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## A470 CARDIFF TO GLAN CONWY TRUNK ROAD: **GELLIGEMLYN ARCHAEOLOGICAL RECORD (G1644)**

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### Archaeological Record

GAT Project No. 1644

Report No. 765

December 2008



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# A470 CARDIFF TO GLAN CONWY TRUNK ROAD: **GELLI-GEMLYN INTERIM SCHEME (G1644)**

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REPORT NUMBER 765

**Prepared for *Gwynedd Consultancy*  
by Richard Cooke**



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## ARCHAEOLOGICAL RECORD

### Page

1	Summary
1	Introduction
2	Impact and Mitigation
3	Methods and Techniques
3	Topography
3	Archaeological Results
6	Conclusion
6	Addendum
8	Bibliography
10	Appendix I: Identified Archaeological Works Design and Watching Brief Design



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# A470 CARDIFF TO GLAN CONWY TRUNK ROAD: GELLI-GEMLYN INTERIM SCHEME

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## Figures and Plates

### Figures

Figure 1: Area effected by interim works.

Figure 2: Features composite plan .

Figure 3: Plan of features 4 and 8.

Figure 4: Location of Features 1880s OS.

Figure 5: Section through feature 8.

Figure 6: Section through feature 16.

Figure 7: Plan of features 13, 16, 23 and 24.

### Plates

Plate 01: View south of Feature 4, culvert and trough

Plate 02: View southeast of Feature 4, culvert and trough

Plate 03: View east of Feature 4, culvert and trough structure.

Plate 04: View east of Victorian lawn roller beneath Feature 4

Plate 05: View south of Feature 14, dry-stone wall

Plate 06: View west of Feature 14 extent, dry-stone wall.

Plate 07: View north of Feature 8, track-way.

Plate 08: View south of section through Feature 8 .

Plate 09: View south of Feature 13, approximate location of track-way prior to bush removal.

Plate 10: View south of Feature 13 after bush removal.

Plate 11: View southeast of Feature 13, with remains of revetment material.

Plate 12: View east of Feature 16.





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# A470 CARDIFF TO GLAN CONWY TRUNK ROAD: GELLI-GEMLYN INTERIM SCHEME

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## Figures and Plates Cont.

### Plates

Plate 13: View south of Feature 16, track-way.

Plate 14: View east of section through Feature 16, track-way.

Plate 15: View east of Feature 23.

Plate 16: View east of inscription on Feature 23.

Plate 17: View east of Feature 24.

Plate 18: View northwest of Feature 24.

Plate 19: View west of Feature 24 original dry-stone wall.

Plate 20: View west of Feature 24 later dry-stone wall .



## **Archaeological Record: A470 Cardiff to Glan Conwy Trunk Road: Gelligemlyn Interim Scheme (G1644)**

### **SUMMARY**

*A combination of basic and detailed Archaeological Recording has been undertaken in advance of proposed alterations to the A470 (T) Gelligemlyn interim scheme. The proposed scheme lies within the steep-sided valley of the Afon Mawddach, south of Ganllwyd between SH 729229 and SH 733223 on the western side of the A470 (T), between Bryn Cemlyn and Gelligemlyn. The scheme will involve creating a new, two lane carriageway along the western side of the existing road. The Archaeological Works Design required a detailed record of three track-ways identified during the Cultural Heritage Assessment, including the excavation of sections across two of these features. Moreover, the assessment outlined a further two features which required a basic level of archaeological recording, these being a culvert and trough in the northern part of the scheme, and a dry stone wall in the southern part. The features are all of unknown age; however the presence of secondary dating evidence at the culvert and trough can provide a conjectural date of the nineteenth century.*

### **1 INTRODUCTION**

Gwynedd Consultancy has commissioned Gwynedd Archaeological Trust to undertake an archaeological record of five features, previously highlighted during the assessment phase (GAT report no.711), which will be affected during construction of the interim scheme to the A470 (T) at Gelligemlyn. The works are confined between Bryn Cemlyn to the north and Gelligemlyn to the south, in the land immediately west of the current road. The area affected is indicated on the site plan (Figure 1).

The proposals include plans to create a new, two lane carriageway along the western side of the existing road; approximately 0.65km in length. This is to replace the original carriageway and is intended to improve the safety of users as opposed to increasing traffic flow.

An archaeological assessment was undertaken in 2000 by Gwynedd Archaeological Trust (GAT report no.711) and revised in October 2008, following the latest DMRB assessment guidance. The principal assessment identified a range of archaeological features of varying importance, as well as recommendations for further assessment, magnitude of impact prior to mitigation, significance of effect prior to mitigation, recommended mitigation measures, magnitude of impact with mitigation, and significance of effect with mitigation. The majority of the features identified consisted of track-ways and boundaries of unknown age; however, some potentially prehistoric features were located outside of the development area, though these lie outside the area of impact and no further work was recommended. It was considered possible that the course of the Roman road lay along the valley side (PRN 17732), and an intermittent watching brief during the implementation of works was recommended.

Upon conclusion of the assessment an Identified Archaeological Works Design and Watching Brief Design (November 2008) was compiled in accordance with the *Standard and Guidance for Archaeological Excavation* (Institute of Field Archaeologists, 1995, rev.1999). The mitigation required a detailed record of the three track-ways, including measured surveys being compiled of two of them. Furthermore, a basic record was deemed necessary for the dry-stone wall and culvert and trough features.

A project design was produced in 2007 by Gwynedd Archaeological Trust in accordance with the mitigation demands and is reproduced in *Appendix I*.

## **2 IMPACT AND MITIGATION**

### **2.1 Impact**

An inspection of the proposed road improvements and the outlying land directly affected as highlighted in Figure 1 was undertaken to ascertain any change in status following publication of the Environmental Statement. The current roadway is to be widened and straightened throughout the area of development, incorporating a maximum of 55.0m width at its northern end and affecting a land strip of approximately 30.0m width throughout the development area of 650.0m. The majority of the development lies to the land immediately west of the current A470 (T), however a small corridor of land (approx 5.0m) will be affected to the east of the road in the southern part of the development.

The works will affect a number of features, both on the western and eastern side of the current roadway. GAT report No.711 produced an extensive gazetteer of archaeological sites in and around the development area (711. p9. 3.4), however the development scheme is only expected to directly affect six features including a potential Roman road (PRN 17732) (see Figure 2).

- Feature 4 is a concrete culvert and iron trough located at SH 72972275 on the eastern edge of the development area in the northern section of the scheme, and will remain in-situ but resurfacing will occur.
- Three track-ways exist in the western part of the development scheme, two of which (features 8 and 13) run parallel to the current road and are located at SH 72802276 and SH 73232244 respectively. Track 8 will be truncated at its southern end by the construction of a minor access road, but will otherwise be unaffected by the scheme. Track 13 will be destroyed in its entirety by the works, however it seems likely that the feature represents part of an earlier road running along the valley floor, and thus the effect of its overall destruction will be no more than moderate in the context of the wider landscape.
- Track-way 16 is located on the western edge of the development in the southern part of the scheme at SH 73252235 and zigzags up the western valley slope. Despite the works only destroying the most eastern part of this feature, it is the most distinctive part and includes the link with the modern roadway and as such warrants detailed recording.
- Potential Roman road (feature 21) SH 73102250 PRN 17732 will also partially be affected via the proposed works, and despite not being mitigated in this report will be monitored by watching brief upon commencement of the works.

### **2.2 Mitigation**

Features 4 and 14 are to receive a basic level of recording in accordance with the mitigation procedures outlined in GAT report No.711. This includes:

- Photographic survey
- Written description
- Sketch map
- A measured survey in some circumstances

Features 8, 13 and 16 are to receive a detailed level of recording which has in addition to the basic recording level:

- A measured survey
- Archaeological excavation, depending upon particular feature and extent/effect of the impact.

### 3 METHODS AND TECHNIQUES

The recording of the features requested in the mitigation was undertaken between 26<sup>th</sup> and 28<sup>th</sup> November 2008. The recording was completed using digital photography and a combination of written records and measured plans. Initially, the intention was to utilise an Electronic Distance Meter (EDM) Total Station to survey relevant features, however the logistics of compiling such a survey in such difficult terrain and vegetative cover proved futile, and as such, features were planned by hand using triangulation from known landmarks and existing sections of Herptile fencing. Though this method does not have the degree of accuracy offered by the Total Station the margin of error is so slight that the technique was considered fit for purpose. Two sections were excavated across track-ways 8 and 16 to record construction techniques and these findings were recorded using digital photography, measured section drawings, and assigned context numbers/descriptions.

Upon the implementation of works at the site, there will be an intermittent watching brief on the Roman road feature 21, which will involve viewing trenches after machining along the suspected course of the feature. Moreover, there will be a partial watching brief on all parts of the site during earth moving stages.

### 4 TOPOGRAPHY

(Reproduced from GAT Report 711)

The valley floor of the Afon Mawddach lies at under 10m above sea level, and as such is only marginally above the tidal limit of the river. The land immediately west of the road inclines steeply to a height of 150m, between 200m and 300m west of the valley floor. The road has been terraced into this western slope. The land on the western side of the road consists of plantations of an imported species of *Quercus* interspersed with dense infestations of *Rhododendron ponticum* along with an area of clear-felled conifer plantation that is now very overgrown. The upper parts of the slope consist of either steep scree or conifer plantations. The land above the steep valley sides comprises enclosed upland sheep pasture. Much of the area within and around the proposed scheme comprises the steep wooded slopes of the Mawddach valley and the featureless flood plain of the river.

### 5 ARCHAEOLOGICAL RESULTS

#### 5.1 Archaeological and Historical Background

(Reproduced from GAT Report 711)

There are no known settlement or burial sites of the prehistoric period in the vicinity of the proposed scheme, however feature 20 to the southwest of the proposed works may potentially be a roundhouse of prehistoric origin. Indeed, to the north of this feature is a sub-circular enclosure, which was thought to be potentially a prehistoric enclosure during the assessment phase (GAT. Report No.711). However, recent discussions with local residents have suggested that the latter feature was in use as a stone built *hendre* (winter dwelling) until about the 1970s. Nevertheless, neither of these features are to be affected by the proposed works and as such require no further archaeological assessment.

Most of the land is either steeply sloping or liable to flooding and as such has a low potential for the discovery of archaeological remains of human settlement or ritual practices. The line of the Roman road between the forts at Tomen y Mur and Brithdir can be traced as far as Pen y Stryd, 9.5km to the north of the scheme. The line beyond this point is open to debate. One of two likely but unproven routes runs along the Mawddach valley and could pass through the scheme corridor.

The most significant event to occur in the Mawddach valley in post-Medieval times was the discovery of gold in the lead mines of the area (Hall 1988). Gold was initially noticed in a jig at Cwm-heisian mine, several km to the north of the study area in 1843 but initial attempts to attract investors were unsuccessful. The American gold rush of 1849, however, whetted the appetite of the stock market for British gold. Several mines in Meirionnydd produced a significant amount of gold but fabulous fortunes were not instantly forthcoming and the bubble burst amidst accusations of fraud.

There are consequently no known medieval or earlier settlements or ritual sites close to the road and only scattered sites on the uplands above the valley. More recent sites are mainly associated with the 'Welsh gold rush' of the late 19<sup>th</sup> century. However, these sites are again mainly restricted to the upper slopes, away from the road, and the principal remains to be affected are linear features such as tracks, boundaries and water courses.

## **5.2 Results of the Archaeological Recording (Basic)**

The archive is held by GAT under the project number G1644.

This section covers features 4 and 14, and is supplemented by photographic records and any illustrations deemed relevant.

### **Feature 4: Culvert and Trough (Plates 1 to 4; Figure 3) SH 72972275**

A concrete culvert in sections measuring 0.9m x 0.6m is built through the eastern revetment wall of the A470 (T) and channels the stream beneath the current A470 (T) for approximately 10.0m. A second, overflow culvert pipe 0.2m in diameter is located 3.0m above the top of the main pipe, and both feed into an iron trough of dimensions 3.5m long and 1.5m wide. The purpose of the iron trough is to clear the stream water well away from the revetment wall before re-feeding it into the original stream course.

The iron trough rests upon wooden planking which are likely to be reused railway sleepers, which in turn is built upon a steel frame, the girders of which run east to west initially, and are then built upon larger girders running north to south. This steel frame is built into two opposing stone buttresses to the north and south.

There are possible traces of an earlier wall to the north of the culvert and trough, but no discerning evidence can be found to ascertain whether an earlier feature was situated on the site, or whether a build-up of material has been deposited over time to create a safe passing place across the stream. The constructed steel frame and buttresses have created a void between the stream bed and structure, in which the barrel of a probable Victorian lawn roller is located. This was most certainly deposited at the site before the most recent construction of the culvert and trough and as such suggests a date of the latter 19<sup>th</sup> Century.

The archaeological value of this feature is rated low (GAT report No.711) and no further recommendations are made for further assessment or works. The feature is now recorded in advance of impact, and as such is preserved via record.

### **Feature 14: Dry Stone Wall (Plates 5 to 6; Figures 2 and 4) SH 73242240**

A single skin dry stone wall which represents a field boundary is located to the immediate west of the A470(T), forming an arced enclosure with the road. This feature is depicted on the 1880s OS map (figure 4) and respects the current road line, suggesting it was created during or after the construction of the road. Moreover, it can be seen from the early map that a significant portion of the area enclosed by the wall was not utilised as forestry plantation, and almost certainly was in use as pastoral land. The feature averages 1.2m in height and 0.6m in width, however in places the wall reaches 1.5m in height. The construction utilises frequent large river cobbles in its first course, transitioning to medium sized, angular grey-blue schist cobbles for the majority of the construction. The wall becomes significantly more substantial approximately 100m up the western slope, where it is better preserved. The feature has been demolished in places in order to allow the construction of herptile fencing, however it seems likely that this shadowed earlier demolition attempts in order to permit rights of way.

The archaeological value of this feature is deemed negligible (GAT report No.711), and no further recommendations are made for further assessment or works. Sections of the feature will be demolished by the development scheme, however the remaining sections and preservation via record is acceptable.

### 5.3 Results of the Archaeological Recording (Detailed)

The archive is held by GAT under the project number G1644.

This section covers features 8, 13 and 16 and is supplemented by photographic records and any illustrations deemed relevant.

#### **Feature 8: Track or Path (Plates 7 to 8; Figure 3 and 5) SH 72802276**

A track or path averaging 1.0m in width but extending to 3.5m in width in places runs parallel to the existing A470 (T) to the northwest of the scheme. Occasional lengths of dry-stone revetment wall can be traced below the path in places, and the feature crosses two tributary streams as it heads south before becoming untraceable in the former plantation. The track is depicted on the OS 6 inch 1880 edition and may well be the remains of an early route along the valley. The track is particularly well preserved to the north of the most northerly stream crossing, with stone built buttresses three courses high, suggesting the remains of an early bridge construction. The feature remains only obvious as a terrace in the natural western valley slope south of this point, and becomes particularly difficult to locate once it has traversed the most southerly stream.

An excavated section across this feature (figure 5) has revealed that the track was constructed by a substantial terrace being cut (1005) into the hillside for approximately 180.0m throughout the steeper slopes of the valley. This terrace begins by running southeast to northwest for 20.0m, then turns west for 30.0m before running northwest again for 130.0m. Due to the very nature of the terrace being cut into the hillside the actual depth of the cut is not discernable, however it must total several metres deviation from the natural incline, especially on the western edge. The terrace created a flat footing for the construction of revetment material (1006) on the eastern edge, which undoubtedly reduced erosion of the oblique edge and reinforced the edge of the track. This revetment material consisted of orange-brown clay-silt with frequent large and medium sub-angular cobbles, with no binding medium. Despite the apparent natural silting of the track by a mixed brown clay-silt (1007), no finds were located or any direct dating evidence.

The archaeological value of the feature is deemed medium (GAT Report No.711), however no recommendations are made for further mitigation. The effect of the development after mitigation is rated minor, as only the most southern part of the feature will be truncated by the scheme and the detailed records obtained ensure preservation of this section via record.

#### **Feature 13: Track or Path (Plates 9 to 11; Figure 7) SH 73232244**

This feature was particularly difficult to locate in its entirety and it must be conjectured that the dynamic flux of the dense vegetation has rendered substantial parts of it hidden. Nevertheless, upon removal of overlying vegetation a significant portion was rediscovered. The track consists of a roughly flat area approximately 2.0m in width, located 15.0-20.0m southwest of and running parallel to the A470 (T). Occasionally the feature becomes mildly concaved and has occasional large, angular schist blocks which are almost certainly the remnants of a revetment structure.

The feature presumably represents an earlier line of the present road, however it was not possible to ascertain an exact date for its construction. A fragment of trackway is depicted on the OS 6 inch and 25 inch maps from the 1880s, and it seems plausible that this track connected with other fragments of track, including feature 8. However, upon vegetation removal it became clear that this feature turns towards the current road for a short period at its southerly edge, suggesting that it originally joined up with a route which followed the current road line. This feature could only be traced for approximately 30.0m length before it became unclear.

The archaeological value of the track is deemed medium (GAT report No.711), however no further recommendations are made for further mitigation. The effect of the scheme after mitigation is rated minor despite the expected destruction of the feature by the scheme. It is likely that it is part of a road running along the valley so the overall destruction in the context of the wider landscape should be no more than moderate.

### **Feature 16: Track or Path (Plates 12 to 14; Figures 6 and 7) SH 73252235**

This track averaged approximately 1.5m in width and was terraced into the western hillside, zigzagging up the slope away from the current road. An excavated section (figure 4) across the track showed it to be well constructed, with a fairly regular terrace cut (1001) being concaved with a mildly undulating base. The cut was filled by a mid ginger-brown sand-silt with approximately 70% medium-sized, angular cobbles on its southerly edge (1002). This undoubtedly formed a revetment structure which prevented erosion on the outward edge. Despite the track having silted up naturally over time with a dark brown sand-silt (1003), its characteristics were still obvious, although no dating evidence could be found.

The track is depicted on the OS 6 inch and 25 inch maps from the 1880s onwards, and is believed to have been a link between the main roadway in the valley and the farms further up the slope. However, the dominance of rhododendrons on the upper parts of the slope has rendered this feature untraceable higher up. Indeed, since the initial assessment phase by GAT in 2000 (report No.711), a substantial portion of this feature has become lost.

The archaeological value of the track is deemed medium (GAT report No.711), however no recommendations are made for further mitigation. The effect of the scheme after mitigation is rated moderate, as despite only the eastern part of the track being destroyed by the scheme, it is undoubtedly the most well preserved and constructed section.

## **6 CONCLUSION**

A total of six archaeological features will be partially or completely destroyed as a direct result of actions associated with the forthcoming construction works. Feature 21(Roman road) is not reported on in this document as its location will only be confirmed during the watching brief.

Features 4 and 14 are deemed to have low and negligible archaeological values respectively, and are expected only to be partially affected or modified by the scheme. Features 8, 13 and 16 are of medium archaeological importance, and while features 8 and 16 are truncated by the works, feature 13 will be destroyed in its entirety. All sites have been recorded to the appropriate specification as required to mitigate the impact.

An intermittent watching brief will be conducted during relevant stages of the construction phase of works.

## **7 ADDENDUM**

On the 18<sup>th</sup> December 2008 a return visit was made to the area and subsequently two extra features were located and basic records taken.

### **Feature 23: Milestone (Plates 15 to 16; Figures 2 and 7)**

A single slab of dimensions 0.66m x 0.4m x 0.16m stands just within the grounds of the Gelligemlyn estate, immediately to the south of the most southerly entrance wall. The stone appears to be worn sandstone and is inscribed with 'To Dolgelley 4 Trewsfynydd ?'.

The mileage to Trawsfynydd (Trewsfynydd) is not clear due to weathering, however the mileage to Dolgellau (Dolgellay) is correct suggesting the stone is either in-situ or has originated in close proximity to its current location. The inscription is orientated to the east and subsequently away from the current A470 (T), suggesting that if the stone is in-situ then it predates the road and perhaps belongs with an earlier route through the valley which was at least 4.0m to the east. However, it seems more likely that the stone has been relocated from nearby and erected as a feature of interest, most probably by the residents of Gelligemlyn.



Four holes have been drilled into the upper portion of the stone, spaced 0.2m width and 0.17m height apart. These appear to be of a later event than the stone and are most probably for the purpose of fixing a sign of some sort, of which there is now no trace.

The feature is currently located within the path of the proposed alterations to be implemented during the scheme, and thus will be directly affected. However, discussions with the residents of the Gelligemlyn estate have shown a desire to relocate the stone further to the east, and to orientate the inscription towards the entranceway to the west before the commencement of works. Considering the likelihood that the stone is not in-situ and has already been relocated to its current position, this proposal is a recommended mitigation.

**Feature 24: Entrance wall to the Gelligemlyn estate (Plates 17 to 20; Figures 2 and 7)**

The stone built entranceway to the Gelligemlyn estate is 0.95m in height and is constructed of large and medium sized cut granite blocks averaging 0.6m long and 0.23m deep, bonded by mortar. The two stone entrance piers stand 1.43m in height with a roughly chiselled granite block 0.27m in diameter adorning the top. The wall is mostly four courses high and appears to be a more recent addition to an earlier dry-stone wall, constructed of medium rounded and sub-rounded river cobbles located 10.0m to the south. This earlier wall is 0.7m high and 1.0m wide, and projects 0.45m further to the east than the later entrance wall. This suggests that the Gelligemlyn entrance wall originally ran closer to the estate than the current alignment.

The earlier wall is only present for approximately 4.0 to 5.0m before again being superseded by another later wall to the south. This later wall is of dry-stone construction measuring 1.3m high and 0.6m wide, but of cut blocks as opposed to river cobbles.

This wall will be demolished as a result of the impending interim improvements to the A470(T), but rebuilt utilising the existing stone to blend it into the landscape. This fact combined with the basic recording already carried out on the wall, means that no further mitigation will be necessary.

## **8 BIBLIOGRAPHY**

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### **8.3 Cartographical sources**

*Ordinance Survey maps:*

British Geological Survey 1982, 1:50 000 Series, Sheet 135, Harlech

1:10 000 Sheet 72NW 1982

6" Meirionethshire 1<sup>st</sup> Ed. Sheet XXXIII. N.W. 1885

### **8.4 Aerial Photographs**

Sortie: 106G/UK/1235 Date 10/03/1946 Frames: 4001 and 4002

## **APPENDIX I**

### **A470 GELLIGEMLYN INTERIM SCHEME**

#### **IDENTIFIED ARCHAEOLOGICAL WORKS DESIGN AND WATCHING BRIEF DESIGN**

##### **1. Implementation strategy**

###### *1.1 Introduction*

This report represents a general strategy and methodology for the archaeological works which are affected by the A470 Gelligemlyn Interim Scheme. It has been prepared by Gwynedd Archaeological Trust on behalf of Gwynedd Consultancy, and sets out the archaeological mitigation strategy as required by the Welsh Assembly Government.

###### *1.2 Background*

The main purpose of this document is to set out the general strategy and methodology to be adopted for the archaeological field investigations that are designed to mitigate the archaeological impact of the scheme.

###### *1.3 Objectives*

The objectives of this programme of archaeological works can be summarised as follows:

- To undertake an appropriate level of archaeological monitoring and recording in areas to be affected by road construction.
- To ensure the long term curation of the recovered data, and its dissemination in a form appropriate to its academic value in line with nationally defined guidelines.

##### **2. Overall Approach**

###### *2.1 Key archaeological themes*

Gelligemlyn lies within the steep-sided valley of the Afon Mawddach. The valley floor is only just above the tidal limit of the river standing at less than 10m above sea level. The land to the west of the road rises steeply reaching a height of 150m, between 200 and 300m to the west of the valley floor. The road has been terraced into the lower parts of this slope. The land on the western side of the road consists of plantations of an imported species of *Quercus* interspersed with dense infestations of *Rhododendron ponticum* along with an area of clear-felled conifer plantation that is now very overgrown. The upper parts of the slope consist of either steep scree or conifer plantations. The land above the steep valley sides comprises enclosed upland sheep pasture.

There are no known settlements or burial sites of the prehistoric period in the vicinity of the proposed scheme. Most of the land is either steeply sloping or liable to flooding and as such has a low potential for the discovery of archaeological remains of human settlement or ritual practices. The line of the Roman road between the forts at Tomen y Mur and Brithdir can be traced as far as Pen y Stryd, 9.5km to the north of the scheme. The line beyond this point is open to debate. One of two likely but unproven routes runs along the Mawddach valley and could pass through the scheme corridor.

The most significant event to occur in the Mawddach valley in post-Medieval times was the discovery of gold in the lead mines of the area (Hall 1988). Gold was initially noticed in a jig at Cwm-heisian mine, several km to the north of the study area in 1843 but initial attempts to attract investors were unsuccessful. The American gold rush of 1849, however, whetted the appetite of the stock market for British gold. Several mines in Meirionnydd produced a significant amount of gold but fabulous fortunes were not instantly forthcoming and the bubble burst amidst accusations of fraud.

Much of the area within and around the proposed scheme comprises the steep wooded slopes of the Mawddach valley and the featureless flood plain of the river. There are consequently no known

medieval or earlier settlements or ritual sites close to the road and only scattered sites on the uplands above the valley. More recent sites are mainly associated with the ‘Welsh gold rush’ of the late 19<sup>th</sup> century. However, these sites are again mainly restricted to the upper slopes, away from the road, and the principal remains to be affected are linear features such as tracks, boundaries and water courses.

### 3. Outline programme of archaeological input

#### 3.1 Definitions

The following table sets out the interpretation of the terminology which will be used for the project to ensure consistency of approach and understanding across the whole scheme.

Type of Mitigation	Definition
Basic Recording	A photographic survey and written description of the site with sketch map and measurements. A measured survey may be required in certain circumstances.
Detailed Recording	A full photographic survey, measured survey and written description. Archaeological excavation may also be required depending upon the particular feature and the extent and effect of the impact.
Excavation	A detailed programme of intrusive investigation to examine, record and retrieve Archaeological Remains.
Preservation <i>in situ</i>	The protection of an identified site, either above or below the ground surface. Methods include fencing of an area or overlaying a site, for example, using geotextiles.
Sample excavation	Method of identifying the nature of archaeological deposits. In this scheme, trial-trenching, an intrusive method will usually be used.
Watching brief	To be carried out over all areas where earth moving is to take place. Four levels of watching brief might be undertaken, the choice being dependant upon the archaeological potential of each location: <ul style="list-style-type: none"> <li>• Comprehensive – present during all ground disturbance</li> <li>• Intensive – present during sensitive ground disturbance</li> <li>• Intermittent – viewing the trenches after machining</li> <li>• Partial – as and when seems appropriate.</li> </ul>

**Table 1: Terminology for archaeological mitigation**

#### 3.2 General Requirements of the Project Design

This project design falls under the general guidance contained within the Highways Agency’s Design Manual for Roads and Bridges (DMRB).

Work beyond the established site boundary will be avoided unless a right has been established to enter the land (except where subsequently necessitated by off-site construction or mitigation works). This is in accordance with DMRB Draft Advice Note 4.3.2 and 4.3.5 and with the overall principle of the primacy of preservation *in situ* stated in paragraph 3.3.4 of the same document. Any works outside the Site will be subject to a programme of Archaeological Works. These will typically comprise an Archaeological Assessment and, if appropriate, Archaeological Evaluation. Recommendations will be made for Mitigation within the Assessment and Evaluation Reports.

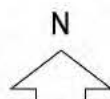
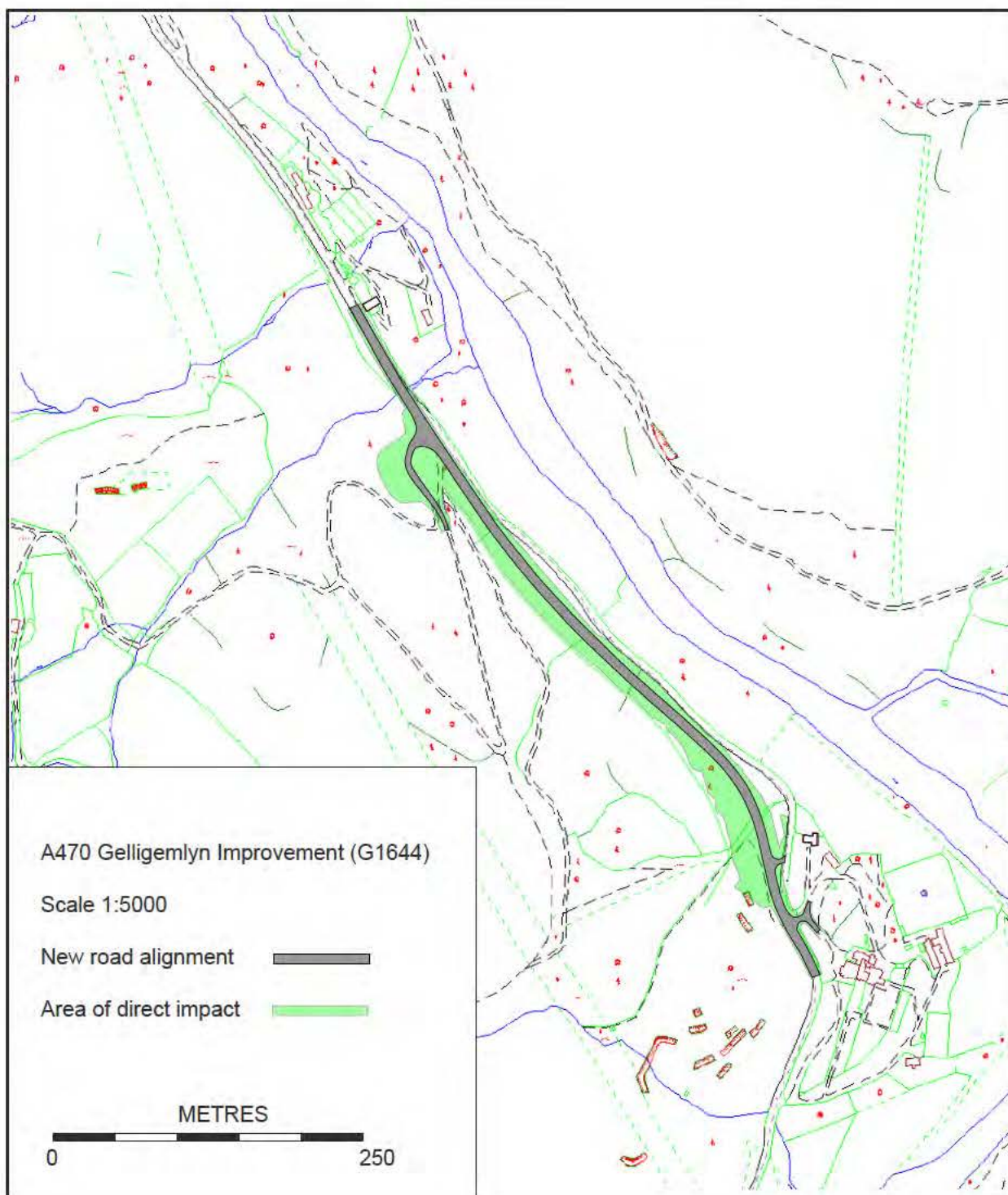
The methodological standards to be adopted have been outlined above, and these will be modified or adapted as necessary to suit particular sites. The individual Archaeological Works for each site will be identified in the Archaeological Design for each site which will be accompanied by the relevant Certificate.

### 3.3 Area of Proposed Works

The area of the proposed works is the area of road improvement of the A470 Gelligemlyn Interim Scheme. The list of archaeological works are given in the *Environmental Statement*; those requiring archaeological action are repeated below in Table 1.

Site	Name	Action
4	Culvert and Trough	Basic Record
8	Track	Detailed Record including excavated section across the feature.
13	Track	Detailed Record
14	Dry stone wall	Basic Record
16	Track	Detailed Record including excavated section.
21	Roman Road	Watching Brief
	Entire route	Partial Watching Brief during all earth moving stages.

**Table 2 Site mitigation summary**



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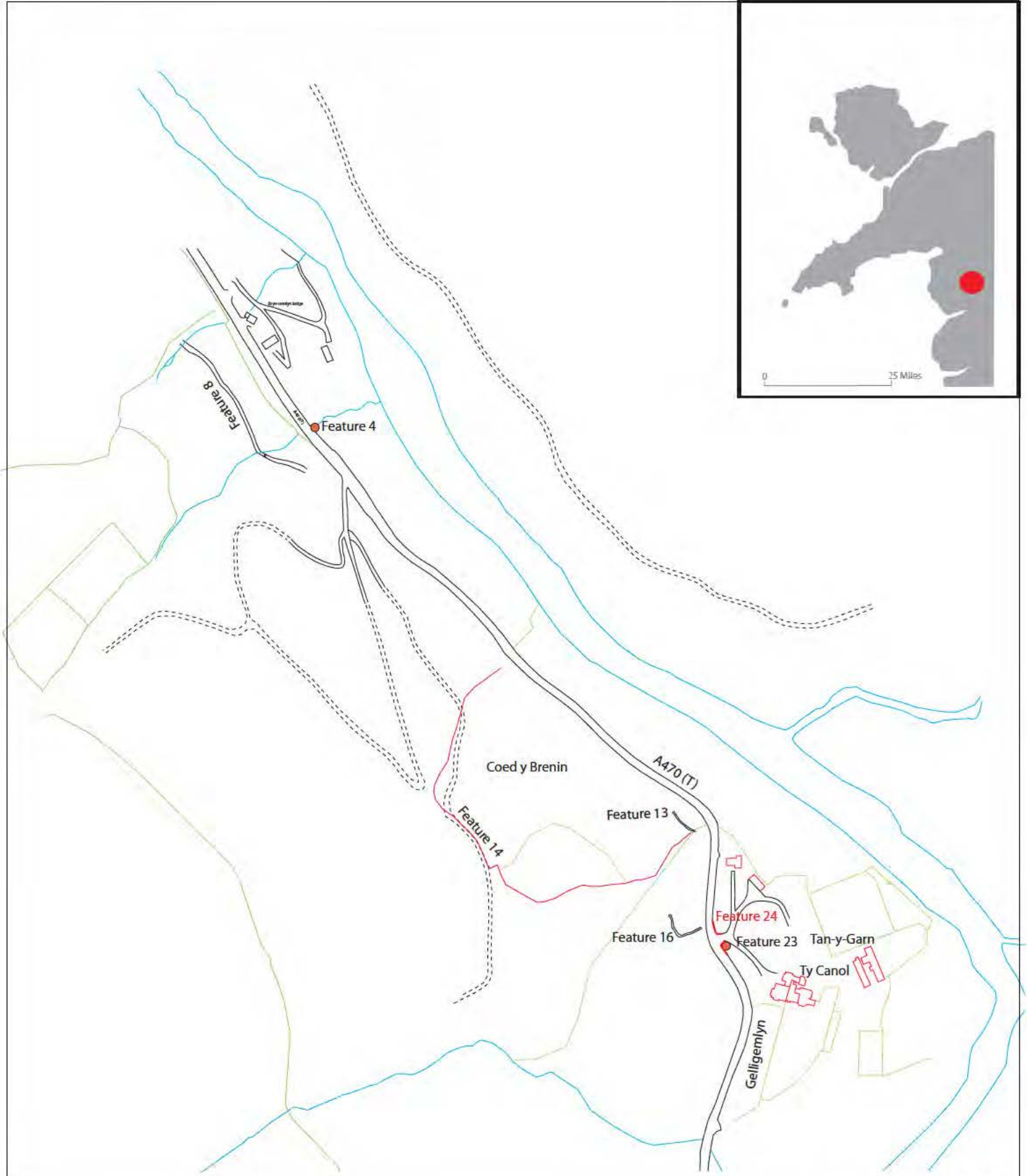


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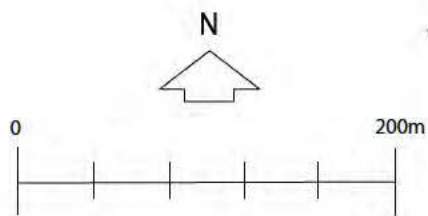
Craig Beuno, Ffynid y Garth, Bangor, Gwynedd, LL57 2RT  
Ffôn: 01248 352535. Ffacs: 01248 370925. email: gat@bangor.co.uk

**G1644 Gelligemlyn  
A470 (T)**

**Figure 1. Area Affected**  
Scale: 1:5000@A4



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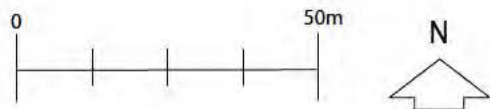
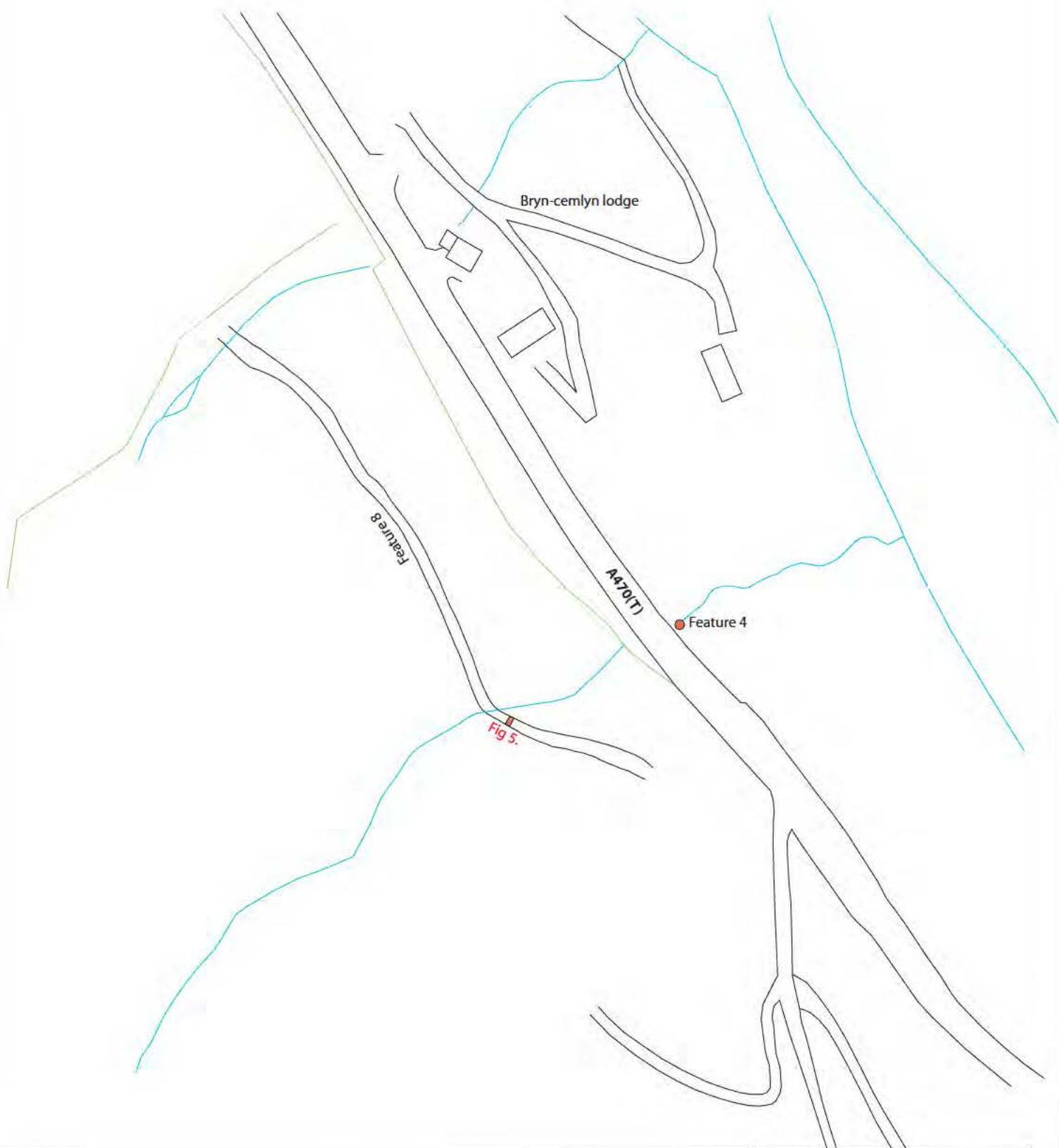


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**Figure 2. Features Composite Plan**  
Scale: 1:4000@A4





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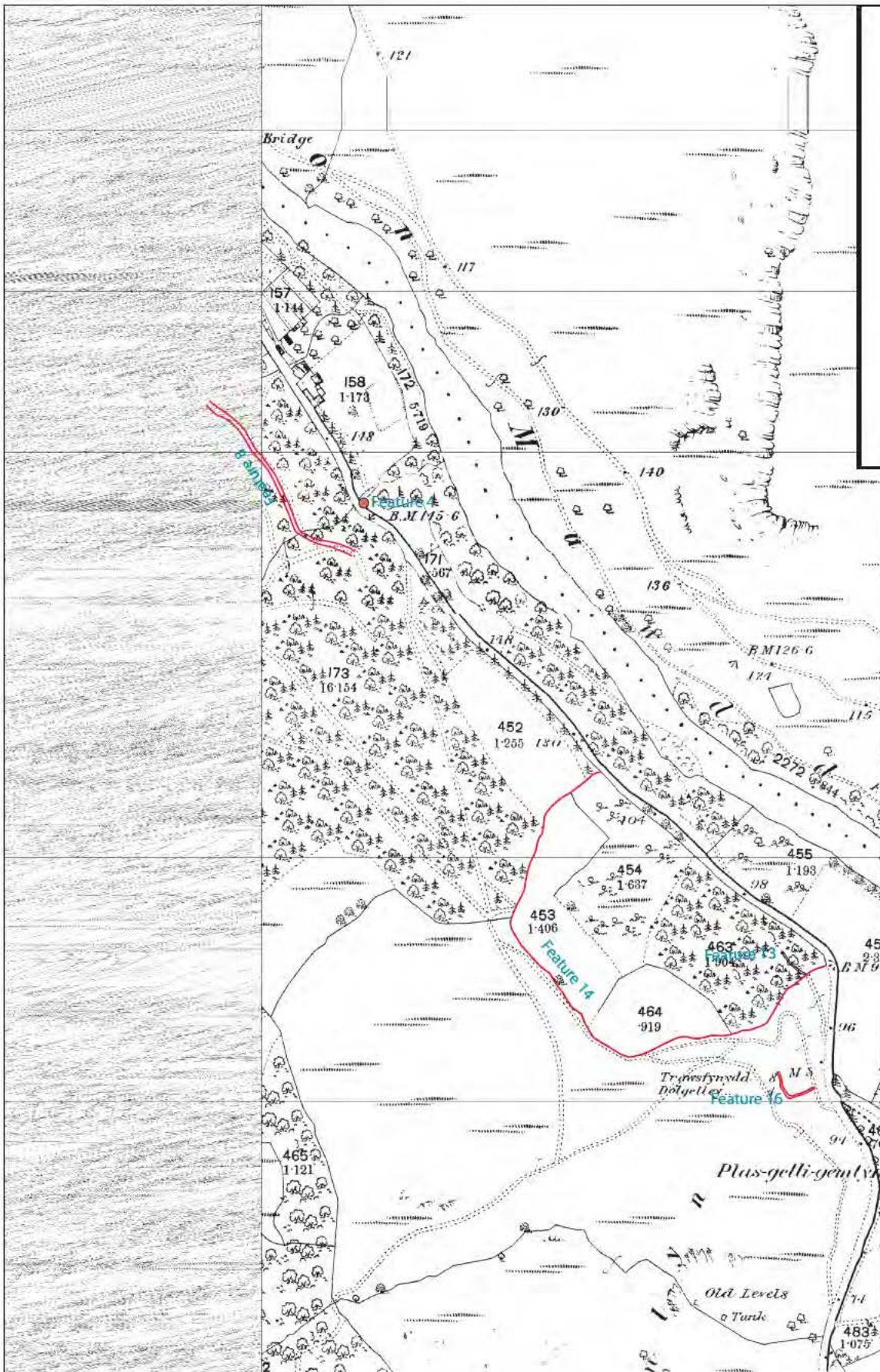
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**Figure 3. Location of Features 4 and 8**  
Scale: 1:1250@A4

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**Figure 4. Location of Features 1880s OS**

Scale: 1:4000@A4

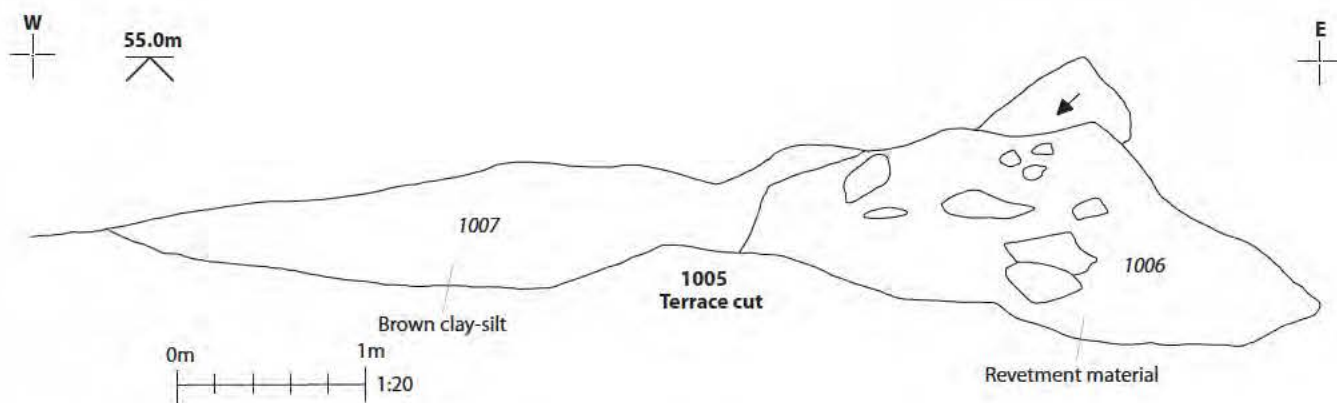


Figure 5: South facing section through feature 8, Track-way.

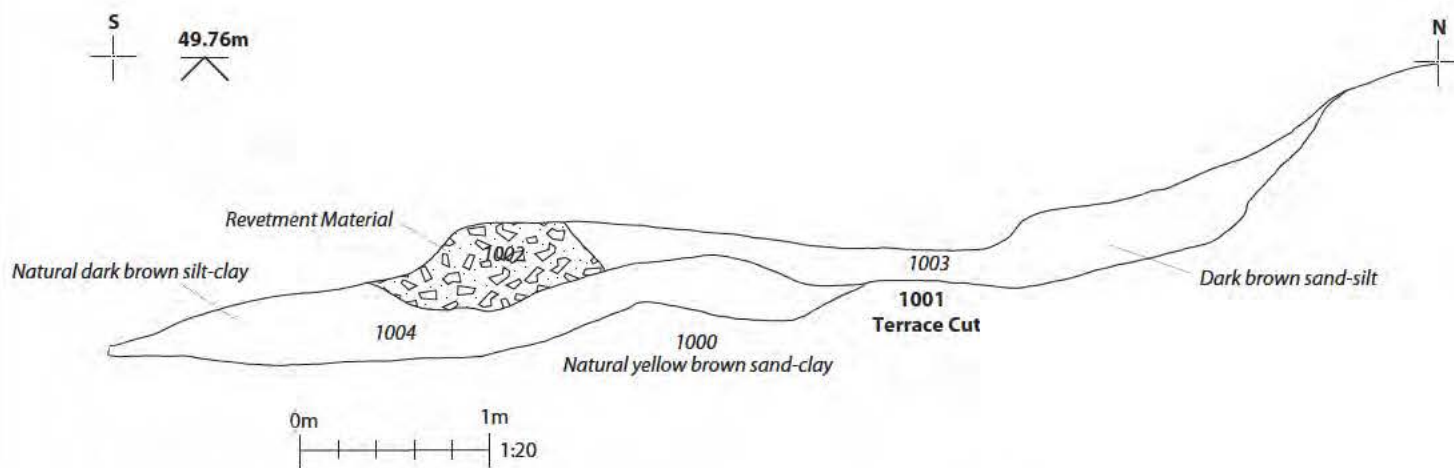


Figure 6: East facing section through feature 16, Track-way.

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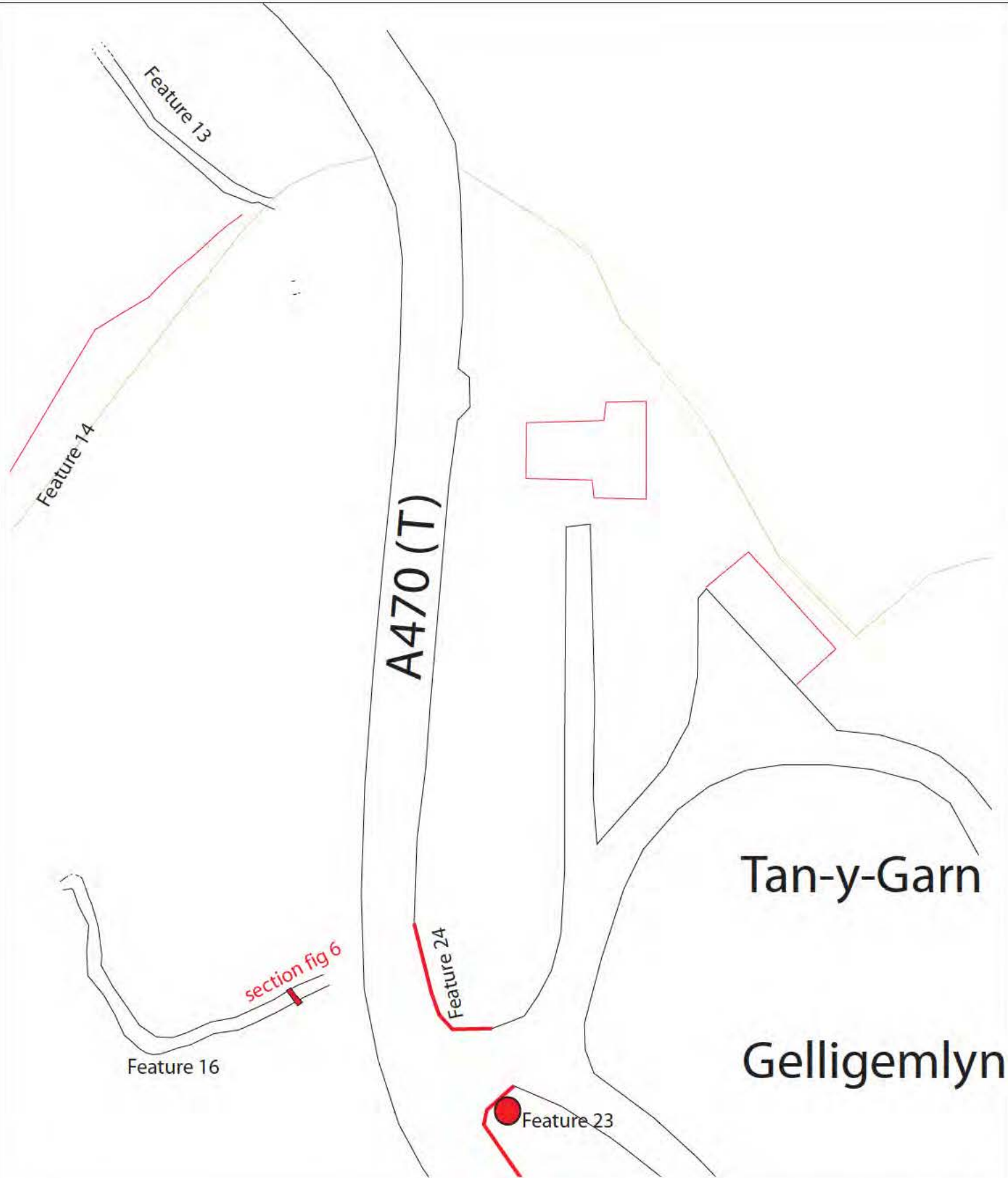
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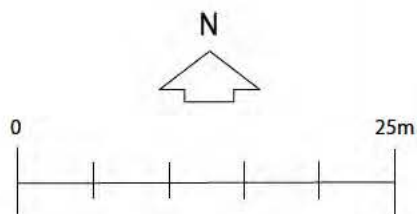
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**Figs 5 and 6.  
Sections through Features 8 and 16**





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A470 (T) Scale: 1:500@A4**  
**Figure 7. Location of Features  
13, 16, 23 and 24**





Plate 01: View south of Feature 4, culvert and trough.



Plate 02: View southeast of Feature 4, culvert and trough



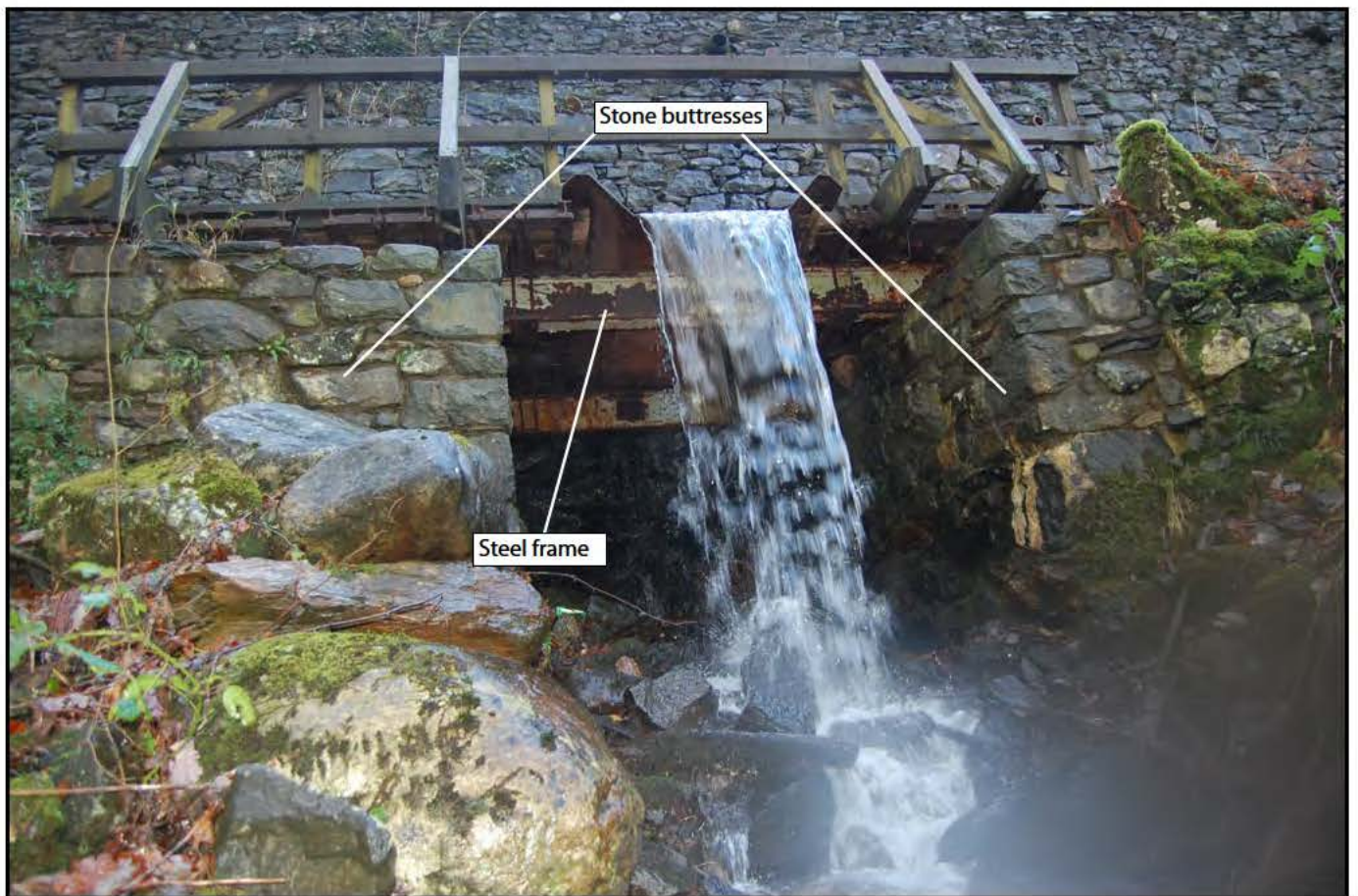


Plate 03: View east of Feature 4, culvert and trough structure.



Plate 04: View east of Victorian lawn roller beneath Feature 4





Plate 05: View south of Feature 14, dry-stone wall.



Plate 06: View west of Feature 14 extent, dry-stone wall.



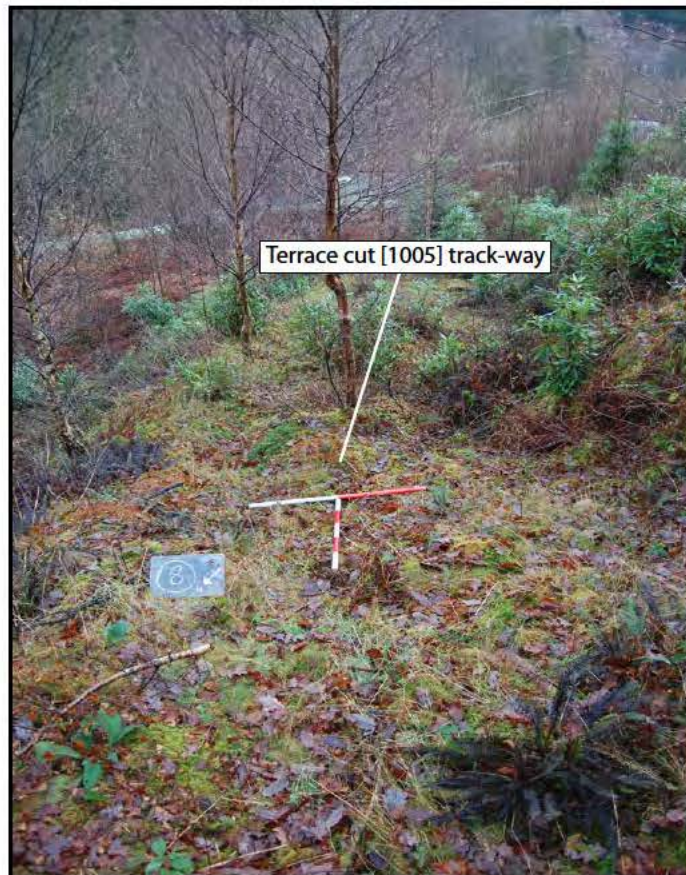


Plate 07: View north of Feature 8, track-way.

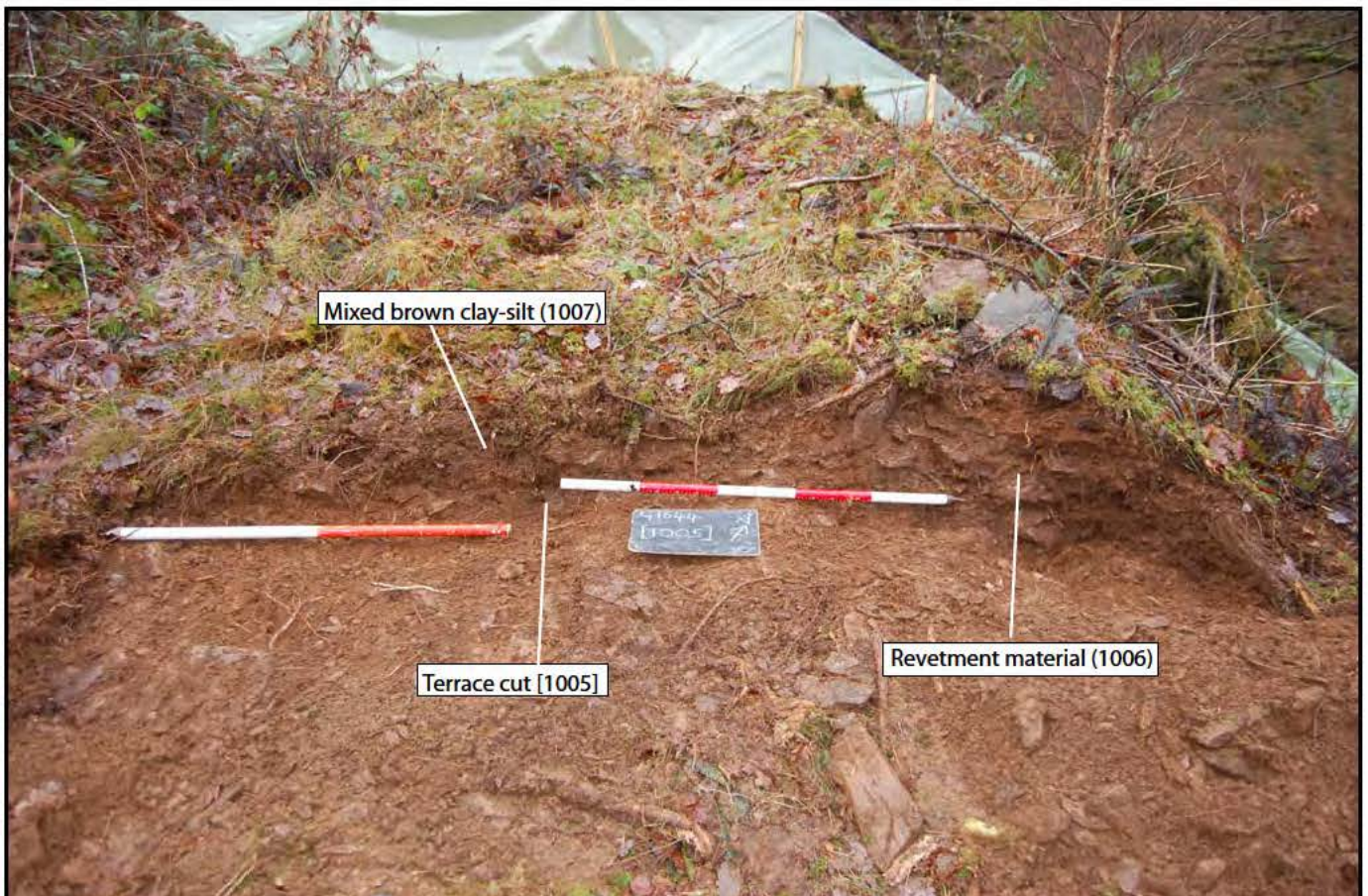


Plate 08: View south of section through Feature 8 .





Plate 09: View south of Feature 13, approximate location of track-way prior to bush removal.



Plate 10: View south of Feature 13 after bush removal.





Plate 11: View southeast of Feature 13, with remains of revetment material.



Plate 12: View east of Feature 16.





Plate 13: View south of Feature 16, track-way.



Plate 14: View east of section through Feature 16, track-way.





Plate 15: View east of Feature 23.



Plate 16: View east of inscription on Feature 23.





Plate 17: View east of Feature 24.



Plate 18: View northwest of Feature 24.





Plate 19: View west of Feature 24 original dry-stone wall.



Plate 20: View west of Feature 24 later dry-stone wall .



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