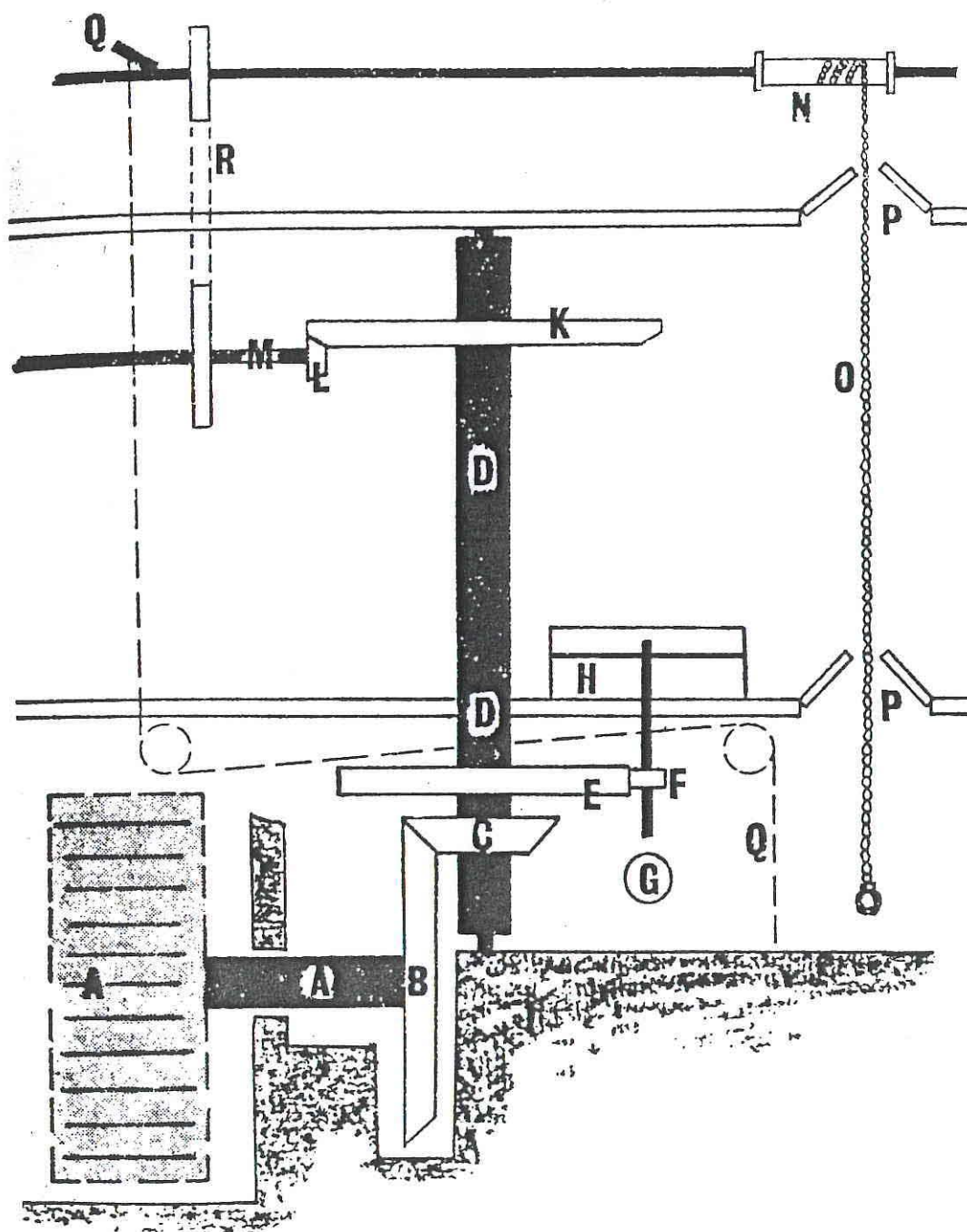


*The Old Mill, Felin Newydd, Waen, Nantglyn,
Denbighshire*

ARCHAEOLOGICAL WATCHING BRIEF



*The Old Mill, Felin Newydd, Waen, Nantglyn,
Denbighshire*

ARCHAEOLOGICAL WATCHING BRIEF

WG Owen
August 1999

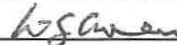
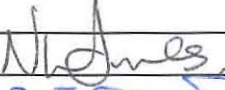

Report for Jones Peckover on behalf of Mr and Mrs Brockley

CPAT Report Record

Report and status

CPAT Report Title	The Old Mill, Felin Newydd, Waen, Nantglyn, Denbighshire: Archaeological Watching Brief		
CPAT Project Name	Old Mill, Nantglyn		
CPAT Project No	828	CPAT Report No	329
Confidential (yes/no)	N	draft/final	Final

Internal control

	name	signature	date
prepared by	W.G.OWEN		19/08/99
checked by	N.W.JONES		20/08/99
approved by	R.J. SILVESTER		20/08/99

Revisions

no	date	made by	checked by	approved by

Internal memo

The Clwyd-Powys Archaeological Trust

7a Church Street Welshpool Powys SY21 7DL

tel (01938) 553670, fax 552179

© CPAT

CONTENTS

- 1 INTRODUCTION
- 2 LOCATION, TOPOGRAPHY AND GEOLOGY
- 3 WATCHING BRIEF
- 4 CONCLUSIONS
- 5 ACKNOWLEDGEMENTS
- 6 REFERENCES

APPENDIX: SPECIFICATIONS

ILLUSTRATIONS

Fig. 1 Site location

Fig. 2 Plan of mill building showing main features

Plate 1 The mill house from S. Photo CPAT 837.1

Plate 2 Mill house SE wall showing axle tree arch. Photo CPAT 837.5

Plate 3 Pulley hoist and housing. Photo CPAT 837.16

Plate 4 Remains of timber water wheel. Photo CPAT 837.14

Plate 5 NE end of wheelpit and tailrace from SE. Photo CPAT 837.12

Plate 6 Remains of wheelpit outer wall from NE. Photo CPAT 837.10

1 INTRODUCTION

- 1.1 The Contracts Section of the Clwyd-Powys Archaeological Trust was approached by Jones Peckover, on behalf of Mr and Mrs Brockley, to provide a quotation and specification for an archaeological watching brief at the Old Mill, Felin Newydd, Waen, Nantglyn, near Denbigh, Denbighshire. The development involved the alteration and extension of a former water mill, planning permission (Planning Application 25/4/97/PF) for which had been granted with a condition that there should be archaeological recording of any remains located during the development works. A brief for an archaeological watching brief had been prepared by Denbighshire Archaeology Service at the request of the developer, which detailed the scheme of works required.
- 1.2 The building in question is a former water mill with the remains of a wooden water wheel and pulley system surviving. It was thought likely that information relating to past alterations to the building might be present and internal features indicated that alterations had taken place in the past.

2 LOCATION, TOPOGRAPHY AND GEOLOGY

- 2.1 Felin Newydd (fig. 1) is located close to the west bank of Afon Lliwen (SH 99546231) below steeply ascending slopes to the south-west. The hamlet of Waen lies some 200m to the east, with the village of Nantglyn beyond.
- 2.2 The solid geology in this area consists of Ludlow shales below boulder clay containing glacial erratics. Soils are well-drained fine and coarse silts of the Manod Association in the Denbigh Series (Rudeforth *et al* 1984).

3 WATCHING BRIEF (fig. 2)

- 3.1 The watching brief was undertaken over a two-day period, the 10th 11th August 1999.
- 3.2 The building consists of the mill house (plate 1) within which are the remains of some of the internal wooden mechanisms. At ground level at the south-eastern end are the remains of the pit-wheel housing wall which formerly supported the horizontally aligned pit-wheel tree or axle and the vertically aligned main shaft and its associated great spur wheel and crown wheel. Centrally placed in the south-eastern wall of the mill is the axle tree window arch (plate 2), which connected the milling machinery to the waterwheel outside, via the pit-wheel. At roof level there remains the wooden sack hoist pulley and its housing below (plate 3) which, at upper floor level, is the trapdoor used to lower the milled grain from the attic. A millstone of the French burr type was also in the mill house but not *in situ*. Also within the mill house in its north-western part are the remains of a cross-wall of unknown function.
- 3.3 Adjacent to the mill house at its north-western end is a former grain drying kiln probably used for drying oats before milling. A narrow angled chute through the wall was visible which connected the kiln to the mill house. Outside the kiln near its north-western corner and leaning against the wall was a millstone made of millstone grit, which was probably formerly used at the mill.
- 3.4 The wheelpit at the south-eastern end of the mill had been infilled and the wheel removed. The overshot wheel was formerly fed by launders from the millpond situated to the south-west of the mill. This pond was fed by a leat which ran a distance of some 300m from a weir upstream (fig. 1). The remains of a wooden water wheel (plate 4) stands some 40m downslope of the mill which may have, at some time, been used at the mill but it is thought not to be the original wheel used (Mr Brockley *pers. comm.*)
- 3.5 Foundation trenches excavated at the south-eastern end of the mill house varied in depth from 1.10m to 1.25m and were 0.60m wide. The foundation trench on the north-eastern side, however, was excavated to a depth of 1.80m and reached the level of the dressed shalestone base of the wheelpit and tailrace. At this depth excavation also exposed one vertical wall of the tailrace channel (plate 5) which was seen aligned at an oblique angle to the wheelpit. Also exposed in section was the outer structural wall of the wheelpit (plate 6). This was 1.5m high and max. 0.70m wide and consisted of

horizontally lain unbonded shalestone slabs of varying thickness. The wheelpit measured 1.30m wide and 1.80m deep.

- 3.6 The south-western trench also exposed the outer structural wall of the wheelpit. Here, however, the wall, which was up to 0.80m wide, extended to a depth of only 0.50m below the ground surface and rested on the natural clay subsoil.
- 3.7 Elsewhere, foundation trenches were excavated into the mottled grey boulder clay, which constituted the undisturbed natural subsoil, with no indication of any archaeological features or deposits.
- 3.8 Finds were recovered exclusively from the infilled wheelpit and consisted mainly of recently redeposited material such as fragments of galvanised steel and wood fragments. Also recovered from the wheelpit was an entire sandstone millstone measuring 0.62m in diameter.
- 3.9 Within the mill house four stantion pits were excavated manually (fig 2). Pits A and B, adjacent to the north-eastern wall, were both excavated to a depth of 1.10m. In both cases the fill consisted of a brownish grey, stony clay loam extending to a depth of 1.0m, beneath which, and extending beyond the limits of excavation, was a grey stony clay apparently closely similar to the natural subsoil exposed in the external foundation trenches. Both pits showed that the main wall of the building consisted of coursed stone, extending to a depth of 1.0m below the present surface, with no foundation trench visible. The position of a former cross wall, which was visible at ground level, was revealed in Pits B and D to be a more superficial structure extending to a depth of 0.25m below the surface. Pits C and D, adjacent to the south-western wall, were excavated to a depth of 0.37m and 0.30m respectively. The fill in both cases was quite different in colour and texture to that of Pits A and B, being of fairly coarse brown-reddish brown clay loam. In pit C, it was seen that the extension to the pit-wheel housing wall exceeded the depth of the excavation.

4 CONCLUSIONS

- 4.1 The watching brief has provided new information relating to the former mill. In particular, the excavation of foundations enabled limited recording of the wheelpit which revealed further details about its size and construction. Within the building, the excavation of stantion pits revealed some detail relating to the extent and construction of the main walls as well as a former cross wall.
- 4.2 In addition, the watching brief has provided a more detailed description of the mill in general and its associated machinery. Although not specified in the brief, the opportunity was taken to conduct a photographic survey of internal and external details which will be kept with the site archive, stored at CPAT, Welshpool.

5 ACKNOWLEDGEMENTS

- 5.1 CPAT would like to thank Mr and Mrs Brockley for their assistance and co-operation during the project.

6 REFERENCES

Rudeforth, C.C., Hartnup, R., Lea, J.W., Thompson, T.R.E., and Wright, P.C., 1984, *Soils and their Use in Wales*, Bulletin No 11. Harpenden: Soil Survey of England and Wales.

APPENDIX 1

PROPOSED CONVERSION OF THE OLD MILL, FELIN NEWYDD, WAEN, NANTGLYN, DENBIGH SPECIFICATION FOR A CONTRACTED ARCHAEOLOGICAL WATCHING BRIEF BY THE CLWYD-POWYS ARCHAEOLOGICAL TRUST

1 Introduction

- 1.1 The proposed development involves the alteration and extension of a former water mill at Felin Newydd, Nantglyn, Denbigh (SH 99546231). Planning permission has been granted (Planning Application 25/4/97/PF) for the proposed works with a condition that there should be archaeological recording of any remains located during development works. A brief for an archaeological watching brief has been prepared by Denbighshire Archaeology Service at the request of the developer, which details the scheme of works required.
- 1.2 The building in question is a former water mill with the remains of a wooden water wheel and pulley system surviving. It is thought likely that information relating to past alterations to the building may be present and internal features indicate that alterations have taken place in the past.

2 Objectives

- 2.1 The objectives of the archaeological works are:
 - 2.1.1 to record the nature, condition, significance and, where possible, the chronology of any archaeological deposits and/or features revealed within the area of the proposed development during the development works in so far as these aims are possible;
 - 2.1.2 to prepare a report outlining the results of the watching brief.

3 Methods

- 3.1 The watching brief will be undertaken to include the monitoring of all groundworks within the development area, including foundation trench excavation, service trench excavation and floors if these are to be disturbed.
- 3.2 Limited excavation of all significant contexts will be undertaken where possible following negotiations with the developer. All significant archaeological deposits and/or features noted during the watching brief will be recorded using the standard numbered context system employed by CPAT with drawn plans/sections at an appropriate scale and 35mm format black and white negative and colour slide photography. All features will be tied in locationally to the Ordnance Survey as accurately as possible.
- 3.3 Following the on-site work an illustrated and bound report will be prepared according to the principles detailed in the Brief. This will be in A4 format and contain conventional sections on: Site location, Topography and Geology; Historic Background; Archaeological evidence; Conclusions and Recommendations; References, together with appropriate appendices on archives and finds. Further publication of the results in an appropriate regional or national journal will be undertaken at a later date and as considered appropriate depending on the nature of the findings.
- 3.5 The site archive will be prepared to specifications laid out in Appendix 3 in the *Management of Archaeological Projects* (English Heritage, 1991). Following agreement with the landowner, arrangements will be made for the long term conservation and storage of all artefacts in an appropriate repository.

4 Resources and Programming

- 4.1 The watching brief will be undertaken by a skilled and experienced archaeologist. Overall supervision will be by Mr R.J.Silvester, a senior member of CPAT's staff who is also a member of the Institute of Field Archaeologists.
- 4.2 All report preparation will be completed by or with the assistance of the same field archaeologist who conducted the watching brief.
- 4.3 The duration of the watching brief will depend entirely on the developers programme of work. The subsequent report will be prepared immediately following completion of on-site recording, dependent on the client's instructions and the arrangement of a suitable timetable. The date of commencement, at the time of writing, has yet to be agreed with the client, and will be dependent on the state of the site and negotiated access. The archaeological curator will be informed of the detailed timetable and staffing levels when agreement has been reached with the client. CPAT would require at least one week's written notice of commencement.
- 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
Projects Officer
26th July 1999

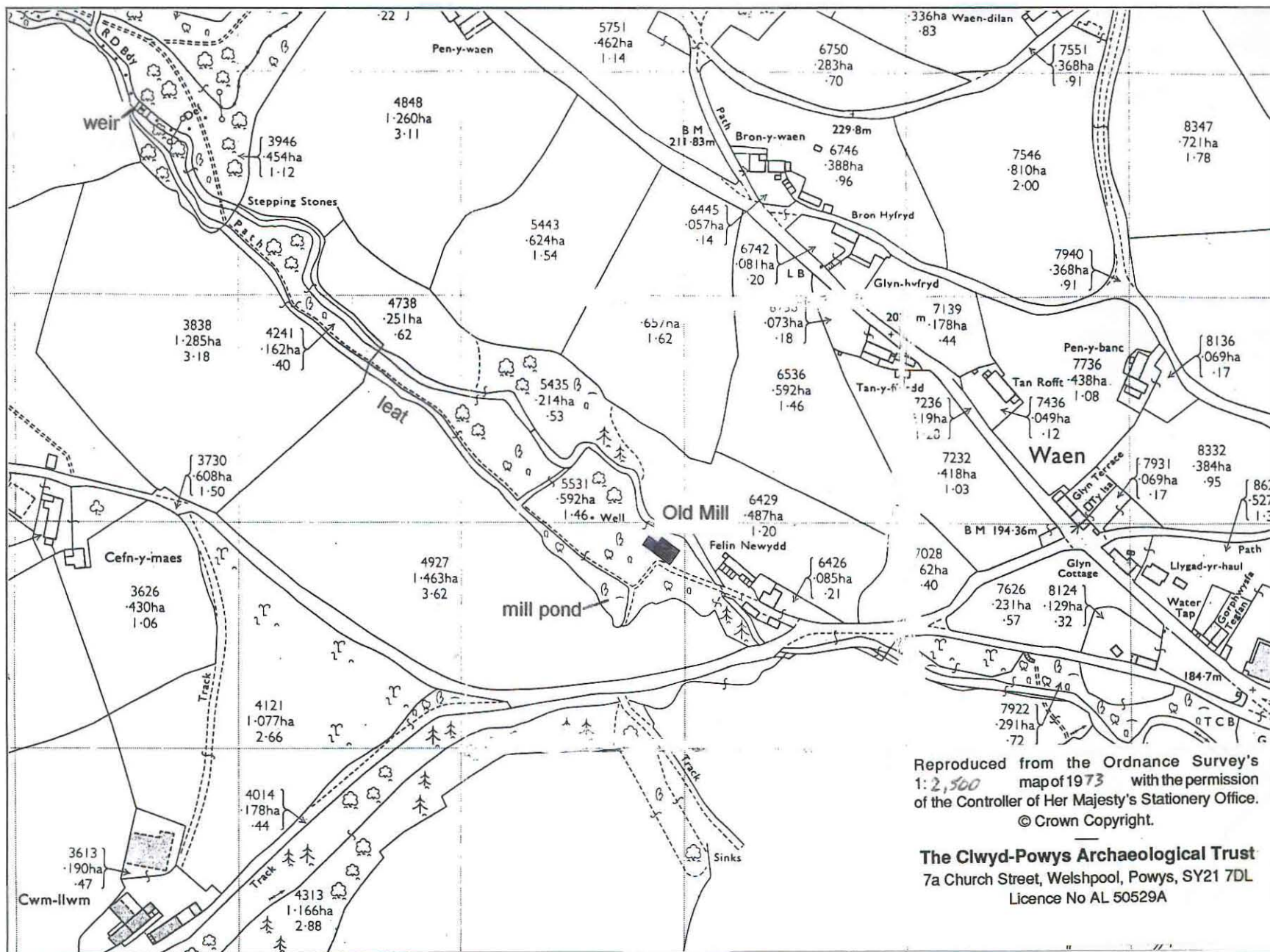


Fig. 1 Site location, scale 1:2,500

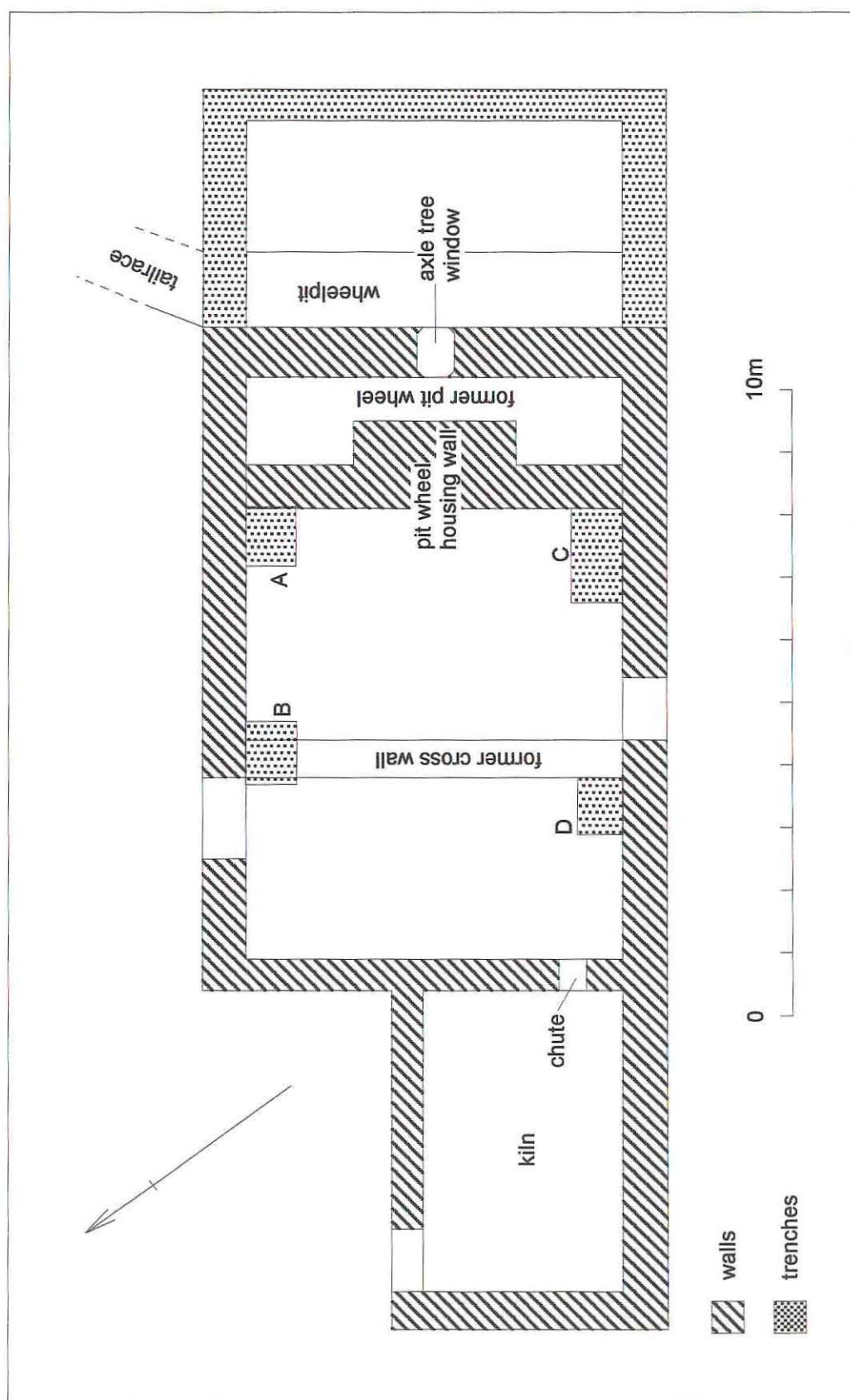


Fig. 2 Plan of mill building showing main features, scale 1:100.



Plate 1 The mill house from S. Photo CPAT 837.1



Plate 2 Mill house SE wall showing axle tree arch. Photo CPAT 837.5



Plate 3 Pulley hoist and housing. Photo CPAT 837.16



Plate 4 Remains of timber water wheel. Photo CPAT 837.14



Plate 5 NE end of wheel pit and tailrace from SE. Photo CPAT 837.12



Plate 6 Remains of wheelpit outer wall from NE. Photo CPAT 837.10