

DYFED ARCHAEOLOGICAL TRUST LTD



**HAFOD
THE LADIES' WALK
ALPINE MEADOW SECTION**

ARCHAEOLOGICAL INVESTIGATION

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PROJECT RECORD No. 32112

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1. INTRODUCTION

The Hafod Trust is currently restoring the Ladies' Walk at Hafod. By October 1995, restoration of the walk had already been completed from Hafod Church (Eglwys Newydd) to the eastern end of the Alpine Meadow (Fig. 1). For much of its course the line of the walk is clear: at the Alpine Meadow both the line and character of the walk is uncertain. Here, archaeological excavation is considered the most appropriate technique to establish both line and character. Archaeological investigations have been previously carried out on the line of the walk across the meadow (Phillips 1994, 19-20); the limited nature of the work precluded the establishment of a firm line for the walk in this area.

In November 1995, Michael Norman and Andrew Sclater of the Hafod Trust contacted Dyfed Archaeological Trust to commission further archaeological investigations at Hafod; the first being an excavation of the Ladies' Walk where it crossed the Alpine Meadow.

The excavation was carried out in January and February 1996 by R Ramsey, B Allen and H Wilson under the direction of K Murphy.

2. THE LADIES' WALK

The Ladies' Walk was created in the late-eighteenth century by Thomas Johnes. The line of the Ladies' Walk, as it is presently understood, is shown on Figure 1. For much of its course along the banks of the Afon Ystwyth and the Nant Peiran the walk is on an artificially created terrace c. 1-2m wide. This is the situation at the western end of the Alpine Meadow, where a clearly defined terrace descends gently onto the meadow (Fig. 2). There is no surface evidence indicating line of the walk across the meadow.

In 1796, George Cumberland described the walk in the vicinity of the Alpine Meadow:

after passing the cold bath, that is fed by a constant spring of the purest water, you enter a sweet, sheltered, level walk, running nearly on a line with the river, but separated from it by narrow and irregular stripes of meadow, and shaded above by climbing woods, and rocks fringed with old roots, and ivy.

This meadow, which seems to be quite hemmed in by the woody hills, conveys an idea of warm, screened, and solitary retirement; at the end of it, however, you are agreeably surprised with a sudden turn of the stream into a confined valley; to the left of which lies, capped in high trees, a most sequestered swell of about two acres, formed into a flower and shrub garden.

In addition to the above written description, there are several contemporary illustrations showing the Ladies' Walk crossing the Alpine Meadow (Figs. 3-6). The views by Smith (1793) and Stadler (1810 - see Fig. 3) show the meadow looking towards west from a viewpoint approximately 20-30m south of Trenches 5 and 6

(Fig. 2). The latter of these two illustrations seems to be a direct copy of the former. All other illustrations show the Ladies' Walk where it passes close to the cliffs at the narrowest point of the meadow - the viewpoint in all cases seems to have been 10-20m east of Trench 1. All the illustrations have one thing in common; they show the Ladies' Walk as a well-defined path.

The history of the Alpine Meadow from the early-nineteenth century through to the mid-twentieth century is uncertain; it seems probable that it was cultivated and occasionally ploughed. In 1954, it was planted with lodgepole pine. Damaged by gales, the trees were subsequently clearfelled.

The geology of the area has been admirably summarised by Dr T Palmer (1996) following an inspection of the archaeological trenches:

The natural material of which the valley floor is made is locally derived siltstone and greywache, with rare vein quartzite and fault breccia. The material is poorly-sorted conglomerate; the largest cobbles are some 15cms across their longest dimension, and clast sizes range down to fine gravel. The finer material fills the spaces between the larger cobbles. A small number of larger boulders are also present. One hundred percent of the clasts are waterworn, ranging from sub-rounded to very well rounded. No clasts denoting human activity were seen. This material was deposited when the river was higher and faster-flowing than it is today, and is probably of fluvio-glacial origin.

3. THE EXCAVATIONS

Nine hand-dug trenches were excavated on the supposed line of the Ladies' Walk in the Alpine Meadow. All heights shown on the figures are in metres above Ordnance Datum and are related to the bench mark of 244.86m on Eglwys Newydd.

Trench 2. Figure 7 (SN 7641 7304)

Excavated across the terrace cut into the valley side at the western end of the Alpine Meadow at the point where the terrace begins to slope down to the meadow, this trench measured 10.5m by 1m. Only topsoil and superficial layers were removed during the excavation.

On the terrace, 0.10-0.20m below leaf mould and soil accumulation, a well-defined band of stone was apparent. It was possible to divide this feature into two distinct though intermixed contexts:

Context 10. The upper surface consisted of angular stones and shale fragments on average between 40-70mm with a scattering of smaller angular stones and some brick fragments, set in compact silty-clay soil matrix. Roots had disturbed

this layer. Palmer (1996) noted that the brick contained inclusions of siltstone pebbles which probably indicate a mid-Wales origin. He also noted other exotic material: pebbles of laminated paper shale and pieces of oolitic limestone of Jurassic age.

Context 11. Below 10. A layer approximately 2.4m wide with well-defined edges, particularly on its northern side. It comprised 70-80% stones set in a silty-clay soil matrix. These stones consisted of rounded cobbles 60-100mm, slabs up to 130-150mm, smaller shale fragments, sub-rounded small stones, occasional small stones and some small fragments of brick. This layer seems to have been laid to form a slight camber. A strong east-west linear depression or rut lay towards its northern side.

The evidence from Trench 2 is conclusive: the terrace at the western end of the Alpine Meadow is the route of a path/track. A very rough metalled surface, possibly of two phases, had been laid over the artificially created terrace in order to provide a firm surface. The substantial nature of the metalling coupled with possible rutting suggests that this path/track may have been designed and used by wheeled traffic as well as pedestrians. All the materials for the metalling could have been collected in the near vicinity of Trench 2, with, as Palmer (1996) suggests, the brick and oolitic limestone gathered from the site of the Cold Bath, a few hundred metres to the west. This may indicate that waste stone chips and brick fragments from the construction of the Cold Bath were used in the make-up of Johnes' path or that the path was repaired at a later date using materials from the disused and dilapidated bath. It seems likely that these path surfaces were not vigorously maintained; a surface of soil was allowed to accumulate over them.

Trench 1. Figures 8 and 9 (SN 7647 7304)

Excavated where the meadow is at its narrowest, 3m to the south of a low cliff. The trench measured approximately 7m by 1m. Only superficial deposits were removed during the excavation.

An east-west band of stones (Context 4) 2.0 - 2.4m wide lay directly beneath the topsoil at an average depth of about 0.10m; some stones were directly below the turf. The band was very well-defined on its northern side; less well so on its southern side. The stones of this layer consisted of rounded cobbles, 150-250mm, and a few angular slabs, 100-250mm. The angular slabs were concentrated towards the edges of the stone band. The stones were set in a compacted silty-clay soil matrix. No other stones apart from those mentioned above were present in Context 4. Soil was removed down to subsoil level on the northern side of Context 4. The band of rested on silt; the upper surface of the fluvio-glacial deposits (Context 5).

All the evidence indicates that the band of stones is make-up for a path. There is no evidence of disturbance; it is therefore assumed that there was never a top dressing of smaller stones. The construction technique seems to be as follows: a band of

topsoil was stripped from the intended line of the path; cobbles were then laid to a level flush with the ground surface and packed in position with soil. Cobbles of similar size and shape to those used in Context 4 can be found in the underlying geological deposits (Context 5).

Trench 3. Figures 8 and 10 (SN 7654 7305)

Excavated on the meadow at the foot of the steep valley side. It measured 5.3m by 1m. Only superficial deposits were removed.

A band of stones (16) approximately 2.3m wide ran obliquely across the trench south-west to north-east. This feature was identical to Context 4 in Trench 1; a deposit of cobbles with some angular slabs set in a compact soil matrix.

The oblique angle of the band of stones across the trench indicates that the path followed a course close to the foot of the valley side from Trench 1 to Trench 3, and, if the line of the path is projected, to the east of Trench 3.

Trench 4. Figure 11 (SN 7658 7305)

A trench 11.2m by 1m excavated from the foot of the valley side out into the meadow.

Following the removal of leaf mould and a loose accumulation of soil (Context 27), deposits at the northern end of the trench, at the foot of the steep valley side, were found to be relatively complex and difficult to untangle because of deep tree-root penetration. Context 33 overlay 31. The former consisted of rounded boulders, cobbles and frequent small- and medium-sized angular and sub-rounded stones, with an angle of rest consistent with their having slipped down the steep valley side. They are in a loose soil matrix. Context 31 was undisturbed subsoil and consisted of gravels and small-, medium- and large-sized rounded stones set in a compact silty-clay matrix. This deposit dipped down steeply to the south; it may be the remains of a palaeo river terrace. Elsewhere in the trench, subsoil was less stony and contained a greater proportion of the silty-clay matrix. A shallow soil (Context 28), possibly an old ploughsoil, was present towards the southern end of the trench.

This trench contained no clear evidence for a built path. Though Context 33 had the appearance of a laid path, it was loose and superficial; it is more likely to owe its origin to the erosion of deposits on the valley side above, especially during the episode of tree planting in 1954.

Trenches 5 and 6 (SN 7658 7304 and SN 7659 7304)

Two trenches were excavated towards the centre of the meadow in order to ascertain whether the course of the path was out from the foot of the valley side. The results of both trenches were negative. Below a humic layer lay a thin topsoil (0.10-0.15m

thick); this may have been a plough soil, and directly overlay a subsoil of river gravel.

A soil sample column was taken from the soil profile in Trench 6 with the intention of obtaining palaeoenvironmental analyses.

Trenches 7, 8 and 9 (SN 7659 7304, SN 7665 7304, SN 7667 7304)

These trenches were dug at the foot of the valley side; the results from all three were negative. In each a superficial and loose stony deposit similar to, and in a similar situation to Context 33 in Trench 4, was found at the very foot the valley side. This overlay river gravel subsoil. Topsoil in all trenches was thin. The southern end of each of these trenches was marked by modern wheel ruts which have cut deeply into the subsoil; it is unlikely that any evidence of the path will survive in this area of disturbance.

4. CONCLUSIONS

The course of the Ladies' Walk at the western end of the Alpine Meadow where it runs down from an artificially created terrace has been established by the excavations as far as Trench 3. To the east of Trench 3 the course of the walk could not be located. Both archaeological evidence from Trench 3 and nineteenth century illustrations indicate that the walk ran fairly close to the foot of the valley side. The absence of hard archaeological evidence for the walk to the east of this trench may be due to several factors: cultivation of the meadow, in particular ploughing, in the nineteenth and twentieth centuries; tree planting in 1954 and subsequent harvesting.

Two phases of metalled surface were detected in Trench 1, where the walk runs along the terrace. It is not inconceivable that here the Ladies' Walk utilised the course of an earlier track; a course that may have continued to be used when the Ladies' Walk fell into disuse.

On the meadow proper, it seems highly likely that the band of cobbles detected in Trenches 1 and 3 were laid specifically for the Ladies' Walk, though without firm dating evidence this is not conclusive. An unusual construction technique was used which provided a firm path with the minimum of visual intrusion.

5. RECOMMENDATIONS

The terrace at the western end of the Alpine Meadow

It would seem here that there is little option but for the re-stored path to follow its original course; this being dictated by the narrow terrace on which the path sits.

There are two recommendation:

1. To protect the archaeological deposits, a barrier or

buffer of soil 100-200mm is maintained between the original track/path surface and the new surface.

2. For Health and Safety reasons it would be impossible to replicate the very uneven original track/path, nevertheless, it is desirable that the restored surfaces remain faithful in appearance and style of the original surfaces exposed in Trench 1. Use should be made therefore of materials available in the vicinity: gravel, cobbles, shale and soil. To aid consolidation a scalping of soil should be spread over the new surface.

The Alpine Meadow

It is recommended that in this section of the walk a new line for the path is created, and that the construction technique used in creating this new path follow as closely as possible that used in the original.

In order to protect the archaeological evidence, a sterile zone c. 2m wide should be maintained between the original path and the new path from where the Ladies' Walk descends onto the western end of the Alpine Meadow to Trench 3. From Trench 3 to the east a suggested course for the new path is shown on Figure 2. This course allows for the broad sweep of the meadow to be appreciated while its curve is sufficiently gentle to discourage visitors from cutting corners.

For construction: it is suggested that machinery is used to strip a 2m wide, 0.2-0.3m deep trench of topsoil from the line of the new path. Cobbles and soil should then be roughly packed into this trench to a level just below the ground surface. A scalping of soil should then be laid over the cobbles. Because of possible damage to the original path, it is recommended that a tracked machine is used for this work.

The boundary zone at the western end of the meadow where the Ladies' Walk begins to climb up onto the terrace is archaeologically sensitive and potentially susceptible to damage during path restoration/construction. It is therefore recommended that the construction technique used on the terrace is maintained for c. 10m onto the meadow, to a point where the original path and the new path clearly diverge.

6. PALAEOENVIRONMENTAL ANALYSIS

A soil sample column was taken from the soil profile in Trench 6 for palaeoenvironmental analysis. After discussions with Astrid Castledine, University College of Wales, Lampeter, it was decided not to proceed with further analysis of the sample. Pollen analysis would be the only appropriate method of study for a mineral soil in such an environment. But given the very shallow nature of the soil and recent history of the Alpine Meadow - forestry plantation, wind damage and clearfelling - any results from such an analysis would be difficult, in the extreme, to interpret. Palaeoenvironmental analysis may, however, be applicable to other

areas of Hafod: where deeper mineral soils exists, where sealed soils or archaeological layers are preserved and where organic deposits can be identified.

7. COPY OF THE BRIEF

The Hafod Trust is proposing to restore the Ladies' Walk across the Alpine Meadow, Hafod. The line of the walk across the meadow is uncertain, though it is considered that it lies close the foot of the valley side. A single trench (Trench W) excavated in 1994 by D G Phillips seemed to confirm this position, but further evidence is required by the Hafod Trust prior to restoration.

The primary objective of the investigation will be to identify and quantify a significant sample of the surviving archaeological evidence by the use of strategically placed archaeological trenches. Four trenches are proposed (see accompanying map):

1. 1m x 10m trial trench across raised platform and on to lower ground.
2. 1m x 10m trial trench adjacent to Phillips' Trench W in order to verify his findings.
3. 1m x 10m trial trench on valley floor towards foot of valley side.
4. 1m x 10m trial trench on valley floor towards foot of valley side.

In addition to the above, a provision will be made for an extra 1m x 20m of trenching. If required, this extra trenching could be used to extend trenches 3 or 4 towards the river or to provide locations in which to examine the presumed line of the walk towards the foot of the valley side.

All trenches are to be hand-dug, and should be normally excavated down to the top of the subsoil, though this may not be necessary if the line of the path can be located with a high degree of confidence. The exact location of the trenches will depend on the position of tree stumps and other factors and is to be determined by the archaeological contractor. All deposits shall be examined and recorded. Plan and section drawings will be normally at 1:20 scale, though 1:10 scale may be required for some details; all should be on drafting film. A single-context recording system shall be used for written descriptions. Black and white and colour slide photography shall be employed.

It is not envisaged that many finds will be encountered during the evaluation.

Six copies of the report detailing all the findings of the evaluation, including artefacts, shall be submitted within four weeks of finishing the fieldwork. The report should contain recommendations relevant to the restoration and conservation of the walk. Interim information will be made available to the

client soon after completing fieldwork. Copies of the report shall be lodged with the National Monuments Record and with the Dyfed Sites and Monuments Record. An archive of the evaluation shall be prepared. On completion of the project the archive shall be deposited with a appropriate institution.

On consultation, Brian Dix recommended: all evidence for the path established by excavation should be left intact; consideration should be given to palaeoenvironmental potential of any deposits, seeking specialist advice if necessary; trenches should be located in reference to the National Grid and all recorded levels related to Ordnance Datum and surveying undertaken with a Total Station theodolite and data recorded electronically. Stephen Briggs echoed much of Dix's recommendations, and stressed the potential importance of palaeoenvironmental deposits.

8. INDEX TO THE ARCHIVE

The archive has been lodged with the National Monuments Record, housed with the Royal Commission on Historic and Ancient Monuments Wales, Crown Building, Plas Crug, Aberystwyth, and consists of the following classes of documents:

Final report

Context records

Survey data - disc

Catalogue of drawings

Site drawings

Catalogues of photographs

Colour slides

Black and white negatives and contact prints

Correspondence

9. ACKNOWLEDGEMENTS

The authors wish to thank Andrew Sclater and Michael Norman of the Hafod Trust and Alec Dauncey of Forest Enterprise for their help and assistance during the course of the work on the Alpine Meadow. Thanks are also due to all members of the Hafod Advisory Committee, but in particular to Roger Hallett for supplying copies of the late-eighteenth century illustrative material reproduced here as Figures 3-6. We would also like to thank Stephen Briggs and Caroline Kerkham for their advice.

10. REFERENCES

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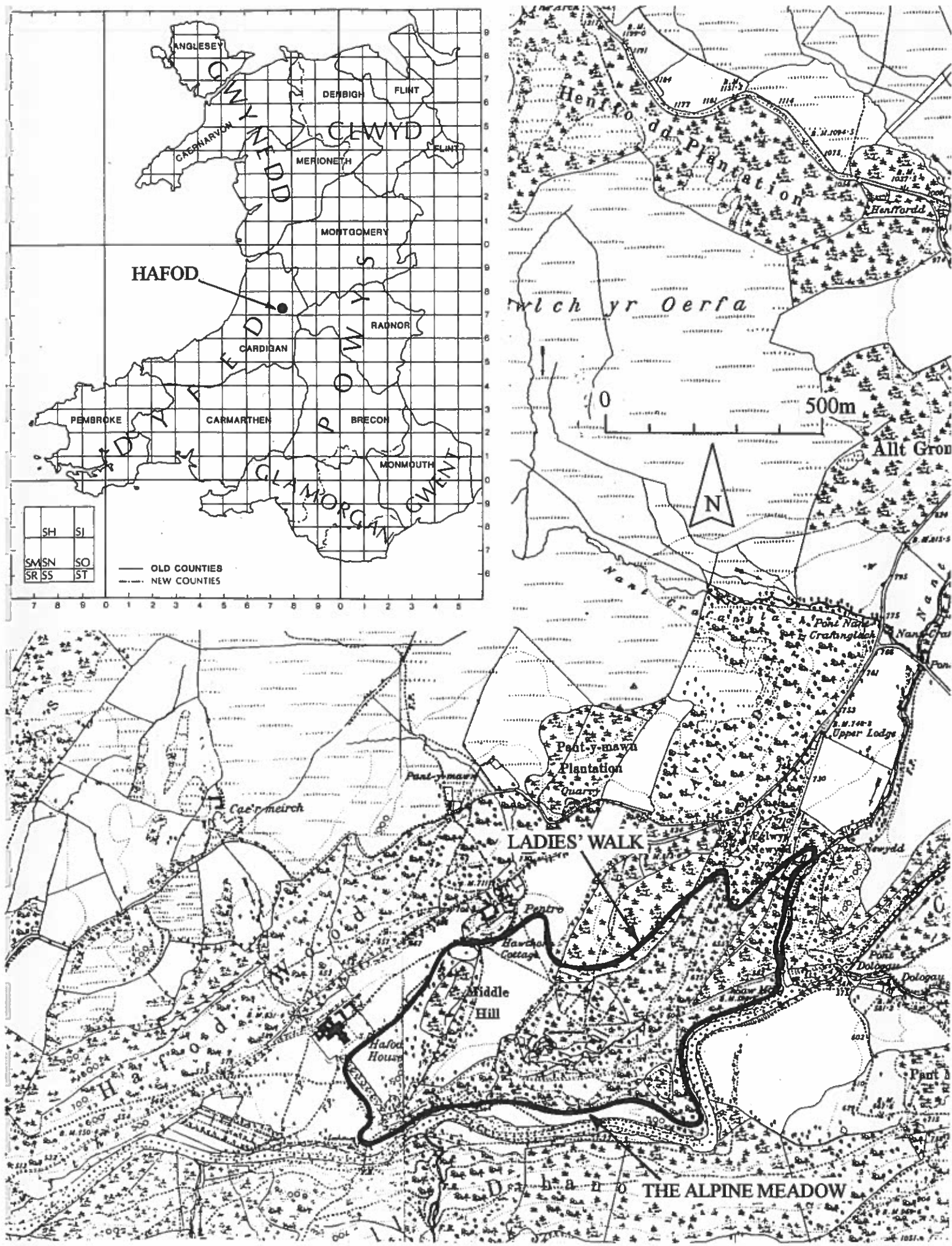


Figure 1. Location Map

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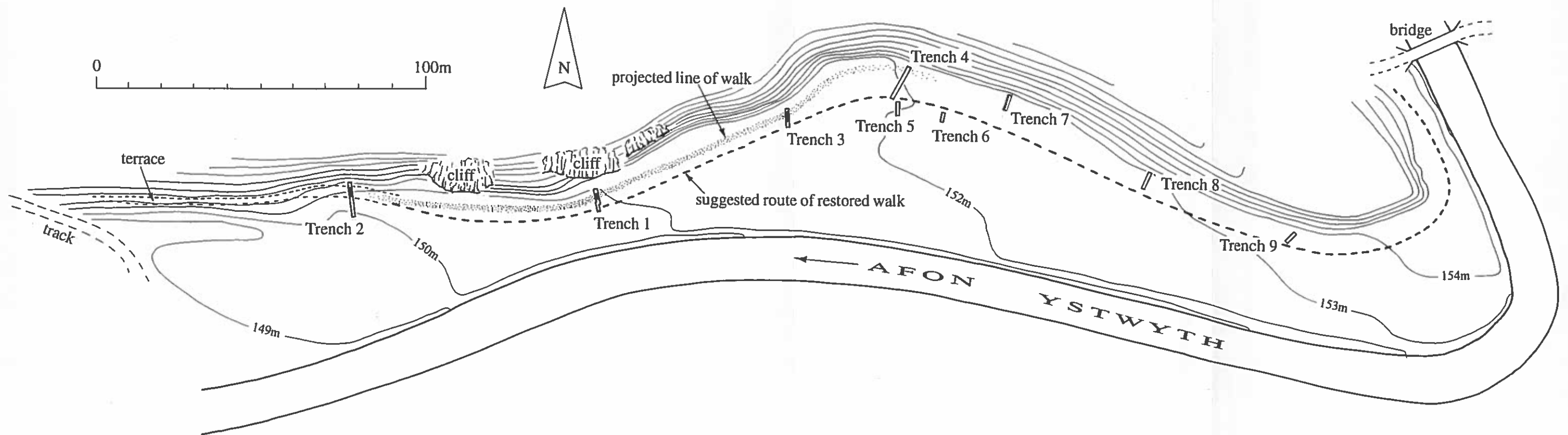


Figure 2. The Alpine Meadow showing the location of the excavation trenches

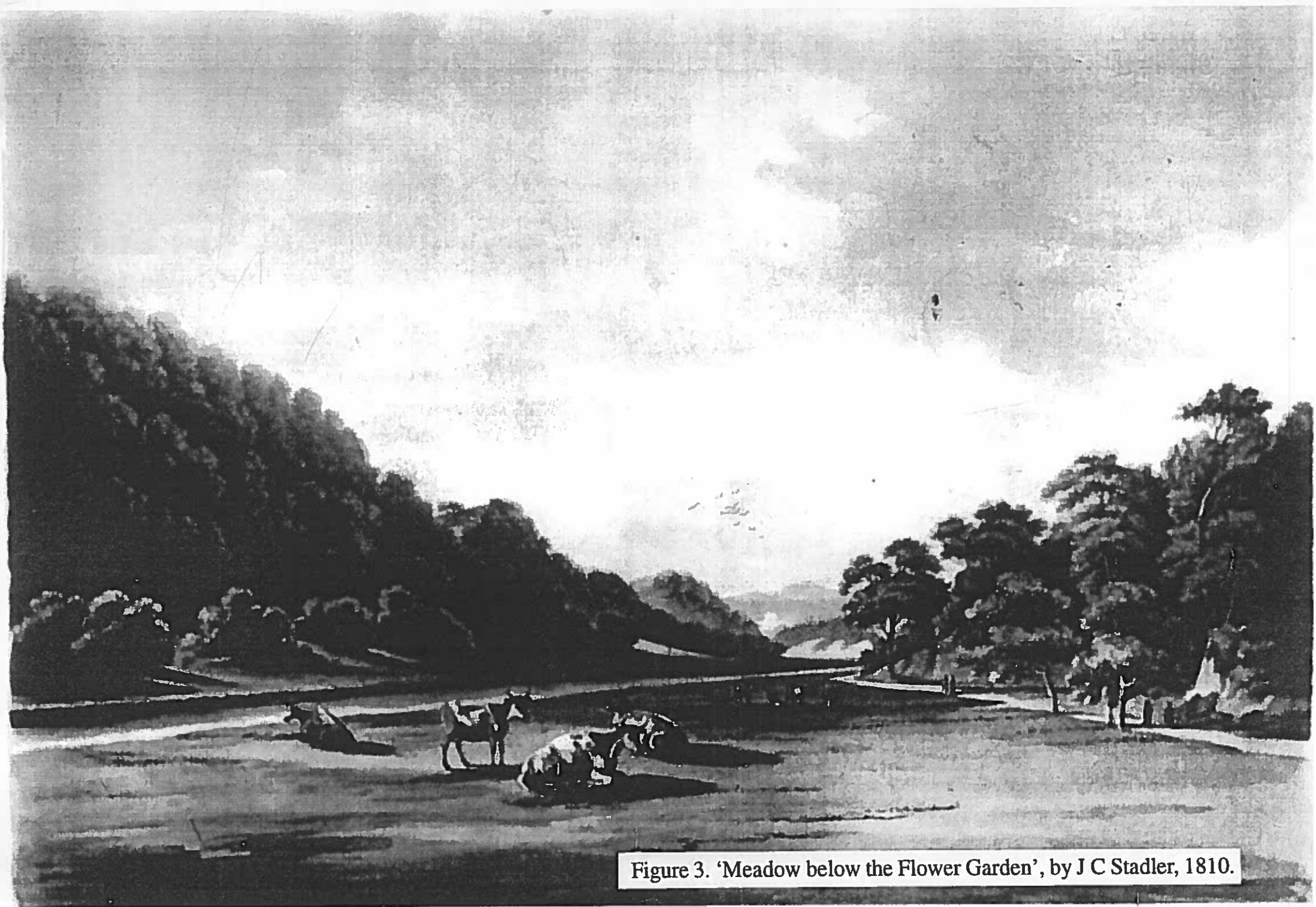


Figure 3. 'Meadow below the Flower Garden', by J C Stadler, 1810.



Figure 4. Pencil sketch of 1786 by Thomas Jones of Pencerrig

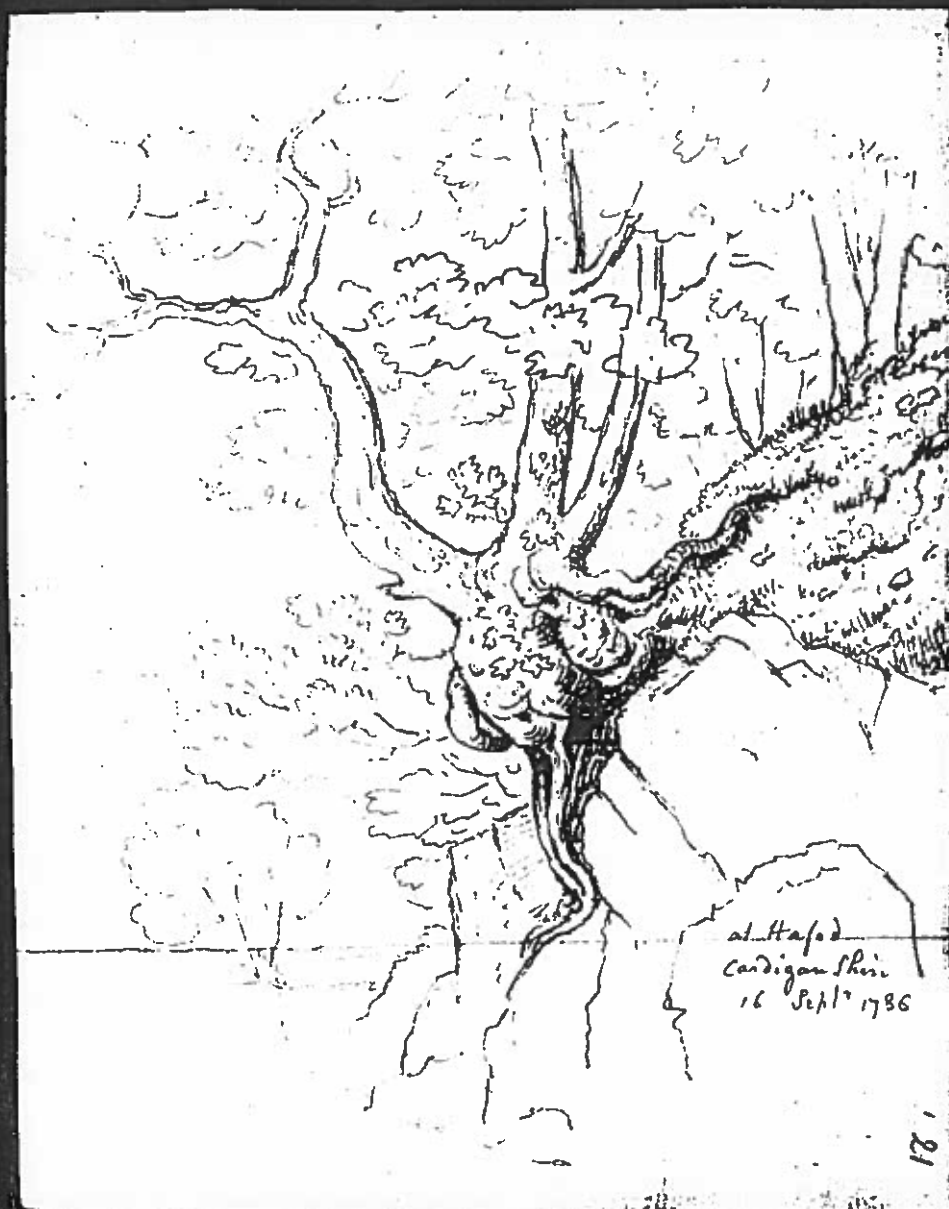


Figure 5. Pencil sketch of 1786 by Thomas Jones of Pencerrig



Figure 6. 'Ladies Walk Hafod'. Derby Porcelain 1787.
National Museum of Wales, Cardiff, Neg. no: 8751.
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HAFOD · LADIES' WALK · THE ALPINE MEADOW
TRENCH 2 PLAN AND WEST-FACING SECTION

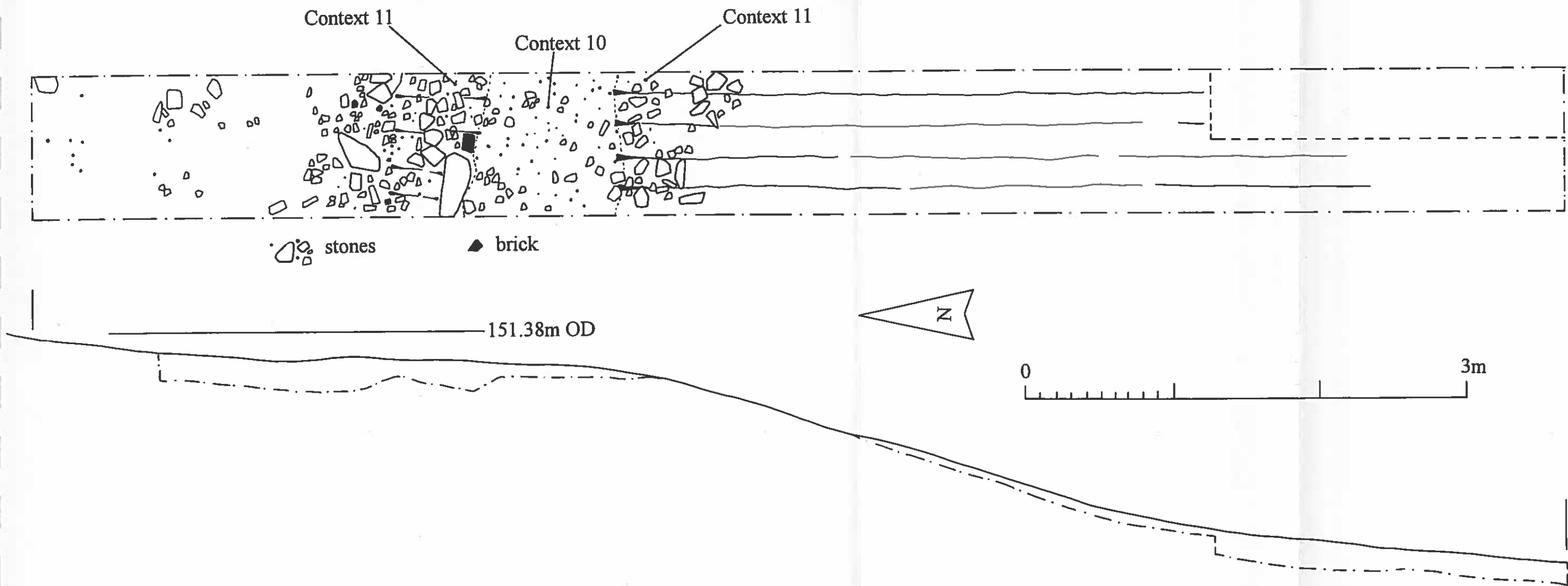
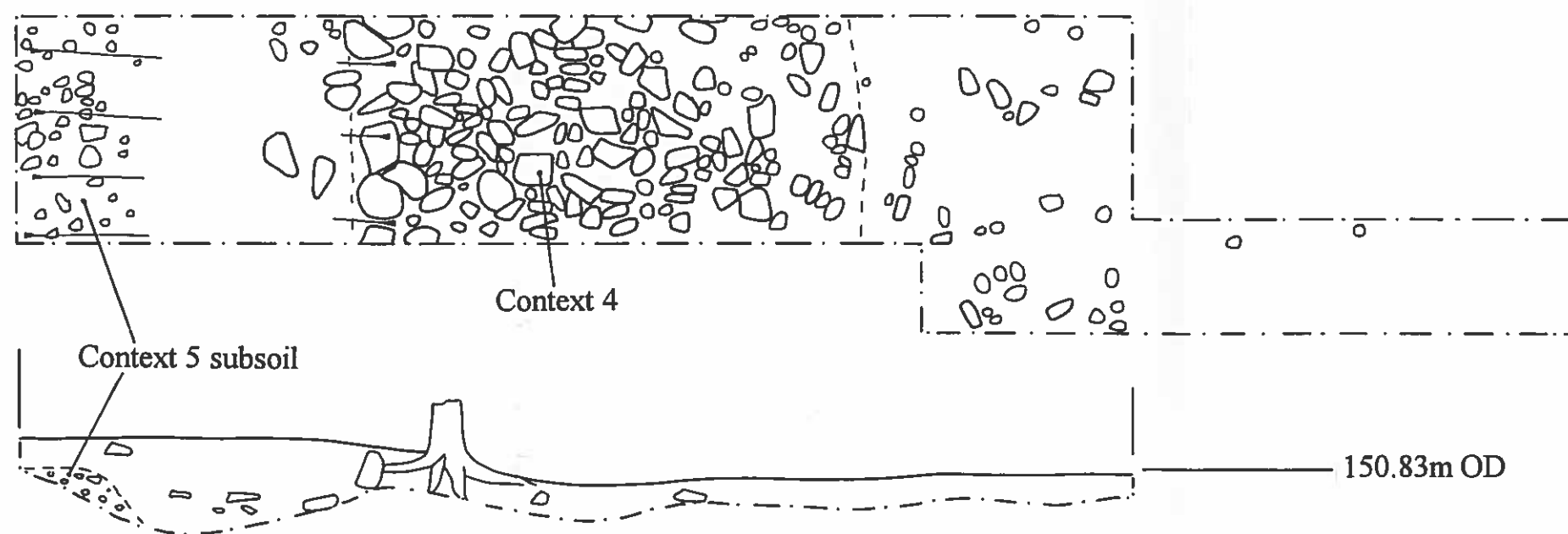


Figure 7. Trench 2: plan and west-facing section



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TRENCH 1 PLAN AND WEST-FACING SECTION

TRENCH 3 PLAN AND EAST-FACING SECTION

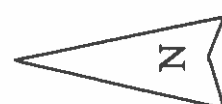
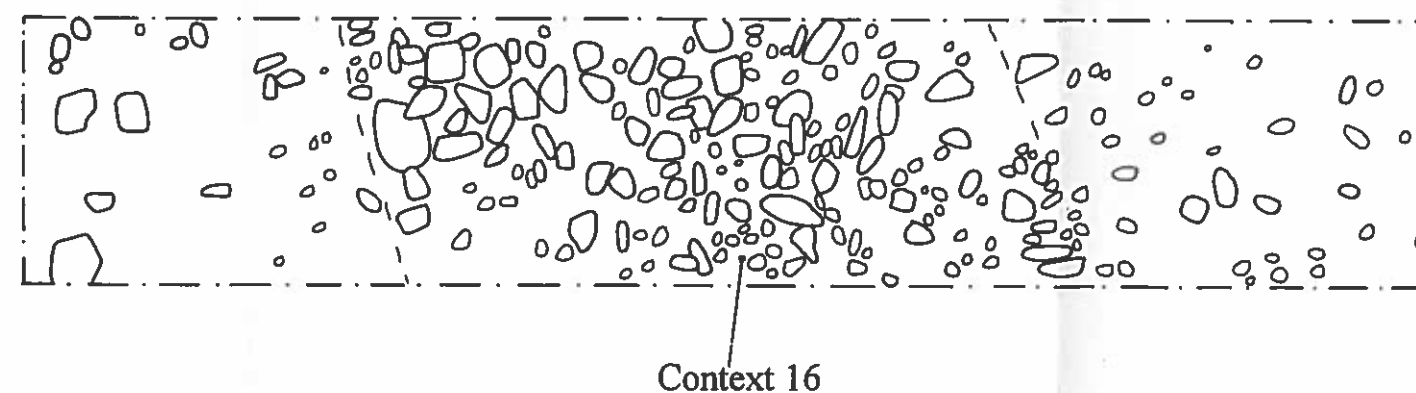


Figure 8. Trench 1: plan and west-facing section.
Trench 3: plan and east-facing section



Figure 9. Trench 1: view from the north showing Context 4. Scale 0.5m



Figure 10. Trench 3: view from the south showing Context 16. Scale 0.5m

HAFOD LADIES' WALK THE ALPINE MEADOW
TRENCH 4 PLAN AND WEST-FACING SECTION

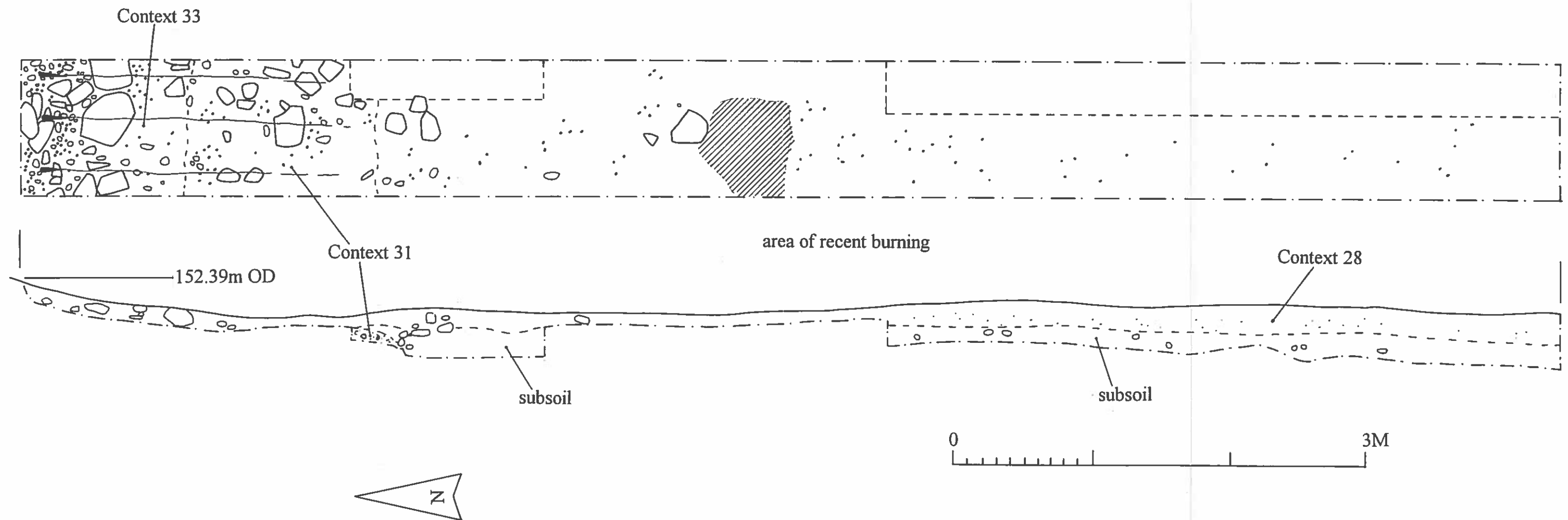


Figure 11. Trench 4: plan and west-facing section