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Barn Outbuilding at Ty Mawr, Pontfadog, Llangollen, Wrexham LL20 7AS (2021/0654)

February 2023 V 1.0



Historic Building Record Level 2

Project Code: A0402.1

Report no. 0381

Event PRN: 213820





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Barn Outbuilding at Ty Mawr, Pontfadog, Llangollen, Wrexham LL20 7AS.

February 2023 v1.0

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1.0 INTRODUCTION

Comisiynwyd Aeon Archaeology gan Mari Jones, y Cleient o hyn ymlaen, i gynnal cofnod adeiladu hanesyddol lefel 2 o adeilad fferm (Parlwr Godro) yn Nhŷ Mawr, Pontfadog, Llangollen, Wrecsam LL20 7AS (yn canolbwyntio ar NGR SJ 23307 38254) ymlaen llaw o newid i ddau (2) lety gwyliau ar osod.

Cafwyd caniatâd cynllunio llawn (cyf: 2021/0654) gan y Cleient gan Gyngor Bwrdeistref Sirol Wrecsam, 'y Cyngor' o hyn ymlaen, ar 25 Tachwedd 2022 gyda'r amod canlynol yn ymwneud ag archeoleg yn cael ei gymhwyso:

Aeon Archaeology was commissioned by Mari Jones, hereafter the Client, to carry out a level 2 historic building record of a barn outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham LL20 7AS (centred on **NGR SJ 23307 38254**) in advance of conversion to 2 no. holiday let accommodation.

Full planning permission (**ref: 2021/0654**) was secured by the Client from Wrexham County Borough Council, hereafter 'the Council', on the 25th November 2022 with the following condition concerning archaeology being applied:

Condition 4

No part of the development shall commence until a programme of building recording and analysis, equivalent to an Historic England Level 2 building survey, has been secured and implemented in accordance with the brief attached to this decision, and a written scheme of investigation shall to be submitted to, and approved in writing by, the Local Planning Authority. The survey shall be completed by a professional archaeological contractor, and the programme of building analysis and recording shall meet the standards laid down by the Chartered Institute for Archaeologists in their Standard and Guidance for the archaeological investigation and recording of standing buildings or structures.

Reason: To secure adequate analytical record of the building prior to alteration, conversion or demolition in accordance with Policy GDPI of the Wrexham Unitary Development Plan.

This design and all subsequent mitigation will conform to the guidelines specified in Historic England's 'Understanding Historic Buildings: a guide to good recording practice' (2016) & Standard and Guidance for the Archaeological Investigation and Recording of Standing Buildings or Structures (Chartered Institute for Archaeologists, 2020).

The DMA at CPAT made the following consultee comments regarding the proposed development:

The proposed conversion will impact a late 18th - 19th c. traditional stone and brick barn recorded as HER PRN 148630. There is currently no detailed record of this building which retains features of architectural interest relating to the agricultural history of the farm. As the modernisation of the building for domestic use will inevitably result in some loss of the original function, layout, fabric, fixtures and fittings of this building an appropriate level of archaeological recording is required.

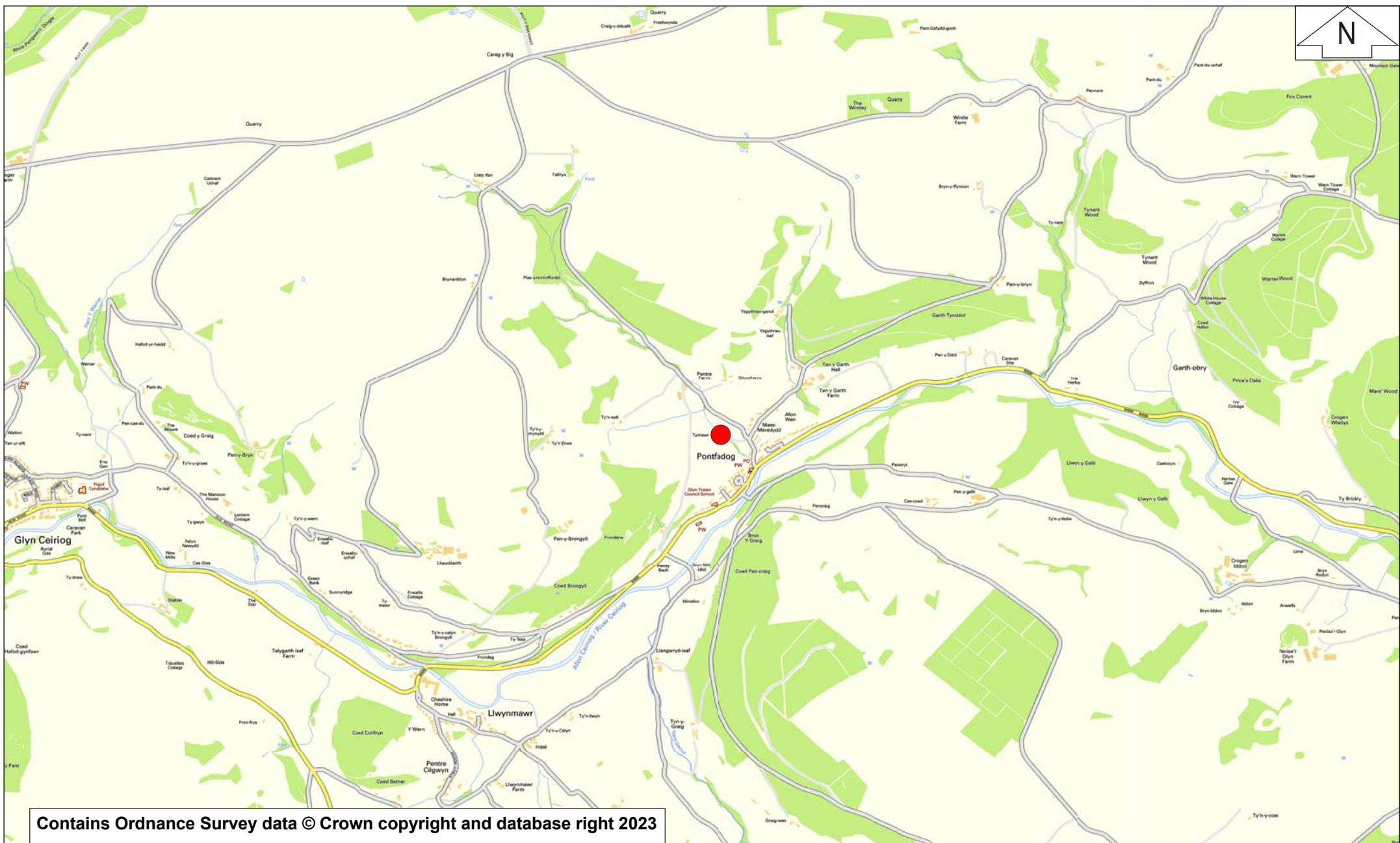


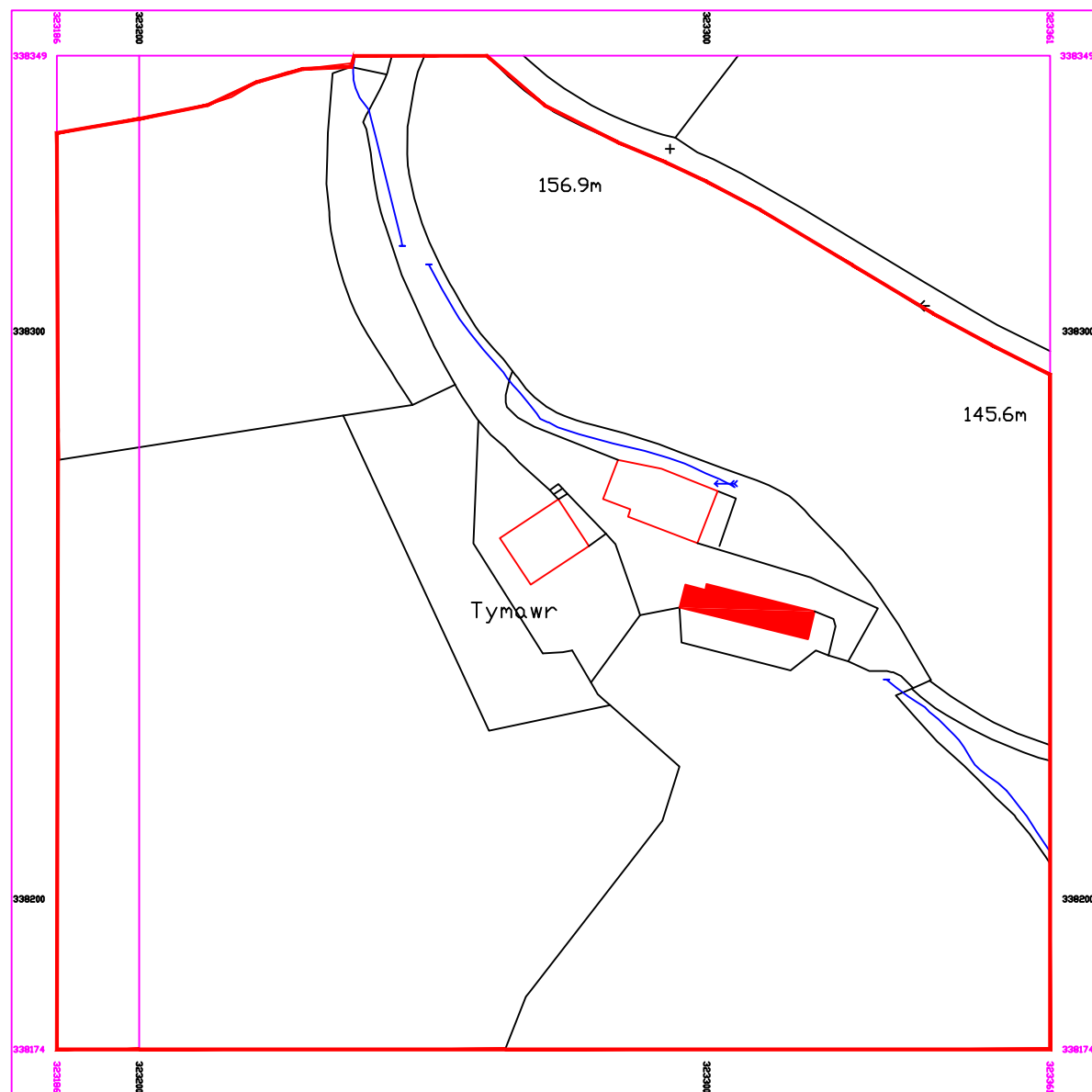
Figure 01: Location of Ty Mawr, Pontfardog, Llangollen, Wrexham LL20 7AS.
Scale 1:20,000 at A4.



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Figure 02: Location of Ty Mawr, Pontfadog, Llangollen, Wrexham LL20 7AS.
Scale 1:5,000 at A4.



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Figure 03: Location of Ty Mawr, Pontfadog, Llangollen, Wrexham LL20 7AS.
Scale 1:1,250 at A4.

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2.0 POLICY CONTEXT

At an international level there are two principal agreements concerning the protection of the cultural heritage and archaeological resource – the UNESCO *Convention Concerning the Protection of World Cultural and Natural Heritage*¹ and the *European Convention on the Protection of the Archaeological Heritage*², commonly known as the Valetta Convention. The latter was agreed by the Member States of the Council of Europe in 1992, and also became law in 1992. It has been ratified by the UK, and responsibility for its implementation rests with Department for Culture Media and Sport.

The management and protection of the historic environment in Wales is set out within the following legislation:

- The Planning (Listed Buildings and Conservation Areas) Act 1990 (As amended)
- The Historic Environment (Wales) Act 2016
- The Town and Country Planning Act 1990
- The Ancient Monuments and Archaeological Areas Act 1979
- The Town and Country Planning (General Permitted Development Order) 1995 (As amended)

The Historic Environment (Wales) Act is the most recent legislation for the management of the Historic Environment and amends two pieces of UK legislation — the Ancient Monuments and Archaeological Areas Act 1979 and the Planning (Listed Buildings and Conservation Areas) Act 1990. The new Act has three main aims:

- to give more effective protection to listed buildings and scheduled monuments;
- to improve the sustainable management of the historic environment; and
- to introduce greater transparency and accountability into decisions taken on the historic environment.

With respect to the cultural heritage of the built environment the *Planning (Conservation Areas and Listed Buildings) Act*³ 1990 applies. The Act sets out the legislative framework within which works and development affecting listed buildings and conservation areas must be considered. This states that:-

“In considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses” (s66(1))

Other known sites of cultural heritage/archaeological significance can be entered onto county-based Historic Environment Records under the *Town and Country Planning 1995*.

Planning Policy Wales sets out the land use planning policies of the Welsh Government. Chapter 6 covers the historic environment and emphasises that the positive management of change in the historic environment is based on a full understanding of the nature and significance of historic assets and the recognition of the benefits that they can deliver in a vibrant culture and economy.

¹ UNESCO, 1972, *Convention Concerning the Protection of the World Cultural and Natural Heritage*

² Council of Europe, 1992, *European Convention on the Protection of the Archaeological Heritage*

³ Great Britain. *Planning (Conservation Areas and Listed Buildings) Act*. Elizabeth II.(1990), London: The Stationery Office

Various principles and policies related to cultural heritage and archaeology are set out in the Planning Policy Wales which guide local planning authorities with respect to the wider historic environment.

The following paragraphs from Planning Policy Wales are particularly relevant and are quoted in full:

Paragraph 6.5.5 concerns planning applications:

The conservation of archaeological remains is a material consideration in determining a planning application, whether those remains are a scheduled monument or not. Where nationally important archaeological remains, whether scheduled or not, and their settings are likely to be affected by proposed development, there should be a presumption in favour of their physical protection in situ. It will only be in exceptional circumstances that planning permission will be granted if development would result in an adverse impact on a scheduled monument (or an archaeological site shown to be of national importance) or has a significantly damaging effect upon its setting. In cases involving less significant archaeological remains, local planning authorities will need to weigh the relative importance of the archaeological remains and their settings against other factors, including the need for the proposed development.

Planning Policy Wales is supplemented by a series of Technical Advice Notes (TAN). Technical Advice Note 24: The Historic Environment contains detailed guidance on how the planning system considers the historic environment during development plan, preparation and decision making on planning and listed building consent applications. TAN 24 replaces the following Welsh Office Circulars:

- 60/96 Planning and the Historic Environment: Archaeology
- 61/96 Planning and the Historic Environment: Historic Buildings and Conservation Areas
- 1/98 Planning and the Historic Environment: Directions by the Secretary of State for Wales

3.0 SPECIFICATION AND PROJECT DESIGN

The requirements were for an archaeological building record of the outbuilding at Tŷ Mawr, Pontfadog prior to alteration, however should observations or desk-based research have suggested the potential for significant features to be encountered during the renovation and site clearance/ground work, the archaeological contractor should make arrangements to undertake any appropriate supplementary recording work during the development. The DCA at CPAT had requested that this building record should be roughly commensurate with the Historic England's '*Understanding Historic Buildings: a guide to good recording practice*' (2016) **Level 2**.

Both the exterior and the interior were be viewed, described and photographed. This record will present conclusions regarding the building's development and use, but will not discuss in detail the evidence on which these conclusions are based.

The detailed photographic record will consist of Historic England's '*Understanding Historic Buildings: a guide to good recording practice*' (2006) elements:

written account: 1-3, 6

drawings: sometimes 1, sometimes one or more of 2-7

photographs: 1,2,4

4.0 METHOD STATEMENT

4.1 Level 2 Record

4.1.1 Written Account

The written account will include:

- The building's precise location as a National Grid Reference and address form;
- A note of any statutory designation and non-statutory designation;
- The date of the record, name(s) of the recorder(s) and archive location;
- A summary of the building's form, function, date, and sequence of development.

4.1.2 Photographs

The photographic record will include:

- A general view or views of the building;
- The building's external appearance. Typically a series of oblique views will show all external elevations of the building and give an impression of its size and shape;
- The overall appearance of the principal rooms and circulation areas.

A Digital SLR (Canon 600D) set to maximum resolution will be used throughout.

4.1.3 Drawings

The drawn record will include:

- A site plan showing the location and orientation of photographs. This will label all room spaces and indicate any architectural features of note.

4.2 Processing data, illustration, report and archiving

Following completion of the record as outlined above, a report will be produced incorporating the following:

- A copy of the design brief and agreed specification
- A site location plan
- A plan illustrating the location and direction of photographs
- Basic background and relevant historical, descriptive or analytical detail
- A full bibliography of sources consulted
- Illustrations, including plans and photographs, will be incorporated within the report.

5.0 DISSEMINATION AND ARCHIVING

A full archive including plans, photographs, written material and any other material resulting from the project will be prepared. All plans, photographs and descriptions will be labelled, and cross-referenced, and lodged with the RCAHMW within six months of the completion of the project.

Upon completion of the project copies of the report will be sent to the Client, regional HER and DCA at CPAT.

The project report and archive will adhere to the Welsh Trusts' and Cadw's *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (2018) including the translation of a non-technical summary into the medium of Welsh.

6.0 DIGITAL DATA MANAGEMENT PLAN

6.1 Type of study

Level 2 historic building record of a barn outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham LL20 7AS (centred on **NGR SJ 23307 38254**) in advance of conversion to 2 no. holiday let accommodation.

6.2 Types of data

Photographs, digital text, annotated plans.

6.3 Format and scale of the data

Photographs taken in *RAW* format and later converted to *TIF* format for long term archiving and *JPEG* format for use in the digital report, converted using *Adobe Photoshop*. All photographs renamed using *AF5* freeware with the prefix (*project code frame number*) and a photographic metadata created using Microsoft Excel (.xlsx) or Access (.accdb).

Written descriptions taken in digital .txt format and sent via email to ensure a digital backup copy at time of record.

Annotated plans scanned as .PDF files.

- 146 digital photographs (TIF file)
- 1 photographic metadata file (.accdb file)
- 1 annotated floor plan (scanned as a PDF file)
- External and internal building descriptions (.txt file)

6.4 Methodologies for data collection / generation

Digital data will be collected / generated in line with recommendations made in the Chartered Institute for Archaeologists (CIfA) *Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives* (2014. Rev 2020). Sections 3.3.1 and 3.3.3 are relevant:

3.3.1 Project specifications, research designs or similar documents should include a project specific Selection Strategy and a Data Management Plan.

3.3.3 Project designs or schedules of works etc should outline the methodology used in recording all information, in order to demonstrate that all aspects of archive creation will ensure consistency; for instance in terminologies and the application of codes in digital data sets, highlighting relevant data standards where appropriate

6.5 Data quality and standards

Consistency and quality of data collection / generation shall be controlled and documented through the use of standardised procedure as outlined in the WSI. This will include the use of standardised data capture file formats, digital proformas, data entry validation, peer review, and use of controlled vocabularies.

6.6 Managing, storing and curating data.

All digital data will be organised into Aeon Archaeology proforma project file systems and backed up to the cloud using *Digital River's Crashplan* with additional copies made to external physical hard drive.

6.7 Metadata standards and data documentation

Digital metadata created using Microsoft Excel (.xlsx) or Access (.accdb) of all photographic plates.

Paper metadata created from Aeon Archaeology proformas for contexts, artefacts, environmental samples, watching brief day sheets, trench sheets, and basic record sheets and then scanned to create digital .PDF copies.

6.8 Data preservation strategy and standards

Long term data storage will be through the submission of digital (.PDF) reports to the regional Historic Environment Record (HER); submission of digital (.PDF) reports and a project completion form to the Oasis database; submission of the scanned (.PDF) archive, photographic plates (.TIF), and metadata (.xlsx) (.accdb) to the Archaeology Data Service (ADS); and retention of copies of all digital files at Aeon Archaeology on physical external hard drive and uploaded to the cloud.

6.9 Suitability for sharing

All digital data will be placed within the public realm (through the channels in 6.8) except for where project confidentiality restricts the sharing of data. All data sets will be selected / discriminated by the Senior Archaeologist at Aeon Archaeology and written permission will be sought from all project specific Clients prior to the sharing of data.

6.10 Discovery by potential users of the research data

Potential users of the generated digital data (outside of the organisation) will be able to source the data and identify whether it could be suitable for their research purposes through access granted via the ADS and Oasis websites. Requests can also be made for data through the regional HER's and directly to Aeon Archaeology (info@aeonarchaeology.co.uk).

6.11 Governance of access

The decision to supply research data to potential new users will be via the associated website request (ADS, Oasis, HER) or via the Senior Archaeologist when made directly to Aeon Archaeology.

6.12 The study team's exclusive use of the data

Aeon Archaeology's requirement is for timely data sharing, with the understanding that a limited, defined period of exclusive use of data for primary research is reasonable according to the nature and value of the data, and that this restriction on sharing should be based on simple, clear principles. This time period is expected to be six months from completion of the project however Aeon Archaeology reserves the right to extend this period without notice if primary data research dictates.

6.13 Restrictions or delays to sharing, with planned actions to limit such restrictions

Restriction to data sharing may be due to participant confidentiality or consent agreements. Strategies to limit restrictions will include data being anonymised or aggregated; gaining participant consent for data sharing; and gaining copyright permissions. For prospective studies, consent procedures will include provision for data sharing to maximise the value of the data for wider research use, while providing adequate safeguards for participants.

6.14 Regulation of responsibilities of users

External users of the data will be bound by data sharing agreements provided by the relevant organisation or directly through Aeon Archaeology.

6.15 Responsibilities

Responsibility for study-wide data management, metadata creation, data security and quality assurance of data will be through the Senior Archaeologist (Richard Cooke BA MA MCIfA) at Aeon Archaeology when concerning data generation and early/mid-term storage. Upon deposition with digital depositories the study-wide data management, metadata creation, data security and quality assurance of data will be the responsibility of the specific organisations' themselves.

6.16 Organisational policies on data sharing and data security

The following Aeon Archaeology policies are relevant:

- Aeon Archaeology Archive Deposition Policy 2019
- Aeon Archaeology Quality Assurance Policy 2019
- Aeon Archaeology Conflict of Interest Policy 2019
- Aeon Archaeology Outreach Policy 2019
- Aeon Archaeology Digital Management Plan 2020

7.0 ARCHAEOLOGICAL AND HISTORICAL RECORD

Pontfadog translates into English as the "Bridge of Madoc", taking its name from a bridge over the River Ceiriog. The parish of Pontfadog was formed on 15 April 1848, separating from the ancient parish of Llangollen. It comprised the whole of *Glyn Traean* - i.e. the townships of *Cilcochwyn*, *Crogen Iddon*, *Crogen Wladys*, *Erwallo*, *Hafodgynfor*, *Nantygwryd*, *Pennant* and *Talygarth*; together with the township of *Cysylltau* from Llangollen Traean. However, *Cysylltau* returned to Llangollen in 1870. The church of St. John the Baptist was consecrated on Thursday, 7th October 1847.

The DMA at CPAT made the following consultee comments regarding the proposed development at Tŷ Mawr, Pontfadog:

The proposed conversion will impact a late 18th - 19th c. traditional stone and brick barn recorded as HER PRN 148630. There is currently no detailed record of this building which retains features of architectural interest relating to the agricultural history of the farm. As the modernisation of the building for domestic use will inevitably result in some loss of the original function, layout, fabric, fixtures and fittings of this building an appropriate level of archaeological recording is required.

Tŷ Mawr, and its associated outbuildings lie in a rural setting in the community of Pontfadog, Llangollen, Wrexham County. It lies approximately 3.14 km east/northeast of Glyn Ceiriog and 5.75km west of Chirk within the Ceiriog Valley. It is positioned on a hillside above the B4500 and is accessed from *Llety Ifan Road* which runs between the village of Pontfadog and up onto the Berwyn ridge between the peaks of *Carreg-y-Big* and *Craig-y-dduallt*.

The 1839 tithe *Map of the Township of Cilcochwyn* and the associated apportionment records that the plot number allocated to the farmstead is 703; and is attributed to the farm named: *Tŷ Mawr*, and this is more specifically described as a *House, buildings fold*. The landowner at this time was *Thomas Hughes* who was also the occupier at this time. The farm did not appear to be part of the Myddleton Estate based at Chirk Castle with most of the surrounding farms belonging to *Biddulph Charlotte Myddelton*.

The outbuildings appear to have survived intact and without major changes since they were constructed, presumably prior to 1839 due to their presence on the tithe map. There was an extension to the west of the building as evidenced by an examination of the fabric – and this likely took place before 1880 (1st edition 6" ordnance survey map). The presence of the farm on the tithe map in 1839 suggests a likely 18th century date of construction. The outbuilding is located to the southeast of Tŷ Mawr farmhouse and consists of:

- 1. Ground Floor; Milking Parlors (east & west) - *Parlwr Godro (dwyrain & gorllewin)* with ground floor storage extension (*Stôr*)**
- 2. First Floor Hayloft with Dairy Storage – *Taflod y Gwair gyda'r Stôr Llaethdy***

8.0 BUILDING DESCRIPTIONS

Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham **The Milking Parlour with Hayloft and Stores - Parlwr Godro, Taflodau y Gwair a** **Stôriau Llaethdy** *(see Figure 04-06; Plates 01-46)*

External Descriptions – Ground Floor

This is a rectangular, building orientated north-northwest to south-southeast, and which measures 21.06m in length by 5.90m in width. The roof of the building is of blue/grey Welsh slate with cement ridge tiles, the ridge of the roof is warped by the beam beneath. The walls are of stone rubble bonded by lime mortar, however, in places there are elements of red-brick detailing (embrasures and some windows) and also red-brick construction is present in the eaves where it appears the roof pitch has been heightened.

The building has apparently been constructed in two phases; the initial phase being the eastern 2/3 of the building, followed by a later western extension. In addition, on the northern elevation there appears to have been windows inserted into the original phase elevations as well as a possible infill for a former cart door entrance (centre of the northern elevation – weather boarded).

The western elevation of the building represents the western gable for the building. This elevation is comprised of flat angular stone rubble bonded by lime mortar. There is a set of red-brick alighting steps which have been rendered in concrete and which provide access to the first-floor storage. Pinned against the external face of the steps is a metal handrailing. The doorway, at first floor level is a wooden board door which has been painted black and is set within black painted wooden frames. Immediately, adjacent to the elevation, there is a telegraph pole.

When viewed from the north, and at the right-hand end of the northern elevation, the front profile of the alighting steps can be seen at the far-right hand side. To the left of this is an extension to the primary building. This has a single doorway which permits access to a ground floor storage room. On the right-hand side, the wall has been constructed in a sympathetic style to the primary building, with stone rubble bonded by lime mortar. Whereas, to the left of the door the wall is of modern breeze-block, bonded by cement. Between these two elements is the large doorway opening which has black painted frames, but now has no door.

Within the concrete block portion of the wall, there is a six-pane window in white painted metal frames. Running along the top of the breeze-block wall and above the back door frame, there is a horizontal timber beam, above which the eaves appear to have been raised with red-brick infill and a horizontal timber wall plate is visible just below the pitch of the slate roof.

To the left of this, the building appears to be largely homogenous in construction, with sub angular and sub rounded rubble, forming the walls – and these have been bonded with lime mortar. There are punctuated in places by partially dressed stone, around the doors and red-brick detailing around embrasure ventilation slits. The wall utilises some squared/dressed

stone, which is applied in rough courses – this can sometimes be suggestive of late 18th century to early 19th century construction (Smith 1988).

This primary phase of construction sits proud from the extension by approximately 0.50 m. The corner of the building here has been repaired with red and yellow bricks. There are three vertical embrasure openings at the right-hand side of the elevation. It appears as if there might have been four (mirroring those seen on the southern elevation), but a modern window insertion has removed the fourth embrasure. This is an eight-pane window with the upper four glass panes, forming an opening light, they are set within a white painted metal frame with a concrete lintel above.

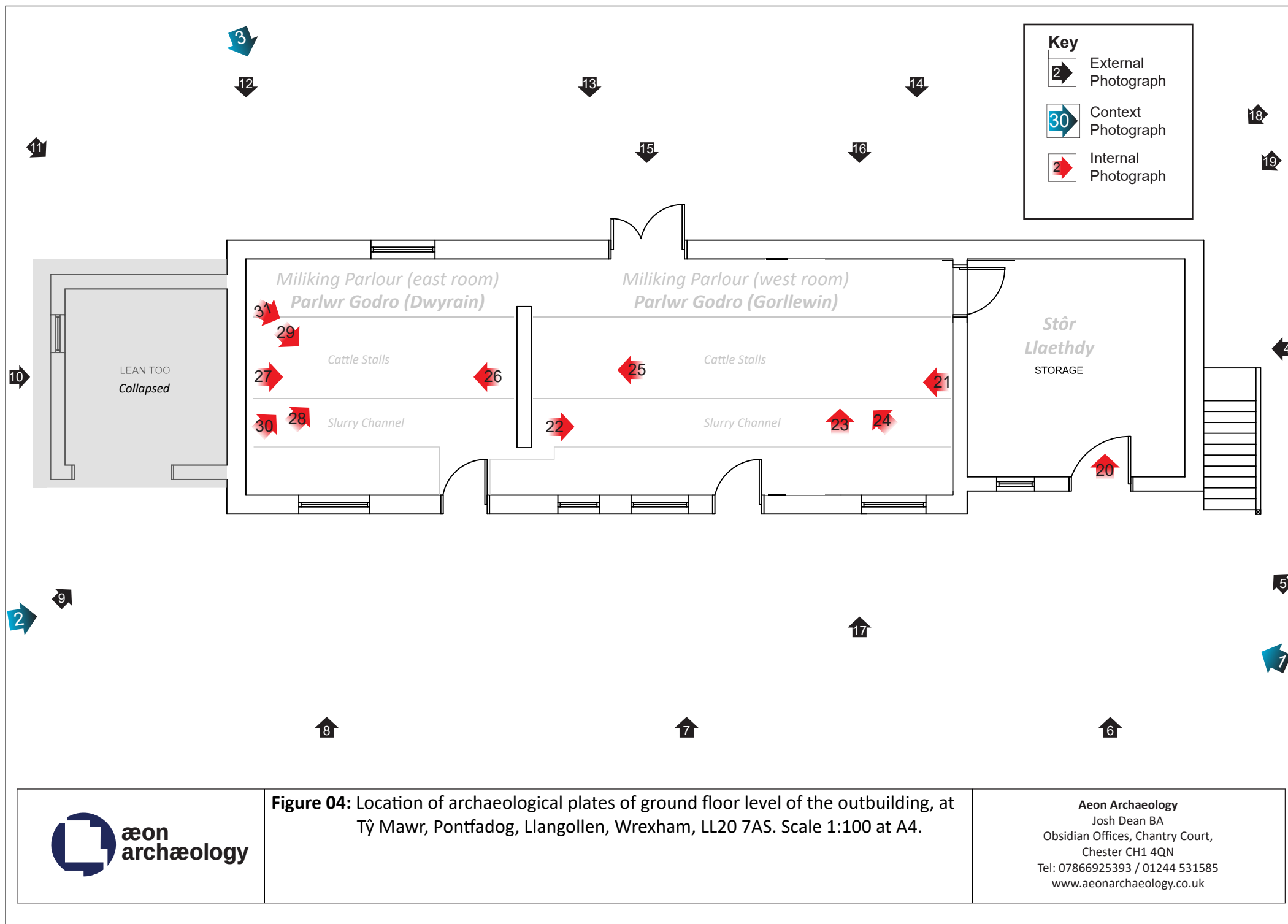
Running horizontally just below the level of the bottom embrasure opening. There is a slate damp course level, and this has also been interrupted by the modern window insertion.

To the left of this at ground floor level there is a single doorway opening which permits access to the milking parlour. This is a black painted door frame, now missing its door. The wall in the centre of the elevation appears to have been infilled with a combination of materials, and may once have housed a cart door entrance (although this is not clearly supported, similar features have been noted on buildings of the same age and vernacular style in the general area by the archaeologist). To the left of the doorway, there is a modern window insertion, which once again has eight-panes and is set within white painted metal frames, with a substantial concrete lintel above.

Above the ground floor door and window, the elevation has been seemingly been deconstructed and re-clad with weather board, with timber uprights visible behind within the Hayloft. To the left of this at ground floor level. There is a centrally located door at the left-hand end. This is an unpainted stable door with black painted wooden frame. To the right-hand side at ground level, there is a four-pane window in white painted wooden frames. And at the left-hand end there is a six-glass pane window in white painted wooden frames with concrete and wooden lintels above. Visible within the elevation and located just above the height of the doorframe, flanking it to the left and right: there are the two exposed ends of substantial, roughhewn, wooden floor beams which are flush with the wall exterior. Above this, and at eaves height, there is a portion of red brick infill, which appears to have raised the level of the roof. This consists of 12 courses of red-brick bonded by cement.

The eastern elevation is obscured in its lower half by a collapsed extension, which has been constructed from red-brick, timber and iron sheeting. Once again, the elevation has been constructed from sub angular and sub rounded stone rubble and has been bonded by lime mortar. At the top of the gable the eaves have been constructed from red-brick (mirroring the northern and southern eaves at this location). At the very apex of the elevation is a six-pane glass window in green painted metal frames with a timber lintel above. Also visible below the timber weather board are the four exposed ends of roughhewn, wooden purlins.

The southern elevation is constructed from sub rounded and sub angular stone rubble bonded by lime mortar. At the right-hand end, the last extant wall of the former extension is visible and this has been constructed from stone rubble bonded by lime mortar.



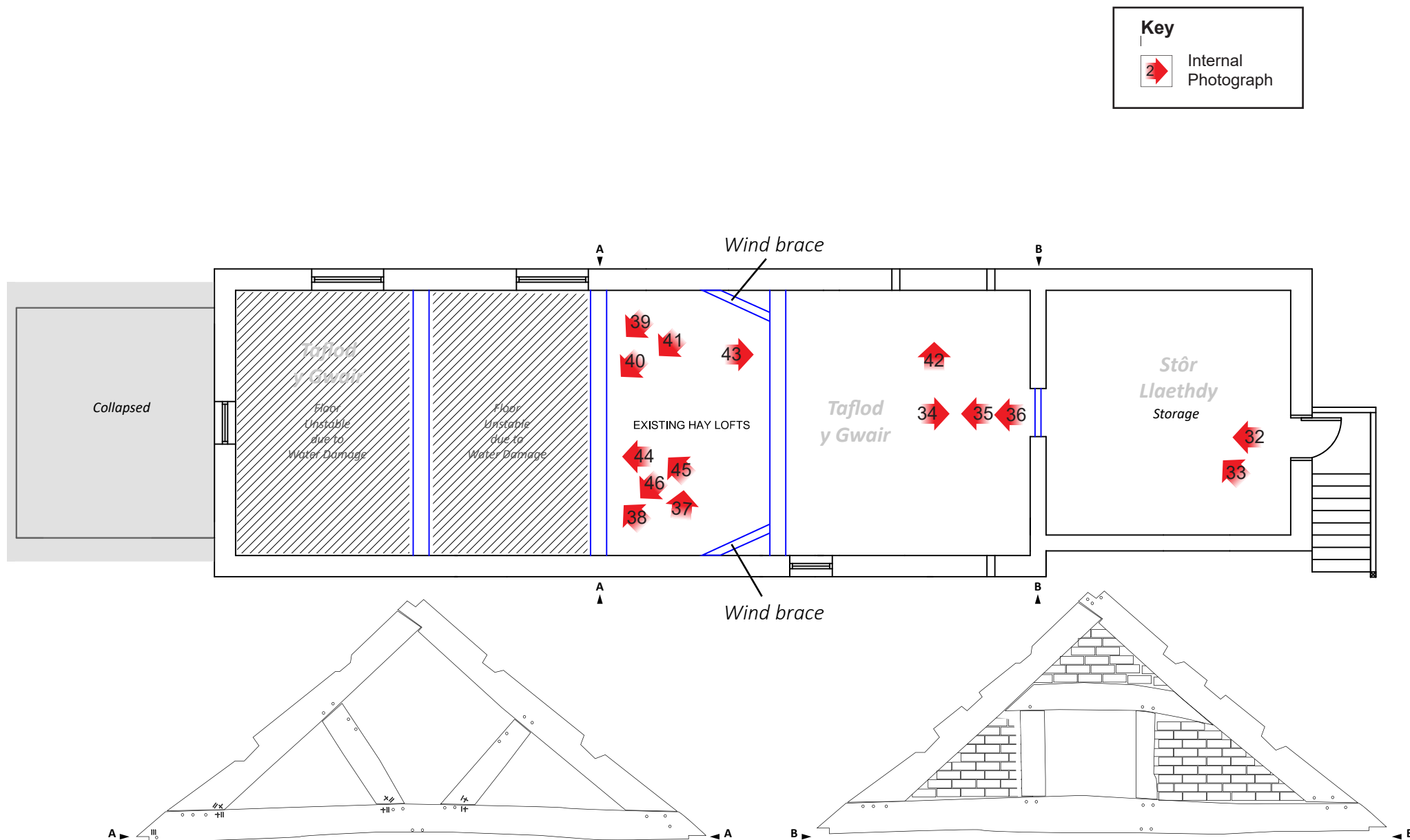
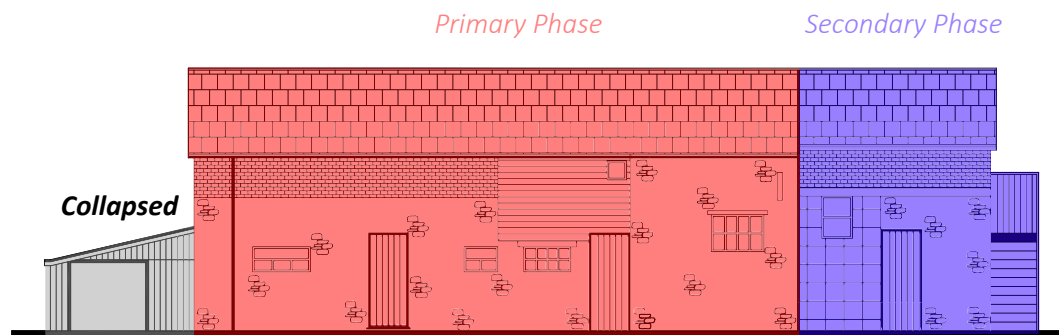
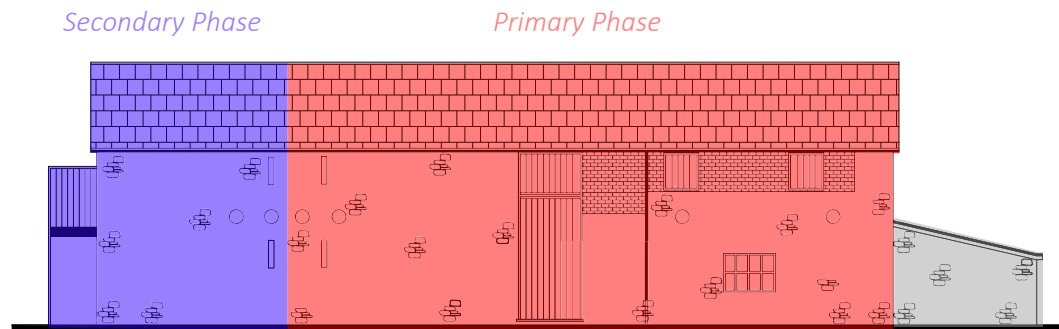


Figure 05: Location of archaeological plates of first floor level of the outbuilding, at Tŷ Mawr, Pontfadog, Llangollen, Wrexham, LL20 7AS. Scale 1:100 at A4.



Northern Elevation of outbuilding



Southern Elevation of outbuilding



Plate 01: Context Shot of the Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the southwest - 1.00m scale



Plate 02: Context Shot of the Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the east - 1.00m scale



Plate 03: Context Shot of the Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the south/southeast - 1.00m scale



Plate 04: Western gable elevation of Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the west - 1.00m scale



Plate 05: Oblique shot of western and northern elevations of Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the northwest - 1.00m scale



Plate 06: Northern elevation (right) of Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the north - 1.00m scale



Plate 07: Northern elevation (centre) of Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the north - 1.00m scale



Plate 08: Northern elevation (left) of Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the north - 1.00m scale



Plate 09: Oblique shot of eastern and northern elevations of Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the northeast - 1.00m scale



Plate 10: Eastern elevation of Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the east - 1.00m scale



Plate 11: Oblique shot of eastern and southern elevations of Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the southeast - 1.00m scale



Plate 12: Southern elevation (right) of Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the south - 1.00m scale



Plate 13: Southern elevation (centre) of Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the south - 1.00m scale



Plate 14: Southern elevation (left) of Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the south - 1.00m scale

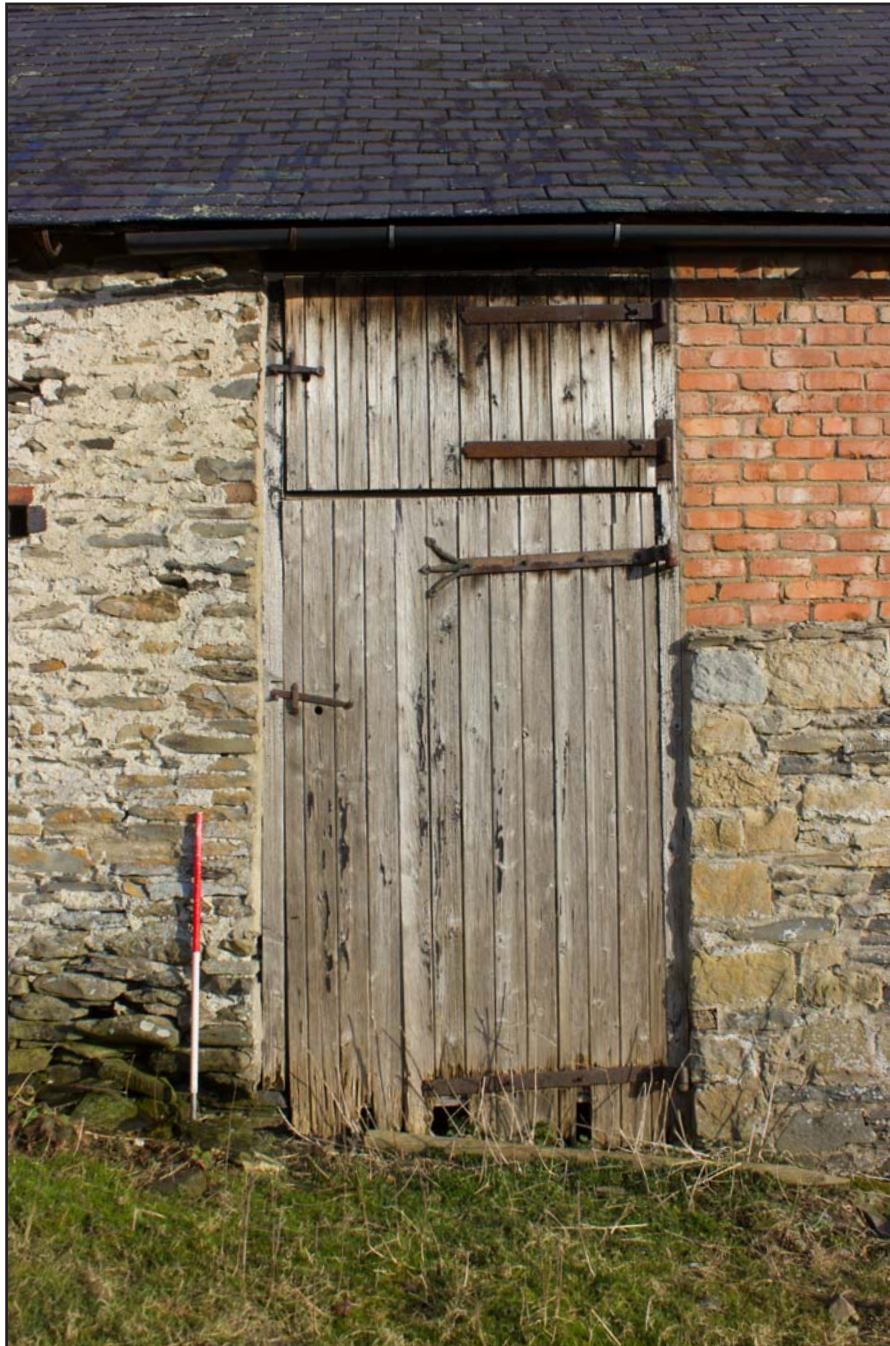


Plate 15: Door in southern elevation of Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the south - 1.00m scale



Plate 16: Ventilation embrasure slots in southern elevation of Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the south - 1.00m scale



Plate 17: Ventilation embrasure slots in northern elevation of Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the north - 1.00m scale



Plate 18: Oblique shot of western and southern elevations of Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the southwest - no scale



Plate 19: Oblique shot of southern elevation of Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the southwest - no scale

To the left of this is the beginning of the primary phase of construction. This appears to have been situated upon much larger stone slabs presumably acting as foundation stones at ground floor level. There is a centralised single window (right-hand side of the building) which has eight-glass panes, the upper four of which form an opening light, and this is in white painted metal frames with a timber lentil above. Halfway up the elevation and flanking the window are to open ends of ceramic piping presumably installed for ventilation of the milking parlour. The upper portion of the elevation is comprised of red-brick bonded by cement with two wooden boarded, hayloft doors with cast iron strap, hinges and latches.

To the left of this, there is an apparent seam in the stonework, which may denote a new phase of construction – (this is not mirrored in the north and may indicate a rebuild). Centralised within the elevation, there is a large full height (to the eaves), wooden board door with cast-iron strap hinges and cast-iron latches. To the left of this there are four vertical embrasure openings which have been detailed with a red-brick. running between these embrasures in a horizontal line, there are seven former joist slot openings (the left-hand side still has to protruding joist ends).

To the left of this, there is a single upright timber which denotes the beginning of the secondary extension. The stonework for the extension has been erected in a sympathetic style, although it is obviously not contemporary with the rest of the building due to the gaps in the mortar.

Internal descriptions – Ground Floor

The Storage Room

This is a rectangular room measuring 4.70m in length by 4.65m in width, and is orientated north to south. The ceiling is comprised of a single sawn timber floor beam (orientated east to west) which supports eight sawn floor joists, and which in turn supports a wooden board floor above. The northern elevation has a single doorway opening at the left-hand side which permits access to the farm track.

To the left of this the wall is of stone rubble bonded by lime mortar and has been rendered in its lower half and painted white. To the right of this it has been constructed from breeze-blocks which have been painted white, and there is a single window opening comprising of six-glass panes in white painted metal frames.

The eastern elevation is of stone rubble, which has been painted white, and has been rendered and painted white in its lower half. Attached along the wall are a series of piped water troughs, and above which there are a series of former embrasure openings – this insinuates that the elevation was the former gable wall for the barn before the extension.

The southern and western elevations are of stone rubble bonded by lime mortar, and which have been painted white with rendering in the lower halves - apart from this the walls featureless. The floors are of poured concrete and the room currently houses all manner of objects intended for storage.

The Milking Parlour (west room) - Parlwr Godro

This is a long rectangular room, which is orientated east to west, and which measures 9.21m in length by 5.90m in width. This room appears to have had a new ceiling installed at some



Plate 20: Ground floor storage room of Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the north - 1.00m scale



Plate 21: Milking Parlour (west room) within Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the west - 1.00m scale



Plate 22: Milking Parlour (west room) within Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the east - 1.00m scale



Plate 23: Milking Parlour, cattle stall, within Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the north - 1.00m scale



Plate 24: Milking Parlour, cattle stalls, within Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the northwest - 1.00m scale



Plate 25: Roof truss ground floor wall support, within Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the west - 1.00m scale

point in the recent past, as the floor above is supported by a network of sawn timber joists. In the southwest corner, there is a gap in the ceiling which presumably allows for hay to be fed down into the milking parlour below.

The room is dominated by east to west aligned animal stalls which have concrete and ceramic feeding troughs and piped water troughs. They are divided by cast metal pipe dividers and form four separate bays. Above these the suspended rigging for the milking apparatus, which has been secured to the timber joists above via metal straps.

The northern elevation is constructed from stone rubble bonded by lime mortar and has been rendered and painted white in its lower half. It has a single centralised doorway opening permitting access to the farm track. This is flanked to the left and right by two reasonably modern, inserted windows which comprise of eight-glass panes, set with and white painted metal frames.

The eastern elevation is partially open to the eastern milking parlour room, however, there is a rendered wall centrally located between two entrance way openings, and these permit access to the room beyond. This wall supports a substantial roughhewn timber structure, which presumably acts as a support for a roof truss located directly above. These timbers have been painted white and above the wall has been clad in plywood.

The southern elevation is constructed from stone rubble bonded by lime mortar and has been painted white. To the left of centre is the lower half of the full height doorway, which is constructed from wooden boards (ledged and braced), this is set within a white painted, sawn, timber frame.

The western elevation is of stone rubble bonded by lime mortar, which has been painted white and rendered and painted white in the lower half. There is a single doorway opening at the left-hand side permitting access to the store. This had a wooden board door, but which has now fallen off its hinges, making access impossible.

The floor is of poured concrete and is generally flat, although its slopes from the west down to the east, dropping away on a more acute angle as it reaches the threshold between the two milking parlour rooms. Furthermore, to the north of the animal stalls there is a slurry channel.

The Milking Parlour (east room) - Parlwr Godro

This is a rectangular room orientated east to west, and measures 6.04m in length by 5.90m in width. The ceiling height within this room is much lower than the room to the west, and appears to be the original floor level – this may explain why the building was raised in height. It comprises of two substantial, timber beams (these are visible, protruding from the northern elevation of the building), orientated north to south, which support 11 hand-hewn timber floor joists. These floor joists support, a heavily water damaged floor above.

Once again dominating, the room is an east to west aligned milking platform. Above this area and suspended from the two substantial timber beams is the milking apparatus. Beneath which are the concrete and ceramic feeding troughs, with the now partially dismantled water troughs.



Plate 26: Milking Parlour (east room) within Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the east - 1.00m scale

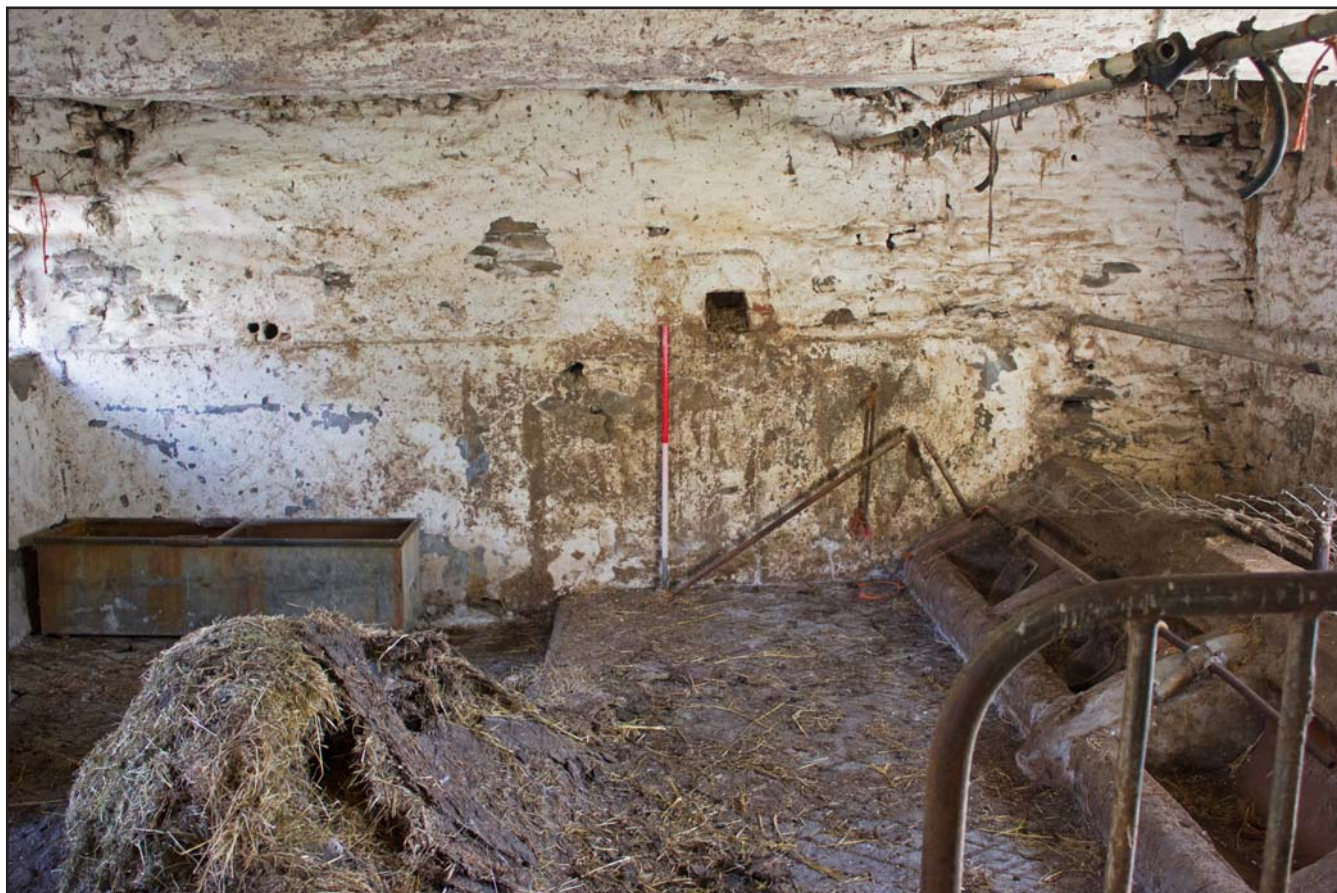


Plate 27: Milking Parlour (east room) within Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the west - 1.00m scale



Plate 28: Milking Parlour, cattle stalls, within Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the northeast - 1.00m scale



Plate 29: Oblique northern elevation, eastern milking parlour room within Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham
- from the southeast - 1.00m scale



Plate 30: Ceiling & floor joists within eastern milking parlour room within Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the southwest - no scale



Plate 31: Ceiling & floor joists within eastern milking parlour room within Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the southeast - no scale

The northern elevation has a single centralised doorway opening permitting access to the farm track. This has a stable door which is unpainted and is set within black painted wooden frames. The wall is of stone rubble bonded by lime mortar and has been rendered in its lower half, both of which have been painted white. To the left and right of the doorway, there are two window openings; the left-hand window opening consists of four-glass window panes set within white painted wooden frames and the right-hand window is of six-glass window panes set within white painted wooden frames. The cheeks of the door and the windows have been rounded out with render.

The eastern elevation is a stone rubble bonded by lime mortar and render in the lower half both of which have now been painted white apart from this the elevation is featureless.

The southern elevation is of stone rubble bonded by lime mortar and has been painted white. There is a single centralised window opening which consists of eight-glass window pane set within white painted metal frames. The western elevation has openings on the left- and right-hand side permitting access to the western milking parlour. Centralised within the elevation, is the partially rendered stone rubble wall, which supports the substantial timbers which support the roof truss above. The floor is of poured concrete, and to the north of the animal stalls is a slurry channel.

Internal Descriptions – First Floor

Storage Room - Stôr Llaethdy

This is a rectangular room orientated north to south and measures 4.70m in length by 4.65m in width. The ceiling comprises of two substantial timber purlins which run through the eastern elevation. These in turn support sawn wooden roof batons, which run up to a hand-hewn ridge beam.

The northern elevation is visible only to the eaves and is constructed from stone rubble bonded by lime mortar at the very left-hand end. However, to the right of this it has been constructed from red-brick bonded by Portland cement with a single opening near the centre now boarded up. Above this, there is a hand-hewn timber wall plate which supports the roof batons and the roof truss (see below).

The eastern elevation appears to be an infilled roof truss. A timber aperture persists, permitting access to the hayloft beyond is the only open part of the truss (between the queen posts). It has been infilled with red-brick to either side, above and below. Visible and protruding from slots cut into the principal rafter of the truss, are the four purlin ends from the roof construction beyond to the east.

The southern elevation is visible only to eaves height, where it has been constructed from stone rubble bonded by lime mortar and which supports a hand-hewn timber wall plate, which in turn supports the roof batons above.

The western elevation is constructed from stone rubble bonded by lime mortar and has a single centralised doorway opening permitting access to the descending steps to the exterior. This is a wooden board door which has been painted black and is set within black painted wooden frames. The wall is of a stone rubble construction bonded by lime mortar. Visible to



Plate 32: 1st Floor storage room within Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the west - 1.00m scale



Plate 33: Roof purlin, 1st Floor storage room within Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the northwest - no scale



Plate 34: Brick infilled truss between, 1st Floor storage room and the Hayloft within Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the east - 1.00m scale

the left and right of the door are horizontal timber wall plates. The floor is of modern timber boards.

The Hayloft – Taflod y Gwair

This is a long, rectangular open room which steps down at the eastern end. It is orientated east to west and measures 15.20m in length by 5.08m in width. This room is accessed via a portal in the western wall (between the queen posts) through the infilled roof truss.

The ceiling is supported by three hand-hewn collar tie roof trusses, with raking queen's posts. These are situated on hand-hewn timber wall plates. On the trusses where the joints are situated are carpenter's marks along with strengthening dowels. The central two timber trusses are supported on sawn upright timber beams; however, the eastern truss is supported by a wall plate on the red-brick walls. Each of the trusses have been further reinforced in some fashion, either with vertical timber struts, or with angled wind-braces, which tie-in to the wall plates on the northern and southern elevations.

Given that the room is largely open, the elevations will be described to reflect this. The northern elevation is comprised of an eaves height, wall construction, surmounted by a timber wall plate, which supports timber roof batons.

The northern elevation at the left-hand end, is comprised of stone rubble bonded by lime mortar, and the upper part of the two embrasure openings are visible here. To the right of this, there is a single hayloft door opening (now without door), and the wall plate is supported here by timber uprights, which have been boarded on the exterior with weather board. This area is bounded by the two substantial timber uprights, which support the northern part of the roof trusses in the centre of the elevation – part of this structure was observed downstairs and is situated on a stone rubble wall. Beyond this to the right-hand side, the wall is constructed from stone rubble bonded by lime mortar in the lower half and appears to have been extended upwards with 11 courses of red brick bonded by cement in the upper half.

The eastern elevation is constructed from stone rubble bonded by white lime mortar. In its upper half there is a timber gable construction which has been infilled with redbrick bonded by cement and which has a single centralised window at its apex, consisting of six-glass panes in unpainted metal frame.

The southern elevation at the left-hand end, is also constructed from stone rubble bonded by lime mortar, but which has been surmounted by 11 courses of red-brick bonded by cement, this has two timber hayloft doors equally spaced along the elevation. It would appear as if the roof of this building has been heightened in its eastern 2/3.

To the right of this, there is a single red brick pier located in front of the wall, and to the right of this is the upper part of the full height timber board door. This is a ledged and braced, black painted door set within an unpainted timber frame. To the right of this the wall is constructed from stone rubble bonded by lime mortar and has been painted white. There are two vertical slot embrasure openings which mirror those on the northern elevation as well as a series of beam slots within the wall, these once would have received floor joists – however, the floor has been cut away in this area presumably in order to allow hay to be passed down from the loft into the barn below.



Plate 35: Collar tie beam trusses with raking struts within the Hayloft inside the Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the west - 1.00m scale



Plate 36: Collar tie beam trusses with raking struts within the Hayloft inside the Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the west - no scale



Plate 37: Side strut or wind brace in Hayloft roof of Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the north - 1.00m scale



Plate 38: Eastern end of hayloft within Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the northwest - no scale



Plate 39: Eastern end of hayloft within Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the southwest - no scale



Plate 40: Floor at eastern end of hayloft within Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the southwest - no scale



Plate 41: Ceiling construction at eastern end of hayloft within Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the southwest - no scale



Plate 42: Embrasure ventilation slots in southern elevation of Hayloft at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the north - 1.00m scale

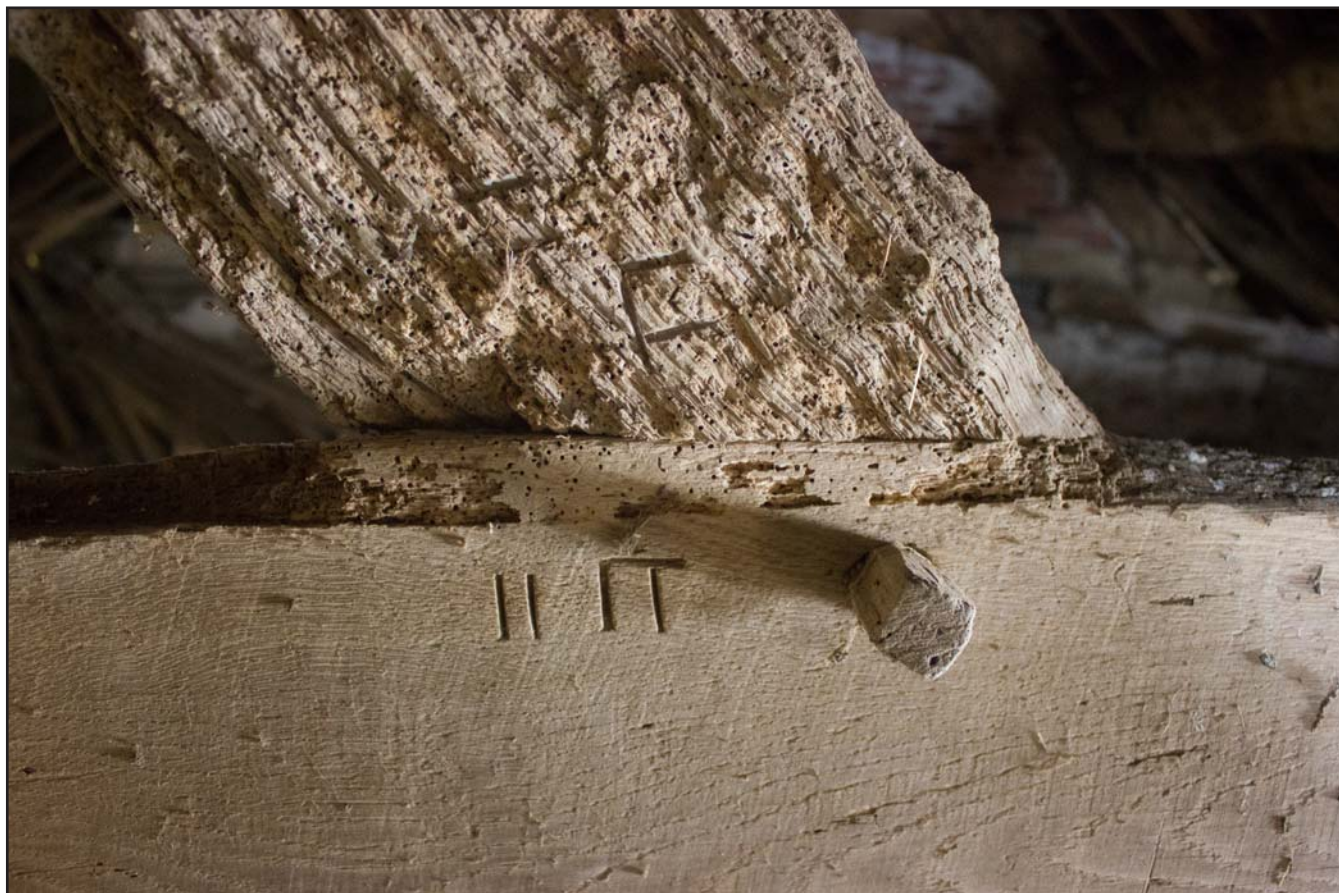


Plate 43: Carpenter's marks and dowel joint reinforcement on trusses in Hayloft Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the east - no scale



Plate 44: Carpenter's marks and dowel joint reinforcement on trusses in Hayloft Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the west - no scale



Plate 45: Carpenter's marks and dowel joint reinforcement on trusses in Hayloft Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the northwest - no scale



Plate 46: Carpenter's marks and dowel joint reinforcement on trusses in Hayloft Outbuilding at Tŷ Mawr, Pontfadog, Llangollen, Wrexham - from the southeast - no scale

The western elevation is constructed from stone rubble bonded by lime mortar in its lower third, and running horizontally along the base of the wall are a series of former embrasure openings (four on the left and four on the right) – suggesting that this was once a gable end for the building. Above this and recessed slightly from the face of the wall, is the adapted timber truss, which forms an aperture in the centre, providing access to the first-floor store. This has been infilled to the left, right and above by red-brick bonded by Portland cement.

9.0 CONCLUSION

This level 2 historic building record was undertaken by Josh Dean BA, archaeologist at Aeon Archaeology on the 15th September 2023. Upon approval from the Client and the CPAT Development Control Archaeologist the report will be archived with the CPAT Historic Environment Record (HER); Royal Commission on the Ancient and Historic Monuments of Wales (RCAHMW); and a copy retained at Aeon Archaeology, Chester under project code A0402.1, report 0381.

The outbuilding at *Tŷ Mawr, Pontfadog* is visible on the tithe map of *Map of the Township of Cilcochwyn*. The exact date of the building is uncertain but it predates the tithe map, likely placing it in the late Georgian to early Victorian era. They were constructed in association with the *Tŷ Mawr* farmhouse which, judging by the tithe apportionment, was not part of the Myddleton Estate and may have been sold to a Yeoman farmer.

Visible in the roof of the outbuilding are three hand-hewn collar tie roof trusses with raking queens' post. Situated on hand-hewn timber wall plates. On the trusses where the mortice and tenon joints are situated are carpenter's marks along with strengthening dowels. The trusses support two sets of roof purlins which are secured with overlapping scarf joints which have been notched into the principal rafter. The roof timbers also have mortice stops which exhibit no discernible structural value and may well, illustrate reuse from another building or possibly from the fledgling shipbuilding industry based at Liverpool in the early 18th century.

The ceiling of the milking parlour has two substantial hand-hewn floor beams, which support 11 hand-hewn floor joists, these have been notched into the beam. These are of a rustic appearance and appear to have been shaped by hand with uneven chamfered corners. Furthermore, there are regularly spaced mortice stops along the floor beams, and these may have once formed timber screens which predated the concrete and steel stalls. This is indicative of a period of refurbishment which may have coincided with the insertion of the windows with opening lights (possibly in lieu of legislation which necessitated the proper ventilation of animal sheds circa. 1950/60).

The timber and construction techniques used in both the eastern ceiling of the milking parlour and the roof construction, could possibly relate to the 19th century, however their rustic appearance, with wood bark still attached in places, and the generally coarse shaping of the timbers could well allude to an earlier date. Perhaps, therefore the timbers could date to the mid-late 18th century – placing the building in the Georgian Era.

This historic building record can be seen as having fulfilled the spirit and intent of the condition recommended by the CPAT Development Management Archaeologist. As such no further mitigatory works are recommended as part of the development.

10.0 SOURCES

Maps.

Ordnance Survey Open Data maps SJ NW23, NE23, SE23 and SW23.

Secondary Sources

Chartered Institute for Archaeologists, (2014). *Standard and Guidance for the Archaeological Investigation and Recording of Standing Buildings or Structures*

Freeman, C., & Lake, J. (2013). *National Farm Building Types*, English Heritage (now Historic England).

McCullough, A. E., Watson, S. W., and Martin, C. H. R., (2017). *Polygonisation of Traditional Farm Buildings in Wrexham, Glastir Pilot*.

Historic England, (2016). *Understanding Historic Buildings: a guide to good recording practice*.

Smith, P., (1988). *Houses of the Welsh countryside: a study in historical geography*. Royal Commission on the Ancient and Historical Monuments of Wales.

APPENDIX I – WRITTEN SCHEME OF INVESTIGATION