

Pant Quarry, Halkyn, Flintshire
ARCHAEOLOGICAL SURVEY AND WATCHING BRIEF



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June 2000

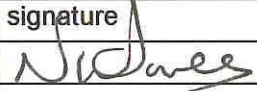
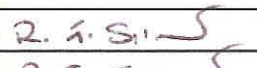

Report for ASH Consulting Group on behalf of Tarmac

CPAT Report Record

Report and status

CPAT Report Title	Pant Quarry, Halkyn. Flintshire: Archaeological Survey and Watching Brief		
CPAT Project Name	Pant Quarry, Halkyn. Flintshire		
CPAT Project No	885	CPAT Report No	369
Confidential (yes/no)		draft/final	FINAL

Internal control

	name	signature	date
prepared by	N.W.Jones		22/06/00
checked by	R.J. Silvester		22/06/00
approved by	R.J. Silvester		22/06/00

Revisions

no	date	made by	checked by	approved by

Internal memo

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1 INTRODUCTION

- 1.1 In March 2000, the Contracting Section of the Clwyd-Powys Archaeological Trust (hereafter CPAT Contracts) was asked by ASH Consulting Group of Old Hall St, Liverpool to provide a cost estimate for archaeological survey and watching brief in advance of, and during, the construction of a new screen bund at Pant Quarry, Halkyn, Flintshire (SJ 20007030; Fig. 1).
- 1.2 A pre-planning assessment had been undertaken by CPAT Contracts during 1998 (Jones *et al.* 1998), consisting of a desk-based study, together with a field survey of the general area. This recorded a total of 47 archaeological sites, most of which were associated with 18th- and 19th-century lead working. The proposed new screen bund directly affected one site, with a further two in close proximity and therefore possibly at risk. In addition, it was also felt that there was the potential for previously unrecorded features being revealed during the stripping of topsoil.
- 1.3 Following the conclusions of the evaluation, the Curatorial Section of the Clwyd-Powys Archaeological Trust, acting in their capacity as archaeological advisors to the local authority, determined that further archaeological recording should be undertaken in advance of, and during the construction work. Accordingly, a brief (CWAT 371) was prepared by MJ Walters detailing the nature of the works required.
- 1.4 The Brief required that a total station survey be undertaken of Bryn Siriol Reservoir (Site 1), Pant Quarry Shaft 1 (Site 9) and Pant Quarry Shaft 2 (Site 10) in advance of any groundworks, and that a watching brief be undertaken during the removal of overburden in the area of the new screen bund.

2 SURVEY

- 2.1 A total station survey was undertaken to include the reservoir (Site 1) and two shaft mounds (Site 9 and 10) which it was thought might be affected by the works. Part of a third shaft (Site 5) was also recorded, although the majority of this site lay beyond the quarry boundary. The survey was undertaken using a Wild TC500 EDM in conjunction with Penmap survey software. The results are shown in Fig. 2.

Bryn Siriol Reservoir (Site 1; Fig. 3)

- 2.2 The reservoir, which was roughly square and aligned north-west to south-east, measured approximately 23m across externally and 16.5m internally. It had been built by excavating into the natural slope on the south and east sides and using the spoil to construct slight banks c. 3.6m wide on the south-east, south-west and north-east sides. On the north-west side, and around the northern corner, considerable dumps of spoil, presumably from the excavation of the reservoir, had been used to form the retaining banks. The general depth of the reservoir was 1.6m below the top of the bank.
- 2.3 Along the south-east side two areas of stonework were visible, one towards the east corner, and the other towards the south corner. It is possible that the latter may have been associated with an inlet sluice, although there is no surface evidence for a leat feeding the reservoir. At the west corner a slight channel 9m in length and 1.3m wide could be identified, aligned with the large shaft (Site 2) lying to the north-west. It is possible that this was the outlet channel and suggests that the reservoir may have been constructed in association with the shaft, although there is no indication of what the water was used for. A substantial break in the bank on the northern corner is likely to be a modern disturbance, probably associated with the placing of an agricultural shed within the reservoir.

Pant Quarry Shafts 1 and 2 (Sites 9 and 10; Fig. 4)

- 2.4 The two shafts lie 12m apart just outside the area of the new screen bund. Situated on a north-east facing slope, the lower and smaller shaft (Site 9) has a diameter of 4.2m, with spoil mounded around the shaft on the downslope side.
- 2.5 The larger shaft (Site 10) has an internal diameter of 5.3m, with a spoil cone 12m in diameter surrounding, mostly on the downslope side. There is a possible ore bin or chute situated on the north-east side, and several large limestone boulders lie within the shaft depression.

3 WATCHING BRIEF

- 3.1 A watching brief was maintained between 7-14 June 2000, during the stripping of topsoil from an area of c. 2.7ha. Mechanical stripping of the area was undertaken using a bulldozer which removed approximately 0.25m of brown loamy topsoil, overlying an orange-brown clay-silt subsoil with occasional limestone outcrops.
- 3.2 The area included the Bryn Siriol reservoir (Site 1), which was seen to be constructed of a rough earth and stone bank, but with no evidence for any structural stonework. There was no evidence for an associated leat feeding the reservoir, as might have been expected. The two shafts (Sites 9 and 10) were not affected by the works.
- 3.3 No archaeological features were noted within the remainder of the area, although small patches of charcoal over an area of some c. 40 x 20cm were identified, though they were interpreted as resulting from vegetation clearance. Several sherds of pottery were recovered from the topsoil, all of which were 19th-century in date, together with a chunk of unworked chert. The finds were recorded, but have not been retained.

4 CONCLUSIONS

- 4.1 The results from the total station survey have provided a detailed record of the sites concerned which ensures their preservation by record, as well as revealing some new evidence. The site archive has been retained by CPAT, but will ultimately be deposited with the County Sites and Monuments Record, CPAT, Welshpool.
- 4.2 The Bryn Siriol Reservoir (Site 1) had been constructed by terracing into the slope on the east side and using the spoil to construct a surrounding earth and stone bank. A possible inlet sluice was identified at the southern corner, together with a possible outlet channel at the west corner. There was, however, no trace of a feeder leat.
- 4.3 The two shafts (Sites 9 and 10) produced little no information, with the exception of a possible ore bin or chute identified on the large shaft (Site 10).
- 4.4 The watching brief revealed limited new information concerning the construction of the reservoir, which was destroyed during the construction works, but produced no evidence for any archaeological features from the remainder of the area.

5 ACKNOWLEDGEMENTS

- 5.1 The author would like to thank the following for their assistance: Wendy Owen, CPAT, for assisting with the survey; Glyn Owen and Bob Silvester, CPAT, for undertaking the watching brief; Andy Swinnerton, Quarry Manager, Pant Quarry.

6 REFERENCES

Jones, N W, Hankinson, R, and Frost, P, 1998. *Pant Quarry, Halkin, Flintshire: Archaeological Assessment*. CPAT Report No 280.

APPENDIX 1

CONSTRUCTION OF A SCREEN BUND AT PANT QUARRY, HALKYN, FLINTSHIRE SPECIFICATION FOR AN ARCHAEOLOGICAL SURVEY BY CLWYD-POWYS ARCHAEOLOGICAL TRUST

1 Introduction

- 1.1 It has been proposed by Tarmac Quarry Products (North West Ltd) that a new screen bund will be constructed on land to the west of Pant Quarry, Halkyn.
- 1.2 An archaeological assessment of the development area undertaken by CPAT Contracts Section in December 1998 identified 47 archaeological sites within the general area, mostly associated with 18th-19th century mining activity (CPAT Report No 280). Of these, four sites were considered worthy of preservation by recorded by means of a total station measured survey. Accordingly, a brief (CWAT 371, dated 13/03/00) has been prepared by MJ Walters, CPAT Section, acting as archaeological advisors to the local authority, which describes the scheme of archaeological works required.

2 Objectives

- 2.1 The objectives to ensure the preservation by record of any surviving archaeological features which are likely to be disturbed or destroyed by the development.
- 2.2 to prepare a report outlining the results of the survey and watching brief.

3 Methods

- 3.1 Three sites will be recorded by detailed total station survey: Site 1, Bryn Siriol Reservoir; Site 9, Pant Quarry Shaft 1; Site 10, Pant Quarry Shaft 2.
- 3.2 The survey will be undertaken using a Wild TC 500 EDM in conjunction with Penmap Survey Software.
- 3.3 A watching brief will be maintained during the initial top soiling and construction of a new earthwork screening bund in order that significant deposits and artefacts can be identified, located and retrieved.
- 3.4 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 by drawn plan/section and photography. All features will be tied in locationally to the Ordnance Survey as accurately as possible.
- 3.5 Following the on-site work an illustrated and bound report will be prepared according to the principles laid out in the Curatorial Brief (section 7). This will be in A4 format and contain conventional sections on: Site location, Topography and Geology; Historic Background; Survey; Conclusions and Recommendations and References, together with appropriate appendices on archives and finds (if any). The report will include digital survey plots of the three sites at an appropriate scale, together with plans, photographs of any features identified during the watching brief.
- 3.6 The site archive will be prepared to specifications laid out in Appendix 3 in the Management of Archaeological Projects (English Heritage, 1991).

4 Resources and Programming

- 4.1 The survey will be undertaken by a small team of 2 skilled archaeologists under the direct supervision of an experienced field archaeologist. Overall supervision will be by Mr RJ 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 archaeologists who conducted the survey and watching brief.
- 4.3 It is anticipated that the field element of the survey will take no more than one day. 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.
- 4.4 A draft report will be forwarded to the client and curator and approved by the curator prior to the submission of the final version, which will be completed within one month of the completion of the watching brief.
- 4.5 Requirements relating to Health and Safety regulations will be adhered to by CPAT and its staff.
- 4.6 CPAT is covered by appropriate Public and Employer's Liability insurance.

N.W.Jones
20th March 2000

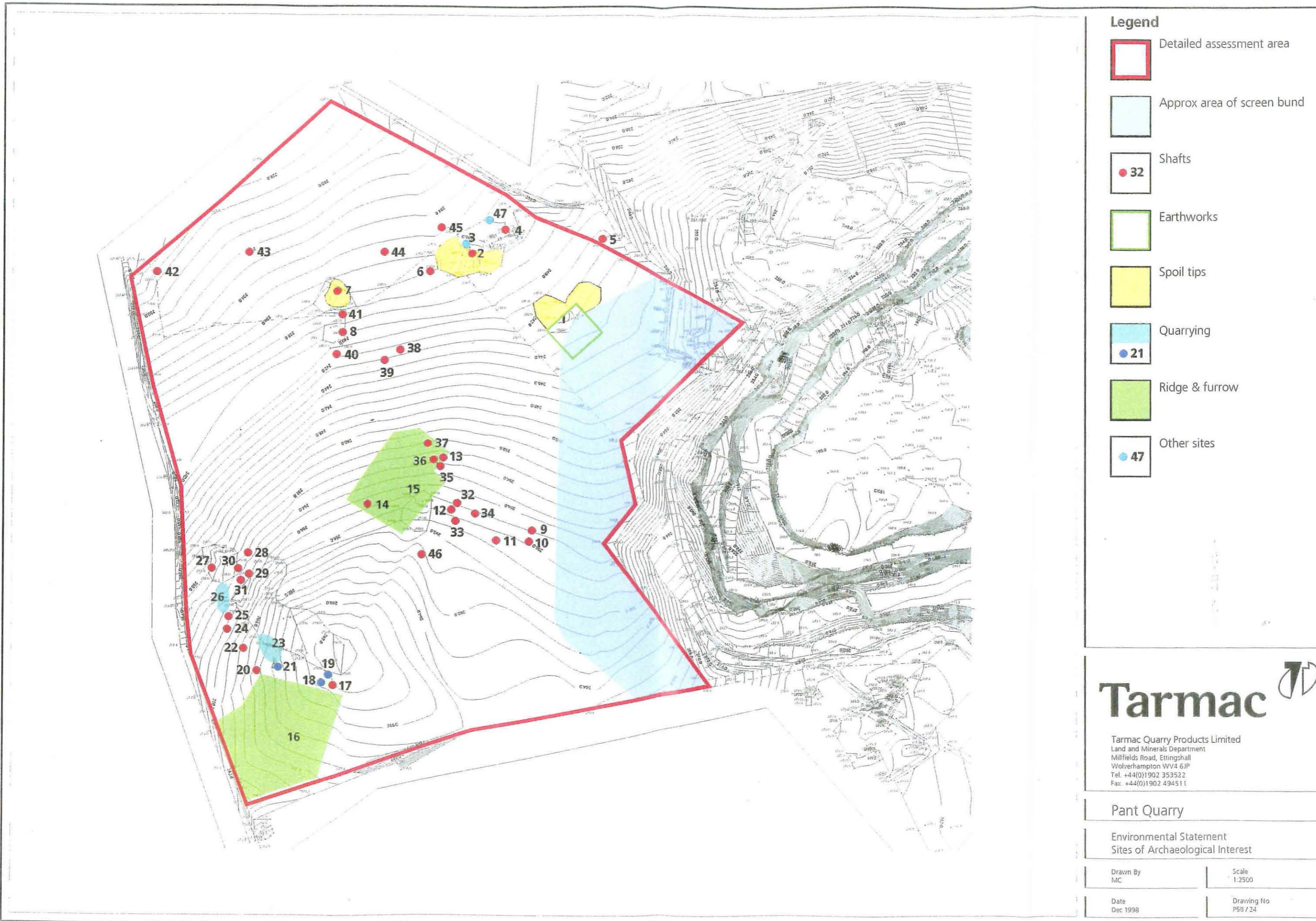


Fig. 1 Pant Quarry, Sites of Archaeological Interest

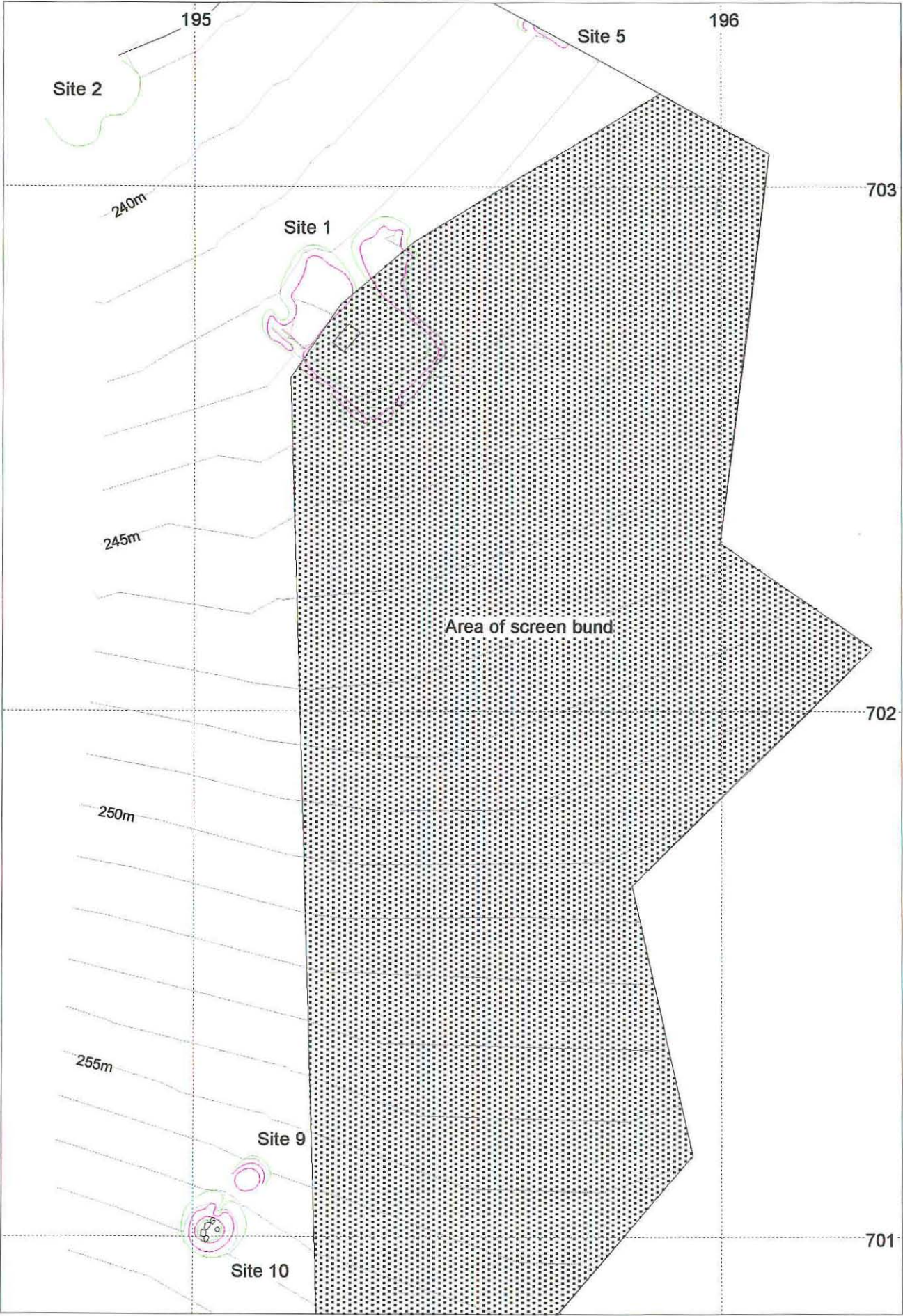


Fig. 2 Total Station survey, scale 1:1,000

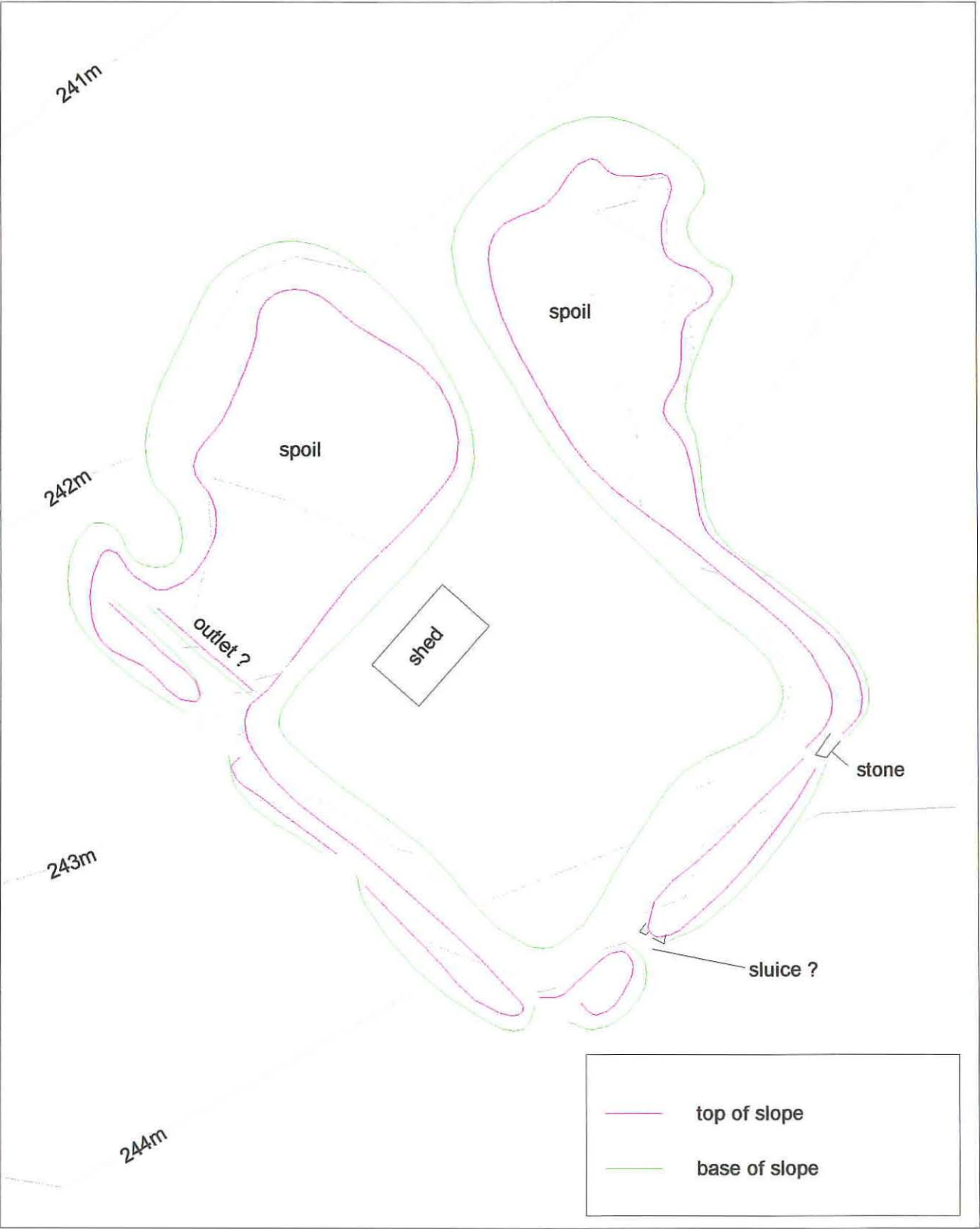


Fig. 3 Bryn Siriol Reservoir, Site 1, scale 1:250

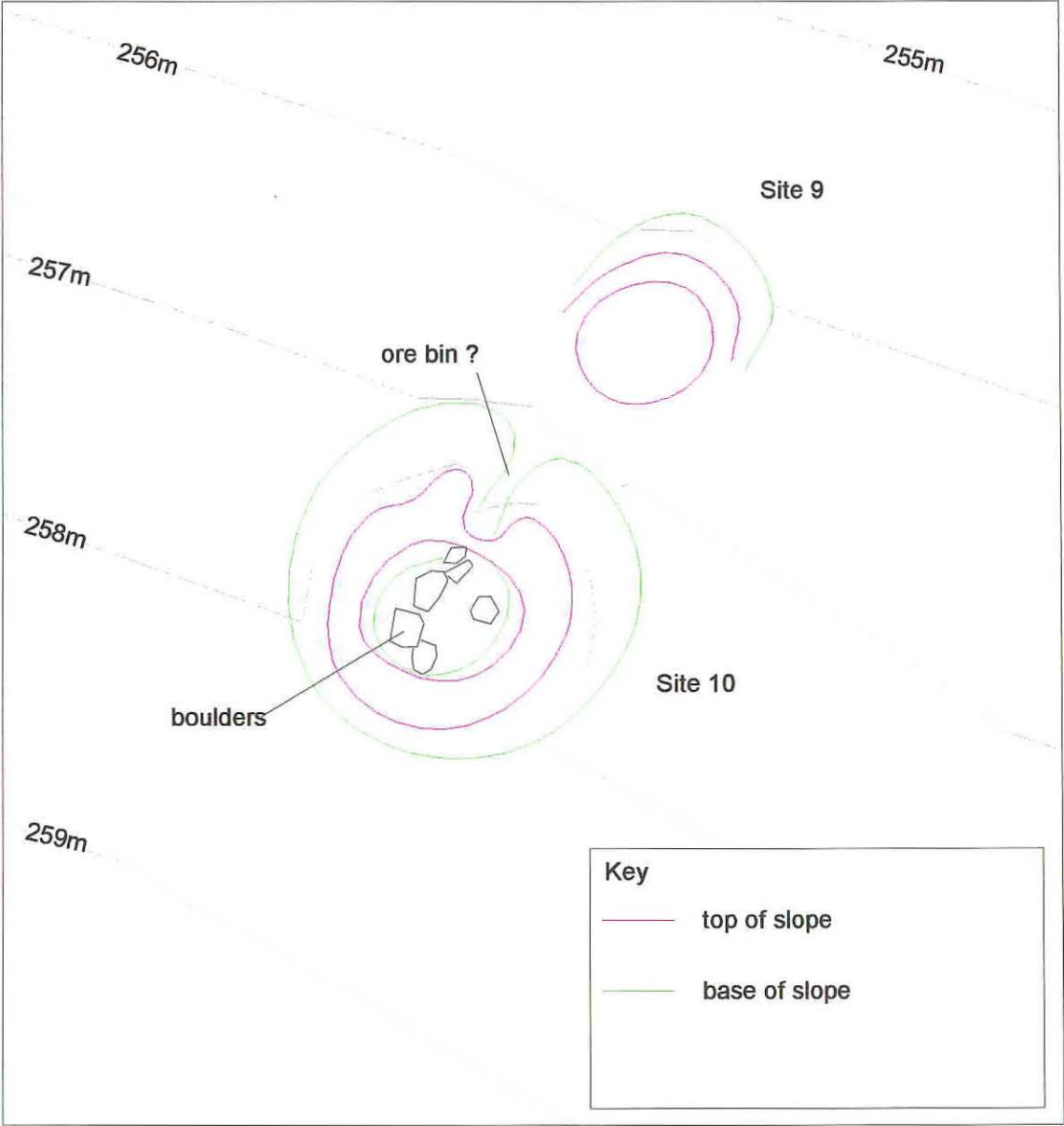


Fig. 4 Pant Quarry Shafts 1 and 2 (Site 9 and 10), scale 1:250