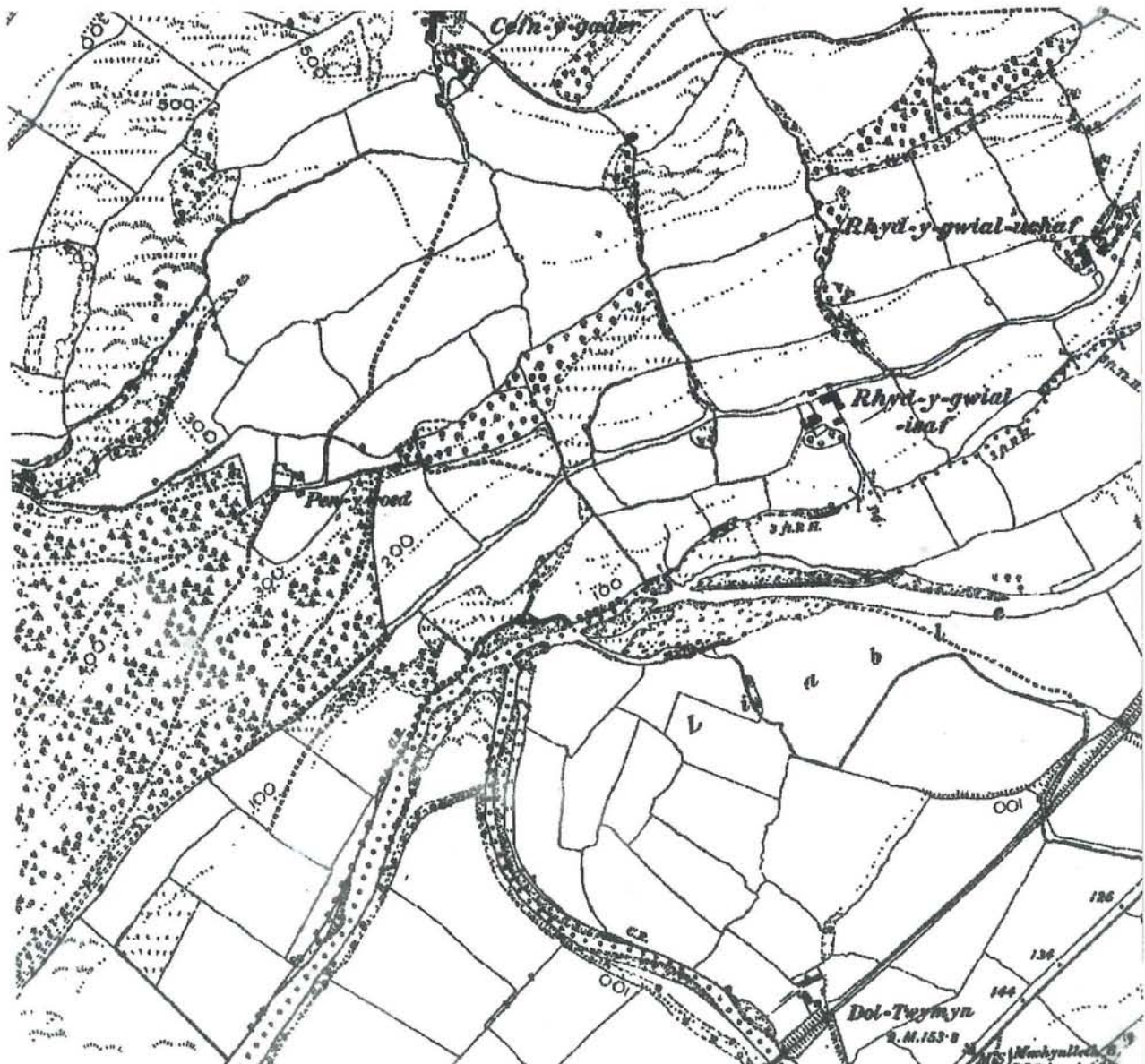


Caersws to Machynlleth Gas Pipeline (Phase 2 Talerddig to Machynlleth)

ARCHAEOLOGICAL WATCHING BRIEF AND EXCAVATION



*Caersws to Machynlleth Gas Pipeline
(Phase 2 Talerddig to Machynlleth)*

ARCHAEOLOGICAL WATCHING BRIEF AND EXCAVATION

R.Hankinson
January 2001

Report for RSK Environment Ltd and British Gas Transco

The Clwyd-Powys Archaeological Trust

7a Church Street, Welshpool, Powys, SY21 7DL

tel (01938) 553670, fax (01938) 552179

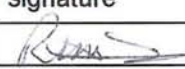
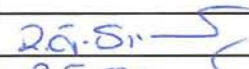
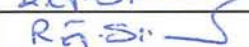
© CPAT 2001

CPAT Report Record

Report and status

CPAT Report Title	Caersws to Machynlleth Gas Pipeline (Phase 2 Talerddig to Machynlleth) Archaeological watching brief and excavation		
CPAT Project Name	Talerddig - Machynlleth Gas Pipeline Watching Brief		
CPAT Project Nos	893 & 903	CPAT Report No	391
Confidential (yes/no)		draft/final	

Internal control

	name	signature	date
prepared by	R. HANKINSON		08/01/01
checked by	R.J. SILVESTER		08/01/01
approved by	R.J. SILVESTER		08/01/01

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	GEOGRAPHICAL BACKGROUND
3	WATCHING BRIEF
4	EXCAVATIONS
5	CONCLUSIONS
6	ACKNOWLEDGEMENTS
7	SOURCES
	APPENDIX 1 - EXCAVATION ARCHIVE
	PLATES
	FIGURES

1 INTRODUCTION

- 1.1 In April 2000, the Clwyd-Powys Archaeological Trust (hereafter CPAT Contracts) was asked by RSK Environment Ltd of Helsby, Cheshire, to provide a quotation for an archaeological watching brief to be carried out during the construction of a gas pipeline between Talerddig and Machynlleth in north-western Powys.
- 1.2 The watching brief represented the final phase in a programme of work on the pipeline corridor, running from near Talerddig village along first the Tymwyn Valley and then the Dovey Valley to terminate just to the east of Machynlleth. An initial assessment of the corridor was conducted in August and September 1999 (Silvester, 2000), and this, through desk-top analysis and fieldwork, defined the known archaeological resource. Following the assessment, and in advance of any works commencing along the line of the corridor, two sites were evaluated to determine their integrity and establish whether the course of the pipeline needed to be modified to take account of them (Hankinson, 2000). In the event the evaluations revealed that these sites had little archaeological significance.
- 1.3 The archaeological watching brief had been requested by the Curatorial Section of the Clwyd-Powys Archaeological Trust, in order that any features which were revealed or disturbed by excavation works could be recorded. The watching brief was the subject of a design brief prepared by the Curatorial Section (CPAT CWAT 374); this specified the regular monitoring of topsoil stripping to determine whether significant deposits or artefacts were present. It was also specified that any features which were revealed should be excavated and recorded in an appropriate manner.
- 1.4 The CPAT quotation was accepted by RSK Environment Ltd, working on behalf of Transco, and the watching brief commenced in July 2000 when topsoil stripping started on the wayleave. It was completed at the beginning of September 2000.

2 GEOGRAPHICAL BACKGROUND

- 2.1 The geographical background (soils, geology etc.) has already been considered in the initial assessment of the gas pipeline (Silvester 2000, 2) and do not need to be repeated here.

3 WATCHING BRIEF

- 3.1 The main part of the watching brief involved the examination of the wayleave (or spread), after topsoil had been removed and before significant numbers of vehicles had traversed it and masked any features that might be present. It was not considered necessary, or indeed financially viable, to have a constant presence on site. Visits were made every 3 to 4 days, depending on the rate of progress of topsoiling work, which was influenced by various factors including the prevailing weather conditions. The methodology adopted consisted of first walking the topsoiled area in one direction, while examining the surface of the subsoil for features of archaeological interest; the area was then walked in the return direction, and the stripped topsoil was examined for any artefacts which had been revealed. Topsoiling work affecting the two sites which had been evaluated was examined when it was in progress.
- 3.2 New evidence relating to known sites which were examined within, or immediately adjacent to, the topsoiled spread, is detailed below in order of the site's PRN (primary record number) in the Sites and Monuments Record (SMR), held by the Curatorial Section of the Clwyd-Powys Archaeological Trust. This is followed by a brief description of the single new site which was identified after topsoiling; a limited programme of excavation was carried out on this site to determine more fully its nature and dating and this is described in Section 4, below.

PRN 21975. Stone quarry (SH 9091 0191). The topsoiled spread passed immediately to the north-east of the quarry, whose appearance suggests modern use to provide stone for farm trackways.

PRN 70252. Platform ? (SH 850 039). The appearance of this site suggests it is a relatively recent spoil mound, perhaps originating from earthmoving activity connected with the terraced trackway running south-west. The site was not directly affected by topsoiling work.

PRN 80094. Leat (Plate 2: SH 9009 0309). The leat was crossed by the wayleave, but was flumed (pipe installed to retain flow) and covered by protective timbers during topsoiling. No evidence relating to its age or morphology was evident.

PRN 80095. Footbridge (SH 8649 0396). There was no visible evidence of this site, which has presumably been destroyed subsequent to its depiction on the 1887 OS 25" map.

PRN 80096. Building (SH 8481 0366). No evidence of this site was present at the given location.

PRN 80098. Quarry ? (SH 8280 0461). This site was crossed by the wayleave, but only a few natural rock outcrops were revealed by topsoiling; there was no evidence of any quarrying activity.

PRN 80099. Narrow gauge railway (SH 8259 0489). The line of this former railway was crossed by the wayleave, but no features relating to it were seen in the topsoiled area. The track may have been laid directly on the ground, perhaps utilising natural gravel deposits to give a firm trackbed, and it appears to have been entirely removed.

PRN 80244. Building (Dolau Bricks: SH 7839 0310). The 2inch:1mile OS Surveyors' drawing (No 337) of 1833-4 names a building adjacent to the road as Dol-y-bricks (brick meadow). No direct evidence of a building was seen in the topsoiled spread, but there were a number of poorly fired brick fragments near the location of PRN 80257, perhaps suggesting that brick manufacture was being carried out nearby. The local clay revealed by topsoil stripping appears to be suitable for brick manufacture and may have been utilised.

PRN 80247. Buildings/farmstead (SH 9246 0056). No certain evidence of this site was seen adjacent to the wayleave and no direct evidence of any buildings was revealed by topsoiling. A fragment of Staffordshire-style slipware of post-medieval date was found at the nearby spring, which suggests a potential date for the farmstead.

PRN 80252. Cottage (SH 8639 0391). The location of this site was probably not crossed by the wayleave. No evidence of a building was seen in the topsoiled spread.

PRN 80257. Building (SH 7837 0320). No evidence of a building was seen in the topsoiled spread. The poorly fired bricks found near its location (See PRN 80244) could suggest that the building may have been used in local brick manufacture.

PRN 80283. Bank ? (SH 8926 0341). This site was crossed by the wayleave and had been evaluated prior to the commencement of pipeline construction work. The evaluation (Hankinson, 2000) demonstrated that the site was a natural, possibly glacial, deposit of clay and stones giving the appearance of a bank. This interpretation was corroborated by observation of the topsoiling, which demonstrated that the bank had a uniform composition.

PRN 80293. Earthworks ? (SH 8208 0526). This site was crossed by the wayleave and had been evaluated prior to the commencement of pipeline construction work, when the irregular ground surface was found to be the result of a natural peat deposit. Examination of the topsoiled spread demonstrated that the deposit extended for a total of 60m on the north-east side of the adjacent fence. Some of the peat would appear to have built up behind a rock outcrop which was revealed by topsoiling at its south-western end.

PRN 80814. Trackway ? (SH 9350 9938). This site is located immediately to the south of the fence which defined the south side of the wayleave; no evidence relating to it was seen in the topsoiled spread.

PRN 80815. Ridge and furrow (SH 9341 9944). The field containing these cultivation traces was crossed by the wayleave, but no evidence relating to them was revealed in the topsoiled spread.

PRN 80816. Wall (Plate 1: SH 9324 9934). The wall was cut during the topsoil stripping, revealing a section through it. The wall was seen to be constructed of facing stones with a loose rubble core; its appearance suggests it is of relatively modern construction.

PRN 80817. Wall (SH 9238 0011). The surviving section of the wall was avoided by topsoiling activities.

PRN 80819. Platform ? (SH 9237 0010). No evidence of a small platform was seen in the topsoiled area.

PRN 77899. Cottage (Plates 3-8: SH 8201 0513). The site of this former dwelling was revealed by topsoil stripping during the watching brief. One main hearth and two smaller features were revealed, one of which apparently post-dated the main hearth. These probable hearths were in varying conditions but would appear to have been constructed of tightly packed stones set into clay, which was reddened by heat where it came into close proximity with the stones. Finds including pottery and iron nails were recovered. The most likely interpretation of the site is that it was a timber framed dwelling occupied in the 16th to 18th centuries (see excavation report, below).

4 EXCAVATIONS

- 4.1 A single new site (PRN 77899) was exposed by topsoil stripping during the watching brief. Initially, only a few closely-set stones were visible, though rapid cleaning demonstrated that a wider area appeared to contain archaeological features. The initial archaeological response was to arrange for that part of the site visible within the wayleave to be marked out to prevent damage by machinery travelling along the pipeline corridor. Unfortunately, however, the location of the site was such that it could not be readily avoided by work associated with the pipe installation and, in consequence, Transco agreed to fund a limited programme of excavation on the site, prior to its disturbance by the pipe installation work, in order to determine its nature and dating.
- 4.2 The area chosen for excavation was centred on the packed stone feature (11) which had led to the initial recognition of the site; a total area of 8.0m x 7.8m was initially cleaned and then excavated. The cleaning was carried out by repeatedly removing approximately 0.1m thicknesses of soil until the stratigraphic sequence became clearer. The features revealed were then drawn and photographed prior to the selective excavation of a sample by sectioning; this method had been adopted in consultation with the Archaeological Curator, Mr M. Walters of the Curatorial Section of CPAT, who monitored the work.
- 4.3 The location occupied by the site was at the base of a gentle south-east facing slope on the floor of the Dovey valley, immediately adjoining the flood plain, and only c.50m from the river. The steep south-east facing side of the valley meets the valley floor approximately 100m to the north-west. The silty soils present in the vicinity of the site appeared to be of fluvial origin. No visible remains were evident prior to topsoiling, possibly as a result of the pasture improvement which has been carried out in the valley floor fields.
- 4.4 The light brown silty topsoil (1) and underlying grey-brown silty ploughsoil or alluvial silt (2) had already been removed prior to the commencement of the excavations, but examination of the edges of the topsoiled area suggested that the combined depth of these two layers over the site was approximately 0.3m. A few of the stones which formed feature 11 had been dislodged by machinery during topsoiling, but it was difficult to determine with any certainty whether stones had previously been disturbed during land improvement. The extent of the feature was readily apparent, however, as a result of the change of underlying soil colour associated with the stones.
- 4.5 Cleaning of the site area revealed three main stratigraphical layers. Layer 4 occupied the north-western side of the cleaned area and consisted of clean and largely stoneless grey and orange-brown gritty silt. Layer 7 occupied the south-eastern side of the excavation and consisted of mottled grey and light brown, slightly gritty silt containing some stone, flecks of charcoal, two fragments of calcined bone and iron nails. The intervening area between layers 4 and 7 formed a curve with its apex to the north and was occupied by a layer (5), of mixed

brown, grey-brown, and orange-brown sticky silt containing small stones, charcoal flecks, two nails and a section of horseshoe, a clay pipe fragment, post-medieval pottery, and burnt clay (probably brick). Limited excavation of these three layers established that layer 4 was probably a naturally formed deposit of silt, largely undisturbed by the post-medieval activity above it. It was overlain by layer 7 on top of which layer 5 had then been deposited. An irregular layer of small stones (6) was occasionally present at the base of layer 5.

- 4.6 Three stone features (9), (10) and (11), interpreted as hearths, were exposed during the process of cleaning the site, all of which had apparently been cut into layer 7. Each hearth consisted of tightly packed stone cobbles which, with a single exception, were of no more than 0.2m in size, and probably collected from the river bed only a few metres away. Care had obviously been taken in constructing the hearths, and around the stones in each case was a reddened corona of clay which could be readily distinguished from layer 7. The main hearth (11) was sub-rectangular in shape with an east-north-east/west-south-west alignment; some stones had been lost, but it would probably have measured 1.7m by 1.2m. A second, smaller hearth (10) was sub-circular, approximately 1.1m in diameter, and may have formed a subsidiary feature associated with, but post-dating, the main hearth on its west side. A section through both (Fig 3) revealed the upper layers of 10 had cut through those of 11, indicating its secondary origin. Both hearths comprised a hollow, excavated into layer 7, filled with brown sticky clay (14 and 17), the upper 0.2m of which (13 and 16) had been reddened by heat. Closely packed stones (12 and 15) had then been set into the top of the clay, and the upper surfaces of some of these were found to have been fractured by excessive direct heat; a single iron object was found within the stones forming layer 12.
- 4.7 The remaining hearth (9) appeared to be morphologically similar to the other hearths, with its remaining surface stone covering an oval area measuring approximately 1.0m x 0.6m. Such were the similarities in surface appearance to both 10 and 11 that it was not sectioned.
- 4.8 The only visible feature in addition to those described above was a 1.0m length of laid stones (8). The feature ran from its west end into the extreme eastern corner of the excavated area and could not be completely investigated as a result, though there was a suggestion of facing on its north side.
- 4.9 *Interpretation.* There is no surviving record of a building or other feature on this spot. An early estate map from 1763, showing in detail the land holdings of the Wynnstay Estate holdings on the west bank of the Dovey, based on the demesne manor of Mathafarn, appears to indicate that by that date the building had disappeared. The other source of information for dating the site, the pottery, broadly supports this contention for the material is of well-recognised forms extending from the 16th to the early 18th centuries (see Appendix 1).
- 4.10 The nature of the building or structure that occupied the spot is very much more difficult to determine. The degradation of the deposits after the abandonment of the site seems to have been on a significant scale. Natural processes including soil movement downslope and also, and perhaps more intrusively, the ploughing that will have been conducted occasionally to improve the pasture, must have damaged and ultimately destroyed whatever structure was present; the hearths survived only because the tightly packed stones almost certainly deflected the plough. Furthermore it is very likely that we do not have the full picture, for in all probability other parts of the site lie further to the east, outside the wayleave and closer to the river. The edge of the main hearth (11) was less than 0.4m from the lower side of the wayleave, that is less than the distance between hearths 11 and 9. Layer 7 with its fragments of domestic debris certainly ran into the unexcavated area, as did the laid stones (8) in the extreme east corner.
- 4.11 It seems unlikely that the hearths would have been in the open, though it is perhaps not entirely impossible. However, the presence of a building over them appears more plausible. That this building was of no great substance is implied by the absence of postholes, wall trenches or substantial foundations. The only possible structural evidence is represented by the group of stones, 8. This might represent the remains of a wall footing but it should be stressed that there is no evidence to confirm this hypothesis. Little work could be done on 8 because it clearly continued beyond the wayleave. Even if this was a relict wall footing it tells us little of the structure it may have supported; the spatial distribution together with the hearths provides no certain clues as to the orientation or size of the putative building.

- 4.12 The function of the site also remains obscure, though we can perhaps indulge in some speculation. The most curious feature is the presence of no less than three hearths. Certainly hearth 10 was later than the main hearth, 11, but this does not mean that it supplanted it - it could simply have been subsidiary. The appearance of three hearths, all with traces of burning on their stones, indicative of use, suggests specialist activity, rather than a simple dwelling which would surely have necessitated only a single hearth. Whether that activity can be associated with the nearby river - such as catching and smoking fish - is not something that can be ascertained. The river is well known for its fishing to the present day, which would in a historic sense imply that the fishing would be well protected by its owners, and this could have led to the founding of small riverside settlements for use by water bailiffs.

5 CONCLUSIONS

- 5.1 The watching brief formed the final phase of archaeological input into the pipeline and was designed to record any further archaeological data which might be revealed during the construction phase of the project. The recording which was carried out has added to our knowledge of the sites which had been recorded during previous phases of work and revealed one new site, for which only sub-surface traces remained.
- 5.2 The majority of the archaeological sites in the vicinity of the pipeline have remained undisturbed by the construction work, demonstrating that the initial assessment (Silvester, 2000) has been successful in its objective of identifying the archaeological resource of the area, with a view towards its preservation. The single new site which was revealed could not have been identified at that stage due to its lack of visible surface remains.
- 5.3 Two sites (PRNs 80283 and 80293) had been subjected to archaeological evaluation prior to the commencement of pipeline installation (Hankinson, 2000). These sites were specifically observed during topsoil stripping, and this confirmed the results of the evaluations which had suggested that these sites were of natural origin.
- 5.4 The most significant additional knowledge produced by the watching brief, in relation to known sites, concerned buildings PRNs 80244 and 80257. During observation of topsoiling, a quantity of poorly fired brick fragments were revealed in the vicinity of these two sites; the concurrence of this evidence with the name "Dol-y-bricks" and the suitability of the local clay suggests that brick manufacture was being carried out in the vicinity, perhaps these buildings were involved in the manufacturing process.
- 5.5 The single new site (PRN 77899) revealed by topsoiling would appear to have been a dwelling, probably occupied between the 16th and early 18th centuries. The site does not appear on the earliest cartographic source for the area dated 1763, suggesting that it had already been lost at that time. It has not been possible to determine the overall size or alignment of the building due to the boundaries of the wayleave, and the lack of structural evidence for its walls or their footings. It may be that some locally made bricks had been included in the structure. The top of layer (7) would appear to have formed the floor of the dwelling.

6 ACKNOWLEDGEMENTS

- 6.1 The writer would like to thank the on-site staff of Lawrence, the construction contractors, and the site staff of Transco for their help and assistance in facilitating both the watching brief and resulting excavation. Thanks also go to Mr Breese of Rhyd-y-Gwial Isaf farm who permitted access to the excavation site on his land and took an interest in the work.
- 6.2 The writer would also like to thank his colleagues at CPAT, Mr R.J. Silvester, for his assistance with the excavations and watching brief, and Mr N. Jones for identifying the pottery finds.

7 SOURCES

7.1 References

Hankinson, R, 2000, *Caersws to Machynlleth Gas Pipeline (Phase 2 Talerddig to Machynlleth) Archaeological Evaluation*, CPAT Report No 368: Welshpool.

Silvester, R.J., 2000, *Caersws to Machynlleth Gas Pipeline (Phase 2 Talerddig-Machynlleth) Archaeological Assessment*, CPAT Report No 334: Welshpool.

7.2 Cartographic Sources

1763 Wynnstay Estate map volume 1 (National Library of Wales)

1833-4 2inch:1mile Ordnance Surveyors drawing No 337.

APPENDIX 1 - EXCAVATION ARCHIVE**Site Records**

17 Context record forms

1 A1 plan

1 A4 plan

1 A4 section drawing

2 Black and white print films

2 Colour slide films

1 Colour print film

Photographic catalogue

Pottery finds (Identification by Mr N. Jones of CPAT)**Unstratified**

3 sherds (14g) Local Red Earthenware trailed slip 17th-18th century

1 sherd (9g) Cistercian type ware ?16th century

1 sherd (20g) ? Jar with patchy mottled internal and external glaze, ?15th-16th century

Context 5

6 sherds (144g) Local Red Earthenware internally glazed storage jar 17th-18th century

1 sherd (23g) Local Red Earthenware trailed slip dish/bowl 17th-18th century

2 sherds (2g) Local Red Earthenware fineware, internal and external brown glaze 17th-18th century

1 sherd (4g) whiteware with pale green internal and external glaze ? 17th-18th century

Other Finds**Unstratified**

1 section of clay pipe stem

10 ?brick fragments (410g)

6 iron objects (185g) including nails

Context 5

1 section of clay pipe stem

2 ?brick fragments (279g)

3 iron objects (112g) consisting of two nails and a section of horseshoe

Context 7

2 fragments of calcined bone (1g)

4 iron nails (45g)

Context 12

1 iron object (29g)



Plate 1. PRN 80816 from NNE



Plate 2. PRN 80094 from SSW



Plate 3. PRN 77899, excavated area after cleaning from NW



Plate 4. PRN 77899, main hearth (11) from SE



Plate 5. PRN 77899, probable subsidiary (10) to main hearth from S



Plate 6. PRN 77899, probable secondary ?hearth (9) from SE



Plate 7. PRN 77899, possible foundation wall (8) from W

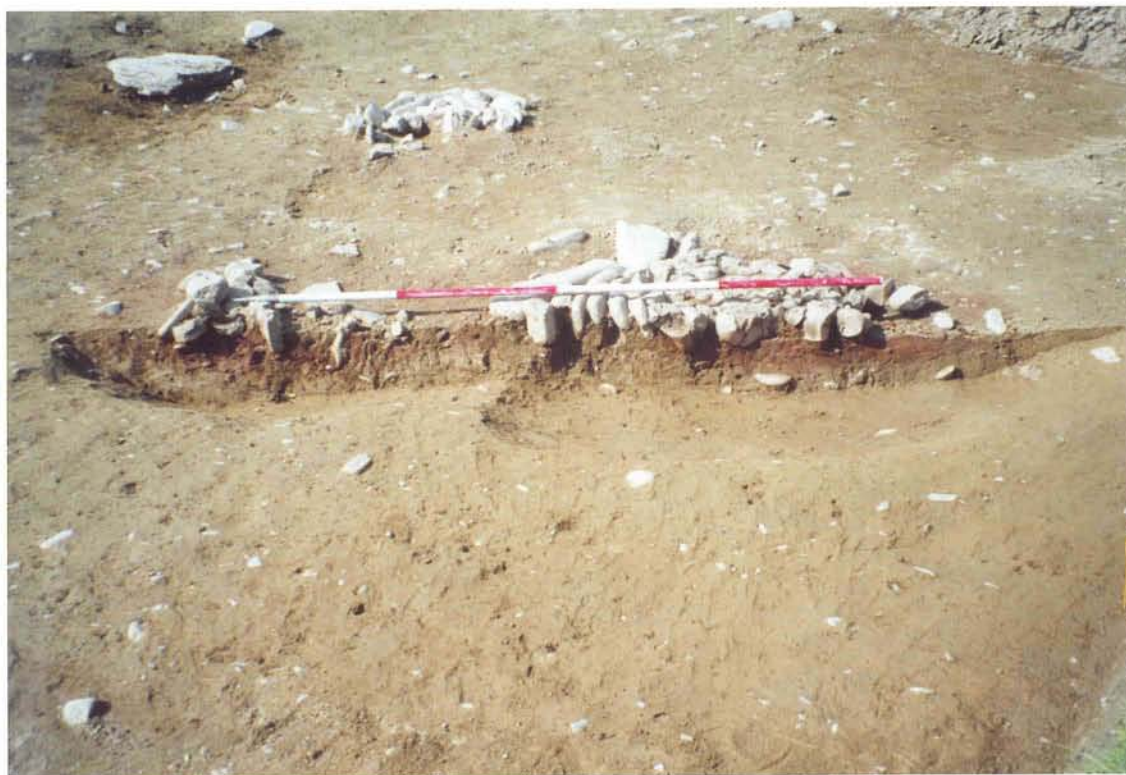


Plate 8. PRN 77899, half-section of main hearth (11) and subsidiary (10) from S

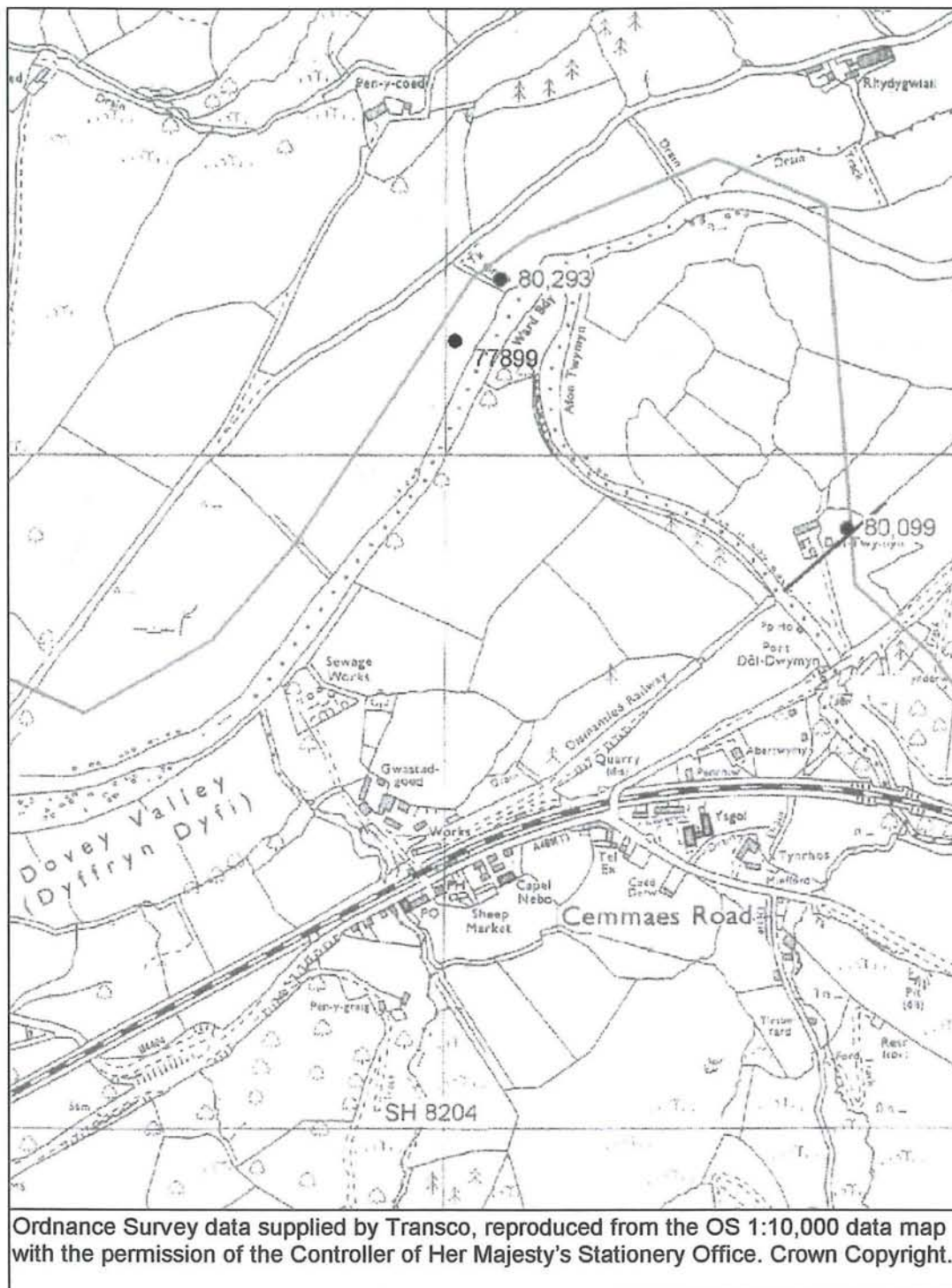


Fig 1. Location of dwelling (PRN 77899) discovered during watching brief (Scale 1:10,000)

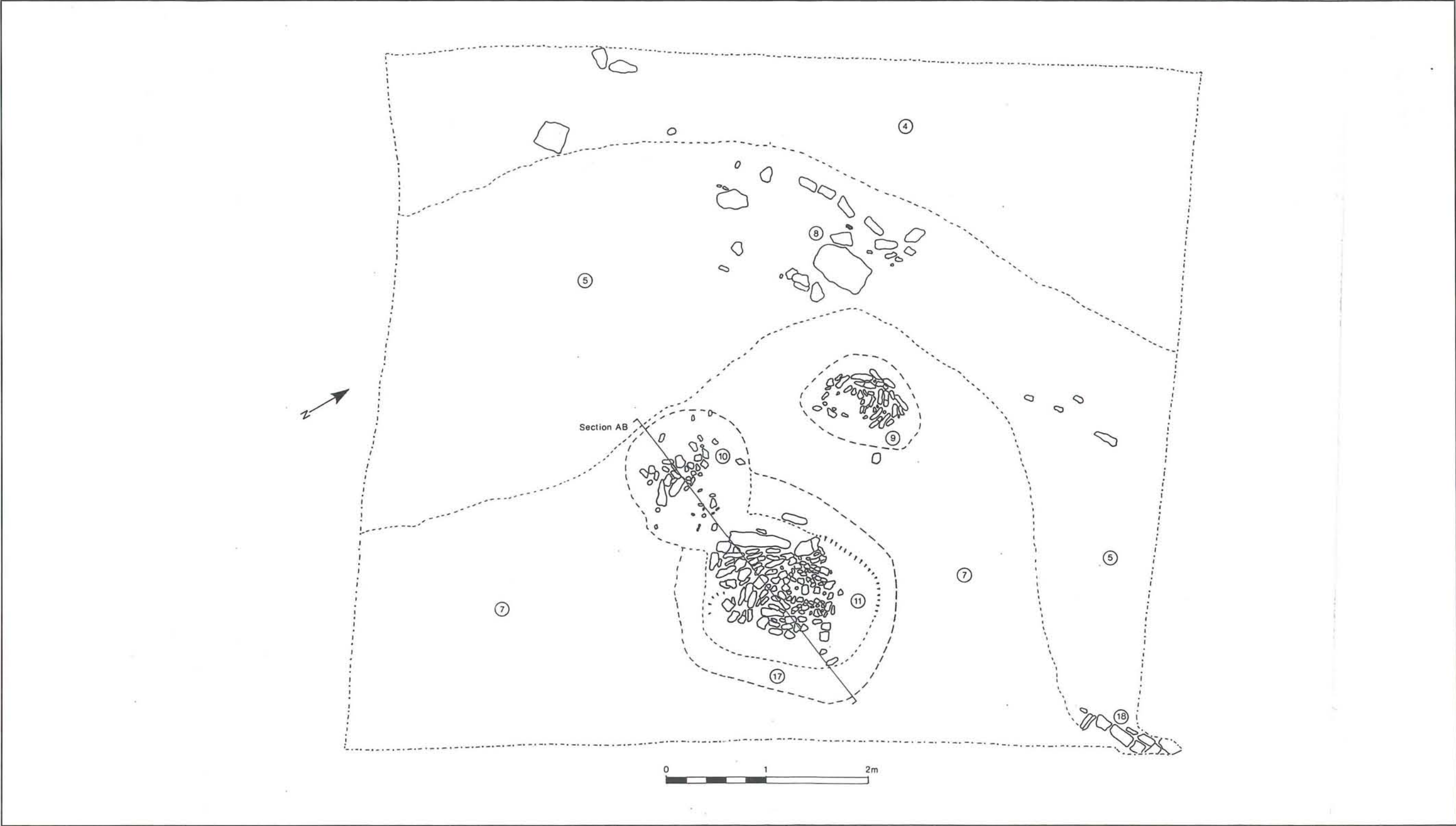


Fig 2. Plan of excavated area (Scale 1:40)

Fig. 2 Interior plan of nave, scale 1:100

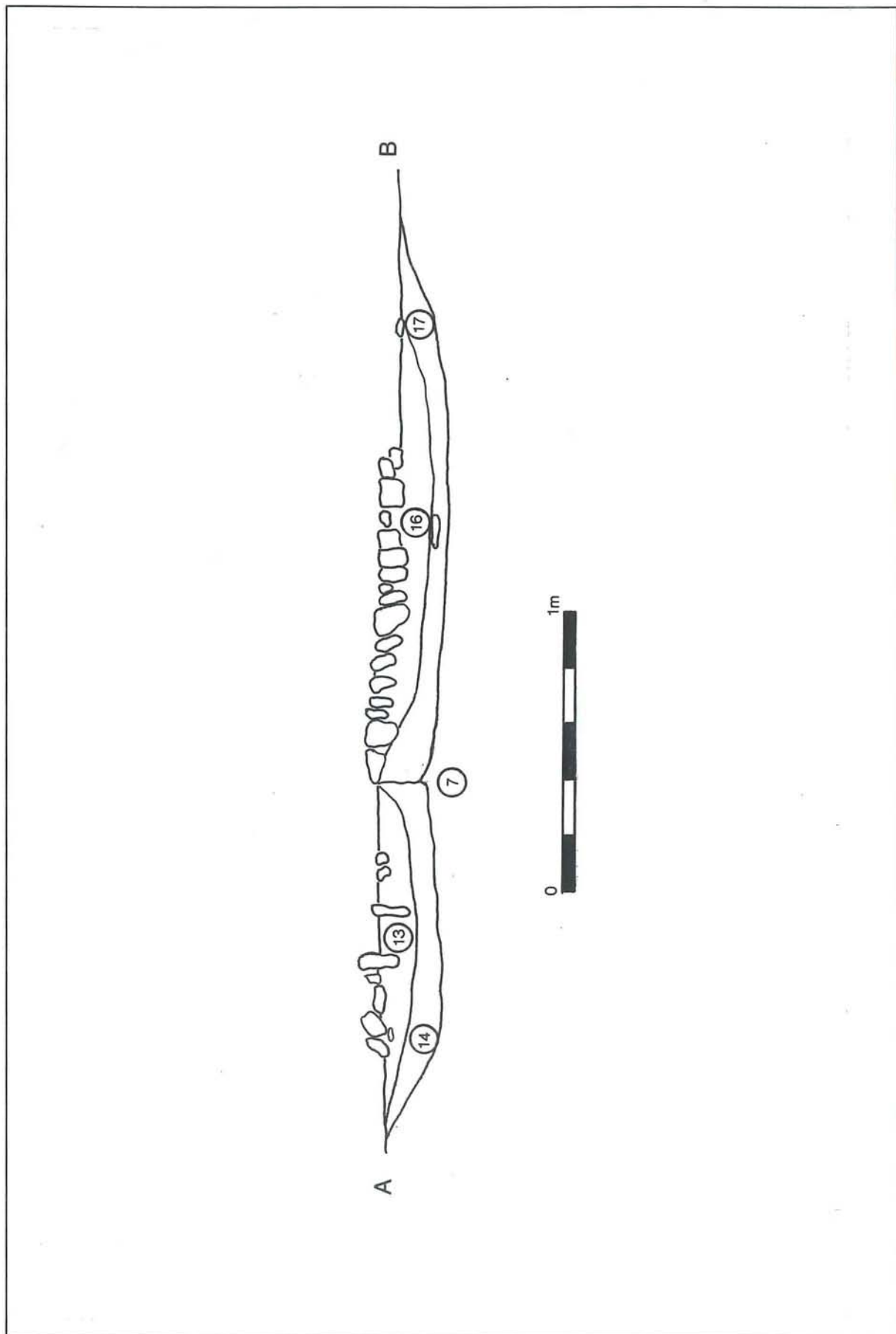


Fig 3. Section AB, through Hearths (10) & (11) Scale 1:20