

## Ty Mawr Wybrnant

### Proposed Micro Hydro Scheme

### Historic Environment Assessment

K. Laws

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*Plate 1: Ty Mawr Wybrnant from the west*

## **Contents:**

Summary

1. Introduction
2. Background
3. Site Visit
4. Assessment of Impact and Recommendations
5. References

## List of Figures

Figure 1: Location of Micro Hydro Electric Power Scheme

Figure 2: Location of Micro Hydro Electric Power Scheme Superimposed on Early Ordnance Survey Map

## List of Plates

Plate1: Ty Mawr Wybrnant from the west

Plate 2: Location of intake

Plate 3: Historic track looking north

Plate 4: Site of turbine house within trees viewed from Ty Mawr

## **Summary**

*A micro hydroelectric power scheme is to be located in the vicinity of Ty Mawr Wybrnant, a grade II\* Listed Building, particularly significance as the birthplace of Bishop William Morgan (1545 to 1604), translator of the Bible into Welsh.*

*The only direct impact of the scheme on the historic environment is slight disruption to a historic track to the south of Ty Mawr. This feature is of local significance only and the impact assessed as being very low and requiring no mitigation.*

*There is a slight potential for visual impact of the Turbine House on the Listed Building. This can be mitigated against by leaving some of the existing trees in place to act as a natural screen.*

## **1. Introduction**

A micro hydroelectric power generating scheme is proposed at Ty Mawr Wybrnant. It is proposed that water will be extracted from the Afon Gwybrnant approximately 300 m to the south west of the house. A pipe, 140 mm in diameter, will run overland or in a shallow trench in an old track, which runs adjacent to the river, for a distance of approximately 170 m. The pipe route will then enter the field to the west of the track, where it will be buried in a trench 200 mm wide and 400 mm deep. It will run in the field adjacent to Glan yr afon, a house and outbuildings ancillary to Ty Mawr, for a distance of 160 m to a turbine house, approximately 50 m to the North West of Ty Mawr (Figure 1 and Figure 2). The turbine house will have a footprint of 2.5 m by 3 m and will stand to a height of 1.7 above ground level. A short buried pipe will be required to discharge water from the turbine back into the Afon Gwybrnant, using an existing culvert as the outfall. A buried electric cable will transfer the electricity produced to Glan yr afon house.

Ty Mawr Wybrnant is an II\* Listed Building and an assessment of the impact of the scheme on the building and its environs is appropriate as part of the scoping for the scheme.

## **2. Background**

Ty Mawr Wybrnant is a large, four bay, stone built storeyed house of Snowdonia type plan, with two chimneys (Plate 1). It is particularly significance as the birthplace of Bishop William Morgan (1545 to 1604), translator of the Bible into Welsh.

Recent analysis of the building concludes that Ty Mawr has developed over a long period of time. The earliest phase was probably an open hall with a cruck frame. This was subsequently converted into the storeyed Snowdonia house (Brooks 2011). The cruck frame would suggest a late medieval date for the earliest phase. Unfortunately Dendrochronology dating was unsuccessful on the remains of the cruck framing. The collar beam trusses of the second phase, the Snowdonia house, however dated to 1565 (North West Wales Dendrochronology Project 2013).

Glan yr Afon, formerly Ty Nant, located directly to the west of Ty Mawr, is thought to originate from the 18<sup>th</sup> Century. It is a cottage with attached outbuildings. It was in a ruinous condition when first acquired by the National Trust and has been rebuilt.

Historic documents dating to the second half of the 16<sup>th</sup> century indicate that John ap Morgan, Bishop William Morgan's farther, was an influential farmer, renting several farms, timber and fishing rights from Maurice Wynn of Gwydir. William Morgan took over the lease of Ty Mawr in the late 16<sup>th</sup> Century but appears to have sublet it to tenants (North West Wales Dendrochronology Project 2013).

In the Penmachno land tax for 1761 Ty Mawr is linked to the neighbouring farm of Talar Gerwin. This link between the two holdings is continued until 1796. The old track, along which the pipe route partly runs, makes its way from Ty Mawr towards Talar Gerwin and therefore potentially dates from the 18<sup>th</sup> Century.

### **3. Site visit**

Ty Mawr was visited to assess the impact of the scheme on the historic buildings and their environs.

The water intake is located in a relatively narrow section of the Afon Gwybernant (Plate 2). It does not disrupt any man made features and will not be visible from the listed building.

The track along which the first part of the pipe route runs is clearly of some age. It has been benched into the bottom of a slope and a number of mature trees are growing along its western edge (Plate 3). It is evident from early Ordnance Survey mapping that this track once ran to Talar Gerwin farm. Historic Documents link the two holdings in 1761. At approx. 1.5 - 2 m wide the track would have been suitable for carts as well as people on foot. The route was last used in the late 1970's when a lady living at Ty Mawr walked every day to Talar Gerwin to clean (*pers. com.* Gerwyn Edwards). There will be some slight disruption to the surface of part of the track where it is laid in a shallow scoop. The pipe will not be visible from the Listed Building.

A wall evident on the early Ordnance Survey Map at the point where the pipe route crosses from the old track to the field is no longer present.

The Turbine House is located within a clump of trees adjacent to the drive to Glan yr Afon (Plate 4). It will not disrupt any archaeological or historic features but is likely to be visible from the listed building.

### **4. Assessment of Impact and Recommendations**

Shallow burial of the pipe along the historic track is unlikely to disturb deposits of archaeological significance so the direct impact on the historic track is considered to be very low. Visually there will be no impact on the Listed Building.

The burial of the pipe in the field adjacent to Glan yr afon is unlikely to disturb deposits of archaeological significance so direct impact in this area is very low. Visually there will be no impact on the Listed Building.

The location of the Turbine House is unlikely to uncover deposits of archaeological significance so direct impact of the construction of the turbine house is very low. The Turbine House will be minimally visible from the Listed Building (Plate 4) provided screening from trees is maintained. The visual impact of the Turbine House on the Listed Building is considered to be low.

## **5. References**

Brooks, I P, 2011 North West Wales Dendrochronology Project – Ty Mawr, Wybrnant, Conwy.

Cadw, 1966, Listed Buildings Description (3578)

Richardson, F, Wyn Jones, I, Scharer, T, 2013 North West Wales Dendrochronology Project – Ty Mawr Wybrnant – Historic Research

Roberts, C, 1984 Vernacular Buildings Survey for Ty Mawr Gwibernant



Figure 1: Location of Micro Hydro Electric Power Scheme



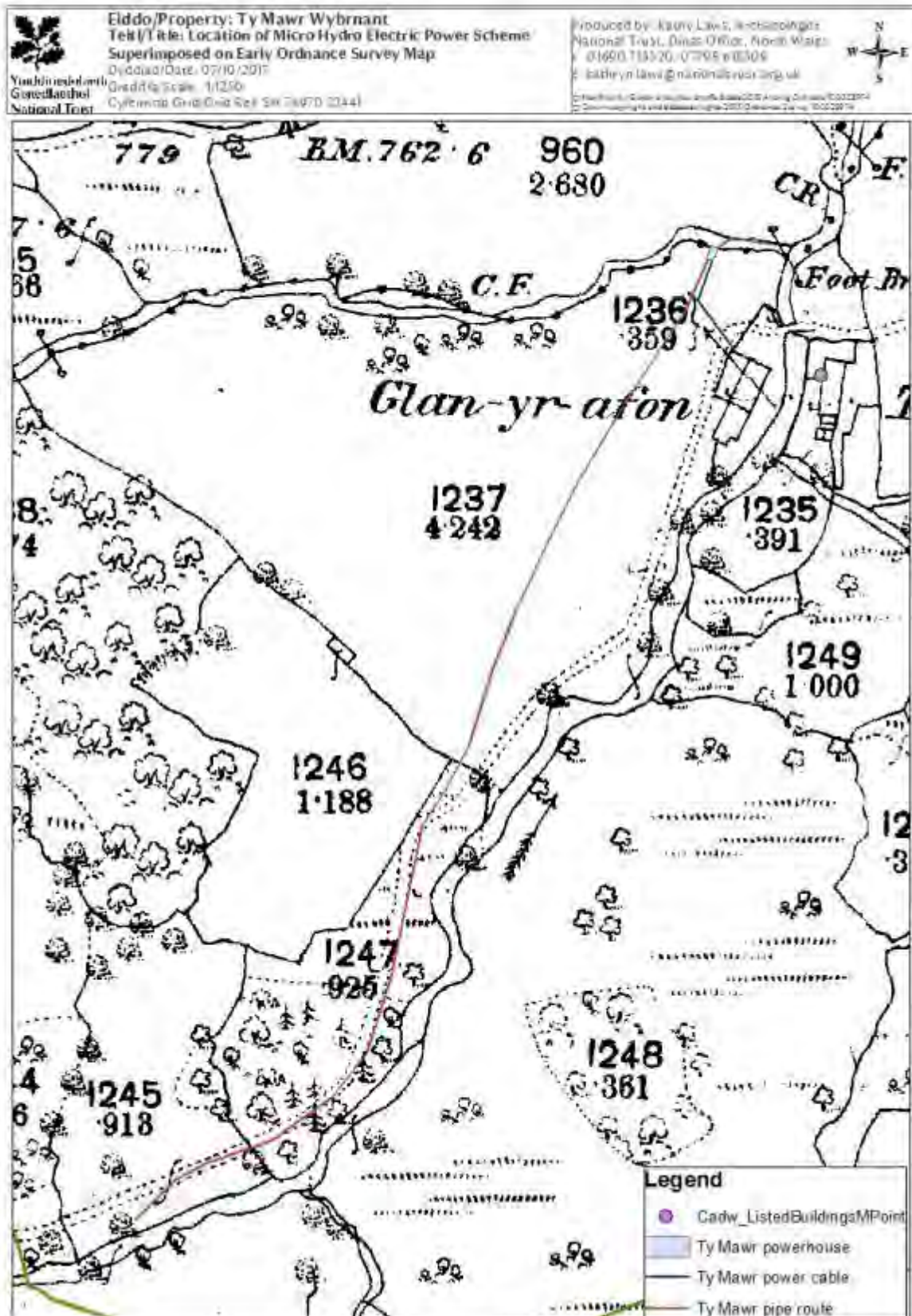


Figure 2: Location of Micro Hydro Electric Power Scheme Superimposed on Early Ordnance Survey Map



Plate 2: Location of intake



Plate 3: Historic track looking north



Plate 4: Site of turbine house within trees (indicated with arrow) viewed from Ty Mawr