate 54: Overlap of the purlin on the southern side of Truss 2



Plate 55: Overlap of the purlin on the northern side of Truss 2



Plate 56: Overlap of the purlin in the eastern side of Bedroom 4



Plate 57: Graffiti on the eastern wall of Bedroom 4



Plate 58: Graffiti on the northern wall of Bedroom 4



Plate 59: Sawn off common rafter for the ceiling light in the Bathroom



Plate 60: Southern principal rafter of Truss 3



Plate 61: Northern principal rafter of Truss 3



Plate 62: Top of Truss 3



Plate 63: Mortice below the collar of Truss 3



Plate 64: Slot in the northern blade of Truss 3



Plate 65: Reused timber used as a lintel in the gable door



Plate 66: The front door after the removal of the render



Plate 67: details of the wooden lintel over the front door.



Plate 68: Crack in the stonework by the front door



Plate 69: Top of Truss 1



Plate 70: Top of Truss 2



Plate 71: Spur between Truss 2 and the northern wall plate



Plate 72: Southern wall plate



Plate 73: Peg hole at the eastern end of the southern wall plate



Plate 74: Northern wall plate



Plate 75: Lap joint between the timbers forming the northern wall plate



Plate 76: Trenches for earlier common rafters



Plate 77: Deposit of moss slates over the northern wall plate

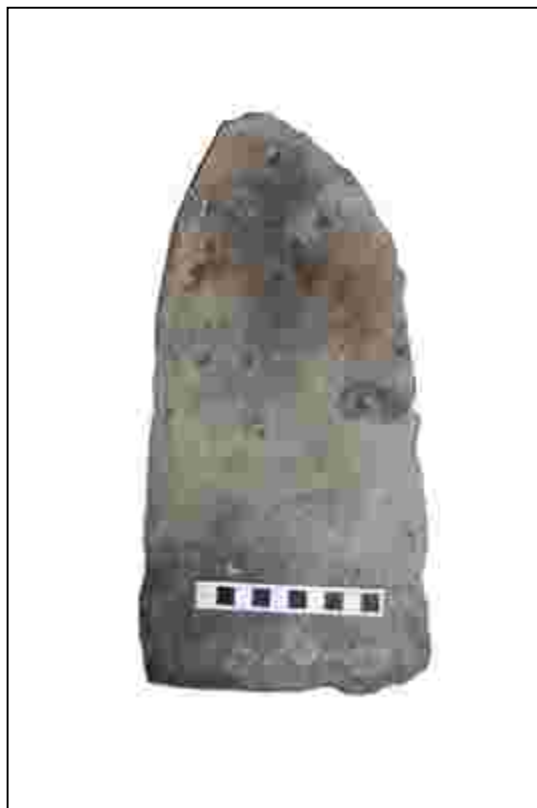


Plate 78: Moss slate



Plate 79: Mortice in the lower northern purlin



Plate 80: Mortice in the lower southern purlin



Plate 81: Lower south eastern purlin



Plate 82: Structure of the dormers



Plate 83: Paper label on the frame of the sash window in the western dormer



Plate 84: Chipping on the render of the western gable showing the slates below



Plate 85: Window rail



Plate 86: Detail of one of the mortice holes



Plate 87: Lintel to eastern gable door.



Plate 88: Lintel (top face)

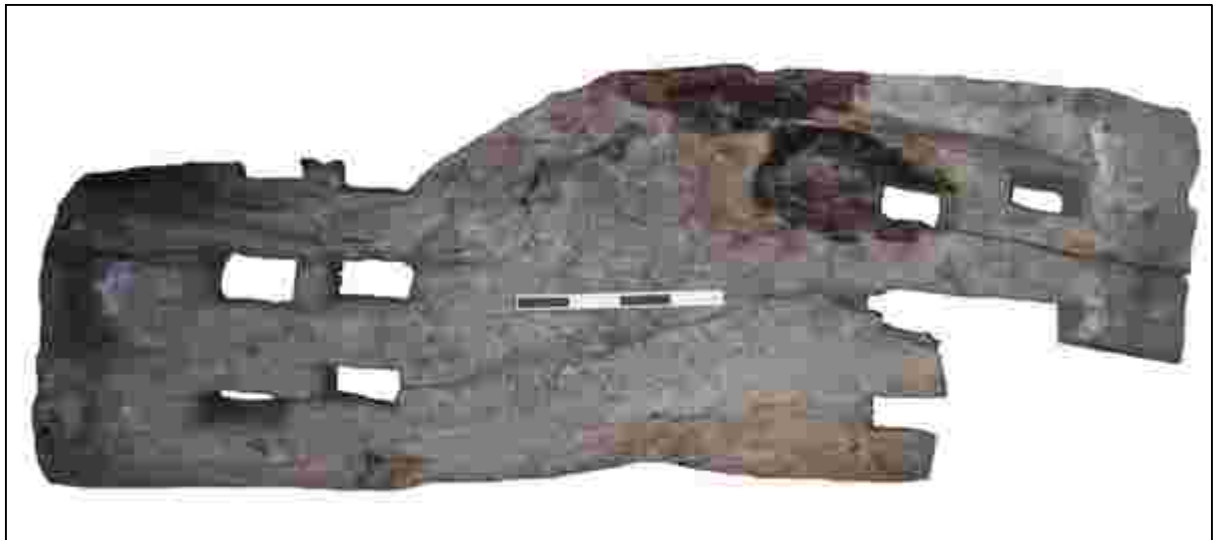


Plate 89: Lintel (lower surface)



Plate 90: The norther blade of Truss 3 extending into the wall



Plate 91: Southern blade of Truss 3 extending into the wall



Plate 92: Detail of the earth bonding in the wall near the southern blade of Truss 3



Plate 93: Small quarry, possible source of the moss slates