

**THE CLWYD-POWYS ARCHAEOLOGICAL TRUST**

# **Aberhafesp pumping station and rising main, Powys**

**ARCHAEOLOGICAL ASSESSMENT**



**CPAT Report No 726**

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**Aberhafesp pumping station and rising main, Powys**  
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August 2005

Report for Severn Trent Water

**The Clwyd-Powys Archaeological Trust**  
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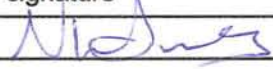
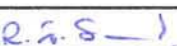

cover: view of eastern end of route. Photo CPAT 1969-15

## CPAT Report Record

### Report and status

CPAT Report Title	Aberhafesp Pumping Station and rising main, Powys: Archaeological Assessment		
CPAT Project Name	Aberhafesp Pipeline		
CPAT Project No	1298	CPAT Report No.	726
Confidential (yes/no)	Yes	draft/final	Final

### Internal control

	name	signature	date
prepared by	N W Jones		08/08/05
checked by	R.J. Silvester		09/08/05
approved by	R.J. Silvester		09/08/05

### Revisions

no	date	made by	checked by	approved by

### Internal memo


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## 1 INTRODUCTION

- 1.1 The Field Services Section of the Clwyd-Powys Archaeological Trust (henceforward CPAT) was asked by Severn Trent Water to provide a quotation for an archaeological assessment of the route of a proposed pipeline and pumping station in the neighbourhood of Aberhafesp, Powys. The assessment was required by Mr M Walters of the Curatorial Section of the Clwyd-Powys Archaeological Trust, who provides archaeological advice to the local planning authority and other bodies operating in the region.
- 1.2 The CPAT quotation was accepted by Severn Trent Water in July 2005. The desk-top and field survey elements of the assessment were carried out in late July 2005 and this report was written immediately thereafter.

## 2 LOCATION, TOPOGRAPHY AND GEOLOGY

- 2.1 The village of Aberhafesp is situated beside the B4568, 4km west of Newtown. The Church and Hall occupy the lower northern slopes of the Severn valley, facing each other across the Aberhafesp Brook. The road runs below and to the south of these properties and follows the edge of a river terrace.
- 2.2 The proposed pipeline is approximately 1.25km in length, lying in fields immediately to the south of the village. The pipeline route runs south-eastwards from SO 06359266 to a proposed pumping station at SO 06979228, and southwards to the River Severn at SO 0677 9187. The area examined in this assessment consisted of a corridor, 30m in total width, centred on the defined route (fig. 1).
- 2.3 The western end of the route commences at 120m OD (SO 06359266) in a pasture field on a river terrace above the flood plain. At SO 06449255 the route leaves the terrace and descends to the flood plain in the area of an abandoned meander. The route then crosses a pasture field which rises northwards onto a river terrace and may once have included an orchard. At SO 06609247 the route enters a field that had recently been cut for silage, within which are traces of a palaeochannel, before turning north-east and then east through pasture fields which rise to the crest of a short spur projecting into the valley at a height of 130m OD. Descending south-eastwards the route enters an arable field on the flood plain at SO 06919231, which includes the site of the proposed pumping station and the route then runs southwards to the river.
- 2.4 The underlying geology of the pipeline route is Palaeozoic slaty mudstone and siltstone, with river alluvium on the flood plain. Soils consist of well drain loam and silt of the Denbigh 1 Association, with deep silty soils of the Terne Association over the alluvium (Soil Survey of England and Wales 1983).

## 3 METHODOLOGY

- 3.1 The initial phase of the assessment consisted of a desk-based study of the readily available primary and secondary sources. The repositories consulted included: the regional Historic Environment Record (HER), held by the Clwyd-Powys Archaeological Trust in Welshpool; the National Monuments Record (NMR), at the Royal Commission on the Ancient and Historical Monuments in Wales (RCAHMW), in Aberystwyth; and the National Library of Wales (NLW), also in Aberystwyth. The NMR also provided aerial photography for study.
- 3.2 Following the desk-based study, the route was examined by a walk-over survey. This entailed the systematic examination of the defined corridor. Any sites that were encountered during the field survey were recorded on standard CPAT site visit forms, the data including the following: an accurate location using a hand-held global positioning system (GPS) receiver; a written description of character, function, condition, vulnerability, dating etc; and a sketch survey, where appropriate. Digital photography, to a resolution of 3 mega pixels, has been taken of selected archaeological sites and locations.
- 3.3 In the following sections the term *PRN* precedes the primary record number of a site in the regional Historic Environment Record.

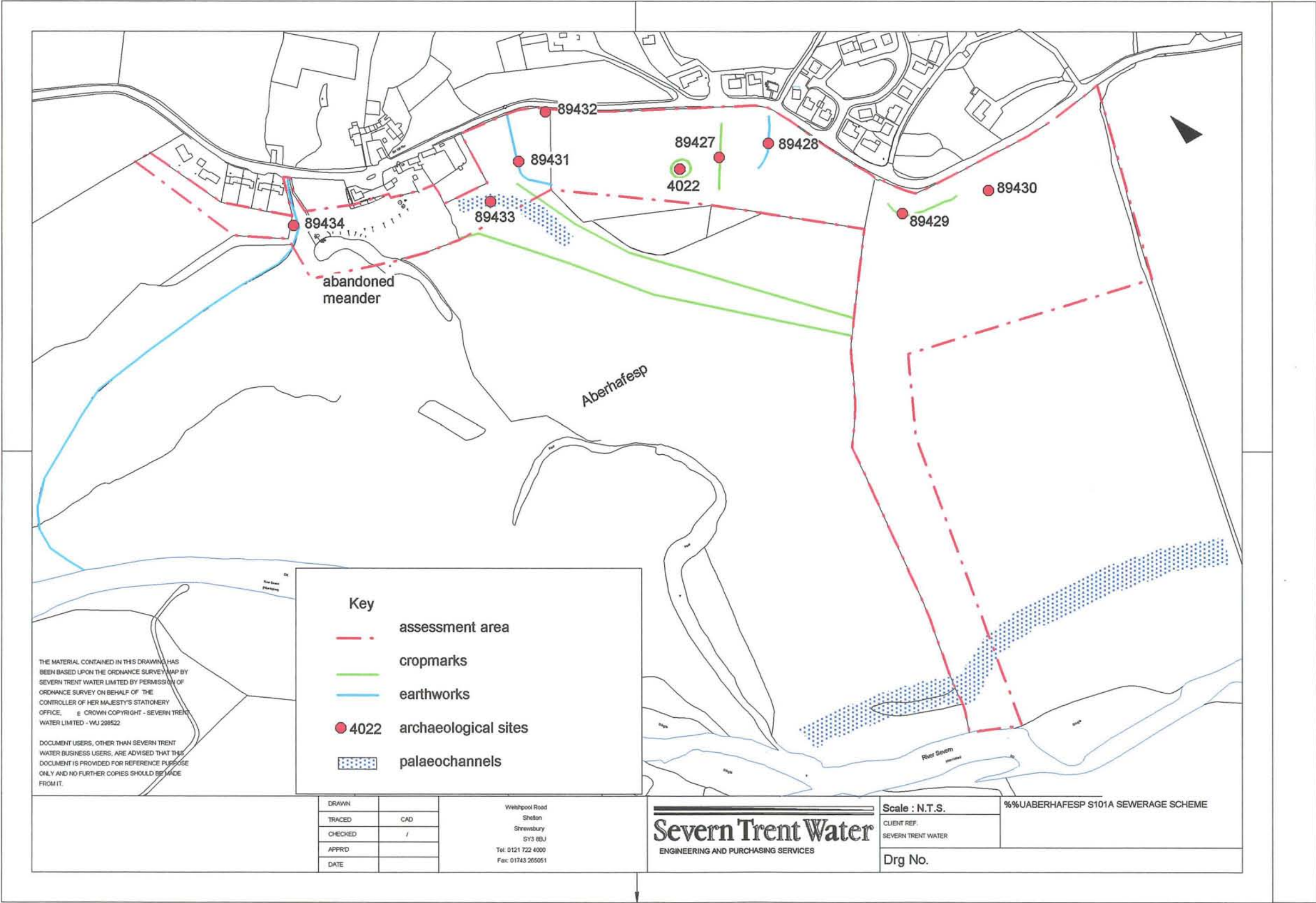


Fig. 1 Assessment area and archaeological sites



#### 4 RESULTS OF THE DESK-BASED STUDY

- 4.1 The information from the regional Historic Environment Record yielded only two recorded sites within the assessment area: the remains of a Bronze Age round barrow (PRN 4022) and a possible prehistoric enclosure (PRN 7031) sited on the crest of a spur. Oblique aerial photography (plate 1) was used to plot the cropmark of the round barrow, and this was revealed as a ring ditch up to 20m in diameter, with a large central pit. No evidence has been encountered during the assessment that confirms the presence of the possible enclosure, and its authenticity remains unproven. The ring ditch, however does demonstrate the presence of Bronze Age activity in the area and there is the possibility for further buried remains on top of the spur.

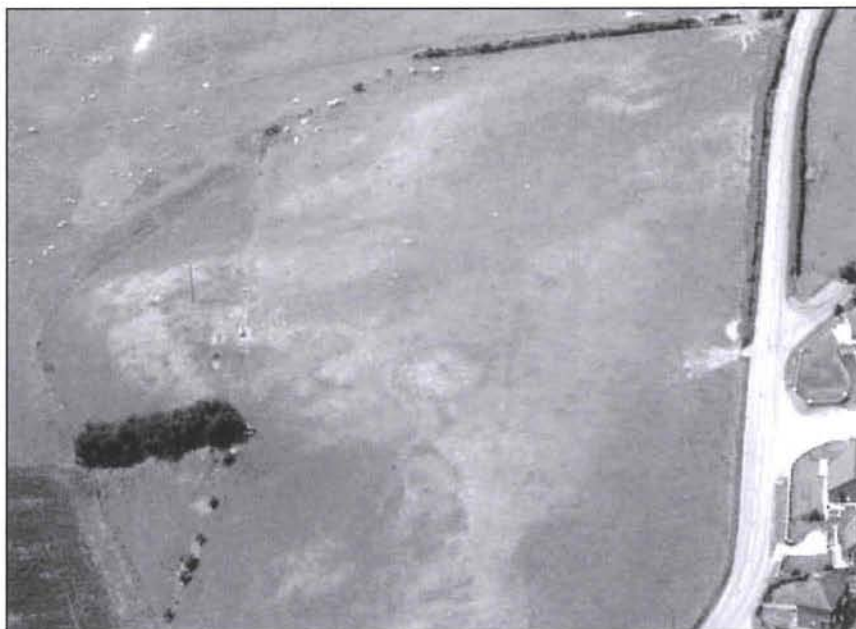


Plate 1 Pentre Round Barrow (PRN 4022) showing as a cropmark in 1989. Photo CPAT 89-MB-0619

- 4.2 The first reference to the village is to *Aberafn* in 1254. The name means the 'mouth of the Hafesp' and presumably refers to the Aberhafesp Brook, west of the church. 'Hafesp' can be translated as 'summer dry'. Nothing is known of Aberhafesp's early history, though it was the centre of an ecclesiastical parish which certainly indicates its origin in the medieval era if not earlier.
- 4.3 St Gwynog's church (PRN 7551), to the north of the assessment area, was rebuilt about 1857. The roof, however, is 15th century and some 18th-century monuments remain inside. Aberhafesp Hall (PRN 20517), also outside the assessment area, is a Grade II listed building of later 17th-century date.
- 4.4 Earlier maps and aerial photographs taken in 1975 show a barn (PRN 89430) which had been demolished or removed by the time that a further series of aerial photographs were taken in 1981. These did reveal, however, two broadly parallel lines about 70m apart, running south-westwards from the garden of Pentre Cottage across two fields. As they approach the second boundary they adopt a slightly more easterly alignment. The Tithe map of 1839 (fig. 2) confirms that these were field boundaries and that in the accompanying survey the field itself was called 'long meadow' (PRN 89433). The field to the north of this was called Maes Pendre, the element *maes* suggesting that it may have been an open field in the medieval period (TA 463) which would have been sub-divided into numerous strips cultivated by different farmers. Other field names recorded at the time of the tithe survey include 'ox pasture' (TA 466), 'piece below pentre' (TA 465) and 'cow pasture' (TA 472).

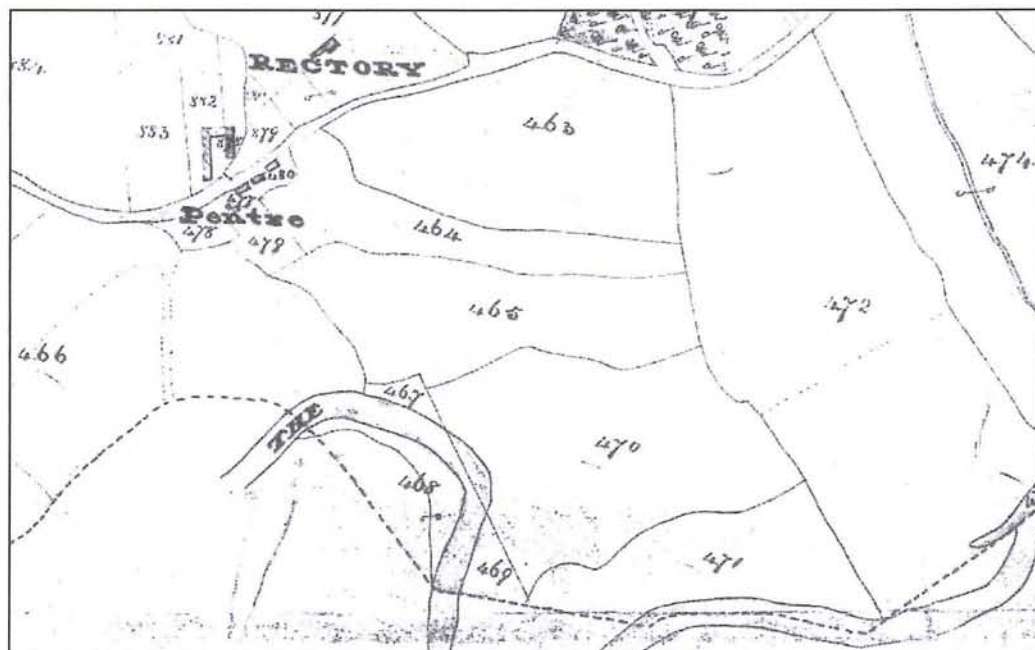


Fig. 2 Tithe Survey for Aberhafesp parish 1839

- 4.5 The Ordnance Survey 1<sup>st</sup> edition 1:2,500 map of 1886 (fig. 3) shows little change from the present day field pattern, the only notable difference being significant changes in the course of the River Severn. The map also shows a track (PRN 89434), still in existence, which ran south from the B4568 and then west to a ford across the River Severn.

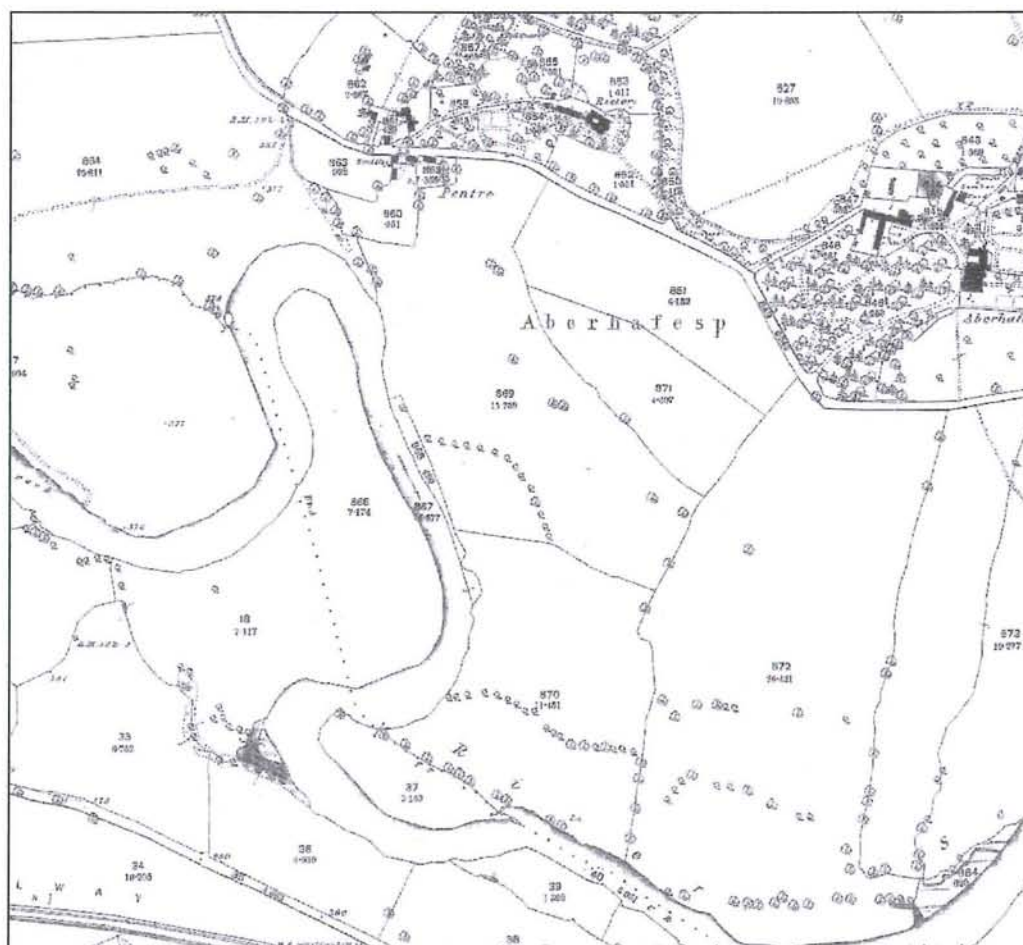


Fig. 3 Ordnance Survey 1<sup>st</sup> edition 1:2,500 map, 1886



## 5 RESULTS OF THE FIELD SURVEY

- 5.1 The basic methodology of the field survey is briefly described in paragraph 3.2, above. One new site was revealed during the field survey, which was also able to verify and enhance the records for a number of sites which had been recognised from desk-based sources, in each case allowing an assessment of their nature, function and potential importance.
- 5.2 A brief assessment of the field boundaries in the study area reveals that the predominant form is of hedges on low banks of earth or stone, sometimes with an adjacent drain.
- 5.3 The field survey identified the earthwork remains of a former field boundary (PRN 89431), forming a lynchet up to 0.6m high (plate 2).



Plate 2 Aberhafesp field boundary IV (PRN 89431). Photo CPAT 1969-08

## 6 ARCHAEOLOGICAL SUMMARY

- 6.1 Each site of archaeological interest, identified during the assessment, has been classified according to its perceived significance. The categories, with the exception of Category E, are based on those given in the Department of Environment, Transport and Regions' *Design Manual for Roads and Bridges* (DMRB) Volume 11 Section 3 Part 2 (1993). Category E is taken from the draft *Archaeology and the Trunk Road Programme in Wales: a Manual of Best Practice* prepared by Cadw: Welsh Historic Monuments (n.d.) which in other respects follows the DMRB volume.

*Category A* sites are those believed by CPAT to be of primary significance, either potentially of national importance or already designated by CADW: Welsh Historic Monuments as scheduled ancient monuments or listed buildings. It is presumed that sites in this category will be preserved and protected *in situ*.

*Category B* sites are sites of regional importance. These sites are not of sufficient importance to justify scheduling, but are nevertheless important in aiding the understanding and interpretation of the archaeology of the region. Preservation *in situ* is the preferred option for these sites, but if loss or damage is unavoidable, appropriate detailed recording should be undertaken.

*Category C* sites are sites of local importance. These sites are of lesser importance, but are nevertheless useful in aiding the understanding and interpretation of the archaeology of the local area. They are not normally of sufficient importance to justify preservation if threatened, but merit adequate recording in advance of loss or damage, or if portable they should be moved.

*Category D* sites are either sites of minor importance or those which are so badly damaged that too little now remains to justify their inclusion in a higher grade. Rapid recording should be sufficient, but as with Category C sites they should be moved if this is an appropriate strategy.

*Category E* sites are sites which have been identified, but whose importance cannot be assessed from fieldwork and desk-based study alone. An archaeological evaluation would be required to categorise such a site more accurately if the proposal was likely to affect it in any way.

- 6.2 The locations of the individual archaeological sites are shown on Figure 1. Tables summarising the archaeology of the study area according to its perceived importance are provided below.

### Category A sites

- 6.2.1 There are no category A sites within the assessment area.

### Category B sites

- 6.2.2 There is only one category B site within the assessment area.

PRN	Name	Type	Period	Condition	NGR
4022	Pentre Round Barrow	Ring ditch	Bronze Age	Unknown	SO06769242

#### PRN 4022 Pentre Round Barrow

The site has been identified from cropmarks visible on an aerial photograph taken in 1977. The results of further photography in 1989 (Plate 1) were used to plot the cropmark, revealing a single ring ditch 18 to 20m in diameter, in the centre of which is a large pit, probably representing a burial. Cropmark features of this type normally represent the plough-levelled remains of a Bronze Age burial mound, or round barrow. The field survey has demonstrated that there are no longer any upstanding earthwork remains of this feature, although significant buried archaeological deposits are likely to survive.

### Category C sites

- 6.2.3 There are no category C sites within the assessment area.



**Category D sites**

6.2.4 There are eight category D sites which have been identified within the assessment area.

PRN	Name	Type	Period	Condition	NGR
89427	Aberhafesp field boundary I	Boundary	Post Medieval	Unknown	SO06809241
89428	Aberhafesp field boundary II	Boundary	Post Medieval	Near destroyed	SO06849240
89429	Aberhafesp field boundary III	Boundary	Post Medieval	Unknown	SO06929229
89430	Aberhafesp barn I	Barn	Modern	Unknown	SO07009227
89431	Aberhafesp field boundary IV	Boundary	Post Medieval	Damaged	SO06649250
89432	Aberhafesp barn II	Barn	Modern	Near destroyed	SO06689253
89433	Aberhafesp field boundary V	Boundary	Medieval ?	Unknown	SO06609248
89434	Aberhafesp track	Track	Post Medieval	Damaged	SO06439255

***PRN 89427 Aberhafesp field boundary I***

A linear feature revealed as a cropmark on aerial photography is likely to be a former field boundary running north-north-east to south-south-west. No earthwork remains survive.

***PRN 89428 Aberhafesp field boundary II***

A curvilinear feature revealed as a cropmark on aerial photography is likely to be a former field boundary running north-north-east to south-south-west. The field survey revealed a slight depression c. 2.5m across and 0.2m deep.

***PRN 89429 Aberhafesp field boundary III***

A curvilinear feature revealed as a cropmark on aerial photography is likely to be a former field boundary running north-north-east to south-south-west. The site lies in an arable field which was under cereal at the time of the field survey, preventing close inspection.

***PRN 89430 Aberhafesp barn I***

A barn was identified on a 1975 aerial photograph, which had been removed by 1981. The site lies in an arable field which was under cereal at the time of the field survey, and this prevented close inspection.

***PRN 89431 Aberhafesp field boundary IV***

A curvilinear earthwork forming a lynchet up to 0.6m high was identified during the field survey which appears to be the remains of a former field boundary.

***PRN 89432 Aberhafesp barn II***

The basal remains of a former barn or animal shed were revealed during the field survey, comprising a concrete base measuring 9 x 4m.

***PRN 89433 Aberhafesp field boundary V***

Two broadly parallel linear cropmarks about 70m apart, running south-westwards from the garden of Pentre Cottage across two fields. As they approach the second boundary they adopt a slightly more easterly alignment. The Tithe map reveals that they were field boundaries and that in the accompanying survey it was called 'long meadow'.

***PRN 89434 Aberhafesp track***

The Ordnance Survey 1<sup>st</sup> edition 1:2,500 map of 1886 shows a track, still in existence, which ran south from the B4568 and then west to a ford across the River Severn.



**Category E sites**

6.2.5 There is a single category E site which has been identified during the assessment.

PRN	Name	Type	Period	Condition	NGR
7031	Aberhafesp Hall Enclosure	Enclosure	Prehistoric ?	Unknown	SO06809242

**PRN 7031**

The HER records a possible prehistoric enclosure around 100m across, identified from aerial reconnaissance. However, an examination of readily available aerial photography during this assessment has failed to confirm the presence of this feature. It is possible that the recorder made an error in locating the site and that the record actually refers to the ring ditch (PRN 4022), although it should be noted that the recorded size is considerably different.

- 6.3 In addition to the sites described above the assessment has identified an abandoned river meander and two palaeochannels (fig. 1) which may contain deposits of palaeoenvironmental significance.

## 7 IMPACT AND MITIGATION

### Impacts

- 7.1 The potential impacts of the proposal on the archaeological resource of the corridor are considered in the table below.

PRN	Name	Type	Condition	Impact	Category
4022	Pentre Round Barrow	Ring ditch	Unknown	Potential damage	B
7031	Aberhafesp Hall Enclosure	Enclosure	Prehistoric ?	Unknown	E
89427	Aberhafesp field boundary I	Boundary	Post Medieval	Partial loss	D
89428	Aberhafesp field boundary II	Boundary	Post Medieval	Partial loss	D
89429	Aberhafesp field boundary III	Boundary	Post Medieval	Unknown	D
89430	Aberhafesp barn I	Barn	Modern	Unknown	D
89431	Aberhafesp field boundary IV	Boundary	Post Medieval	Partial loss	D
89432	Aberhafesp barn II	Barn	Modern	Loss	D
89433	Aberhafesp field boundary V	Boundary	Medieval ?	Partial loss	D
89434	Aberhafesp track	Track	Post Medieval	Partial loss	D

- 7.2 In addition to the sites recorded above, there is the potential for further unrecorded sites that may be impacted upon by the proposed pipeline. Such sites will not have been previously recorded and will remain only as sub-surface features, having no extant visible traces.

### Mitigation

- 7.3 Consideration of the potential impact on the known archaeology suggests that the mitigation measures which follow provide an appropriate response to the proposals.

### Terminology

- 7.3.1 The following standard archaeological terms are used below as recommended mitigation measures:

- Preservation in situ:* where it is considered to be the most suitable response it may be considered appropriate to preserve the site in its present form, condition and location.
- Preservation by record:* where proposals will inevitably lead to the loss of a site sufficient recording should be undertaken to provide a full, accurate and permanent record of its nature, form, significance and dating. Preservation by record can take a number of forms, depending on the nature of the site in question, and may be achieved with or without excavation and could include any or all of the following: written record; drawn record; photographic record; artefactual record; survey; and environmental sampling.
- Evaluation:* where insufficient information exists regarding a site for a decision to be made regarding its future management a programme of investigative work may be proposed. Such investigation may include geophysical survey, topographical survey and trial excavation.
- Watching brief:* a watching brief may be recommended to include archaeological monitoring of all relevant ground works, including topsoiling, in order to identify and record any previously unknown archaeological remains which may be revealed. Sufficient time must be allowed for adequate recording of any remains that are encountered.

### General Mitigation

- 7.3.2 It has been noted in paragraph 7.2 that there is a potential for unrecorded sites in the proposal area and if any exist, then these may be subject to an impact from the proposal. Sites which fall into this category specifically include those without obvious surface traces or finds scatters such as might be

associated with prehistoric activity. In order to provide some mitigation for the potential effect of the scheme in this regard, a watching brief is recommended during any significant ground disturbance. This would occur, primarily to any topsoil stripping that takes place prior to the commencement of pipeline installation work. With the exception of Pentre Round Barrow (PRN 4022), the archaeological sites recorded during the assessment are not considered to be of sufficient significance to merit any mitigation other than preservation by record during the overall watching brief.

#### **Site-specific Mitigation**

- 7.3.3 The only known site which is considered to have significant archaeological potential is Pentre Round Barrow (PRN 4022). This should be preserved in situ. In order to facilitate this, an exclusion zone of at least 50m in diameter should be clearly marked around the perimeter of the site prior to any groundworks commencing, and the fencing of any wayleave should also be excluded from the defined area. Because of the difficulty in identifying the position of the feature, the fencing should be supervised by an archaeologist with access to the plan contained in this report.

PRN	Name	Type	Condition	Impact	Mitigation
4022	Pentre Round Barrow	Ring ditch	Unknown	Potential damage	Preservation in situ

- 7.3.4 The remaining sites have no additional mitigation recommended over and above the general watching brief described in para 7.3.2.



## 8 CONCLUSIONS

- 8.1 The assessment has identified a number of archaeological sites which may be affected by the proposed pipeline, only one of which is considered to be of sufficient importance to merit specific mitigation. Pentre Round Barrow (PRN 4022) was identified as a cropmark from aerial photography and represents the plough-levelled remains of a Bronze Age burial mound. Although no surface remains survive, there are likely to be significant buried deposits which should be preserved in situ through clear demarcation of the site prior to works commencing.
- 8.2 The remaining sites are all considered to be of minor significance and do not therefore merit any specific mitigation although a general watching brief is recommended during all topsoil stripping to ensure the identification and recording of any buried archaeological deposits which may be encountered.

## 9 ACKNOWLEDGEMENTS

- 9.1 The writer would like to thank the following for their assistance and co-operation: Bob Silvester, CPAT, for undertaking the desktop study; the staff of the National Monument Record, RCAHMW, Aberystwyth; and the staff of the National Library of Wales, Aberystwyth.

## 10 REFERENCES

### Published and Printed Sources

Soil Survey of England and Wales, 1983. *Soils of England and Wales. Sheet 2: Wales*. Harpenden: Soil Survey of England and Wales.

### Maps

1839 Tithe map and apportionment for Aberhafesp

1886 1<sup>st</sup> edition 1:2500 Ordnance Survey, Montgomery 36.13

*Note: no relevant estate maps or any other map earlier than 1839 was identified*

### Aerial Photographs

#### *Vertical*

1975 (23 June) Meridian Airmaps Scale 1:10,000; nos 43 75 061-3

1981 (16 April) Meridian Airmaps Scale 1:10,000; nos 05 81 247-8

1984 (24 April) J A Story and Partners. Scale 1:10000; nos 05 84 069-70

1992 (13 June) NRSC Airphoto Group. Scale 1:10000; nos 79 92 091-2

#### *Oblique*

1977 CUCAP CDJ22

1989 CPAT 89-MB-0618 to 0620

1999 RCAHMW 995082