

Treweunydd Hydro-Power Scheme

Archaeological Assessment

G1570

Report No. 364

Prepared for Shawater Ltd.

By

Ymddiriedolaeth Archaeolegol Gwynedd

Gwynedd Archaeological Trust

Treweunydd Hydro-Power Scheme

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S Jones MA AIFA & LA Dutton MIFA MAAIS

Ymddiriedolaeth Archaeolegol Gwynedd
Gwynedd Archaeological Trust

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TREWEUNYDD HYDRO-POWER SCHEME

ARCHAEOLOGICAL ASSESSMENT

1 INTRODUCTION

The proposed hydro-power scheme will extract water from the Afon Treweunydd at SH 5850 5480 and convey the water via a buried pipeline to a powerhouse and outfall at SH 5707 5414. Gwynedd Archaeological Trust (Contracts Section) has been asked by Shawater Ltd to carry out an archaeological assessment of the proposed scheme.

2 ASSESSMENT BRIEF

An initial report was requested from Gwynedd Archaeological Trust, assessing the likely archaeological impact of the scheme and suggesting mitigatory measures.

The basic requirement was for a desktop survey and field search of the proposed area in order to assess the impact of the proposals on the archaeological and heritage features within the area concerned. The importance and condition of known archaeological remains were to be assessed and areas of archaeological potential and new sites to be identified. Measures to mitigate the effects of the proposed scheme on the archaeological resource were to be suggested.

Gwynedd Archaeological Trust's proposals for fulfilling these requirements were, briefly, as follows:

- a) *to identify and record the cultural heritage of the area to be affected by the proposals;*
- b) *to evaluate the importance of what was identified (both as a cultural landscape and as the individual items which make up that landscape); and*
- c) *to recommend ways in which damage to the cultural heritage can be avoided or minimised.*

3 METHODS AND TECHNIQUES

3.1 Desk-top Study

This involved consultation of maps, computer records, written records and reference works, which make up the Sites and Monuments Record (SMR), located at Gwynedd Archaeological Trust. Records (including early Ordnance Survey maps, tithe maps, schedules, and reference works - see bibliography) were consulted in the Gwynedd Archives, Caernarfon and the University of Wales Archives, Bangor.

3.2 Field Search

This was undertaken on the 15th of May 2000, when the whole of the proposed route of the pipeline was walked. Conditions were fair for fieldwork, with weather conditions of light drizzle.

Sites identified were marked on copies of 1:10,000 OS maps as accurately as possible without surveying. Each site was described and assessed. Detail notes, sketch plans and photographs were made of the more important features.

3.3 Report

All available information was collated, and transferred onto a map at a scale 1:10,000. The sites were then assessed and allocated to the categories listed below. These are intended to give an idea of the importance of the site and the level of response likely to be required; descriptions of the sites and specific recommendations for further assessment or mitigatory measures, as appropriate, are given in the relevant sections of this report.

The criteria used for allocating sites to categories are based on those used by the Secretary of State when considering ancient monuments for scheduling; these are set out in *Planning Guidance (Wales): Planning Policy, Circular 60/96*.

3.4 Categories

The following categories were used to define the importance of the archaeological resource.

Category A - Sites of national importance.

Scheduled Ancient Monuments, Listed Buildings and sites of schedulable or listable quality, *i.e.* those which would meet the requirements for scheduling (ancient monuments) or listing (buildings) or both.

Sites, which are scheduled or listed, have legal protection, and it is recommended that all Category A sites remain preserved and protected *in situ*.

Category B - Sites of regional or county importance.

Sites which would not fulfil the criteria for scheduling or listing, but which are nevertheless of particular importance within the region.

Preservation *in situ* is the preferred option for Category B sites, but if damage or destruction cannot be avoided, appropriate detailed recording might be an acceptable alternative.

Category C - Sites of district or local importance.

Sites which are not of sufficient importance to justify a recommendation for preservation if threatened.

Category C sites nevertheless merit adequate recording in advance of damage or destruction.

Category D - Minor and damaged sites.

Sites, which are of minor importance or so badly damaged that too little remains to justify their inclusion in a higher category.

For Category D sites, rapid recording, either in advance of or during destruction, should be sufficient.

Category E - Sites needing further investigation.

Sites whose importance is as yet undetermined and which will require further work before they can be allocated to categories A - D are placed in this category, with specific recommendations for further assessment.

3.5 Definition of Impact

The impact has been defined as none, slight, likely, considerable or unknown as follows:

None:

There is no construction impact on this particular site. Sites identified as of particular importance are, where possible, avoided by the improvement proposals. Such sites have been identified in the tables.

Slight:

This has generally been used where the impact is marginal and would not by the nature of the site cause irreversible damage to the remainder of the feature, e.g. a track or field boundary.

Likely:

In some instances the site in question would not fall within the direct line of the proposed development but could be affected by construction works and therefore may, subject to its nature be removed or damaged.

Considerable:

The total removal of a feature or its partial removal which would effectively destroy the remainder of the site.

Unknown:

This is used when the location of the site is unknown, but thought to be in the vicinity of the proposed development.

3.6 Definition of Mitigatory Recommendations

None:

No impact so no requirement for mitigatory measures.

Detailed recording:

Requiring a photographic record, surveying and the production of a measure drawing prior to commencement of works.

Archaeological excavation may also be required depending on the particular feature and the extent and effect of the impact.

Basic recording:

Requiring a photographic record and full description prior to commencement of works.

Watching brief:

Requiring observation of particular identified features or areas during works in their vicinity. This may be supplemented by detailed or basic recording of exposed layers, structures or sections.

Avoidance:

Features that may be affected directly by the scheme, or during the construction of the scheme, should be avoided. Occasionally a minor change to the proposed route

of the pipeline is recommended, but more usually it refers to the need for care to be taken during construction of the pipeline to avoid accidental damage to a site. This is often best achieved by clearly marking sites prior to the start of work.

Reinstatement:

The feature should be re-instated with archaeological advice and supervision.

4 ARCHAEOLOGICAL FINDINGS AND RECOMMENDATIONS

4.1 Preliminary Topographic Assessment

The route of the pipeline is located on a strip, running north-east to south-west, of Ordovician rocks of the Bala (Ashgill, Caradoc), Llandeilo and Arenig series, with intrusions of igneous beds of felsite to the north and north-west. The powerhouse and the outfall are located on improved land rising to the east. Near here, a curving, linear depression in the field marks the position of a bend in the Afon Treweunydd that was straightened some time in this century. The route of the railway line marks the end of the improved land and the beginning of the less well improved land. The slope increases and the boulder strewn area is crossed by a number of drainage channels and natural streams. Above this band of partially improved ground is unimproved, rough and very uneven ground. Drainage is very poor here, and the vegetation of reeds and coarse grass reflect this.

4.2 Archaeological and Historical Background

The area of the survey was located in the native, Welsh, medieval administrative unit or *cantref* of Arfon and within the smaller unit or *commote* of Is Gwyrfa. It appears isolated from the known surrounding townships of the period.

The first edition OS map from the 1840's shows the survey area as open farmland with the farm of Bron y Fedw towards the base of the mountain slope. The Tithe map of 1840 shows more detail of the area. The lands of Bron y Fedw are shown unenclosed with no record of any features such as sheepfolds, only the farmhouse itself is shown. Field names from nineteenth century estate maps reflect pastoral activities with names incorporating such descriptions as *ffridd* (= upland pasture) and *gorlan* (=sheepfold).

The survey area eventually became part of the Vaynol Estate and during the post medieval period was developed as a slate producing area. Slate was extracted from the Glanrafon quarry, initially on a small scale, but the coming of the North Wales Narrow Gauge Railway in 1877 led to an expansion of production until it subsequently developed into the largest slate quarry in the district, employing 193 people in 1887 (Boyd 1981, 245). The quarry finally closing in 1916. The massive slate tips still dominate the area, but most of the structures associated with the quarry have been demolished to foundation level.

The North Wales Narrow Gauge Railway was part of an ambitious scheme to demonstrate the potential of narrow gauge public railways and more specifically to connect the Gwyrfa valley and the Moel Tryfan area with Caernarfon. The part of the system within the area of this survey was an extension from Railway No. 6 (from Dinas on the Caernarvon-Afon Wen line) to Rhyd-ddu, South Snowdon (Boyd 1972, 151). There was a triangular junction with the quarry system at Glanrafon Quarry, which connected with an incline and a considerable trackage within the workings themselves, including a quarter mile tunnel. The loop on the main was a stopping place for quarrymen's traffic (Boyd 1972, 192).

The Glanrafon Viaduct took the railway over the Afon Treweunydd, described at the time of its construction as 'exceedingly strong, under test' (Boyd 1972, 163). This viaduct still stands today; indeed the railway itself is due to be reopened.

4.3 The Existing Archaeological Record

There are three known archaeological sites within 50m of the pipeline route:

PRN 6133 – Enclosure, Afon Treweunydd

PRN 3391 – Cist with urn – Findspot, Glanrafon

PRN 20196 – Quarry, Glanrafon

In c. 1864, an urn containing ashes (PRN 3391) was found in a stone cist while ploughing in a field on Glan-yr-Afon Farm not more than 180m from the present road. The urn was broken and its contents scattered by accident just after its discovery. The other site on the pipeline route is PRN 6133, an enclosure of unknown date, probably related to agricultural practices in Cwm Treweunydd.

Large-scale industrial activity is present south of the pipeline route, in the form of the disused Glanrafon Slate Quarries. North of the route is a small trial quarry (PRN 20195).

4.4 The Archaeological Survey

This includes the pipeline route and its immediate borders, within c. 50m on each side. All features of human activity are recorded except those deriving only from current land-use. Features are numbered in sequence from the southern, the downhill end of the route upwards. The location of all the features is shown on the accompanying map.

1 Barn, Bron-y-fedw-uchaf SH57155435

Category C Impact: None

The roofless remains of a stone-built barn, adjacent to the farm at Bron-y-fedw-uchaf. One gable end stands to nearly its full original height, the other has collapsed.

Recommendations for further assessment: None

Recommendations for mitigatory measures: Avoidance

2 Water wheel, Bron-y-fedw-uchaf SH57165437

Category B Impact: None

The remains of an iron undershot water wheel, adjacent to Bron-y-fedw-uchaf farm.

Recommendations for further assessment: None

Recommendations for mitigatory measures: Avoidance

3 Dismantled railway, Bron-y-fedw-uchaf SH57195441

Category B Impact: Slight

A revetted trackway, bounded on either side by a dry-stone wall. No rails are visible at present, but this was constructed as part of the North Wales Narrow Gauge Railway.

Recommendations for further assessment: None

Recommendations for mitigatory measures: Basic recording & watching brief

4 Sheep shelter, NE of Bron-y-fedw-uchaf SH57265440

Category D Impact: None

A 'L'-shaped dry-stone wall, roughly built and including some clearance stones.

Recommendations for further assessment: None

Recommendations for mitigatory measures: Avoidance

5 Sheep shelter, NE of Bron-y-fedw-uchaf SH57235437

Category D Impact: None

A 'L'-shaped drystone wall, roughly built.

Recommendations for further assessment: None

Recommendations for mitigatory measures: Avoidance

6 Denuded wall SH57425436C

Category C Impact: Likely

A single line of boulders forming a denuded wall, 0.4m high and approximately 25m long. This stretch of walling, along with the terracing and walling at sites 7 and 8, probably represent a relict field system of a medieval or prehistoric date.

Recommendations for further assessment: None

Recommendations for mitigatory measures: Detailed recording

7 Terrace SH57445432C

Category C Impact: None

PRN 29467

A revetted terrace constructed of stones, 0.5m high and approximately 26m long, part of a relict field system (see sites 6 & 8).

Recommendations for further assessment: None

Recommendations for mitigatory measures: None

8 Terracing and walling SH57535431C

Category C Impact: Slight

PRN 29460

A short, curving length of terracing, with stone revetting. Approximately 50m long and 0.6m high, running in a NNW-SSE direction. A 10m long denuded wall of aligned single stones and a number of clearance cairns, part of a relict field system (see sites 6 & 7).

Recommendations for further assessment: None

Recommendations for mitigatory measures: Detailed recording

9 Enclosure SH57875443

Category C Impact: None

29470

An enclosure, constructed of roughly built dry-stone walling of medium sized boulders. It is oval in shape and 10m by 6m in size, with walls up to 0.9m high and 1m wide. Two, possible sheep creeps are visible on the eastern and southern sides.

Recommendations for further assessment: None

Recommendations for mitigatory measures: None

10 Sheepfold and sorting pens SH 5795 5455

Category C. Impact: Slight

29491

A large 'D' shaped enclosure (80m x 60m) encompassing three smaller, interconnected enclosures. The drystone walls stand over 1m high on average, but are slighted in some places. This site is recorded on the 1876 and 1895 Vaynol estate maps and is marked on the 1888 and 1915 OS maps as a sheepfold. This site may be PRN 6133 (Enclosure, Afon Treweunydd) as no site was identified at the location of PRN 6133.

Recommendations for further assessment: None

Recommendations for further measures: Avoidance

11 Sheepdrove SH 5821 5462

Category D. Impact: None

An arc of drystone walling located along a curving section of the east bank of the river, c.20m long, <1.8m high. There are traces of a slate 'palisade' fence perpendicular and upslope of the river to the south. An opening in the wall at the edge of the river faces an abutment on the opposite bank. This site is recorded on the 1915 OS map as a sheepfold.

Recommendations for further assessment: None

Recommendations for mitigatory measures: None

12 Remains of rectangular structure ? SH 5818 5467

Category C. Impact: Likely

Low grassed over stony banks, < 0.2m high, forming a sub-rectangular plan, 7m x 4.5m, oriented NE - SW, with visible internal 'facing' to south and east, within an uneven hollowed interior. There are traces of a track? skirting the south side of the feature. The area is generally stony, and there are traces of clearance in the vicinity. This site is not recorded on any of the maps examined and may be the remains of a medieval structure.

Recommendations for further assessment: None

Recommendations for mitigatory measures: Avoidance or detailed recording & watching brief.

13 Sheepfold and Droveway SH 5826 5464

Category C. Impact: Likely

Located at base of steep slope on west bank of the river, and incorporated with field boundary wall which forms apart of its south side. A funnelled droveway, comprised of a slate and wire fence on the north side, leads to a counterscarp revetted, sub-circular sheepfold, divided into three compartments by slate 'palisade' walls. In common with feature 18, there is an opening at the river edge facing an abutment - probably for a slate or wooden bridge - on the opposite bank. This site is marked on both the 1888 and 1915 OS maps as a sheepfold.

Recommendations for further assessment: None

Recommendations for mitigatory measures: Avoidance

14 Enclosure / Sheepfold, droveway and sorting pen. SH 5844 5482

Category C. Impact: Considerable

A large sub-oval enclosure (75m x 30m) situated along the sloping west bank of the river, and incorporates a smaller sorting/lambing pen (SH 5842 5468) at its south-west corner. This smaller single compartment (20mx10m) is accessed via a droveway, defined by a line of boulders, that segregates the west end of the main enclosure from the larger eastern side. Of drystone construction and incorporating a number of large erratic boulders, the walls stand over to c. 1.5m high on average. Outside the main enclosure to the west are traces of a number of small terraced platforms, which form the riverbank at this location. This site is recorded on both the 1888 and 1915 OS maps as a sheepfold.

Recommendations for further assessment: None

Recommendations for mitigatory measures: Avoidance or detailed recording

15 Sheepfold SH 5852 5484

Category D. Impact: None

A small sheepfold formed from apex of boundary walls and slate and wire fencing, comprising two compartments. This site is marked on both the 1888 and 1915 OS maps as a sheepfold.

Recommendations for further assessment: None
Recommendations for mitigatory measures: None

16 Slate Tip SH57835425C
Category D Impact: Slight

A disused slate tip of the Glanrafon Slate Quarry, located on the northern side of the Afon Treweunydd. (Part of PRN 20196).

Recommendations for further assessment: None
Recommendations for mitigatory measures: Basic recording & watching Brief

5 SUMMARY OF RECOMMENDATIONS FOR MITIGATORY MEASURES

Category A - National importance

Nil

Category B - Regional Importance

2	Avoidance
3	Basic recording & watching brief

Category C - Local Importance

6	Detailed recording
9 & 7	None
1, 10 & 13	Avoidance
14	Avoidance or detailed recording
8	Detailed recording
12	Avoidance or detailed recording & watching brief

Category D - Minor or damaged sites

4 & 5	Avoidance
11 & 15	None
16	Watching brief & basic recording

6 GENERAL RECOMMENDATIONS

6.1 The Construction Requirements

6.1.1 Prior to the commencement of work

Avoidance

The proposed pipeline follows the route of an existing slate metalled trackway which runs along the northern side of the Afon Treweunydd for approximately half of the route before turning northwards towards Bron-y-fedw-uchaf. At the eastern end of the route construction may affect a number of structures associated with upland farming, notably two large, well preserved sheepfolds (site 16 & 10) and a drove route (site 13). Where possible these features should be avoided, but if disturbance is envisaged detailed recording and a watching brief would be necessary. At the western end of the route two other features associated with pastoral activities should be avoided (sites 4 & 5). At Bron-y-fedw-uchaf farm the remains of a drystone barn and a water wheel should also be avoided.

Sites to be avoided:

Site 1 – Barn, Bron-y-fedw-uchaf
Site 2 – Water wheel, Bron-y-fedw-uchaf
Site 10 – Sheepfold and sorting pens
Site 13 – Sheepfold and droveway
Site 14 – Enclosure/sheepfold, droveway and sorting pen
Site 4 – Sheep shelter
Site 5 – Sheep shelter

Basic recording

Requiring a photographic record and full description prior to commencement of works.

Sites requiring basic recording:

Site 3 – Dismantled railway
Site 16 – Slate Tip

Detailed recording

Requiring a photographic record, surveying and the production of a measure drawing prior to commencement of works.

Archaeological excavation may also be required depending on the particular feature and the extent and effect of the impact.

Sites requiring detailed recording:

Site 6 – Denuded wall
Site 8 – Terracing and walling
Site 12 – Rectangular structure?
Site 14 – Enclosure/sheepfold, droveway and sorting pen

General archaeological recommendations

A There should be an archaeologist present during the marking out and fencing of the easement to advise on the exact route. This would seek to minimise the easement width at the points where it adjoins significant features.

B Archaeological advice should be sought before and during the creation of any temporary topsoil dumping areas.

6.1.2 During construction

There should be a watching brief to allow close monitoring of works near to features specified in order to avoid damage but there is no requirement for a general watching brief along the majority of the route.

Sites requiring watching briefs:

Site 3 – Dismantled railway
Site 12 – Rectangular structure?
Site 16 – Slate tip

6.1.3 After construction

There should be allowance for production of a proper level of archiving and production of a report and drawings with a summary for publication, if the resulting information is suitable.

7 Bibliography

7.1 Unpublished Sources

Gwynedd Sites and Monuments Record, Bangor
University of Wales, Bangor, Archives
Countryside Council for Wales
Gwynedd Archives, Caernarfon:

Vaynol 532, 1921 - Counterpart licence to work the tips at the Glanyrafon Quarry Rhydd-ddu
Vaynol 526, 1879 - Lease for 21 years on slate quarries, Glanarfon
Vaynol 530, 1895 - Counterpart lease for 47 years of slate quarries.
Vaynol 523, 1876 - Agreement for lease of slate rock at Bron y Fedw.

7.2 Maps

Ordnance Survey maps:

1 Inch, 1st edition (part of)
1:10,000 1977 (part of)
1:2,500 1915 Carnarvonshire Sheet XXI.8 (part of) x4
1:10560 1888 Carnarvonshire Sheet XXI NE (part of)

Other maps:

Tithe Map, Betws Garmon c.1840 (part of) x2
Vaynol 530, 1895 - Counter part lease for 47 years of slate quarries (part of), showing the line of the railway.
Vaynol 530, 1895 - Counter part lease for 47 years of slate quarries (part of), showing the Glanarfon quarry.
Vaynol 523, 1876 - Agreement for lease of slate rock at Bron y Fedw.

7.3 Published Sources

Boyd, J.I.C., 1972. *Narrow Gauge Railways in South Caernarvonshire*
Boyd, J.I.C., 1981. *Narrow Gauge Railway in Northern Caernarvonshire*

7.4 Aerial Photographs

Colour verticals, 1993 (1:10,000):

Line 20 - 10793, Prints 210 - 211

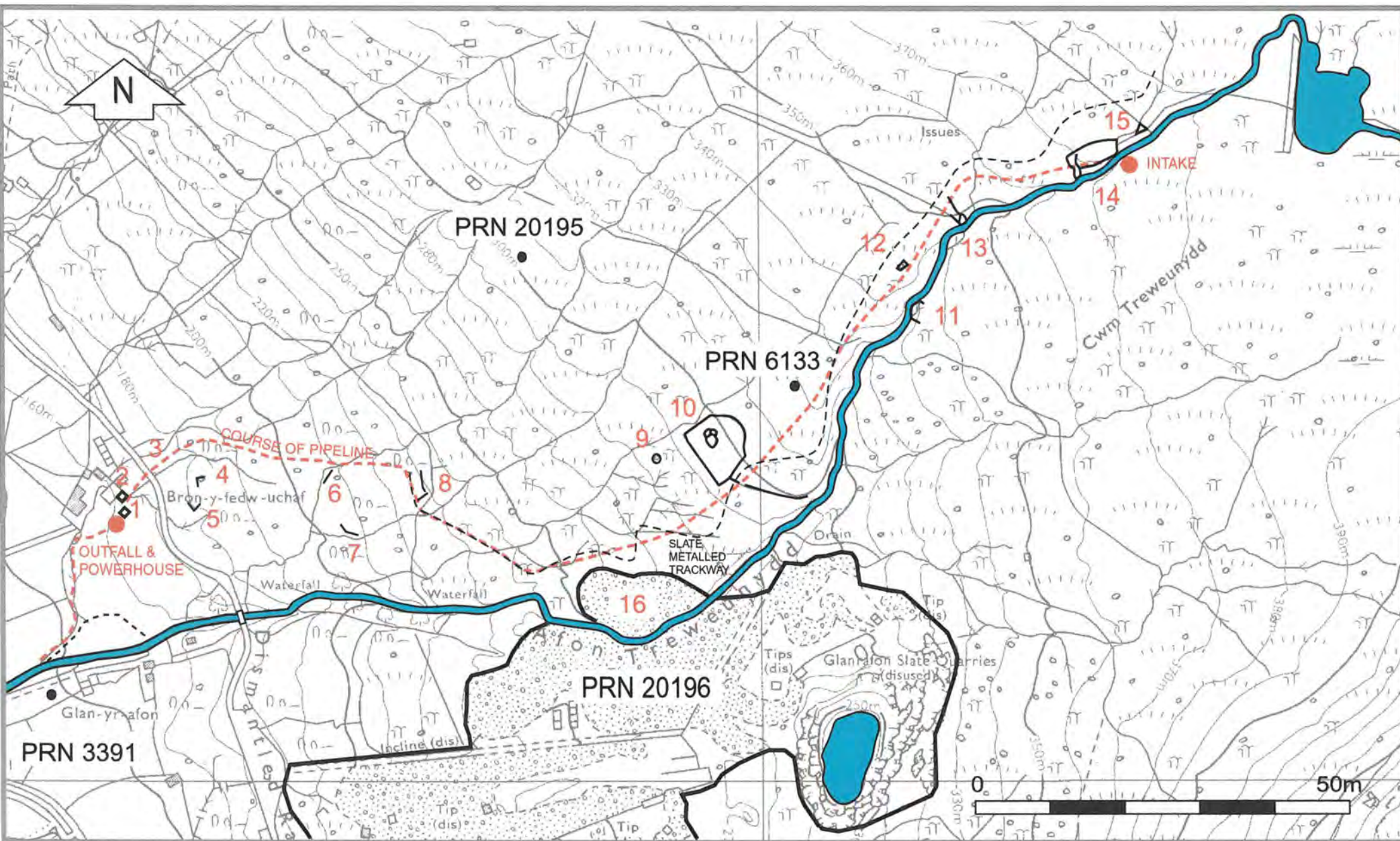
8 NON-TECHNICAL SUMMARY

An archaeological assessment was carried out of the route of the proposed pipeline. This work involved a desktop study of existing records followed by a field walkover. The desktop study included examination of records which make up Gwynedd Sites and Monuments Record held at Gwynedd Archaeological Trust and searches of other records and maps held in archives at Caernarfon (Gwynedd Archives) and Bangor (UCNW Archives) as well as early OS maps and printed literature. The fieldwork involved walking all of the c. 1.7km of the route with observation of an area c. 50m on either side and brief recording and assessment of every feature except those that were clearly recent.

A total of 16 archaeological features were identified within the corridor of the route or immediately adjacent. Most of the features are associated with pastoral agricultural practices, for example sheepfolds, but including an interesting area of potentially early field systems was also identified lower down the hill slope. A rectangular structure, possibly medieval in date may be related to these denuded walls.

Industrial activity along the proposed route is represented by a disused slate tip (associated with the nearby Glanrafon Slate Quarry) and a section of the North Wales Narrow Gauge Railway.

It is recommended that the area of denuded walls be surveyed to assess their distribution and possible date. The route of the pipeline should avoid the large sheep enclosures (sites 14 & 10) at the eastern end of the area and the water wheel at Bron-y-fedw-uchaf farm. Watching briefs should also be carried out at a number of highlighted sites including the possible rectangular structure.



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Client:

Shawater Ltd

Scales:

1:7500

16/05/00

Andrew Dutton

Drawing number

C:\G1570Hydro/Treweunydd.ai

1 of 1



Figure 1: Showing the proposed route of the pipeline along the western end of the Afon Treweunydd.

Figure 2: Showing the proposed route of the pipeline along the Afon Treweunydd above the Glanrafon Viaduct.





Figure 3: Showing the route of the proposed pipeline near Glanrafon Quarry.

Figure 4: Showing the route of the proposed pipeline near the eastern intake.





Figure 5: Showing the route of the proposed pipeline at the eastern end and the approxiamte location of the intake.

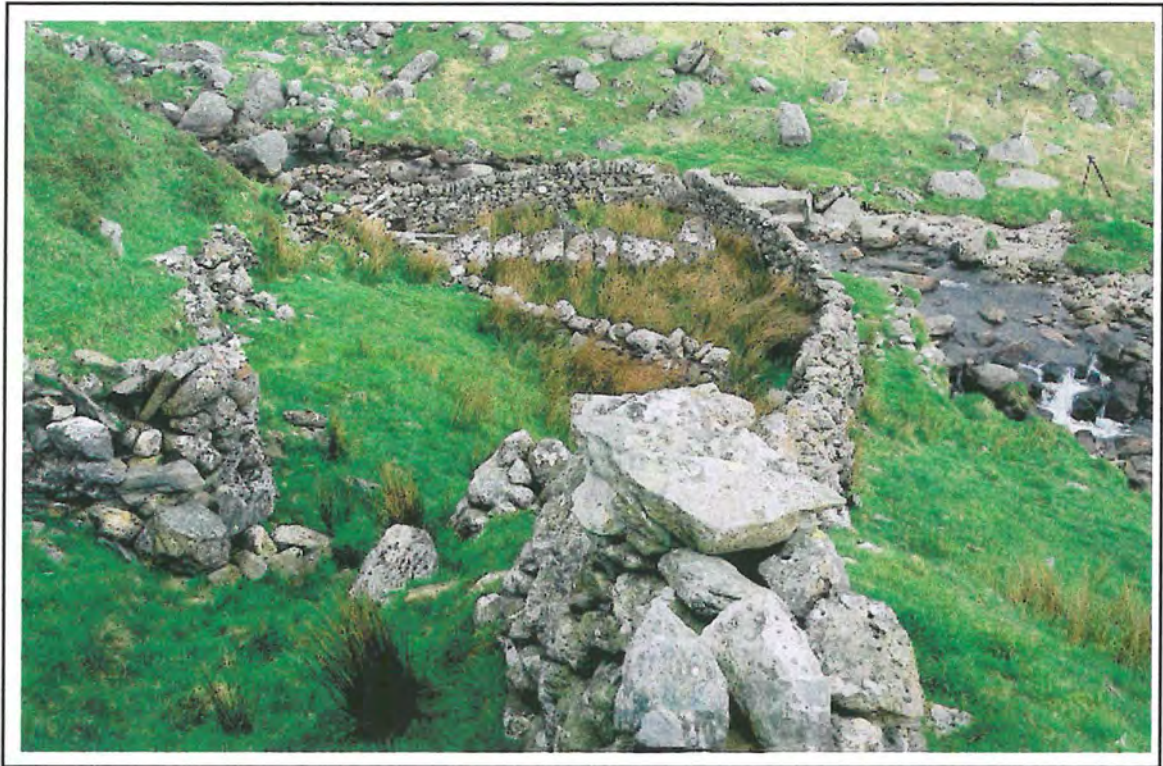
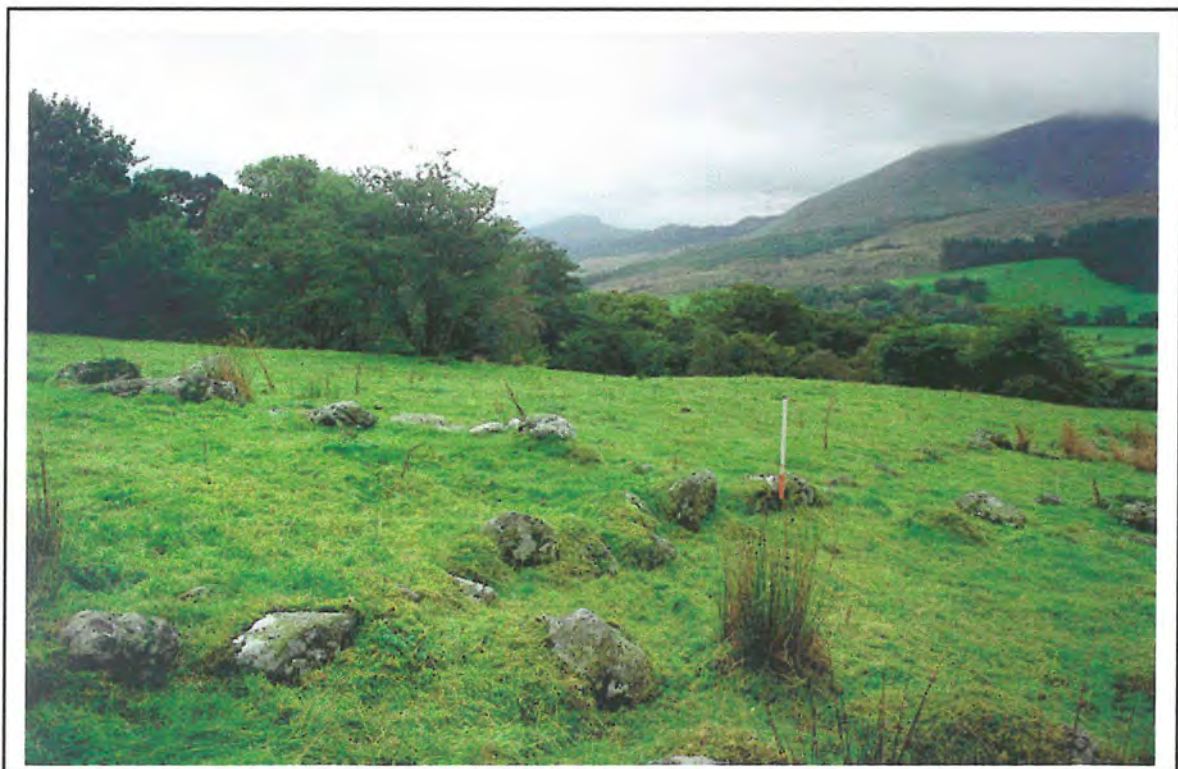


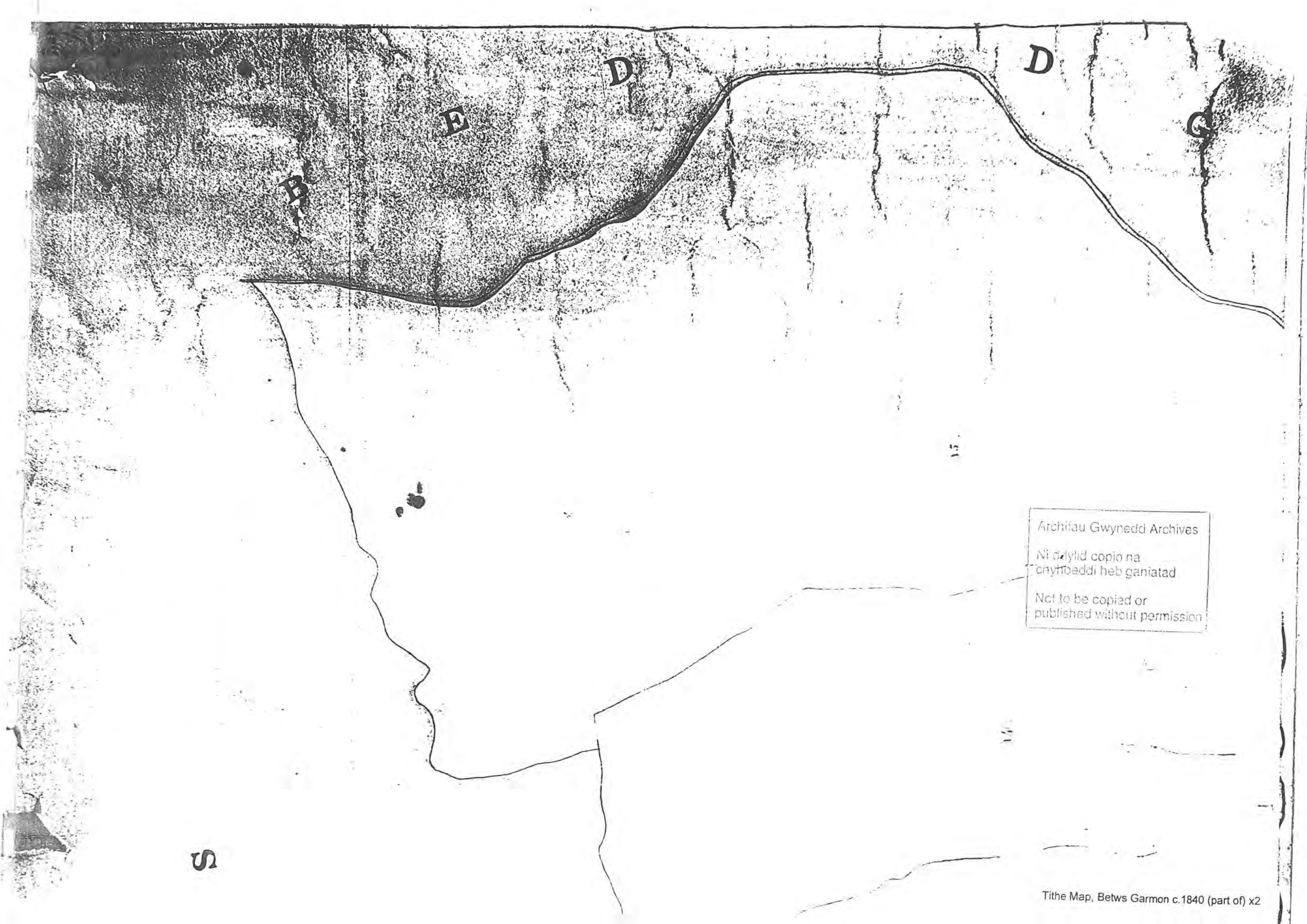
Figure 6: A multi-cellular sheepfold (site 20), and the Afon Treweunydd.

Figure 7: An area of denuded field banks above Bron y fedw Farm.



APPENDIX I: *Maps Consulted*





Archifau Gwynedd Archives
Ni dylid copïo na
chynweddï heb ganiatad
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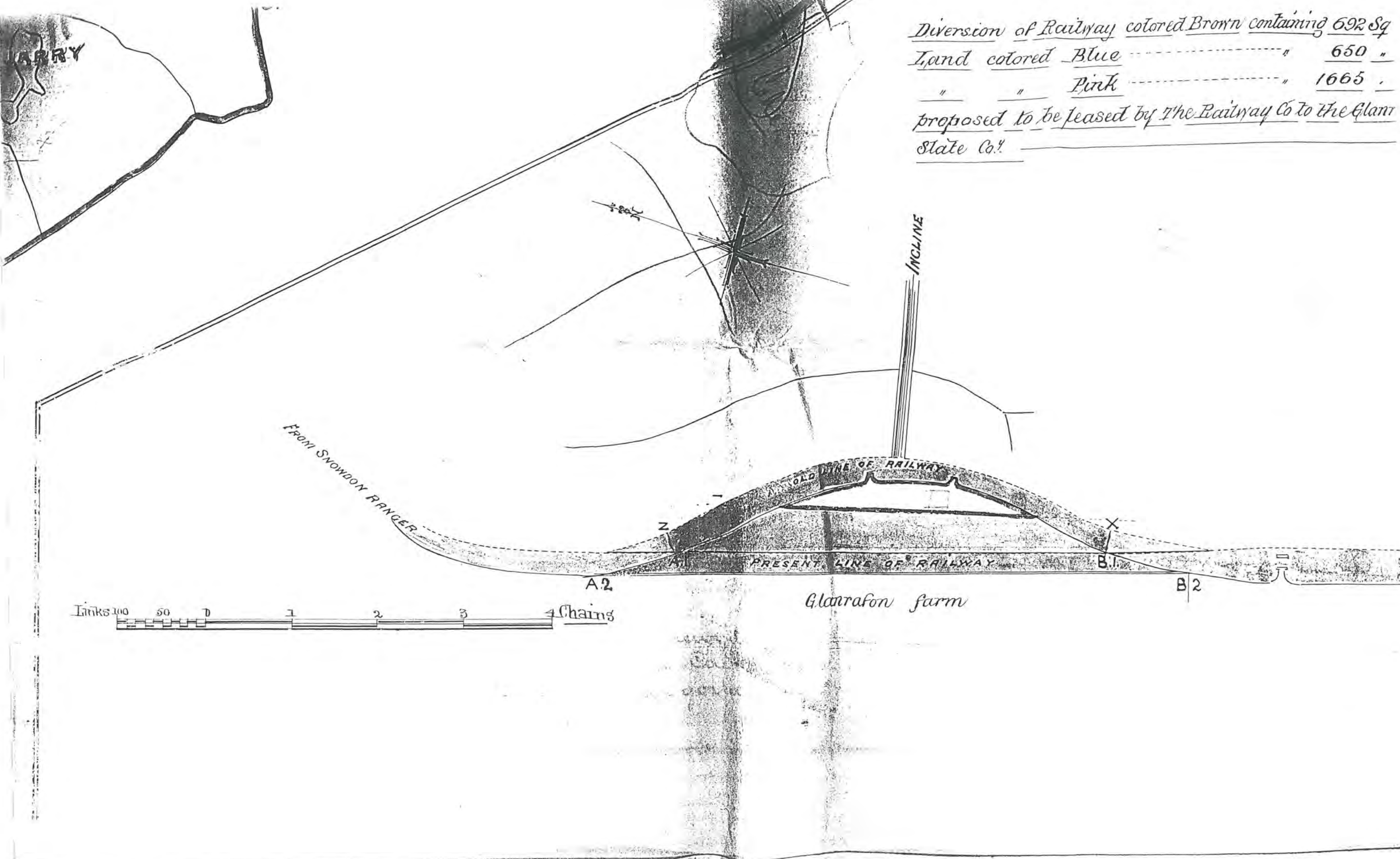
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chyhoeddi heb ganiatad
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50

Handwritten notes in the top right corner, including a signature and the words "The Survey of the" and "the" followed by illegible text.

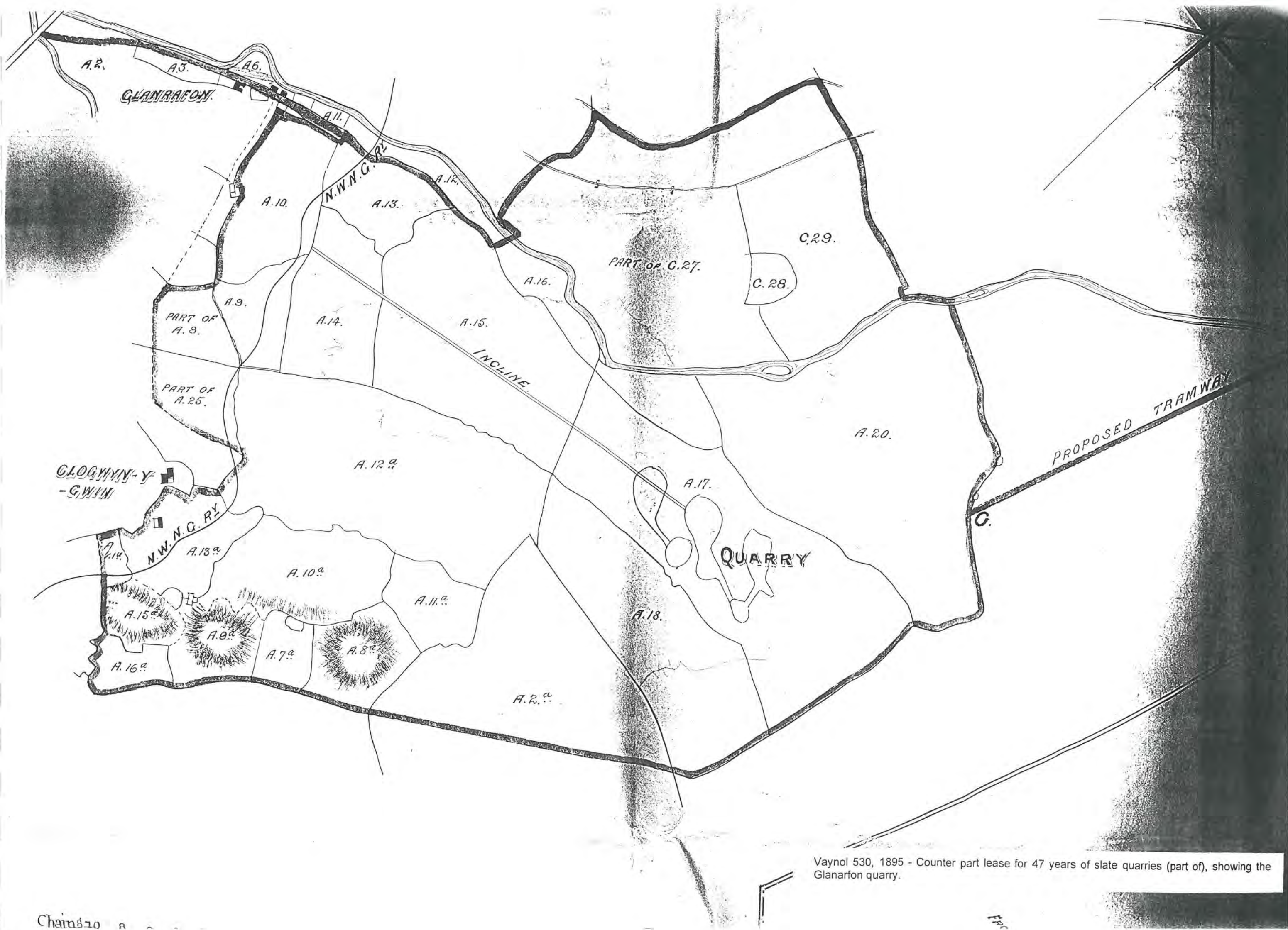


Diversion of Railway colored Brown containing 692 Sq
Land colored Blue ----- " 650 "
" " Pink ----- " 1665 "
proposed to be leased by The Railway Co to the Glanr
State Co.!

Edw. H. Owen



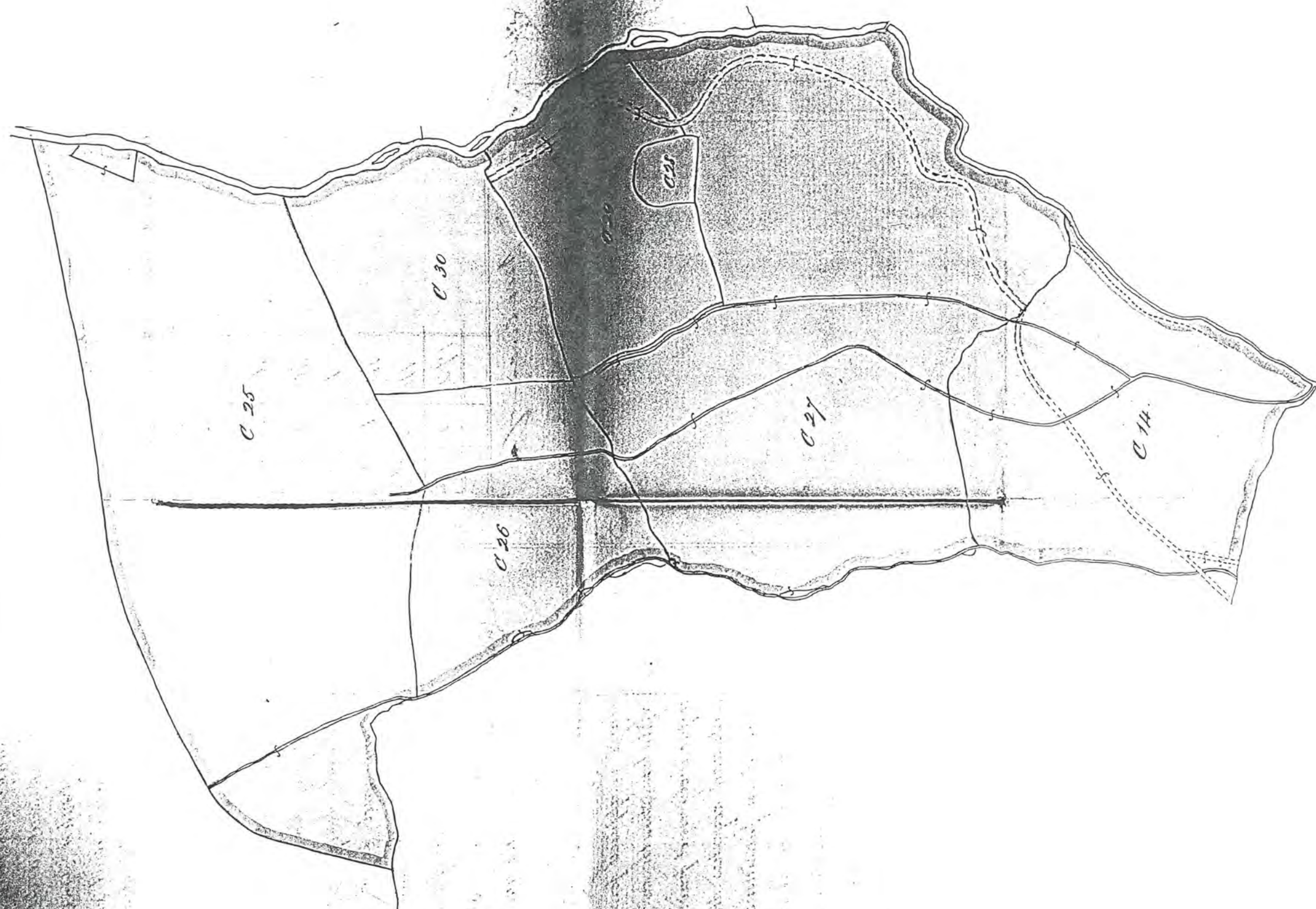
Vaynol 530, 1895 - Counter part lease for 47 years of slate quarries (part of), showing the line of the railway.



Vaynol 530, 1895 - Counter part lease for 47 years of slate quarries (part of), showing the Glanarfon quarry.

PLAN OF

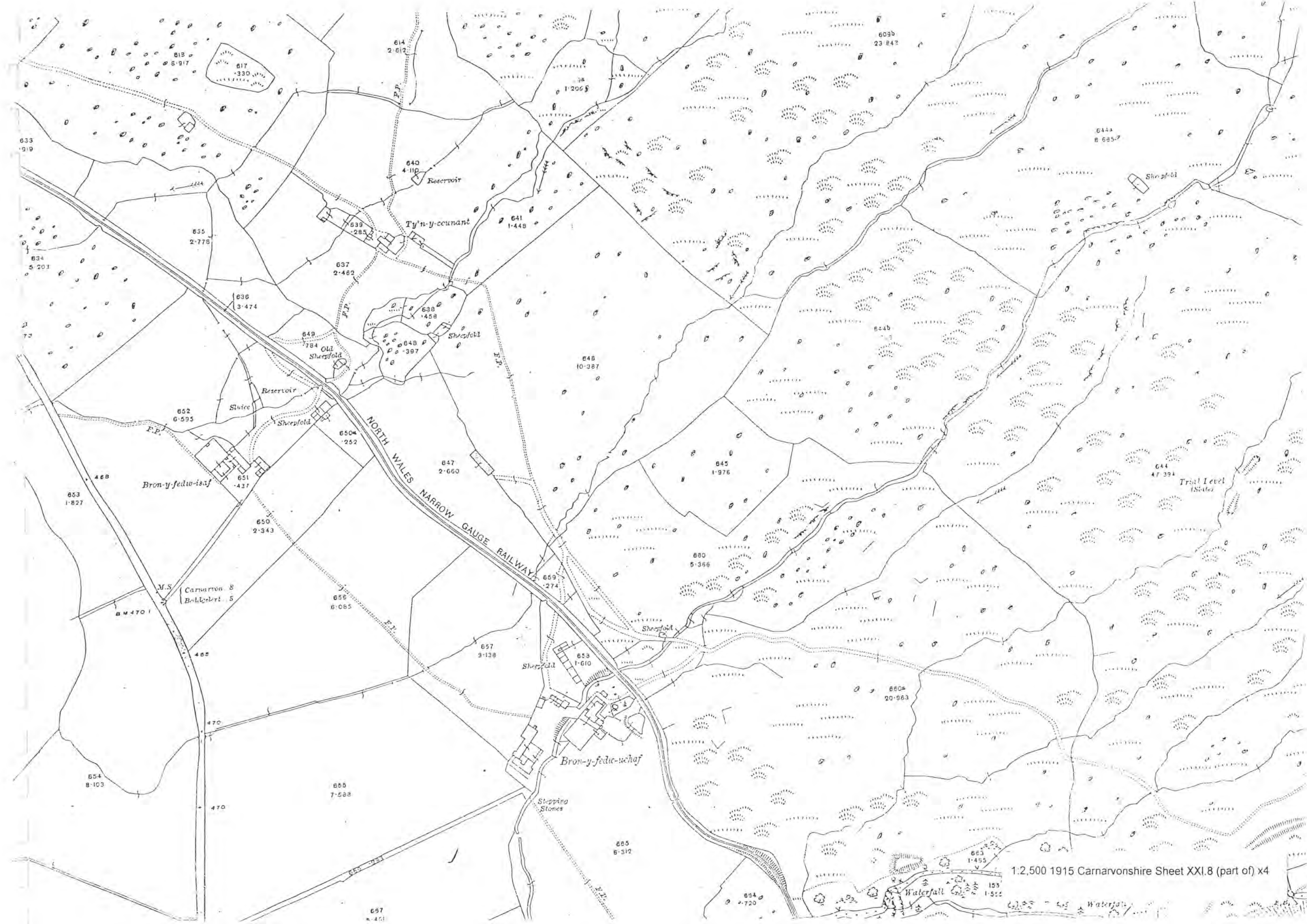
*Part of Bronyfedw in the
Parish of Bellus Garmore*



The following parcel numbers do not appear on this edition
 Parish of Ballyvaughan 632
 Parish of Ballyvaughan 152, 174, 175.

MON PH.







855
7-589

Bron-y-fedic-uchaf

Stepping
Stones

853
6-312

857
5-461

856
6-122

C.R.

Glan-y-afon

1 Glan-y-afon or
1 Cwellyn No 2

167
4-221

at Cwellyn No 1

fun
Glan-y-afon

852
7-771

856
7-817

862
1-153

863
1-153

Well

864
2-311

867
3-800

170
9-285

171
2-254

172a
2-412

172
2-466

172b
2-157

173
3-369

175
2-269

174
1-936

168
2-243

159
2-663

157
1-703

Sheepfold

Incline

154
7-546

156
4-518

160
4-431

161
7-04

863
1-455

155
1-555

Waterfall

Waterfall

Union & R.D. Bdy

852
2-981

The information
document
Reference

1:2,500 1915 Carnarvonshire Sheet XXI.8 (part of) x4



British Ordnance Archives
This map was prepared for
the Ordnance Survey by permission

XXI or Eifion Division
LLANBERIS
XVI, S.E.

Carnarvonshire, Sheet XXI, N.E.

Northern or Arfon Division
LLANBERIS
Southern or Eifion Division
LAT. 53° 5'



1:10560 1888 Carnarvonshire Sheet XXI NE (part of)

XXI, S.E.
BEDDGELEERT
LLANWYDA
BEDDGELEERT
XXI, N.W.
BEDDGELEERT
LAT. 53° 5'

Scale: Six Inches to One Statute Mile or 880 Feet to One Inch = 10560
40 Chains 5
40 Perches 20
1 Mile
Price 1s
5000 5500 Feet
1 Mile

Sheet XXI.

NW	NE
SW	SE

From 2500 Plans and Published at the Ordnance Survey Office, Southampton

1891
Approximate Mean Water at Liverpool those indicated thus (B.M. 54) refer to Marks made on Buildings, Walls, &c.
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1,10,000 1977



SHEET SH 55 SE

BETWS GARMON C

CAERNARVON CO CONST

LONG.
4 06 W

57

58

5

355000m

GVYRFAI No 4 ED

No 22 WARD

