

THE CLWYD-POWYS ARCHAEOLOGICAL TRUST

Rhydlydan Farm Stables, Aberhafesp, Powys

ARCHAEOLOGICAL ASSESSMENT



CPAT Report No 780

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Rhydlydan Farm Stables, Aberhafesp, Powys

ARCHAEOLOGICAL ASSESSMENT

N Jones
February 2006

Report for APEC Architects on behalf of Cashmill Properties

The Clwyd-Powys Archaeological Trust

7a Church Street, Welshpool, Powys, SY21 7DL
tel (01938) 553670, fax (01938) 552179

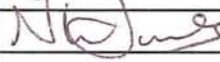
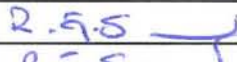
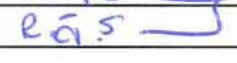
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CPAT Report Record

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The Clwyd-Powys Archaeological Trust

7a Church Street Welshpool Powys SY21 7DL

tel (01938) 553670, fax 552179

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1 INTRODUCTION

- 1.1 The Field Services Section of the Clwyd-Powys Archaeological Trust was invited by APEC Architects, on behalf of Cashmill Properties, to prepare a specification of works for undertaking an archaeological assessment in connection with proposals to convert a range of stables at Rhydlydan Farm and Mill, Aberhafesp, Powys. The Curatorial Section of the Clwyd-Powys Archaeological Trust, acting as archaeological advisors to the local planning authority, determined that a programme of archaeological assessment and building recording should be undertaken to assess the potential impact of the proposals on the archaeological resource and produced a brief detailing the works required (BUI 603).
- 1.2 Although the Curatorial brief required the completion of a Level 3 building survey of the stable block, CPAT was instructed by the client to undertake a rapid survey and assessment of the building, on the understanding that any detailed building survey would be undertaken following receipt of planning permission as a condition of consent. Accordingly, the assessment comprised two phases of investigation, consisting of a desk-top study, followed by a rapid photographic and descriptive survey of the building, which was used to assess the significance of the structure.
- 1.3 The stables are associated with Rhydlydan Mill which, in its present form, is thought to have been built in 1845, possibly on the site of an earlier mill. This corn mill had an overshot wheel and three pairs of stones, the design of the mill making it a very rare type outside eastern England (Welsh Mills Society 1998, 5). The stables are of timber frame construction with external weatherboarding.

2 LOCATION

- 2.1 Rhydlydan Mill is situated on the west side of the Nant Rhyd Rhos-llan stream 1.5km west of Aberhafesp, on the north side of the Severn valley (SJ 058932). The mill and farm are accessed via a track leading north from the B4568, with the stables lying on its west side, north of the farm house (Fig. 1).

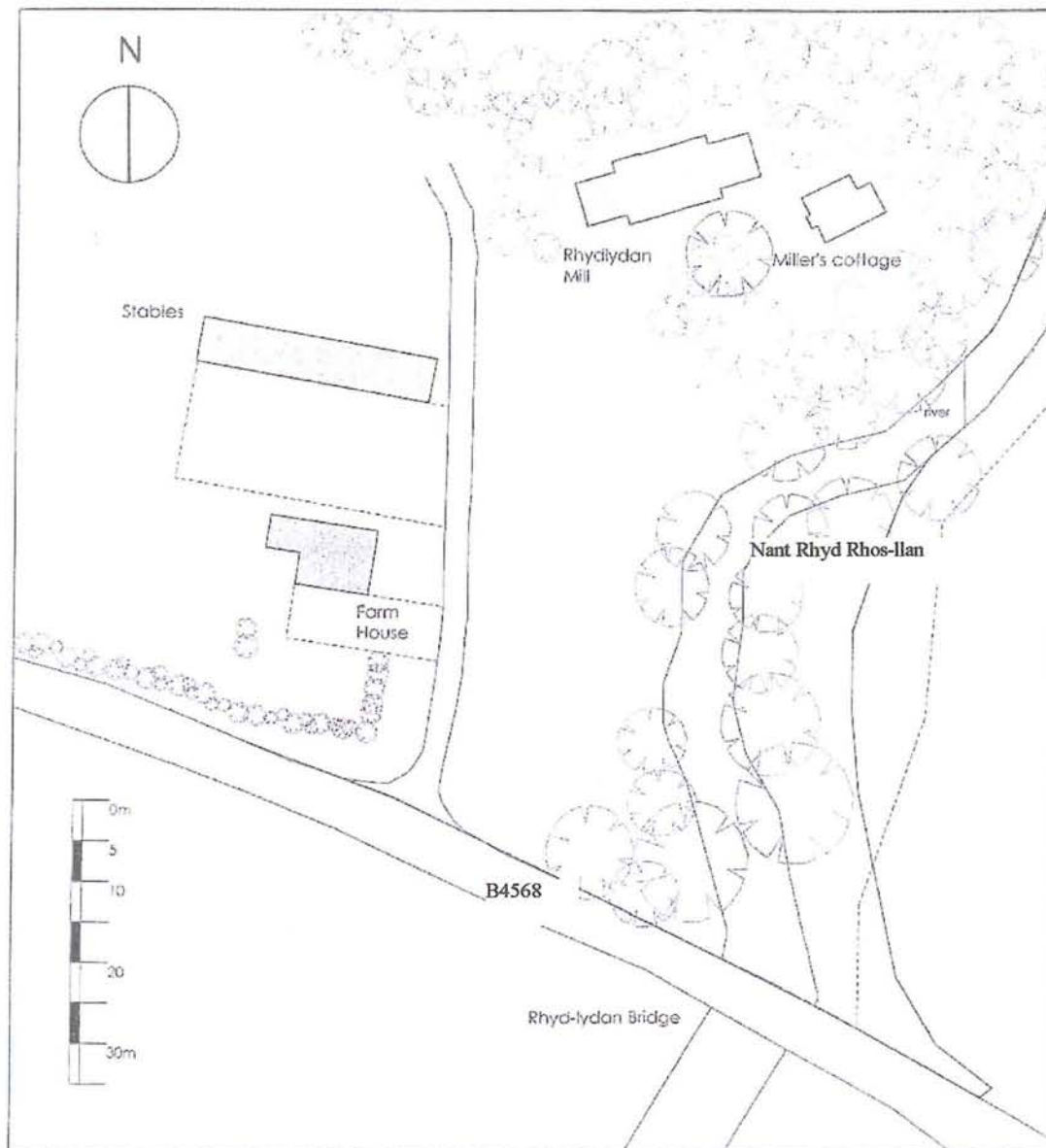


Fig. 1 Rhydlydan Farm, Mill and Stables (courtesy of APEC Architects)

3 DESK-BASED STUDY

- 3.1 The desk-based study involved the examination of all the readily available primary and secondary documentary, cartographic, pictorial, and photographic sources for the immediate area. Repositories consulted included the following: the regional Historic Environment Record (HER), held by CPAT at Welshpool; the National Monuments Record, maintained by the Royal Commission on Ancient and Historical Monuments in Wales (RCAHMW) in Aberystwyth; the National Library of Wales in Aberystwyth; and Powys County Archives in Llandrindod Wells.

Rhydlydan Mill

- 3.2 The mill itself is a Grade II Listed Building (PRN 20908) which is of considerable architectural and historic interest, largely because of the unusual nature and preservation of the machinery. The building is mainly of stone construction with brick dressings and dentil eaves course, with four storeys including the attic. A date of 1845 is painted inside the mill, which could reflect the

date of construction. A later grain drying kiln is attached to the east end of the building and there is the shell of another structure on the west side. The large overshot waterwheel dates from the 1840s, was supplied by Newton Foundry, and is sited within the building. The wheel drove three pairs of stones, the machinery being unusual for this area in that the stones were overdriven. It has been suggested that the framing for the upstream and downstream millstones could be of late 18th-century date, possibly having been reused from another mill either here or elsewhere (Booth and Stoyel 2005). Cartographic evidence (see below) clearly indicates that a building, possibly a mill, occupied this site by 1817.

- 3.3 The design of the mill suggests that it was intended for use as a merchant mill, producing quantities of flour for sale, presumably in Newtown which was at its height of prosperity in the mid 19th century. However, the local need was often for toll milling and this is indicated by the addition of the drying kiln.
- 3.4 The mill was powered by water from a mill pond occupying an area of 225m² to the north of the mill, which was fed by a leat running about 650m from a weir on the Rhyd Rhos-lan Brook (SJ 06192970).
- 3.5 Rhydlydan Farmhouse is built in the same style as the mill, with a red-brick front elevation, random stone elsewhere and brick dressings and dentil eaves course. A brick-built lean-to extension on the west end has a date stone inscribed 'S 1879'.

Cartographic evidence

- 3.6 The earliest available cartographic evidence is provided by the Ordnance Survey Surveyors' Drawing of 1817 (Fig. 2). Unfortunately, the scale of the map and level of detail mean that it is not possible to be certain about which buildings are depicted. It is clear that a building, probably a mill stood on the site of the present mill building, together with a group of four buildings. Although the accuracy of the map cannot be verified the configuration of these buildings does not match that of the existing buildings, and it is possible that these earlier structures which have since been replaced.



Fig. 2 Ordnance Survey Surveyors' Drawing 1817

- 3.7 The Tithe Survey for Llanwnnog Parish, Township of Esgob and Castle, dated 1847 (Fig. 3), provides more detail regarding the buildings at Rhydlydan. The mill and yard were then occupied by Thomas Benbow, while the farm was occupied by David Hamer. The survey depicts the mill and mill pond, together with the farmhouse, stables and three smaller buildings.

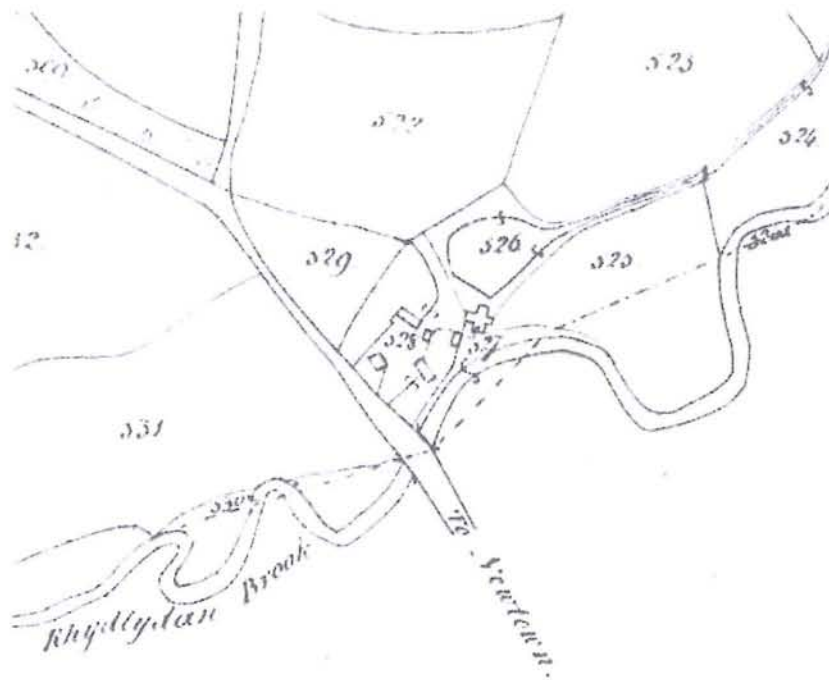


Fig. 3 Tithe Survey for Llanwnnog Parish, Esgob and Castle Township, 1847

- 3.8 The earliest detailed depiction is provided by the Ordnance Survey 1st edition 25" map, published in 1886 (Fig. 4). The complex of buildings is largely the same as on the tithe survey, although the stables are more readily identifiable, and have been lengthened by the addition of an extra range and smaller building at the west end.

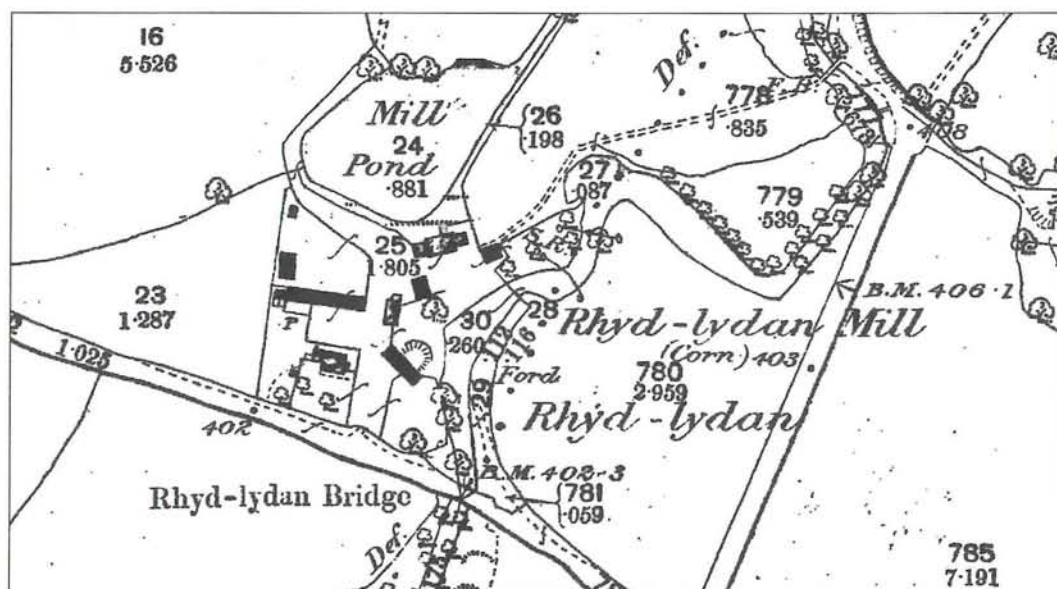
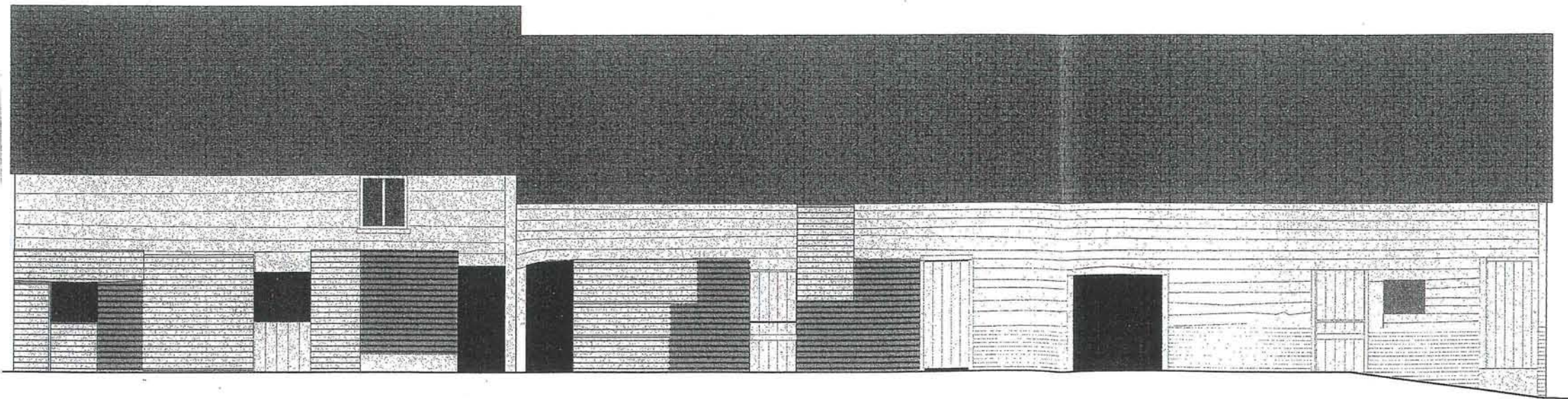


Fig. 4 Ordnance Survey 1st edition 25" map, published 1886

South Elevation (courtesy of APEC Architects)



Ground Floor Plan

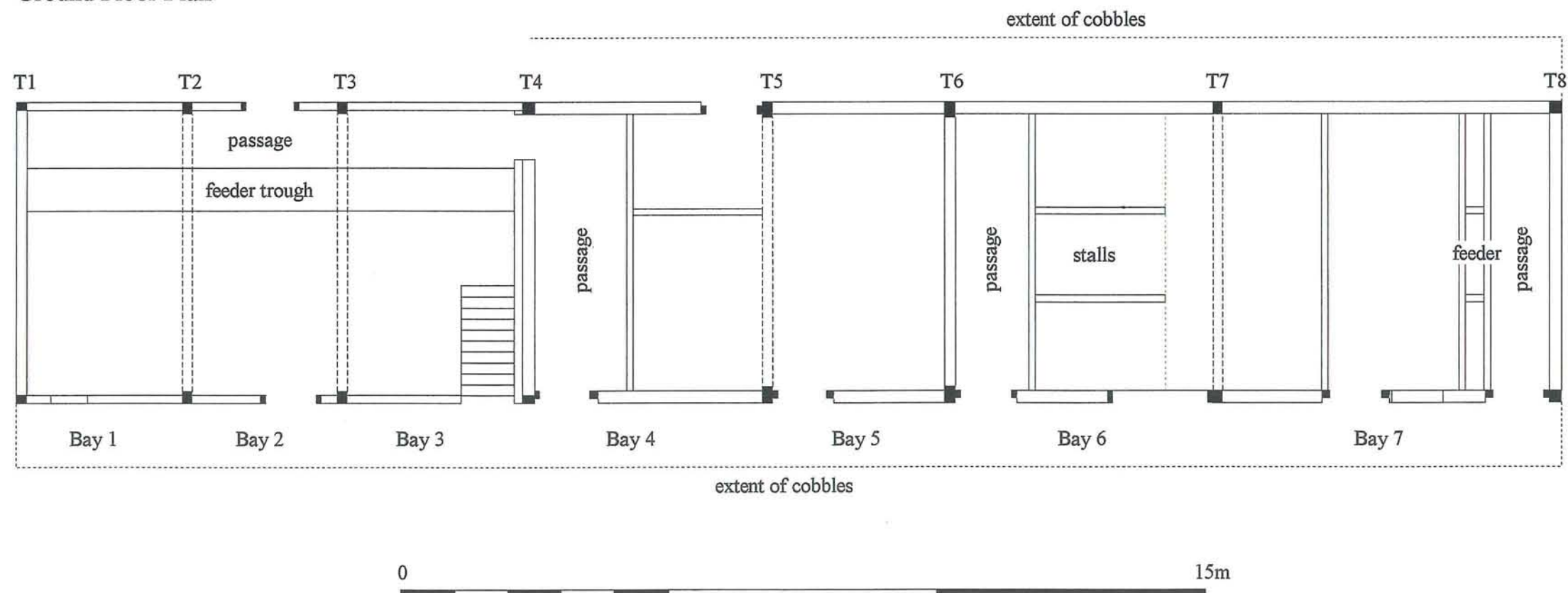


Fig. 5 Rhydlydan Stables: Ground Floor Plan and South Elevation

4 RAPID BUILDING SURVEY (Fig. 5)

- 4.1 The rapid building survey was conducted on 9 February 2006 and comprised an internal and external photographic survey, together with basic measurements and a written description. The survey was restricted to the stable range.
- 4.2 The stable range has two main phases of construction, originally consisting of a timber-framed barn with weatherboard cladding, a slate roof and ceramic ridge tiles (Plate 1). This was extended at the west end by the addition of a slightly taller stables building, of similar construction but with moulded timber barge boards and fascia boards (Plate 2), and a brick-built outbuilding which is now ruinous. An area of cobbling extends along the length of the range on the south side, and at least two-thirds of the north side. In the following description the stable range is described from west to east, with Bay 1 at the west end and Bay 7 at the east end.
- 4.3 The later stables building is composed of three bays (Bays 1-3) which are open at ground-floor level, although divided longitudinally by a feeding trough of brick construction with a ceramic trough and timber frame surround (Plate 3). There is a single door on either side of Bay 2 giving access to the stables on the south side and a feeding passage along the length of the north wall. The floor level has been reduced to the south of the feeding trough.
- 4.4 A timber staircase in the south-east corner of Bay 3 gives access to the first floor which is divided into three bays, with timber boarding against either side of the trusses to a height of 1.55m, leaving an access way off-centre to the rear (Plate 4). These were presumably designed to hold animal feed.
- 4.5 The framing and trusses are all formed by simple carpentry with pegged joints and no assembly marks. On the north elevation the frame rests on a brick plinth. Truss 1, at the western end, is boarded internally and clad in corrugated iron externally so that no detail was visible. Trusses 2 and 3 are identical with principal rafters and a collar with two posts below. The single purlins are held by cleats and the slates are nailed to timber laths. The base of the southern posts of both trusses rest on carved pad-stones.
- 4.6 The earlier barn is composed of four unequal bays (Bays 4-7) and appears to have been mostly constructed from reused timber, including trusses and first-floor joists which have evidently come from another building. The framing is irregular and rests on a brick plinth, above which the sides are clad in weatherboarding, with areas of corrugated iron patching. The later stables have been added, without the removal of the weatherboarding, on what was the western gable end.
- 4.7 Bay 4 is divided to form a feeding passage at the west end, now a tack room, while the east side is open to Bay 5. An inserted first floor above the passage forms a gallery, with a higher ceiling/loft inserted over the remainder of the bay. The original cobbled floor is largely concreted over. A door in the south wall gives access to the passage, while a door has been inserted through Truss 4 to allow access to the feeding passage at the rear of the stables. The removal of the lower framing of Truss 5 has created a larger room with doors in the north and south walls and a modern stable partition in the northern part of Bay 4.
- 4.8 The western end of Bay 6 is occupied by a feeding passage along the end of Bay 5 with a door in the south wall and a shuttered window in the north wall. The eastern side of the passage is boarded, on the other side of which the remainder of the bay is divided into three stalls with a cobbled floor raised slightly above the cobbling for a passage which originally ran along the eastern end of the bay. The original door in the south wall has been enlarged and the lower framing of Truss 7 has been removed. The first floor of Bay 6 is supported on a pair of substantial longitudinal beams, with cross beams and joists, all of which have flat chamfers and

plain stops. The nature of the carpentry suggests that these timbers are not from an agricultural building and have been derived from a domestic building likely to be of 17th or 18th-century date.

- 4.9 At ground-floor level, Bay 7 is divided into three units. The western end has been joined to Bay 6 and is largely open to the ridge, having been divided from the rest of the bay by a boarded partition formed of reused timbers. To the east of the partition the bay has a first floor (Plate 5) of the same construction as that in Bay 6, presumably taken from the same building. There is a feeder passage and trough along the eastern end of the bay. Interestingly, the first-floor beams were evidently not long enough to extend to the end of the bay and the original jointed ends of the beams are visible above the passage.
- 4.10 The roof trusses in the earlier barn are all different and include a significant number of reused timbers, suggesting that all may have been derived from another building. Trusses 4 and 8, however, at either end of the building, are very similar and probably originated from the same building. Both are typical of box-frame construction with tie beam and collar, Truss 4 having four posts above and below the collar (Plate 6), while Truss 8 has only two posts below the collar on either side of a window, and two slanted struts above. Both trusses also have pairs of through purlins on either side with wind braces on the lower purlins only. Each bay has paired purlins and a ridge pole, with slates hung on timber laths with iron nails. It is notable that Truss 4 includes the joints for further purlins to the west, indicating that this was not originally an end truss.
- 4.11 Truss 5 has been considerably altered with the collar missing and two posts inserted, together with two slanting struts (Plate 7). The lower purlins have windbraces on the west side, but not on the east. The lower framing below the tie beam has been removed.
- 4.12 Truss 6 may originally have been similar to Trusses 4 and 8 with the collar surviving but the three posts below it have been removed to be replaced by a pair of rather slight posts and slanting struts (Plate 8). The upper part of the truss is badly weathered and peg holes for wattle and daub infill indicate that this was originally the end truss of another building.
- 4.13 Truss 7 is also missing the collar and has two long, slanting struts above the tie beam, with a further pair below. The lower part of the frame is absent, and the posts at either end do not form a pair as the southern post is jowled.

5 CONCLUSIONS

- 5.1 The assessment has revealed that the existing complex of buildings which comprise Rhydlydan Farm and Mill are likely to date from the 1840s and that they have replaced earlier structures of which no trace now survives. The earliest cartographic source, dated 1817, depicts a building where the mill now stands, along with four other buildings.
- 5.2 The stable range has two phases of construction of which the earlier was originally built as a barn, presumably as part of the general rebuilding in the mid-19th century. The building has clearly been constructed with extensive use of timbers from at least one other building, most notably the roof trusses and the first floor in Bays 6 and 7. The detail in the carpentry of the floor timbers suggests that it came from a domestic building and it may be postulated that this was an earlier farmhouse dating from the 17th or 18th centuries. The barn has seen significant modifications with the removal of the lower framing of two trusses and the partial replacement of the original cobbled floor with concrete.

- 5.3 The barn was later extended at the west end by the addition of a purpose-built stables sometime between 1847 and 1886. Although the floor level has been largely reduced, the structure of this addition remains largely intact.
- 5.4 Details which are currently available regarding the proposals to convert the stable range to domestic accommodation suggest that the external appearance will not be greatly affected. The brick plinth is to be retained with weatherboard cladding above, possibly incorporating some of the original cladding. Internally, although changes to the layout are proposed, particularly within the later stable building, it is understood that as much as possible of the original timber framing will be retained.

6 ACKNOWLEDGEMENTS

- 6.1 The writer would like to thank the following people for their assistance during the project: Ian Grant, CPAT; the staff of the National Library of Wales, Aberystwyth; and the staff of the National Monuments Record, Aberystwyth.

7 REFERENCES

Unpublished sources

Booth, T, & Stoyel, A, 2005. *Rhydlydan Mill, Nr Caersws, Powys*. Unpublished notes. Society for the Protect of Ancient Buildings.

Cartographic sources

Ordnance Survey Surveyors' Drawing 198, 1817.

Tithe Survey and Apportionment (1846) for Llanwnnog Parish, Esgob and Castle Township, 1847.

1st edition 25" Ordnance Survey map Montgomeryshire 36.9, published 1886.

APPENDIX 1 SPECIFICATION

1 Introduction

- 1.1 The Contracting Section of the Clwyd-Powys Archaeological Trust has been invited to prepare a specification of works for undertaking an archaeological assessment in connection with proposals to convert a range of stables at Rhydlydan Farm and Mill, Aberhafesp, Powys. The Curatorial Section of the Clwyd-Powys Archaeological Trust, acting as archaeological advisors to the local planning authority, have determined that a programme of archaeological assessment and building recording should be undertaken to assess the potential impact of the proposals on the archaeological resource and have produced a brief detailing the works required (BUI 603).
- 1.2 Although the Curatorial brief requires the completion of a Level 3 building survey of the stable block the client has issued instructions that at this stage the building should be the subject of an assessment to be submitted as part of an application for outline planning permission, and that any detailed building survey will be undertaken following receipt of permission as a condition of consent. Accordingly, the following specification outlines the methodology for undertaking two phases of investigation, initially comprising a desk-top study, photographic survey and descriptive survey of the building which will be used to assess the significance of the structure, with the possibility of detailed building recording being undertaken at a later date.
- 1.3 The stables are associated with Rhydlydan Mill which is thought to have been built in 1845, possibly on the site of an earlier mill. The former corn mill had an overshot wheel and three pairs of stones, the design of the mill making it a very rare type outside eastern England (Welsh Mills Society 1998, 5). The stables are of timber frame construction with external weatherboarding.

2 Objectives

- 2.1 The objectives of the assessment are:
 - 2.1.1 to reveal by means of a desktop study and field investigation, the nature, condition, and significance of the building in so far as these aims are possible;
 - 2.1.2 to prepare a report outlining the results of the assessment, incorporating sufficient information on the archaeological resource for a reasonable planning decision to be taken regarding the future management of the building;
 - 2.1.3 to undertake a programme of detailed building recording subject to the receipt of outline planning permission.

3 Methodology

- 3.1 Stage one of the assessment will involve the examination of all the readily available primary and secondary documentary, cartographic, pictorial, and photographic sources at the County Records Office, Llandrindod Wells; the County Sites and Monuments Record, Clwyd-Powys Archaeological Trust, Welshpool; the National Library of Wales, Aberystwyth; and the National Monuments Record, Aberystwyth.
- 3.2 All cartographic sources consulted will be included within the desktop section of the report, together with transcriptions of relevant documents and copies of plans, maps and photographs containing relevant information.

- 3.3 Stage two will consist of a detailed photographic survey of the stable block, subject to access and health and safety considerations. This will be undertaken in digital format, to a minimum of 3 mega-pixels and will be accompanied by a descriptive record of the building which will record the fabric, construction methods together with surviving fixtures and fittings and an assessment of the condition of the structure.
- 3.4 An illustrated and bound report will be prepared in A4 format, containing conventional sections on: Site location; Historical Background; Building Survey; Conclusions and References, together with appropriate appendices on archives.
- 3.5 The site archive will be prepared to specifications laid out in Appendix 3 in the Management of Archaeological Projects (English Heritage, 1991), to be deposited with the Regional Sites and Monuments Record (SMR).
- 3.6 Should a programme of detailed building recording be required this will be undertaken generally following the prescription for a Level 3 Survey as identified in RCHME 1996 *Recording Historic Buildings: a descriptive specification*.
- 3.7 The building survey will be undertaken using as a primary means of recording a reflectorless EDM in conjunction with Penmap survey software to record all external elevations, including architectural detail, differences in construction and phases. Where visual access is limited additional detail may be recorded using a hand-held laser tape (Disto), or by conventional hand recording. Internal ground and first-floor plans, including details of roof trusses, will be produced using a combination of surveying techniques, largely dictated by access and safety. Survey data will be manipulated using AutoCAD to produce two-dimensional plans and elevations. The survey will be undertaken subject to access and health and safety considerations.

4 Resources and Programming

- 4.1 The assessment will be undertaken by a small team of skilled archaeologists under the overall supervision of Mr RJ Silvester, a senior member of CPAT's staff who is also a member of the Institute of Field Archaeologists (IFA). CPAT is an IFA Registered Organisation.
- 4.2 All report preparation will be completed by or with the assistance of the same field archaeologist who conducted the assessment.
- 4.3 It is anticipated that the desktop study will be completed within two days, while the building survey will be completed within one days. The report will be completed within 2 weeks of the completion of on-site works. A draft copy of the report will be forwarded to the Client and Curator for approval prior to the production of the final report. Copies of the final report will be provided to the client and the Regional SMR. The Curator will be informed of the timetable in order to arrange for monitoring if required. At present, CPAT would not be in a position to undertake the assessment before February 2006.
- 4.4 Requirements relating to Health and Safety regulations will be adhered to by CPAT and its staff.
- 4.5 CPAT is covered by appropriate Public and Employer's Liability insurance.

N.W. Jones
6 January 2006



Plate 1 Stable range from the south-east. Photo CPAT 2091-001



Plate 2 Stable range from the south-west. Photo CPAT 2091-027

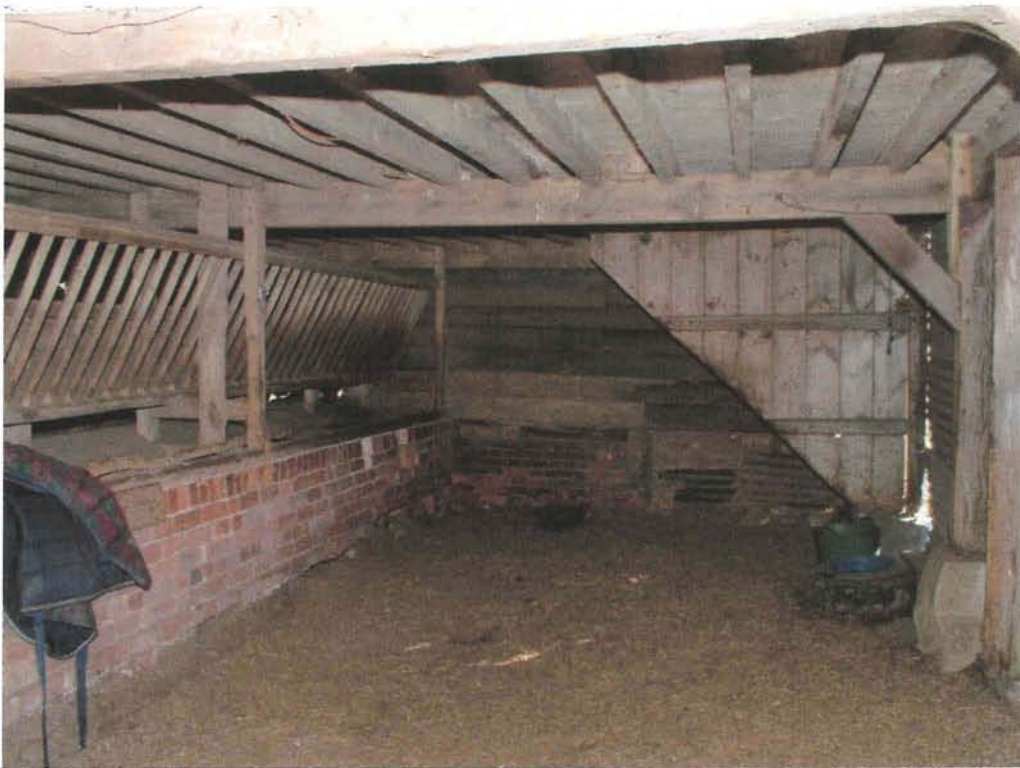


Plate 3 Stable building showing feeding trough, lower part of Truss 3 and boarded stairs. Photo CPAT 2091-020

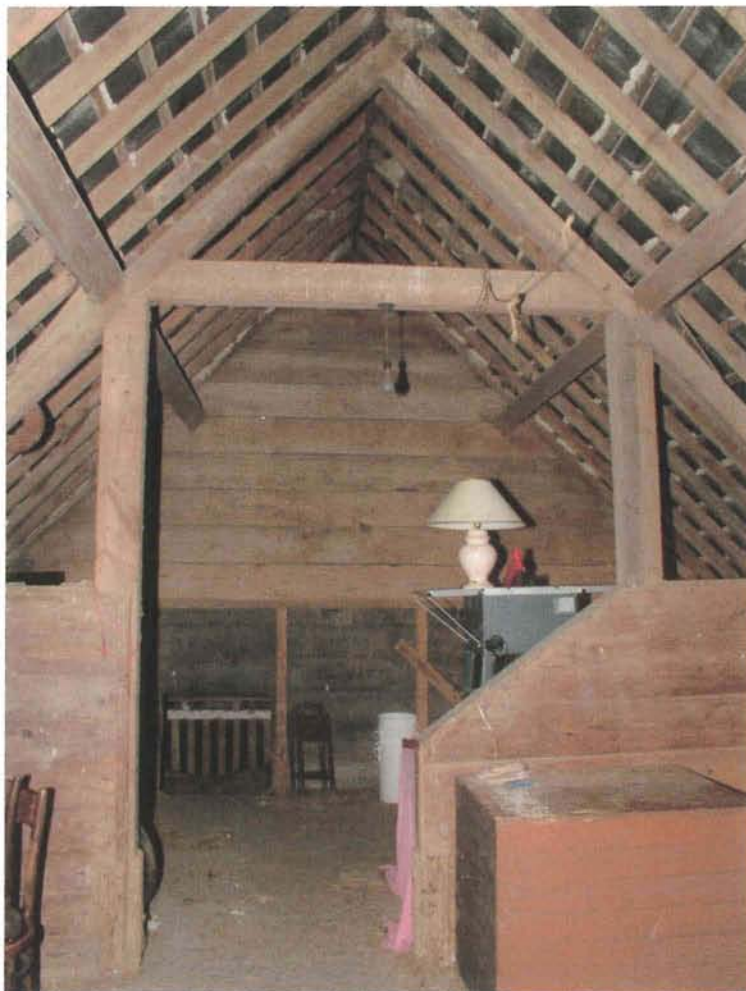


Plate 4 First floor of stable building showing Truss 3 and partitions. Photo CPAT 2091-014



Plate 5 Bay 7 showing first-floor beams and joists. Photo CPAT 2091-015



Plate 6 Truss 4 from the east. Photo CPAT 2091-012



Plate 7 Truss 5 from the west. Photo CPAT 2091-010



Plate 8 Truss 6 from the east. Photo CPAT 2091-007