

Land off Ty Du Road, Glan Conwy

Archaeological Assessment



Ymddiriedolaeth Archaeolegol Gwynedd
Gwynedd Archaeological Trust

Land off Ty Du Road, Glan Conwy

Archaeological Assessment

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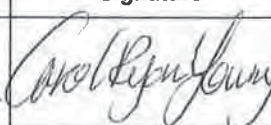


Front cover image: View up Ty Du Road to Ty Du Farmhouse (G2615_011)

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CRYNODEB ANHECHNEGOL

Ym mis Mai 2019 comisiynwyd Ymddiriedolaeth Archeolegol Gwynedd (GAT) gan Brenig Construction i gynnal asesiad archeolegol cyn datblygiad preswyl arfaethedig ym Maes y Felin, Glan Conwy (NGR SH8061075650). Roedd yr ardal asesu yn mesur 6.68ha ac yn cynnwys tair llain siâp afreolaidd yn cynnwys tir amaethyddol.

Nodwyd cyfanswm o 29 o nodweddion o fewn radiws o 1km i ganolbwynt yr ardal ddatblygu arfaethedig gyda 4 nodwedd yn arbennig o agos at ardal yr astudiaeth. Y nodweddion hyn oedd y 4 adeilad rhestredig gradd II, Hafod, y garej gerllaw Hafod, ffermdy Ty Du a'r ystodau amaethyddol sy'n gysylltiedig â Thŷ Du.

Cwblhawyd yr arolwg cerdded yn rhannol yn ardal yr astudiaeth gan nad oedd yr holl gaeau yn hygyrch ar adeg eu cwblhau. Ni nododd yr arolwg hwn fod unrhyw asedau archeolegol newydd wedi'u nodi, er y gallai glaswellt a llystyfiant uchel eu cuddio ar hyn o bryd.

NON-TECHNICAL SUMMARY

Gwynedd Archaeological Trust (GAT) was commissioned by Brenig Construction to undertake an archaeological assessment in advance of a proposed residential development at Maes y Felin, Glan Conwy (NGR SH8061075650). The assessment area measured 6.68ha and included two irregular shaped plots incorporating agricultural land. The assessment was undertaken in May 2019.

In total 29 features were identified within a 1km radius of the centre point of the proposed development area with 4 features in particular being within very close proximity to the study area. These features were the 4 grade II listed buildings, Hafod, the garage adjacent to Hafod, the Ty Du farmhouse and the agricultural ranges associated with Ty Du Farmstead.

A partial walkover survey was completed of the study area as not all fields were accessible at the time of completion. This walkover survey did not identify any new archaeological assets although they may currently be obscured by high grass and vegetation.

1 INTRODUCTION

Gwynedd Archaeological Trust (GAT) was commissioned by Brenig Construction to undertake an archaeological assessment in advance of a proposed residential development of land off Ty Du Road, Glan Conwy (NGR SH8061075650; postcode: LL28 5NE; Figure 01). The assessment area measured 6.68ha and includes two irregular shaped plots incorporating agricultural land. The assessment was undertaken in May 2019.

The assessment was undertaken in accordance with the guidelines specified in the Chartered Institute for Archaeologists *Standard and Guidance for Historic Environment Desk-Based Assessment* (Chartered Institute for Archaeologists, 2014) and the requirements of section 2.3 of MoRPHE (English Heritage 2015) and to MAP2 (English Heritage, 1991, *Management of Archaeological Projects*).

The archaeological assessment was monitored by the Gwynedd Archaeological Planning Service (GAPS) and was undertaken in accordance with an approved Written Scheme of Investigation (WSI) ([Appendix I](#)). In line with the Gwynedd Historic Environment Record (HER) requirements, the HER was contacted at the onset of the project to ensure that any data arising was formatted in a manner suitable for accession to the HER under the guidance set out in *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (The Welsh Archaeological Trusts, 2018). The HER was informed of the project start date, location including grid reference and estimated timescale for the work. The HER Enquiry Number for this project is GATHER1095 and the Event PRN is 45423. A bilingual event summary has been prepared for submission to the HER in accordance with their guidance.

GAT is certified to ISO 9001:2015 and ISO 14001:2015 (Cert. No. 74180/B/0001/UK/En) and is a Registered Organisation with the Chartered Institute for Archaeologists and a member of the Federation of Archaeological Managers and Employers (FAME).

2 METHODOLOGY

2.1 Assessment (Desktop Study)

A desk-based assessment is defined as “a programme of study of the historic environment within a specified area or site on land, the inter-tidal zone or underwater that addresses agreed research and/or conservation objectives. It consists of an analysis of existing written, graphic, photographic and electronic information in order to identify the likely heritage assets, their interests and significance and the character of the study area, including appropriate consideration of the settings of heritage....Significance is to be judged in a local, regional, national or international context as appropriate” (ClfA 2014, 4).

The desk-based assessment included a study of the following resources:

1. The regional Historic Environment Register ((HER) Gwynedd Archaeological Trust, Craig Beuno, Ffordd y Garth, Bangor, Gwynedd LL57 2RT) was examined for information concerning the study area. This included an examination of the core HER, the 1:2500 County Series Ordnance Survey maps and any secondary information held within the HER. All relevant assets were mapped, described and added to a gazetteer of sites and the relative importance of any assets defined;
2. The National Monuments Record of Wales (Royal Commission on the Ancient and Historical Monuments of Wales, Plas Crug, Aberystwyth SY23 1NJ) was checked for assets additional to the HER;
3. Aerial photographs from the National Monuments Record of Wales (Royal Commission on the Ancient and Historical Monuments of Wales, National Monuments Record of Wales, Plas Crug, Aberystwyth SY23 1NJ) were examined for potential assets;
4. An on-line catalogue search of the National Library of Wales (Penglais Rd, Aberystwyth SY23 3BU) was completed;
5. Archive data, including primary and secondary sources, historic maps and estate maps was examined at the regional archives (Gwasanaeth Archifau Conwy Archive Service, Old Board School, Lloyd St, Llandudno LL30 2YG). The archive data included historic mapping including the local tithe map and schedule;
6. Light Detection and Ranging (LiDAR) data was examined from the Lle Geo-Portal at <http://lle.gov.wales/home> for information on potential surface features using digital terrain modelling and digital surface modelling.

2.2 Walkover Survey

A walkover survey was undertaken on 17th May 2019 and incorporated the highlighted plots identified in Figure 01. All known and new archaeological features on the ground were located and described on GAT pro-formas and included in the report gazetteer with their relative importance defined. The potential for sub-surface archaeology was estimated and defined.

A photographic record was maintained in RAW format using a digital SLR set to maximum resolution (Nikon D5100; resolution: 4,928 × 3,264 [16.2 effective megapixels]) and a photographic metadata table was completed ([Appendix II](#)). Photographic images were archived in TIFF format; the archive numbering system was G2615_001 to G2615_075.

2.3 Assessment (Gazetteer)

A gazetteer has been compiled for all known and new sites within and within proximity to the specified route; the gazetteer includes the following:

Feature Number	
Site name	
PRN number	
Grid reference	
Period	
Site type	
Assessment category	
Description	
Impact	
Recommendation for further assessment/evaluation	
Recommendation for mitigatory measures	

2.4 Setting of Listed Buildings in relation to the proposed development

The setting of the adjacent Listed Buildings in relation to the proposed development site was assessed, using the guidance established in Setting of Historic Assets in Wales (Cadw, 2017). Setting is defined in the guidance as the broader landscape context into which the individual historic asset is set; this context includes physical and cultural factors specific to that location. For the purposes of the assessment, the setting was assessed using the following stages in the guidance document:

Stage 1: Identify the historic assets that might be affected by a proposed change or development

This was undertaken as follows:

- The location, size and scale of the proposed development was examined; and
- The location and nature of identified historic assets was considered.

Stage 2: Define and analyse the settings to understand how they contribute to the significance of the historic assets and, in particular, the ways in which the assets are understood, appreciated and experienced.

The setting of a historic asset is made up of:

- its current surroundings
- our present understanding and appreciation of the historic asset; and
- what (if anything) survives of its historic surroundings.

Stage 2 should clearly identify the key factors relating to setting which contribute to the significance of the historic asset. The Setting of Historic Assets in Wales (Cadw, 2017) provides a series of questions to help define the significance of the asset:

- How do the present surroundings contribute to our understanding and appreciation of the historic asset today?
- Thinking about when the historic asset was first built and developed:
 - what were its physical, functional and visual relationships with other structures/historic assets and natural features?

- what topographic or earlier features influenced its location/what was its relationship to the surrounding landscape/was it constructed to take advantage of significant views or to be a part of a significant view?
- Thinking about changes since the historic asset was built:
 - has its function or use changed? What is the current condition of the building and how are they managed?
 - what changes have happened to the surrounding landscape/streetscape?
 - have changes happened because of changes to the historic asset or to its historical setting?
 - has the presence of the historic asset influenced changes to the landscape, for example, where a monument has been used as a marker in the layout of a field enclosure/ has the presence of the historic asset influenced the character of the surrounding landscape/streetscape/have historic and designed views to and from the historic asset changed?
- Thinking about the original layout of the historic asset and its relationship to its associated landscape:
 - were these relationships designed or accidental/how did these relationships change over time?
 - how do these relationships appear in the current landscape; are they visual or buried features?
- Are there other significant factors, such as historical, artistic, literary, place name or scenic associations, intellectual relationships (for example, to a theory, plan or design), or other non-visual factors such as sounds or smells that can be vital to understand the historic asset and its setting?.

Stage 2 also identifies the viewpoints from which the impact of the proposed change or development should be assessed, taking into account:

- views to, from and across the historic asset that were designed and developed when the historic asset was first created
- views to, from and across the historic asset which are linked with a time in its history
- important modern views to, from and across the historic asset – for example, popular visitor viewing points

2.5 Archive and Dissemination

A full archive including plans, photographs, written material and any other material resulting from the project has been prepared and the following dissemination has been applied:

- A digital report has been prepared for *Brenig Construction* and GAPS;
- A paper report plus a digital report has been prepared for the regional Historic Environment Record, Gwynedd Archaeological Trust along with relevant digital datasets, including a bilingual event summary, in accordance with *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (Version 1);
- A digital report and archive data has been prepared for submission to the *Royal Commission on the Ancient and Historical Monuments of Wales*, in accordance with the *RCAHMW Guidelines for Digital Archives Version 1*. Digital information will include the photographic archive and associated metadata;

3 RESULTS

3.1 Location and Geological Summary

The study area is located at Maes y Felin, Llansanffraid Glan Conwy, and is within the Conwy region of the Natural Resources Wales Historic Landscape, specifically the Ffridd Y Mynydd and Eglwysbach & Llanddoged areas (<https://landmap-portal.naturalresources.wales>).

The bedrock geology in the study area is Nantglyn Flags Formation – Mudstone and Siltstone which is a sedimentary bedrock formed during the Silurian Period in an environment previously dominated by deep seas. This is overlain by Devensian till – Diamicton which was formed in the Quaternary Period. These are a wide range of deposits and geomorphologies typical of the glacial and inter-glacial periods during the Quaternary (British Geological Survey, 2019).

3.2 Statutory and Non-Statutory Designations

There are no Scheduled Monuments (SM) within the buffer of the study area which is defined as a 1km radius from a centre point at NGR SH8061075650. The nearest Scheduled Monument is situated 1.4km to the SW of the centre point and is the Hendre-Waelod Burial Chamber (PRN 2475, SM DE125, NGR SH7927974751), a chambered long cairn dating to the Neolithic period.

There are 18 Listed Buildings (LB) located within the 1km buffer, four of which are within 30m of the study area.

The first of these four, and the closest buildings to the study area are the Ty Du Farmhouse (PRN 12613, LB 3649, NGR SH8074875594) and its associated ranges (PRN 69014, LB 17029, NGR SH8077475869) constructed in 1857 by Whitehall Dod. The northern and western boundaries of the Ty Du farmstead are situated on the edge of the study area. The Butterfly-Plan Villa known as Hafod (PRN 66870, LB 17027, NGR SH8047675378) and the Garage adjacent to Hafod (PRN 66875, LB 17028, NGR SH8048575377) which date to c.1930 are the other two buildings in very close proximity to the study area.

There are three grade II* buildings situated within the buffer area. These are the Felin Isaf Mill (PRN 66879, LB 3630, NGR SH8028274938), the Clover Mill (PRN 66867, LB 17320, NGR SH8027374945) and the Former Oat Kiln at Felin Isaf (PRN 66881, LB 17042, NGR SH8026074958). The mills date to the late 17th/early 18th century with the Oat Kiln being added during the 19th century. These buildings were given a higher Grade II* listing due to their rare completeness including the retention of most of the milling machinery (Evans & Burnett, 2012).

Ref Number	Name	PRN	Easting	Northing	Grade
DE125	Hendre-Waelod Burial Chamber	2475	279279	374751	SM
3649	Ty Du Farmhouse	12613	280748	375594	II
17029	Ranges, Ty Du Farm	69014	280774	375869	II
255	24 Top Llan Road	69013	280390	375978	II
17022	Church House	66882	280396	376058	II
17320	Clover Mill	66867	280273	374945	II*
3630	Felin Isaf Mill	66879	280282	374938	II*

Ref Number	Name	PRN	Easting	Northing	Grade
17042	Former Oat Kiln at Felin Isaf	66881	280260	374958	II*
17028	Garage adjacent to Hafod	66875	280485	375377	II
17027	Hafod	66870	280476	375378	II
216	Llansantffraid Glan Conwy	7081	280400	376100	II
17026	Manse adjoining Welsh Methodist Chapel	66880	280435	375750	II
17024	Plas Tirion	66860	280388	375869	II
17025	Welsh Methodist Chapel	66864	280437	375756	II
17023	The Old Rectory	66861	280388	376576	II
217	Plas Isa Farmhouse	66855	281552	375649	II
17045	Former carthouse and stable range at Plas Isa	66878	281512	375605	II
219	L-shaped agricultural range at Plas Isa	66865	281545	375611	II
218	Earlier House SW of Plas Isa	66884	281498	375635	II

3.3 Environmental Remains and Soil Morphology

Given the intense nature of the agricultural exploitation of the study area of recent centuries, the likelihood is **low** that any environmental remains of significance will be encountered, unless recovered from a secure archaeological context. However the proximity of the study area to numerous watercourses means there is potential for preserved remains in any waterlogged areas.

Full detail of the soil morphology is unknown at this stage but it is likely to consist of a sandy, silty clay typical of glacial deposits.

3.4 Historical and Archaeological Background

3.4.1 Introduction

A brief examination of the regional Historic Environment Record does not show any known assets within the confines of the assessment plots and the local area is mostly characterised by post-medieval activity. No other archaeological project work is listed within the HER as having been completed within the assessment plots, but GAT completed an assessment along the A470 road to the immediate southwest for the proposed A470 Trunk Road Pentrefelin to Bodnant Improvement Scheme (Evans & Smith, 2008). The report characterised that assessment area as “representing a farming landscape with a field pattern little changed from the 18th century, but with some fragments of landscape and possible trackways surviving from earlier periods” (ibid, 04).

3.4.2 Prehistoric and Roman Background

There are very few recorded prehistoric sites in the Conwy Valley, these sites being mainly found in upland zones. However, there is a Neolithic chambered tomb, a Scheduled Monument, which is situated 1.4km to the SW of the centre point of the study area. The Hendre-Waelod Burial Chamber (PRN 2475, SM DE125, NGR SH7927974751), known locally as Allor Moloch (Atlas of Terror), is a good example of a ‘Portalled A Dolmen’ of the Irish Dec Groups and survives in good condition. Consisting of a subrectangular chamber formed by 6 or 7 orthostats which support a large 2.2m x 2.8m 1m thick capstone, the chamber is now used by sheep as a shelter (Smith, 2002).

Evidence survives for the Conwy valley floor being occupied during the Roman period when there was a major auxiliary fort at Caehun (Canovium) close to the west side of the River Conwy, 5.5km south west of the study area. This site appears to have been chosen in order to use the river for transport. There is evidence for an east-west orientated Roman road (PRNs 17652-6) crossing the valley and running between Canovium and Varis (St. Asaph, Flintshire) (Smith, 2002).

3.4.3 Medieval Background

During the medieval period the main historic settlement in the area was at Conwy situated on the west bank of the Conwy River and 3km to the north west of the Study area. This was

essentially an English Borough until the 16th century and is dominated by the Castle and town walls erected by Edward I between 1283 and 1287 (Berks & Davidson, 2006). 'The Edwardian castles were usually designed with both a castle dock and a town quay, the principal function of the former to aid defence, and of the latter for trading. Conwy was no exception to this, and possessed both a town quay and a castle dock' (Ibid).

3.4.4 *Post Medieval and Modern*

In 1633 Robert Davies II of Gwysaney, Flintshire had married Anne, daughter and co-heiress of Sir Peter Mutton, and it was as a result of this marriage that the Llanerch estate in Denbighshire was added to the Davies' estates. It is not known whether the 80% or so of the study areas that was Llanerch property by the time of the tithe map of 1842 was the property of the estate at this time (Figure 02 and Apportionment below), however it is first specifically mentioned in the Gwasaney estate papers on 4th January 1779, when the land is held in trust for John Davies Esquire and his heirs for 500 years (Flintshire Archives; D/GW/B/780). Maes y Felin is not listed in the estate rentals of 1758-1759, but it is by 1772 suggesting that it had certainly become part of the estate by then (Flintshire Archives; D/GW/333). References to the parish of Llansantffraid Glan Conwy go back however to 1654 in estate documents, and are frequently referred to, but specific holdings are not listed, so it is difficult to be certain about the origins of the estate holdings within the study area (Flintshire Archives; D/GW/470).

In 1785 the estate was divided between sisters Letitia and Mary after John Davies had died unmarried. The former obtained Llannerch and therefore the estate land that lies within the study area (Usher 1964). She died without issue on 11th December 1801 aged 67 and devised her possessions including the study area to her cousin, Anne Elizabeth, daughter and heiress of Peter Davies, and the wife of the Rev. George Allanson, who by then widowed, owned the property by the time of the tithe assessment in 1842 (Figure 02) (Dictionary of Welsh Biography, seen at www.biography.wales/article/s-DAVI-COO-1200). In 1842 the Llannerch property was inherited by Whitehall Dod, who rebuilt Ty Du to the south-east after a fire (See below). He died in 1878 and was succeeded by his son in the estate (*North Wales Chronicle and Advertiser*, 2nd March 1878, seen at <https://newspapers.library.wales/view/4515663/4515668>). The estate was sold into private hands in 1959 (Country Life Vol. 126).

The fact that two parcels of land (190 and 191 on the tithe map; Figure 02) were the property of the 'Poor of Bettws' suggests that this is land that had been given to the church as a charitable bequest, the income from which was to be used for the support of the poor. The origins of this bequest are not currently known, but may go back to the 17th century.

The house at Hafod and its associated Garage (LB 170287 Grade II, PRN 66870) was built in 1935 and was designed by the outstanding Arts and Crafts architect, Herbert Luck North (1871-1941), who lived and worked in Llanfairfechan from c.1901. It was formerly called Arsyllfa and was possibly built for a Mrs Ashcroft.

It has a 'Y' shaped plan, its angled wings stretching westwards to the afternoon sun and the garden, recalling the butterfly plan popular amongst Arts and Crafts architects earlier in the century. North designed two other butterfly-plan houses, in Devon and in the Lake District, and his own house (Wern Isaf) in Llanfairfechan is a sort of reverse butterfly plan.

The construction and materials are typical of North's buildings: white, roughcast walls, roofs of graded Welsh slates, small-paned windows and canted rainwater pipes. Not so typical here are the hipped roofs as North tended to use plain gables with verges.

The house has been altered internally, though a few original features survive. Externally, dormers and a conservatory have been added, and the stem of the Y-plan was extended in the 1970s, and again later (Voelcker, 2011).

Immediately to the east of the house sits the contemporary garage (LB 17028 Grade II; PRN 66875). The construction style is the same as for the house with the roof hipped to the east and half-hipped to the west, where flush outshots flank the boarded garage door. It has a recessed, boarded door to the north with tripartite steel-framed window to the right of it.

Ty Du (LB 3649 Grade II; PRN 12613) was built in 1857 by Whitehall Dod (1823-1878), a local estate owner. It was said locally to have been built after fire destroyed the previous farm on site, hence name Ty Du, 'the black house.'

It is a two-storey farmhouse of rendered brick with slated roof. It has dogstooth brickwork at the eave, and a projecting stack to R with twin off-set chimneys. The gabled cross-wing to the right of it with a date stone inscribed 'WD 1857' towards the apex. It has plain, single sash windows to ground and first floors. The main block has further plain sashes to both floors, that to the first-floor on the right being narrower. Beneath this is a single-storey gabled

porch with pierced bargeboards and wooden finial. There is a Tudor arched entrance with 19th century door. It has a central outshot to rear of main block with modern window (formerly an entrance) and chimney in the west angle. It has a single-storey gabled annex set back to the right with further entrance and modern window. The house is listed as an intact example of a typical mid-19th century model farm, associated with the farm ranges discussed below.

The agricultural ranges (LB 17029 Grade II; PRN 69014) enclose a courtyard immediately to the north east of the farmhouse, the south west corner open. The range is of red brick with slate roofs and dogstooth brickwork to eaves; a north range of one-and-a-half storeys, the remainder single storey. The short west range has two camber-headed doorways facing the yard with a contemporary lean-to advanced to the left; similar entrance to its south face, boarded doors throughout. The north range has two wide, cambered openings with narrower, similar openings flanking them; three small cambered windows above with internal boarded shutters. To the right a flush barn section with similar wide and narrow entrances; geometric shaped ventilators of brick to rear. The east, cart shed range, has three open cambered arches facing west away from the yard where there is a cobbled pavement. Stepped down and set back slightly from this range to the south, a stable block with two entrances as before with stable doors; small window and vents face outwards. The south range adjoins at right-angles and has three wide, arched cart openings to the courtyard, the two western-most with later brick infill; rear cambered entrance with boarded door. Towards the west of this range an off-centre brick chimney with oversailing courses serves the former brewhouse.

3.5 Cartographic Evidence

The earliest known cartographic evidence covering the study area are the maps of the Gwasaney estate dating to around 1780. These covered the whole of the Gwasaney and Llanerch estates in twelve maps, however three of these are now lost, which includes ‘*Map V; Glan Conwy*’ which would have covered the 80% or so of the study area that was the property of the Llanerch estate. The schedule that accompanied these maps however survives (Flintshire Archives; D/GW/735), and those portions covering and adjacent to the study area are listed in the table below.

Map 205	Names of Pieces	No. of Acres			Parish	Township
		A	R	P		
2	A quillet in Cae'r Gyder	1	1	-	Llansantffraid	Tre Llan
5	Cae Cain	3	-	36	“	Tre Powell
7	Nant	2	-	10	“	“
8	Cae Drws	2	-	16	“	“
11	Cae Dryn y Garnedd	2	2	20	“	“
13	Cae Pant	2	3	20	“	“
4	Cae'r Llan	10	2	8	“	“

The tithe map and apportionment of the parish of Llansantffraid Glan Conwy of 1842 shows the entire study area (Figure 02). The boundaries of the study area generally survive from this time until the present day. The historic system of lanes adjacent to the study area, which survive to the present time, can also be seen to date from before 1842. The boundaries in the western plot remain as they were in 1842 up to the present time, probably since this is the portion of the study area that had historically been in multiple ownership, making field amalgamation less likely. Both the properties of Ty Du and Tawelfan are shown to be present. The study areas are mainly in the hands of the Llannerch estate, at this time held by Anne Elizabeth Allanson, but the poor of Bettws also hold some of the land. One field (192) is in the hands of a yeoman farmer, who farms the land himself, and also owned a number of fields to the west of the study area, now developed with housing. The apportionment for the relevant area is detailed in the table below, and the numbers refer to those shown in the parcels of land on the tithe map (Figure 02).

Landowner	Occupiers	Number Referring to the Plan	Name and Description of Land and Premises	State of Cultivation	Quantities in Statute Measure A R P
Allanson, Anne Elizabeth	Sarah Parry Evans	187	Part of Cae'r Gyder	Arable	2 3 -
		187a	Part of Cae'r Gyder	Arable	- 1 -
	Joseph and William Williams	358	Cae'r Llan	Arable	9 1 3
Bettws, Poor of	Edward Hughes	190	-	Arable	- 2 34
		191	-	Arable	1 2 16
Roberts, Thomas	Himself	192	Cae'r Conwy Alwyr	Arable	2 - 20

An examination of the 1st to 3rd editions 25-inch to 1 mile Denbighshire County Series Ordnance Survey maps of the area dating from between 1875 and 1912 (Sheets III.9, III.10, III.13 and III.14) show little difference in land use and apportionment and the development plots are in use as improved agricultural land, as they are at present. Llansantffraid Glan Conwy can be seen on subsequent mapping to have expanded significantly to the north, with housing development having expanded to the northern and western boundaries of the study area in recent times.

3.6 Artefact Potential

The potential for the recovery of artefacts is thought to be **low** as there have been very few archaeological assets located within the vicinity of the study area. However, Roman coins (PRN 2471, Feature 16) have been found within the 1km buffer zone. The large scale ground disturbance characteristic of housing developments will always have the potential for encountering archaeological assets and artefacts.

3.7 Aerial Photographs and Lidar

Four aerial photographs were examined dating from 1942 to 1978. The first of these, RAF AC31:H13:140 Frame 45 taken on the 16th of April 1942 shows the study area in the bottom left corner of the image. The Ty Du farmhouse (PRN 12613, Feature 21) and its associated ranges (PRN 69014, Feature 15) can be seen on the image but are not clearly definable due to the image quality and the height at which it was taken. Hafod (PRN 66870, Feature 10) and the garage adjacent to Hafod (PRN 66875, Feature 09) are also discernible on the image. The density of housing shown on the image appears to be little changed from that shown on the Ordnance Survey 3rd edition 25 inch Denbighshire County Series map of 1912. It is evident that large swathes of the countryside are being used to cultivate crops during the war.

The second image examined is RAF 106G/UK.735 Frame 3020 taken on the 27th August 1945 (Figure 05). The image shows large amounts of agricultural activity over the western section of the study area. The eastern most area, being undulating and rocky, has not been used for crops. Hafod and the Ty Du farmstead can be clearly seen in the image and appear to have changed little from their original design layout.

543 RAF 2889 Frame 0254 taken 27th May 1964 shows all of the study area apart from the Ty Du farmstead buildings. This image is not as clear as the one taken in 1945 but it is evident that the land in the study area is still being utilised for agricultural purposes. It is clear from this image that more land around the study area is being put over to housing rather than agriculture.

The final image is from Meridian Airmaps Ltd 11/78 Frame 070 taken 21st May 1978. This image only shows the western section of the study area fully with small parts of the eastern section. By this time the western area appears to be mostly overgrown rather than agricultural though it could possibly have been used for housing livestock during this period. The eastern section appears less wild and could have been cultivated during this period though it is equally possible that the land was being used for livestock due to the topography. The most striking difference between this photo and the previous images is the density of housing shown. By the late 1970's large housing developments appear to have taken over the majority of the land immediately north of the study area. Hafod and the Ty Du farmstead do not feature on this image.

No new archaeological assets were identified from examining the aerial photography.

Light Detection and Ranging (LiDAR) data was examined, obtained from the Lle Geo-Portal at <http://lle.gov.wales/home>, for information on potential surface features using digital terrain modelling and digital surface modelling at 1m interval. The Ty Du farmstead and Hafod are clearly visible on the surface model but not on the terrain model. No new archaeological features were identified on the images.

3.8 Setting of Listed Buildings in relation to the proposed development

3.8.1 Stage 1: Identify the historic assets that might be affected by a proposed change or development

The only previously known asset that is likely to be directly affected by the proposed development is the Ty Du Farmstead (PRNs 12613 & 69014, Features 21 & 15) as the limit of the eastern most development area shares a boundary with the farmstead. Hafod house (PRN 66870, Feature 10) and its associated garage (PRN 66875, Feature 09) appear to be situated to capture the views to the west and are currently screened from the development area by large trees. This, however, may not be the case depending on the development plans which are not available at time of writing.

3.8.2 Stage 2: Define and analyse the settings to understand how they contribute to the significance of the historic assets and, in particular, the ways in which the assets are understood, appreciated and experienced.

3.8.2.1 The current surroundings of the Listed Buildings

The house at Hafod lies amongst agricultural fields at the southernmost limit of the town of Llansanffraid, Glan Conwy. It is accessed via a single track 'B' road which is currently lined by large trees. This road is a possible Holloway. The house has paved and lawn covered areas to the west and east, a parking area to the north (the garage is 20m to the NW of the house), and borders agricultural fields to the south. The design of the house reflects the setting with the turned in wings of the house facing west to gain maximum benefit from the imposing views of the Conwy estuary and mountains.

The Ty Du farmstead lies amongst agricultural fields to the east of the Llansanffraid, Glan Conwy and is accessed via the same road as Hafod, which is named after the farm, 'Ty Du Road'. The farmhouse faces to the south over an agricultural landscape and has a small garden area to the west and north. To the north east of the farmhouse, the agricultural ranges enclose a courtyard accessed via the south west corner adjacent to the farmhouse. The ranges face the internal courtyard area.

The location, size and scale of the proposed development is currently unknown, though it is likely to be of a similar character to the already developed area to the east in Llansanffraid, Glan Conwy. The visual impact to Hafod is likely to be small as the main views are away from the planned development area. Ty Du however will suffer a visual impact to the north from the farmhouse.

3.8.2.2 Our present understanding and appreciation of the Listed Buildings

The Ty Du farmhouse and outbuildings are Grade II listed and were built in 1857 by Whitehall Dod, a local estate owner, after a fire destroyed the previous farm on the site. The house and outbuildings are listed as an intact example of a typical mid-19th century model farm. Situated immediately to the east of the outbuildings is a corrugated iron barn which, according the plaque on the side, was supplied by 'Hill & Smith Makers Ltd Brierley Hill'. Hill & Smith was not incorporated until 1909 (<https://www.hill-smith.co.uk/en-GB/about/history/>) so this is a later addition to the farmstead and as such is not listed.

Hafod and its associated garage were built in 1935 and were designed by the Arts and Crafts architect, Herbert Luck North. The house was previously known as Arsyllfa and was possibly originally built for a Mrs Ashcroft. The house is 'Y' shaped or butterfly in plan with angled wings that stretch westwards in order to capitalise on the afternoon sun and views out to the Conwy estuary. The main house has twice been extended to the east where there is a now a conservatory and seating area to take advantage of the views over the fields to the east as well as the morning sun. To the west of the building the more formal gardens are situated.

3.8.2.3 What if anything survives of its historic surroundings?

To the north and west of the both Hafod and the Ty Du farmstead the agricultural field systems in which they were initially situated have almost entirely disappeared and been replaced by residential developments. This has happened in the post war period as evidenced by the aerial photography examined previously. To the south of the listed buildings the agricultural land remains almost entirely unchanged.

3.8.2.4 Significance

Conservation Principles (Cadw 2011, 10) identifies four component values which contribute to the significance of an historic asset: its **evidential** value; its **historical** value; its **aesthetic** value, and its **communal** value.

As listed buildings, the significance of Hafod and the Ty Du farmstead are rated as moderate. Hafod is of significance for its **evidential** value as a type of building from the Arts and Crafts tradition, and the Ty Du farmstead for its **evidential** value as an intact mid-19th century model farm. They are of moderate **historical** value as they aid understanding of both the Arts and Crafts movement of the early 20th century and the development of farmstead during the 19th century but are, however, not unique examples of these buildings. Hafod derives its **aesthetic** value from its Arts and Crafts design and its setting to take advantage of multiple vistas. The Ty Du farmstead also derives its **aesthetic** value partially from its design and setting, however, the encroachment of local housing on the farmstead has affected this. As both of the buildings are currently privately owned the **communal** value of the buildings must be considered moderate. The primary contribution of the setting of the listed buildings to their significance is **evidential**.

3.9 The Walkover Survey

The walkover survey was undertaken on the 17th May 2019. Unfortunately not all of the fields that make up the study area were accessible during the visit (See figure 6 for breakdown of fields visited). No fields were fully accessible during the walkover but 3 fields were able to be viewed from the boundaries (G2, G4 and G7). 5 fields were completely inaccessible (G1, G3, G5, G6 and Y1).

3.9.1 Field G1

This field could not be accessed or viewed from distance on the walkover survey.

3.9.2 Field G2

There is one access to field G2 from Ty Du road which was securely locked and covered with barbed wire on the day of the walkover survey so the field was only viewed from this vantage point (Plate 01). To the south west of the access gate stands an old farm outbuilding constructed from wood with corrugated iron roofing which is almost entirely covered in vegetation (Plate 02). The field is gently sloping down from SE to NW and is bounded by well-established trees (Plate 03). There were no archaeological features immediately evident in this field.

3.9.3 Field G3

This field could not be accessed or viewed from distance on the walkover survey.

3.9.4 Field G4

G4 was visible in the distance from the access gate to G7. A partial view was also available through the trees on its north eastern boundary with the housing estate. No clear view was available of the field in its entirety but no archaeological features were immediately evident.

3.9.5 Field G5

This field could not be accessed or viewed from distance on the walkover survey.

3.9.6 Field G6

This field could not be accessed or viewed from distance on the walkover survey.

3.9.7 Field G7

There is one access to field G7 from Ty Du road which was securely locked and covered with barbed wire on the day of the walkover survey (Plate 04). Both the south western and north eastern sides of this field are bounded by large trees (Plate 05). A large wooden and breeze block building is situated at the north western corner of this field which has a corrugated roof. There were no archaeological features immediately evident in this field.

3.9.8 Field Y1

This field could not be accessed or viewed from distance on the walkover survey.

3.9.9 Hafod (PRN 66870 & 66875)

Hafod house and its associated garage are situated at the south western end of Ty Du Road which appears to be a possible holloway (Plate 06). The boundary to field G1 opposite the entrance to Hafod is populated by mature trees and bushes screening the road and the house from the study area (Plate 07). The house itself is set back from the road and screened by a combination of large trees and hedges (Plate 08). The garage can only be partially seen from the road through the trees.

3.9.10 Ty Du Farmstead (PRN 12613 & 69014)

The Ty Du farmstead is situated at the top of a single track road which is bordered by well-established tall hedgerows (Plate 09). The farmhouse is mortared brick and stands behind a stone and mortar wall with a hedgerow (Plate 10). To the east of the farmhouse are the brick outbuildings some of which are currently used as stables (Plate 11 & 12). To the east of the outbuildings is a barn made of a steel structure clad by corrugated iron (Plate 13).

3.10 Gazetteer of Features

A 1km radius search from the centre point of the study area (NGR SH8061075650) was used to source records from the GAT HER for this assessment which returned 29 results in total.

All the features noted below are shown on Figure 07 with green circles numbered (gazetteer of features). All the recommendations are based on the current understanding of the scheme proposals and their impact on the features. In the event of alterations to the scheme, the recommendations might have to be revisited.

Feature Number	01
Site Name	24 Top Llan Road, Llansanffraid Glan Conwy
PRN Number	69013
Grid Reference	SH8039075978
Period	Post Medieval
Site Type	Building
Assessment Category	B
Description	C17th Inn converted in the C19th. A Grade II listed building
Impact	None
Recommendation for further assessment/evaluation	None
Recommendation for mitigatory measures	Avoidance

Feature Number	02
Site Name	Agricultural shed, Glan Conwy
PRN Number	33323
Grid Reference	SH8048076040
Period	Modern
Site Type	Agricultural Building
Assessment Category	C
Description	Prefabricated building made from corrugated iron. Painted black. Maker - Hill & Smith, Brierley Hill. (Batten, 2011)
Impact	None
Recommendation for further assessment/evaluation	None
Recommendation for mitigatory measures	Avoidance

Feature Number	03
Site Name	The Old Rectory
PRN Number	66861
Grid Reference	SH8038876576
Period	Post Medieval
Site Type	Rectory
Assessment Category	B
Description	An early 19 th century rectory retaining a good façade (Cadw, 2019).
Impact	None
Recommendation for further assessment/evaluation	None
Recommendation for mitigatory measures	Avoidance

Feature Number	04
Site Name	Church House
PRN Number	66882
Grid Reference	SH8039676058
Period	Post Medieval
Site Type	Church House
Assessment Category	B
Description	Grade II listed Church hall built in 1932 by S Colwyn-Ffoulkes, architect from Colwyn Bay (Cadw, 2019).
Impact	None
Recommendation for further assessment/evaluation	None
Recommendation for mitigatory measures	Avoidance

Feature Number	05
Site Name	Clover Mill
PRN Number	66867
Grid Reference	SH8027374945
Period	Post Medieval
Site Type	Mill
Assessment Category	A
Description	Grade II* listed late 17 th Century clover mill with adjacent mid 18 th Century grain mill. Still in use until 1942. (Evans & Burnett, 2012).
Impact	None
Recommendation for further assessment/evaluation	None
Recommendation for mitigatory measures	Avoidance

Feature Number	06
Site Name	Felin Isaf Mill
PRN Number	66879
Grid Reference	SH8028274938
Period	Post Medieval
Site Type	Mill
Assessment Category	A
Description	Grade II* listed late 17 th Century clover mill with adjacent mid 18 th Century grain mill. Still in use until 1942. (Evans & Burnett, 2012).
Impact	None
Recommendation for further assessment/evaluation	None
Recommendation for mitigatory measures	Avoidance

Feature Number	07
Site Name	Felin-Uchaf, Pentre-Felin
PRN Number	34594
Grid Reference	SH8056274706
Period	Unknown
Site Type	Corn Mill
Assessment Category	B
Description	Labelled 'Felin-uchaf (Corn)' on 1st edition and 2nd edition OS County Maps. In the aerial photographs the buildings appear to be roofed and the Mill race is obscured by trees. (Evans & Burnett, 2012)
Impact	None
Recommendation for further assessment/evaluation	None
Recommendation for mitigatory measures	Avoidance

Feature Number	08
Site Name	Former Oat Kiln at Felin Isaf
PRN Number	66881
Grid Reference	SH8026074958
Period	Post Medieval
Site Type	Kiln
Assessment Category	A
Description	Grade II* listed oat Kiln dating to the second quarter or mid 19 th Century. Associated with Felin Isaf Mill (PRN 66879, Feature 06). (Evans & Burnett, 2012)
Impact	None
Recommendation for further assessment/evaluation	None
Recommendation for mitigatory measures	Avoidance

Feature Number	09
Site Name	Garage adjacent to Hafod
PRN Number	66875
Grid Reference	SH8048575377
Period	Post Medieval
Site Type	Garage
Assessment Category	B
Description	Grade II listed garage immediately to the E of Hafod house (PRN 66870, Feature 10). Similar construction to the house with roof hipped to the East and half-hipped to the West. (Cadw, 2019)
Impact	None
Recommendation for further assessment/evaluation	None
Recommendation for mitigatory measures	Avoidance

Feature Number	10
Site Name	Hafod
PRN Number	66870
Grid Reference	SH8047675378
Period	Post Medieval
Site Type	Villa
Assessment Category	B
Description	Grade II listed butterfly-plan villa of c.1930. Built in the neo-vernacular style of Arts and Craft derivation. Designed by architect Herbert Luck North. (Voelcker, 2011)
Impact	None
Recommendation for further assessment/evaluation	None
Recommendation for mitigatory measures	Avoidance

Feature Number	11
Site Name	Llansanffraid, Glan Conwy
PRN Number	7081
Grid Reference	SH8040076100
Period	Medieval
Site Type	Church
Assessment Category	B
Description	Llansanffraid Glan Conwy grade II listed parish church is a medieval church although the present building dates largely to 1839 and consists of undivided nave and chancel. The late medieval glass in the west window is notable. Some medieval masonry from the original double nave church still exists. (Davidson, 2000)
Impact	None
Recommendation for further assessment/evaluation	None
Recommendation for mitigatory measures	Avoidance

Feature Number	12
Site Name	Manse adjoining Welsh Methodist Chapel
PRN Number	66880
Grid Reference	SH8043575750
Period	Post Medieval
Site Type	Chapel
Assessment Category	B
Description	A grade II listed simple early 19 th Century manse group retaining good external character (Cadw, 2019).
Impact	None
Recommendation for further assessment/evaluation	None
Recommendation for mitigatory measures	Avoidance

Feature Number	13
Site Name	Nev's Garage, Graig
PRN Number	33371
Grid Reference	SH8045574715
Period	Modern
Site Type	Garage
Assessment Category	C
Description	Corrugated iron garage with a pitched roof painted white (Batten, 2011).
Impact	None
Recommendation for further assessment/evaluation	None
Recommendation for mitigatory measures	Avoidance

Feature Number	14
Site Name	Plas Tirion
PRN Number	66860
Grid Reference	SH8038875869
Period	Post Medieval
Site Type	House
Assessment Category	B
Description	Grade II listed small, late Georgian house, said to have been built in 1812 for a local sea captain. Rubble construction with scribed rendered walls, plain end chimneys and slate roof (Cadw, 2019)
Impact	None
Recommendation for further assessment/evaluation	None
Recommendation for mitigatory measures	Avoidance

Feature Number	15
Site Name	Ranges, Ty Du Farm, Llansanffraid
PRN Number	69014
Grid Reference	SH8077475617
Period	Post Medieval
Site Type	Farm Building
Assessment Category	B
Description	Grade II listed agricultural ranges built in 1857 by Whitehall Dod, local estate owner. Believed locally to have been built after fire destroyed the previous farm on the site. A good example of a 19 th Century farmstead. (Cadw, 2019)
Impact	Unlikely
Recommendation for further assessment/evaluation	None
Recommendation for mitigatory measures	Avoidance

Feature Number	16
Site Name	Roman Coins, Findspot, Llansanffraid
PRN Number	2471
Grid Reference	SH80007600
Period	Roman
Site Type	Findspot
Assessment Category	B
Description	2 Roman coins found in July 1940 in the rectory garden whilst digging a post hole for a chicken run.
Impact	None
Recommendation for further assessment/evaluation	None
Recommendation for mitigatory measures	None

Feature Number	17
Site Name	Pits and Gullies, Llansanffraid Glan Conwy
PRN Number	55896
Grid Reference	SH81357620
Period	Prehistoric
Site Type	Pit
Assessment Category	C
Description	Prehistoric pits and gullies cut into silt stone bedrock and containing burnt clay and charcoal. Three distinct phases, the rock cut linear, the parallel running gullies and the intercutting pits indicate a fairly lengthy period of activity, and the large quantity of burnt clay suggests possible industrial processes. (Davidson & Roberts, 2012)
Impact	None
Recommendation for further assessment/evaluation	None
Recommendation for mitigatory measures	Avoidance

Feature Number	18
Site Name	Plas Isa Farmhouse
PRN Number	66855
Grid Reference	SH8152275649
Period	Post Medieval
Site Type	House
Assessment Category	B
Description	2-storey end-chimney farmhouse, probably of late C17 date, with Georgian-style re-fenestration (Cadw, 2019)
Impact	None
Recommendation for further assessment/evaluation	None
Recommendation for mitigatory measures	Avoidance

Feature Number	19
Site Name	Former carthouse and stable range at Plas Isa
PRN Number	66878
Grid Reference	SH8151275605
Period	Post Medieval
Site Type	Stable
Assessment Category	B
Description	Late C18 stable and cart house block incorporating a sub-Medieval barn, probably the primary barn to the earlier house at Plas Isa; this represents the lower (N) section. (Cadw, 2019)
Impact	None
Recommendation for further assessment/evaluation	None
Recommendation for mitigatory measures	Avoidance

Feature Number	20
Site Name	L-shaped agricultural range at Plas Isa
PRN Number	66865
Grid Reference	SH8154575611
Period	Post Medieval
Site Type	Barn
Assessment Category	B
Description	Central barn to SE range, probably late C17, though re-roofed C19 and with extensions to L and R, stepped down and stepped up respectively (Cadw, 2019).
Impact	None
Recommendation for further assessment/evaluation	None
Recommendation for mitigatory measures	Avoidance

Feature Number	21
Site Name	Ty Du Farmhouse, Llansanffraid
PRN Number	12613
Grid Reference	SH8074875594
Period	Post Medieval
Site Type	Farmstead
Assessment Category	B
Description	Grade II listed farmhouse built in 1857 by Whitehall Dod (1823-1878), local estate owner. Believed locally to have been built after fire destroyed the previous farm on the site (hence name Ty Du, 'the black house'. A good example of a 19 th Century farmstead. (Cadw, 2019)
Impact	Unlikely
Recommendation for further assessment/evaluation	None
Recommendation for mitigatory measures	Avoidance

Feature Number	22
Site Name	Welsh Methodist Chapel
PRN Number	66864
Grid Reference	SH8043775756
Period	Post Medieval
Site Type	Chapel
Assessment Category	B
Description	Grade II listed early 19 th Century chapel and manse group (PRN 66880, Feature 12) retaining good external character (Cadw, 2019)
Impact	None
Recommendation for further assessment/evaluation	None
Recommendation for mitigatory measures	Avoidance

Feature Number	23
Site Name	Hedge Bank, Llansanffraid Glan Conwy
PRN Number	34922
Grid Reference	SH80987636
Period	Post Medieval
Site Type	Hedge Bank
Assessment Category	C
Description	Hedge running from SH 80987636-SH 81067644. Present day hedge of hawthorn and mature trees on a substantial bank. The bank possibly of Medieval origin. (Evans & Smith, 2011)
Impact	None
Recommendation for further assessment/evaluation	None
Recommendation for mitigatory measures	Avoidance

Feature Number	24
Site Name	Field Boundary, Llansanffraid Glan Conwy
PRN Number	34921
Grid Reference	SH80627653
Period	Post Medieval
Site Type	Field Boundary
Assessment Category	C
Description	A former boundary of a field that existed at the time of the 1842 Tithe map. It has been ploughed over and is quite slight so is not a major earthwork and does not have potential for a buried soil with environmental evidence (Evans & Smith 2011).
Impact	None
Recommendation for further assessment/evaluation	None
Recommendation for mitigatory measures	Avoidance

Feature Number	25
Site Name	Hedge Bank, Llansanffraid Glan Conwy
PRN Number	34923
Grid Reference	SH81127647
Period	Post Medieval
Site Type	Hedge Bank
Assessment Category	C
Description	Runs from SH 81127647 to SH 81187640.. A modern hawthorn and briar rose hedge on an older, low bank probably a remnant of pre-estate boundary (Evans & Smith 2011).
Impact	None
Recommendation for further assessment/evaluation	None
Recommendation for mitigatory measures	Avoidance

Feature Number	26
Site Name	Hedge Bank, Llansanffraid Glan Conwy
PRN Number	34924
Grid Reference	SH81417605
Period	Post Medieval
Site Type	Hedge Bank
Assessment Category	C
Description	Runs from SH 81417605 to SH 81557620. Mainly hawthorn and blackthorn on top of an older, spread bank, c. 0.8m high. (Evans & Smith 2011)
Impact	None
Recommendation for further assessment/evaluation	None
Recommendation for mitigatory measures	Avoidance

Feature Number	27
Site Name	Hedge Bank, Llansanffraid Glan Conwy
PRN Number	34927
Grid Reference	SH80967639
Period	Post Medieval
Site Type	Hedge Bank
Assessment Category	C
Description	Runs from SH 80967639 to SH 81357658. Hedge banks that may be 18th century or earlier in date, and are shown on the tithe map of 1842 (Evans & Smith 2011).
Impact	None
Recommendation for further assessment/evaluation	None
Recommendation for mitigatory measures	Avoidance

Feature Number	28
Site Name	Platform, Llansanffraid Glan Conwy
PRN Number	34920
Grid Reference	SH80377651
Period	Unknown
Site Type	Platform
Assessment Category	C
Description	An approximately circular platform, c. 8m diameter, terraced into the slope. It lies approximately 20m north of the proposed alternative pipeline route. Possibly a stack stand associated with Medieval farming or a small quarry area for the adjoining track (Evans & Smith 2011).
Impact	None
Recommendation for further assessment/evaluation	None
Recommendation for mitigatory measures	Avoidance

Feature Number	29
Site Name	Earlier House SW of Plas Isa
PRN Number	66884
Grid Reference	SH8149875635
Period	Multiperiod
Site Type	House
Assessment Category	B
Description	A sub-Medieval parlour wing of the third-quarter C16, and an early C17 stair block addition survive, though the (presumably Medieval) hall was gone by c.1800 and replaced by a low bakehouse/brewhouse to the NE; the house appears to have been subsidiary to the (later) Plas Isa farmhouse since at least the turn of the C19 and was used for storage and services (Cadw, 2019).
Impact	None
Recommendation for further assessment/evaluation	None
Recommendation for mitigatory measures	Avoidance

4 CONCLUSIONS

4.1 Conclusion

In total 29 features were identified within a 1km radius of the centre point of the proposed development area with 4 features in particular being within very close proximity to the study area. These features were the 4 Grade II listed buildings, Hafod (PRN 66870), the garage adjacent to Hafod (PRN 66875), the Ty Du farmhouse (PRN 12613) and the agricultural ranges associated with Ty Du (69014).

As the exact development plans are unknown at this time it is difficult to assess how the setting of these listed buildings will be affected. However, it is believed that the E-W layout of Hafod, and it being situated across the road from the western most development area, means that its setting will not be adversely affected. The same cannot be said for the Ty Du farmstead as the eastern development area shares a boundary with the farm. The change from agricultural surroundings to housing will forever change the setting of Ty Du farm.

A partial walkover survey was completed of the study area as no fields were fully accessible at the time of completion. This walkover survey did not identify any new archaeological assets although they may currently be obscured by high grass and vegetation. Additional information regarding the development and more comprehensive access to the study area may change the conclusions and recommendations in this assessment.

4.2 Table of Features and Recommendations

Asset_No	PRN	Site_Name	Period	NGR	Recommendations for Further Assessment	Mitigation Recommendations
01	69013	24 Top Llan Road, Llansanffraid Glan Conwy	Post Medieval	SH8039075978	None	Avoidance
02	33323	Agricultural shed, Glan Conwy	Modern	SH8048076040	None	Avoidance
03	66861	The Old Rectory	Post Medieval	SH8038876576	None	Avoidance
04	66882	Church House	Post Medieval	SH8039676058	None	Avoidance
05	66867	Clover Mill	Post Medieval	SH8027374945	None	Avoidance
06	66879	Felin Isaf Mill	Post Medieval	SH8028274938	None	Avoidance
07	34594	Felin-Uchaf, Pentre-Felin	Unknown	SH8056274706	None	Avoidance
08	66881	Former Oat Kiln at Felin Isaf	Post Medieval	SH8026074958	None	Avoidance
09	66875	Garage adjacent to Hafod	Post Medieval	SH8048575377	None	Avoidance
10	66870	Hafod	Post Medieval	SH8047675378	None	Avoidance
11	7081	Llansanffraid, Glan Conwy	Medieval	SH8040076100	None	Avoidance
12	66880	Manse adjoining Welsh Methodist Chapel	Post Medieval	SH8043575750	None	Avoidance
13	33371	Nev's Garage, Graig	Modern	SH8045574715	None	Avoidance
14	66860	Plas Tirion	Post Medieval	SH8038875869	None	Avoidance
15	69014	Ranges, Ty Du Farm, Llansanffraid	Post Medieval	SH8077475617	None	Avoidance
16	2471	Roman Coins, Findspot, Llansanffraid	Roman	SH8007600	None	None

Asset_No	PRN	Site_Name	Period	NGR	Recommendations for Further Assessment	Mitigation Recommendations
17	55896	Pits and Gullies, Llansanffraid Glan Conwy	Prehistoric	SH81357620	None	Avoidance
18	66855	Plas Isa Farmhouse	Post Medieval	SH8152275649	None	Avoidance
19	66878	Former carthouse and stable range at Plas Isa	Post Medieval	SH8151275605	None	Avoidance
20	66865	L-shaped agricultural range at Plas Isa	Post Medieval	SH8154575611	None	Avoidance
21	12613	Ty Du Farmhouse, Llansanffraid	Post Medieval	SH8074875594	None	Avoidance
22	66864	Welsh Methodist Chapel	Post Medieval	SH8043775756	None	Avoidance
23	34922	Hedge Bank, Llansanffraid Glan Conwy	Post Medieval	SH80987636	None	Avoidance
24	34921	Field Boundary, Llansanffraid Glan Conwy	Post Medieval	SH80627653	None	Avoidance
25	34923	Hedge Bank, Llansanffraid Glan Conwy	Post Medieval	SH81127647	None	Avoidance
26	34924	Hedge Bank, Llansanffraid Glan Conwy	Post Medieval	SH81417605	None	Avoidance
27	34927	Hedge Bank, Llansanffraid Glan Conwy	Post Medieval	SH80967639	None	Avoidance
28	34920	Platform, Llansanffraid Glan Conwy	Unknown	SH80377651	None	Avoidance
29	66884	Earlier House SW of Plas Isa	Multiperiod	SH8149875635	None	Avoidance

5 ACKNOWLEDGEMENTS

Thanks must go to Bryn Roberts from Brenig Construction for his assistance in organising access and information for this assessment. Thanks must also go to the staff at the National Library of Wales, Bangor University Archives and Special collections and the Conwy Archive Service who provided much archive and cartographic material in support of this project.

6 SOURCES CONSULTED

6.1 Primary Sources

Conwy Archives, Llandudno

Ordnance Survey 1st edition 25 inch Denbighshire County Series map of 1892. Sheets III.9, III.10, III.13 and III.14

Ordnance Survey 2nd edition 25 inch Denbighshire County Series map of 1900. Sheets III.9, III.10, III.13 and III.14

Ordnance Survey 3rd edition 25 inch Denbighshire County Series map of 1912. Sheets III.9, III.10, III.13 and III.14

Tithe map of the Parish of Llansaintffraid, Glan Conwy in the county of Denbigh, 1842.

Flintshire Archives, Harwarden

Gwysaney MSS

D/GW/470 Rental of Llansantffraid, Plas Isa Demesne, Brneuryn and a tenement in Caernarfonshire 1654

D/GW/735 Map book and Schedule for the Gwasaney Estate c. 1780 [Original in NLW, seen on MF3 in Flintshire Archives]

D/GW/B/780 Assignment of Lands in the parish of Llansantffraid, Co. Denbigh 4th January 1779

National Archives

Tithe map and Apportionment of the Parish of Llansantffraid Glan Conwy 1842

Register of Aerial Photography, Welsh Assembly Government, Cardiff

Vertical Images

RAF AC31: H13:140 Frame 45 taken 16th April 1942

RAF 106G/UK.735 Frame 3020 taken 27th August 1945

543 RAF 2889 Frame 0254 taken 27th May 1964

Meridian Airmaps Ltd 11/78 Frame 070 taken 21st May 1978

6.2 Secondary Sources

Batten, A., 2011, *Understanding Corrugated Iron Buildings in North West Wales*, Birmingham University MA Dissertation.

British Geological Survey, <http://mapapps.bgs.ac.uk/geologyofbritain/home.html>.

Cadw, 2017. *Setting of Historic Assets in Wales*

Cadw, 2019, Cof Cymru – National Historic Assets of Wales, accessed online <https://cadw.gov.wales/historicenvironment/recordsv1/cof-cymru/?lang=en>

[Country Life 1959 Volume 126 seen at](#)

Davidson, A., 2000, *Historic Churches of Gwynedd, Gazetteer of Churches: Diocese of St. Asaph*, GAT Report 390.

Davidson, J & Roberts, J., 2012, *Coed Dolwyd Service Reservoir and Associated Pipework, Glan Conwy*, GAT Report 983.

Dictionary of Welsh Biography, seen at www.biography.wales/article/s-DAVI-COO-120

English Heritage, 1991, *Management of Archaeological Projects*

English Heritage, 2015, *Management of Research Projects in the Historic Environment (MoRPHE)*.

Evans, R. & Burnett, A., 2012, *Medieval & Post-Medieval Mills, Scheduling Enhancement 2011-2012 – Part 01: Report & Gazetteer*. GAT Report 1042.

Evans, R. & Smith, G., 2008, *A470 Cardiff to Glan Conwy Trunk Road: Pentrefelin to Bodnant, Conwy*. GAT Report 675.

Evans, R. & Smith, G., 2011, *Coed Dolwyd Service Reservoir & Pipeline: Llansanffraid, Conwy*. GAT Report 957.

Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs) (Version 1)

Hill & Smith Makers Ltd. 2019. <https://www.hill-smith.co.uk/en-GB/about/history/>

Natural Resources Wales Historic Landscape - https://landmap-portal.naturalresources.wales/view_survey.php?survey_id=7695

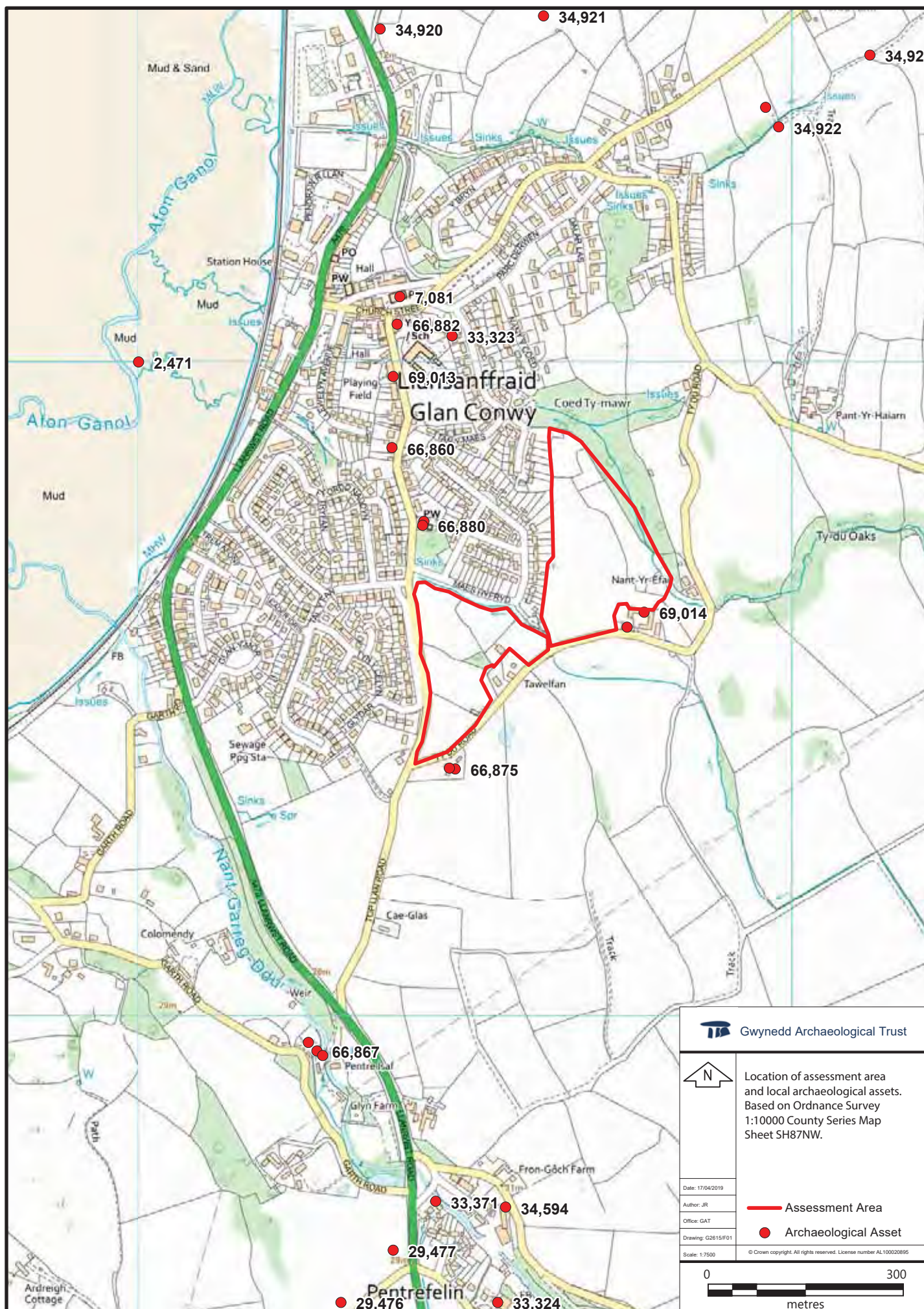
Royal Commission on Ancient and Historic Monuments of Wales 2015 *Guidelines for digital archives*

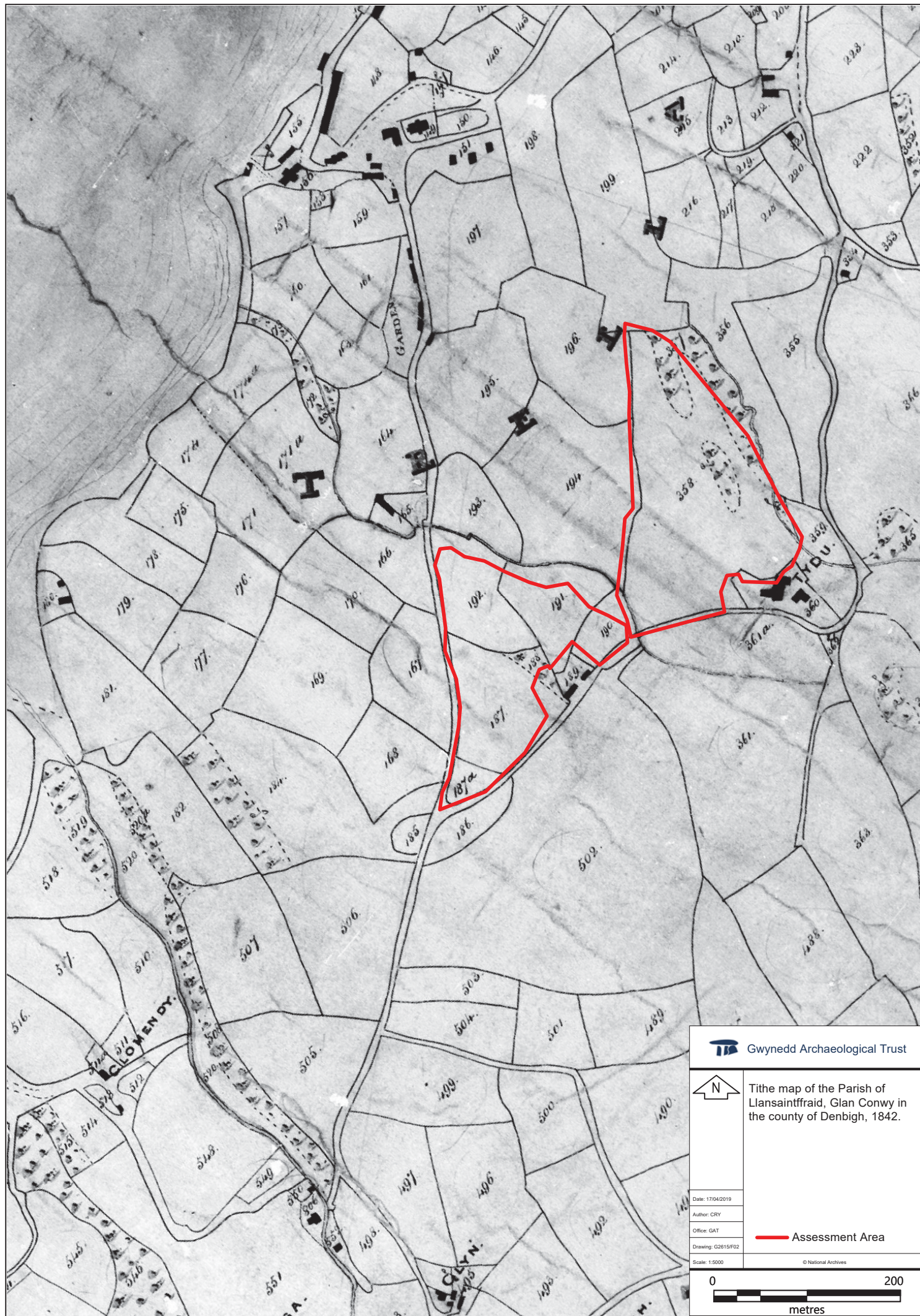
Smith, G., 2002, *Survey of Prehistoric Funerary and Ritual Monuments in Wales: West Conwy and North Gwynedd*. GAT Report 449.

Standard and Guidance for Historic Environment Desk-Based Assessment (Chartered Institute for Archaeologists, 2014).

Usher, G.A. 1964 *Gwysaney and Owston*

Voelcker, A. 2011 *Herbert Luck North: Arts and Crafts Architecture for Wales* (RCAHMMW)





Gwynedd Archaeological Trust



Tithe map of the Parish of Llansaintffraid, Glan Conwy in the county of Denbigh, 1842.

Date: 17/04/2019

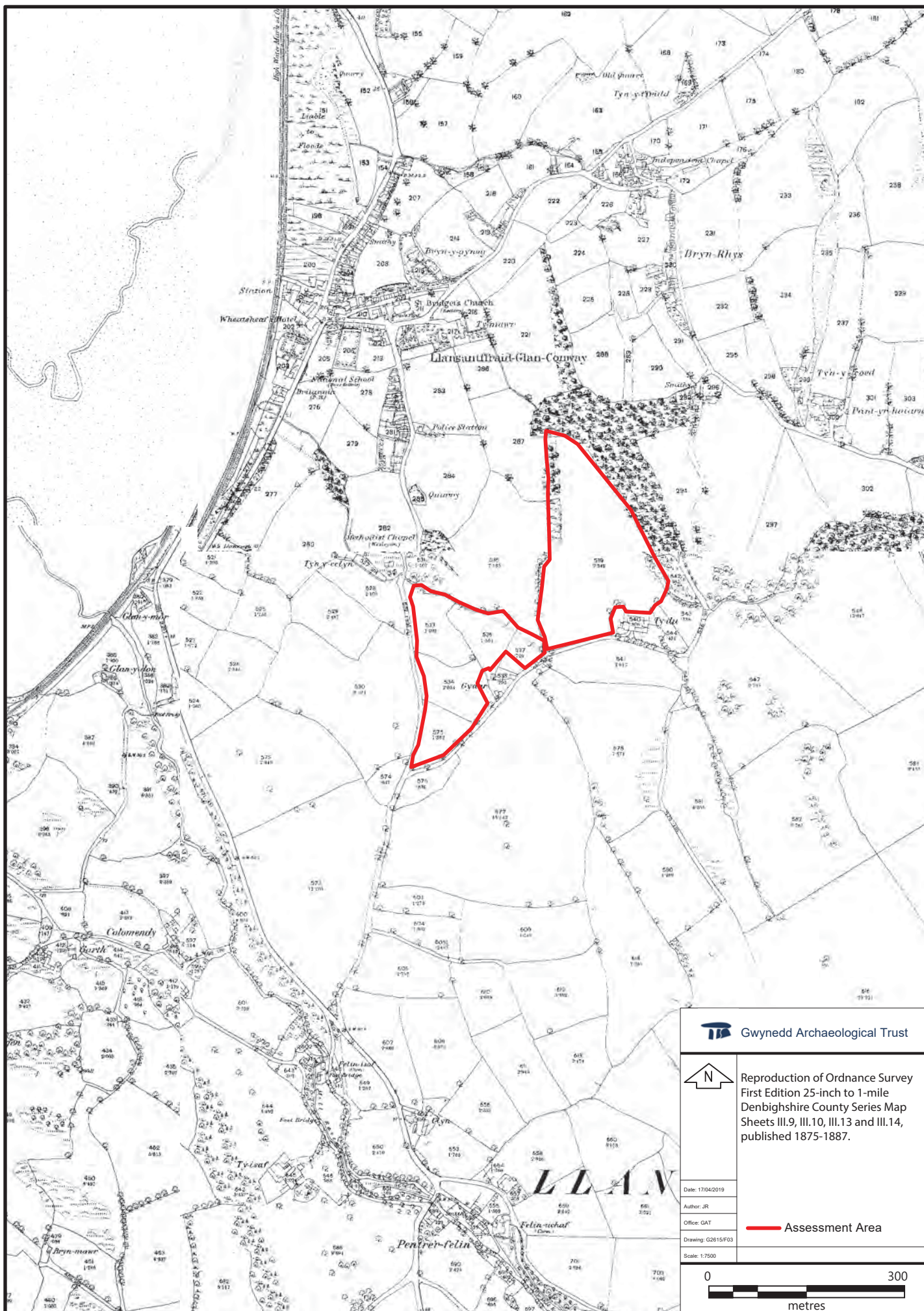
Author: CRV

Office: GAT

Drawing: G2615/F02

Scale: 1:5000

© National Archives



Gwynedd Archaeological Trust



Reproduction of Ordnance Survey
First Edition 25-inch to 1-mile
Denbighshire County Series Map
Sheets III.9, III.10, III.13 and III.14,
published 1875-1887.

Date: 17/04/2019

Author: JR

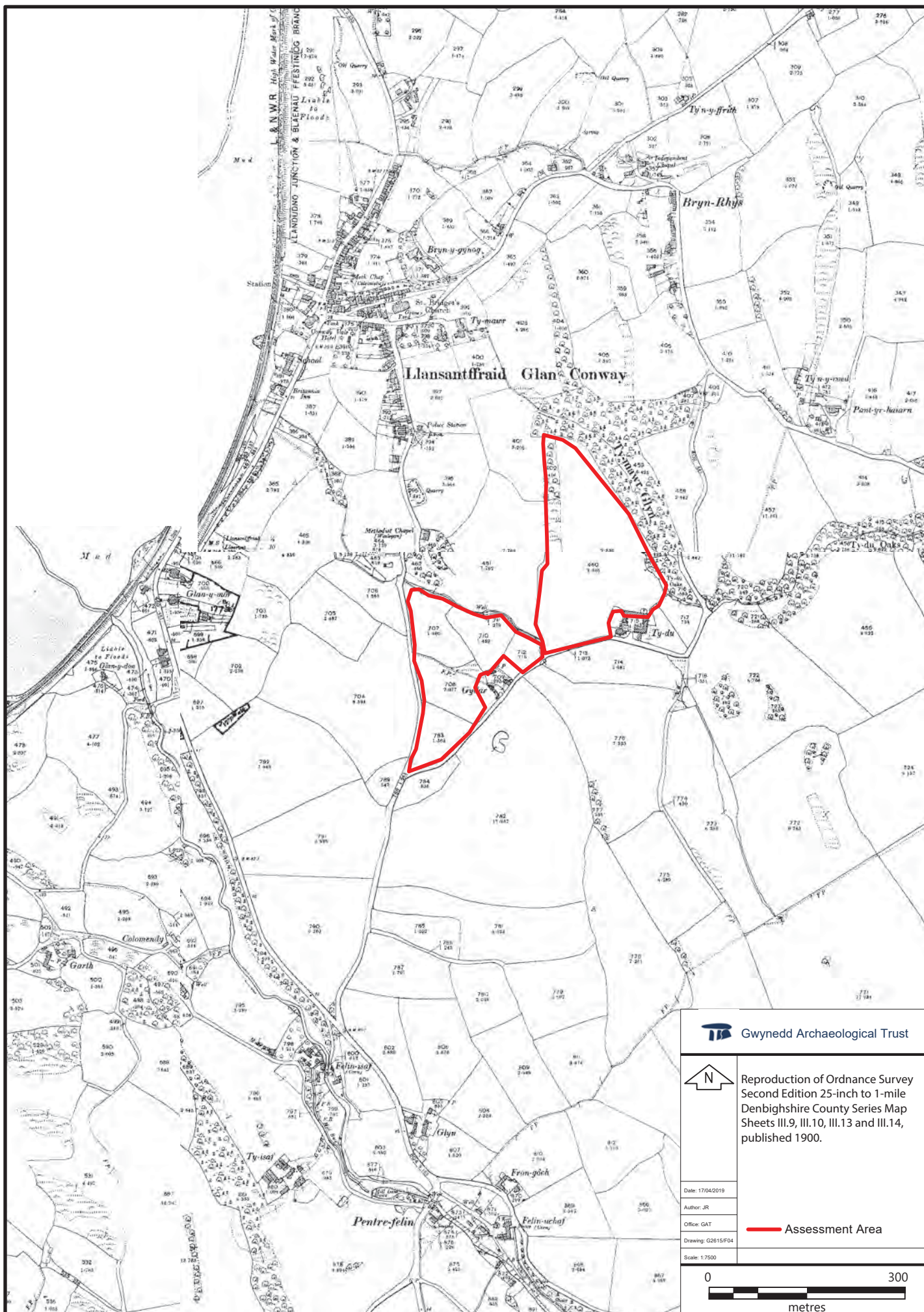
Office: GAT

Drawing: G2615/P03

Scale: 1:7500

 Assessment Area





106G/UK.735.27AUG45.F/20/3415QUN.

3020



Gwynedd Archaeological Trust

Aerial photograph of the study area.

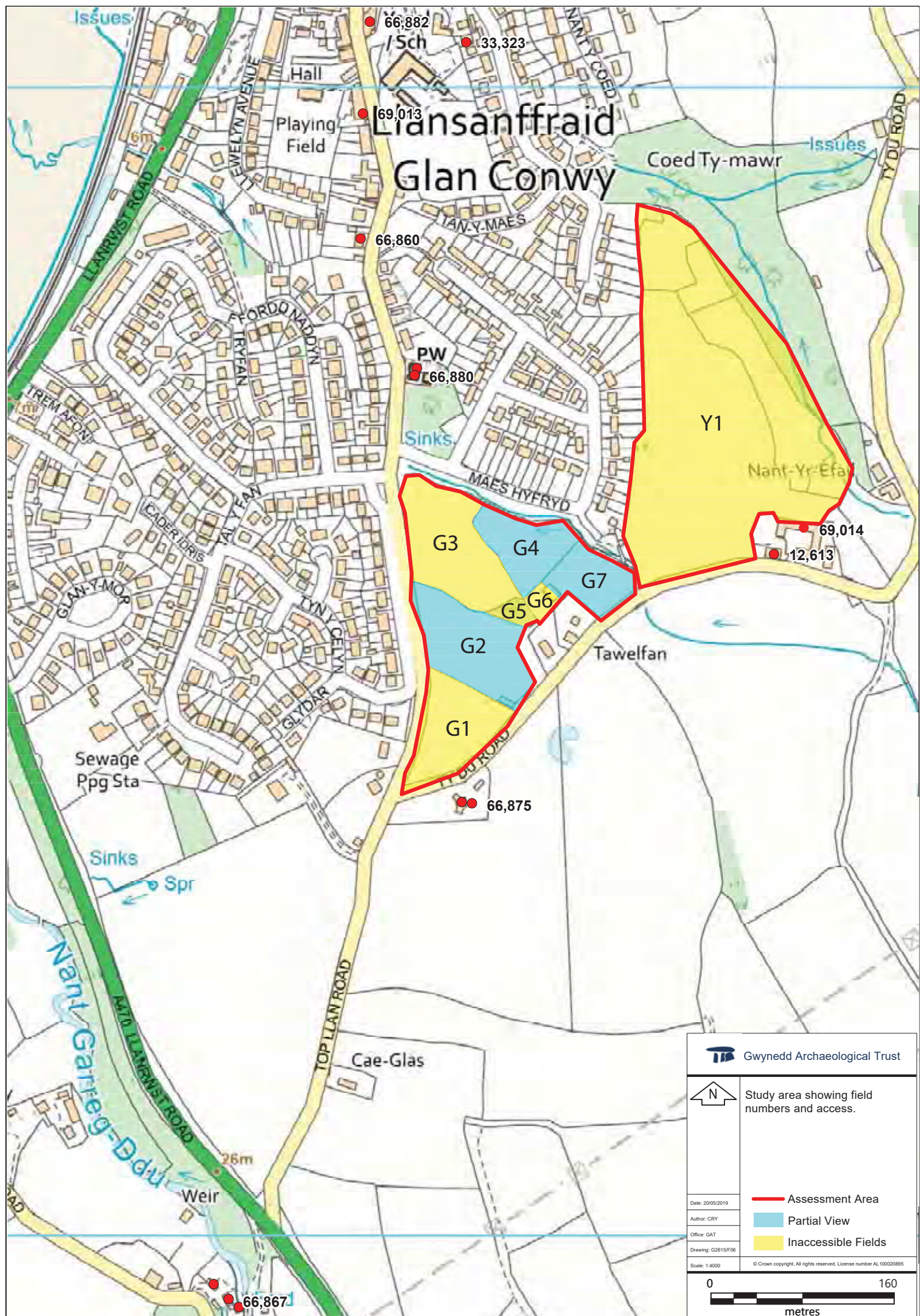
RAF 106G/UK.735 Frame 3020 taken on the 27th August 1945.

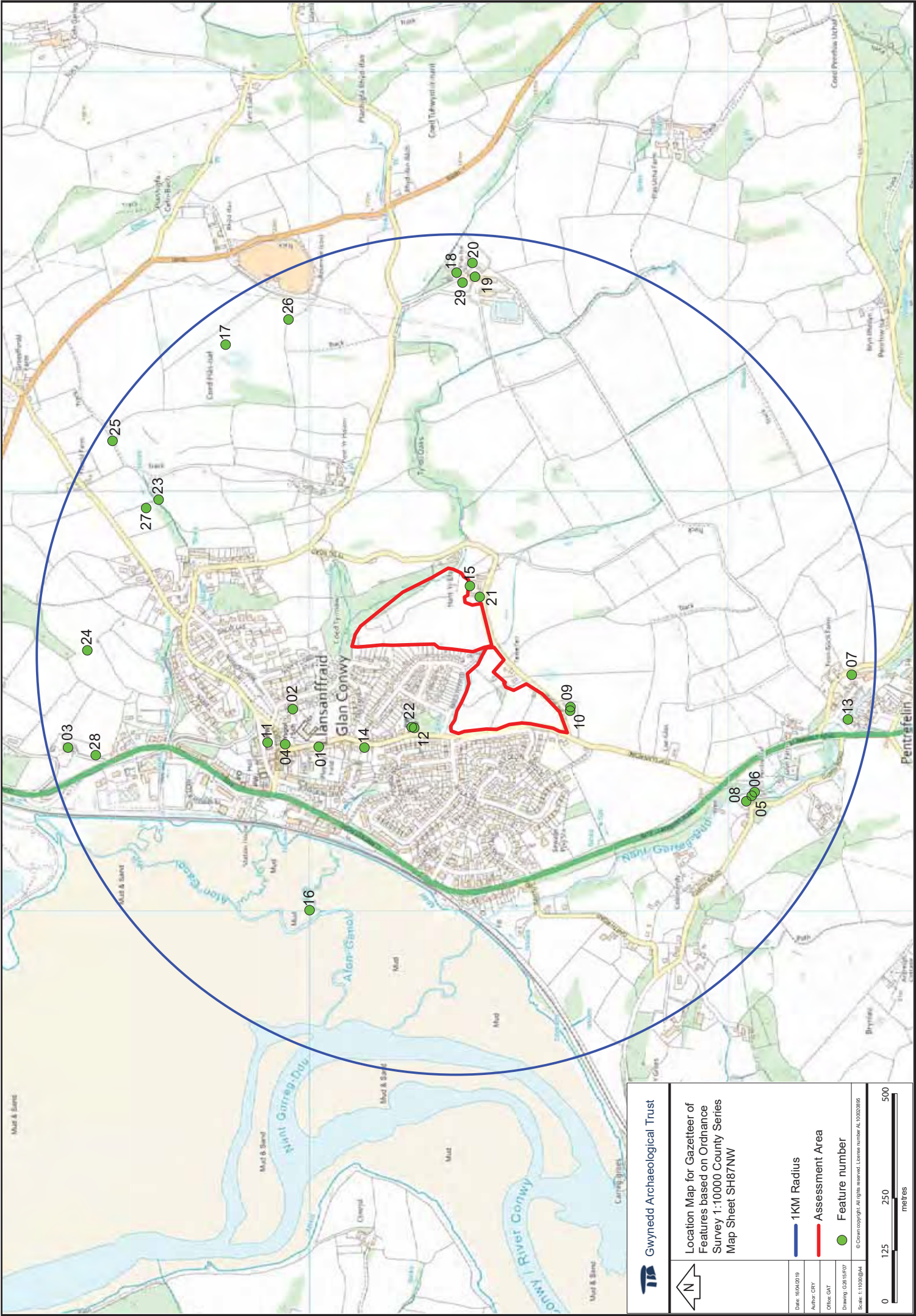
Date: 20/08/2019

Author: CRY

Officer: GAT

Drawing: 03/01/19/05










	 Gwynedd Archaeological Trust	Location Map for Gazetteer of Features based on Ordnance Survey 1:10000 County Series Map Sheet SH87NW		
	Date: 01/06/2019	 1KM Radius	 Assessment Area	 Feature number
	Author: CRY			
	Office: GAT			
Drawing: 03/15/07		© Crown copyright. All rights reserved. License number AL100020905		
Scale: 1:1000000		<div><div></div><div>0 125 250 500</div><div>metres</div></div>		



Plate 01: Access gate to G2 viewed from Ty Du Road; scale: 1x1m; (archive reference: G2615_001).



Plate 02: Farm outbuilding in field G2; no scale; (archive reference: G2615_002).



Plate 03: Main view of field G2; no scale; (archive reference: G2615_003).



Plate 04: Access gate to field G7; scale: 1x1m; (archive reference: G2615_012).



Plate 05: View of G7 from access gate with G4 in the background; no scale; (archive reference: G2615_014).



Plate 06: Possible Holloway leading to Hafod; scale: 1x1m; (archive reference: G2615_005).



Plate 07: Mature trees bounding G1 opposite entrance to Hafod; scale: 1x1m; (archive reference: G2615_006).



Plate 08: Entrance to Hafod house; scale: 1x1m; (archive reference: G2615_007).



Plate 09: Road leading to Ty Du Farmhouse; no scale; (archive reference: G2615_017).



Plate 10: Ty Du Farmhouse; scale: 1x1m; (archive reference: G2615_022).



Plate 11: Ty Du farmstead outbuildings; scale: 1x1m; (archive reference: G2615_021).



Plate 12: Ty Du Farmstead outbuildings; no scale; (archive reference: G2615_023).



Plate 13: Ty Du Farmstead outbuildings & barn; scale: 1x1m; (archive reference: G2615_025).

APPENDIX I

Reproduction of Gwynedd Archaeological Trust written scheme of investigation

MAES Y FELIN, GLAN CONWY
(G2615)

WRITTEN SCHEME OF INVESTIGATION FOR
ARCHAEOLOGICAL ASSESSMENT

Prepared for Brenig Construction

April 2019



Ymddiriedolaeth Archaeolegol Gwynedd
Gwynedd Archaeological Trust

All GAT staff should sign their copy to confirm the project specification is read and understood and retain a copy of the specification for the duration of their involvement with the project. On completion, the specification should be retained with the project archive:

Name

Signature

Date

MAES Y FELIN, GLAN CONWY (G2615)

WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL ASSESSMENT

Prepared for *Brenig Construction*, April 2019

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	Location of assessment area (outlined red) and local archaeological assets. Based on Ordnance Survey 1:10000 County Series Map Sheet SH87NW. Scale 1:17500 @ A4. © Crown Copyright. All Rights Reserved. License Number AI100020895.	19
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Red. Scale 1:7500@A4.....22

1 INTRODUCTION

Gwynedd Archaeological Trust (GAT) has been asked by Brenig Construction to prepare a written scheme of investigation for an archaeological assessment in advance of a proposed residential development at Maes y Felin, Glan Conwy (NGR SH80527552; postcode: LL28 5NW; Figure 01). The assessment area measures 12.28ha and includes three irregular shaped plots incorporating agricultural land.

The assessment will conform to the guidelines specified in the Chartered Institute for Archaeologists *Standard and Guidance for Historic Environment Desk-Based Assessment* (Chartered Institute for Archaeologists, 2014). The format of this written scheme of investigation corresponds to the requirements of section 2.3 of MoRPHE (English Heritage 2015) and to MAP2 (English Heritage, 1991, *Management of Archaeological Projects*). The assessment is scheduled to be completed in May 2019.

GAT is certified to ISO 9001:2015 and ISO 14001:2015 (Cert. No. 74180/B/0001/UK/En) and is a Registered Organisation with the Chartered Institute for Archaeologists and a member of the Federation of Archaeological Managers and Employers (FAME).

1.1 Monitoring Arrangements

The archaeological mitigation will be monitored by the Gwynedd archaeological Planning Service (GAPS); the content of this WSI and all subsequent reporting by GAT must be approved by GAPS prior to final issue.

1.2 Historic Environment Record

In line with the Gwynedd Historic Environment Record (HER) requirements, the HER will be contacted at the onset of the project to ensure that any data arising is formatted in a manner suitable for accession to the HER and follows the guidance set out in *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (The Welsh Archaeological Trusts, 2018). The HER will be informed of the project start date, location including grid reference, estimated timescale for the work, and further relevant information associated with the project.

The GAT HER Enquiry Number for this project is GATHER1095 and the Event PRN is 45423. The GAT HER will also be responsible for supplying Primary Reference Numbers (PRN) for any new assets identified and recorded. On completion of the report, GAT will be responsible for preparing a bilingual event summary, as well as an individual summary of any new asset/PRN identified; these summaries will be submitted to the HER along with the report and the summaries will be prepared in accordance with the formats defined in *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)*.

2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

A brief examination of the regional Historic Environment Record does not show any known assets within the confines of the assessment plots and the local area is mostly characterised by post-medieval activity. To the immediate south of the central plot is a “butterfly-plan” villa of c.1930 date (Primary Reference Number (PRN) 66870; NGR SH80477537) along with a contemporary garage (PRN 66875; NGR SH80487537); to the immediate south of the eastern plot is a Grade II Listed farmhouse (ref. 3649; NGR SH80747559) and associated ranges (ref. 17029; NGR SH80777561), both built in 1857. A mill and associated buildings are located c.90m southwest of the westernmost plot, along the western bank of Nant Garreg Ddu River ((Figure 01). The Felin Isaf mill is located next to a ford and the extant buildings include a Grade II* Listed former oat kiln (ref.: 17042; NGR SH80267495), clover mill (ref.: 17320; NGR SH80277494) and the mill itself (ref.: 3630; NGR SH80287493). The buildings date from the seventeenth to nineteenth centuries.

A brief examination of the 25-inch to 1 mile Ordnance Survey maps of the area (Sheets III.9, III.10, III.13 and III.14) show little difference in land use and apportionment and the three development plots are all in use as improved agricultural land, as they are at present. The only visible difference between the three plots is the addition of an east west field boundary in the westernmost plot between the publication of the First and Second Editions (1875 and 1900 respectively cf. Figures 02 and 03).

No other archaeological project work is listed within the HER as having been completed within the assessment plots, but GAT completed an assessment along the A470 road to the immediate southwest for the proposed A470 Trunk Road Pentrefelin to Bodnant Improvement Scheme (GAT Report 675). The report characterised that assessment area as “representing a farming landscape with a field pattern little changed from the 18th century, but with some fragments of landscape and possible trackways surviving from earlier periods” (ibid. 04).

3 METHODOLOGY

3.1 Assessment (Desktop Study)

A desk-based assessment is defined as “a programme of study of the historic environment within a specified area or site on land, the inter-tidal zone or underwater that addresses agreed research and/or conservation objectives. It consists of an analysis of existing written, graphic, photographic and electronic information in order to identify the likely heritage assets, their interests and significance and the character of the study area, including appropriate consideration of the settings of heritage....Significance is to be judged in a local, regional, national or international context as appropriate” (ClfA 2014, 4).

The desk-based assessment will involve a study of the following resources:

1. The regional Historic Environment Register ((HER) Gwynedd Archaeological Trust, Craig Beuno, Ffordd y Garth, Bangor, Gwynedd LL57 2RT) will be examined for information concerning the study area. This will include an examination of the core HER, the 1:2500 County Series Ordnance Survey maps and any secondary information held within the HER. All identified assets will be mapped, described and added to a gazetteer of sites and the relative importance of any assets defined;
2. The National Monuments Record of Wales (Royal Commission on the Ancient and Historical Monuments of Wales, Plas Crug, Aberystwyth SY23 1NJ) will be checked for assets additional to the HER;
3. Aerial photographs from the National Monuments Record of Wales (Royal Commission on the Ancient and Historical Monuments of Wales, National Monuments Record of Wales, Plas Crug, Aberystwyth SY23 1NJ) will be examined for potential assets;
4. An on-line catalogue search of the National Library of Wales (Penglais Rd, Aberystwyth SY23 3BU) will be completed;
5. Archive data, including primary and secondary sources, historic maps and estate maps will be examined at the regional archives (Gwasanaeth Archifau Conwy Archive Service, Old Board School, Lloyd St, Llandudno LL30 2YG). The examination of the archive data will include historic mapping including the local tithe map and schedule;
6. If available for the assessment area, Light Detection and Ranging (LiDAR) data will be examined from the Lle Geo-Portal at <http://lle.gov.wales/home> for information on potential surface features using digital terrain modelling and digital surface modelling.

3.2 Walkover Survey

A walkover survey will form an integral part of the assessment and will incorporate the highlighted plots identified in Figure 01. All known and new archaeological features on the ground will be located and described on GAT pro-formas; the sites will then be added to a report gazetteer and their relative importance defined. The potential for sub-surface archaeology will be estimated and defined.

A photographic record will be maintained in RAW format using a digital SLR set to maximum resolution (Nikon D3000; resolution: 3,872 × 2,592 [10.2 effective megapixels]) and a photographic metadata table will be completed and included in the report. Photographic images will be archived in TIFF format; the archive numbering system will start from **G2615_001**. A handheld GPS unit will also be used during the walkover survey.

3.3 Assessment (Gazetteer)

A gazetteer will be compiled for any existing and newly identified sites within the assessment area, based on information sourced from the desk based assessment and walkover; the gazetteer will be prepared in the following format and will include:

Feature Number	
Site name	
PRN number	
Grid reference	
Period	
Site type	
Assessment category	
Description	
Impact	
Recommendation for further assessment/evaluation	
Recommendation for mitigatory measures	

The following categories will be used to define the assessment category of the archaeological asset:

Category A - Sites of National Importance.

Scheduled Monuments, Listed Buildings of grade II* and above, as well as those that would meet the requirements for scheduling (ancient monuments) or listing (buildings) or both. Sites that 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.

Grade II listed buildings and 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 that are of minor importance or are 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, the importance of which is as yet undetermined and which will require further work before they can be allocated to categories A - D are temporarily placed in this category, with specific recommendations for further evaluation. In this report several sites of unknown potential have been allocated to this category.

The impact of the proposed works on any asset will be identified using the following impact criteria, defined either as *none, slight, unlikely, likely, significant, considerable or unknown* as follows:

None:

There is no construction impact on this asset.

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 asset, e.g. part of a trackway or field bank.

Unlikely:

This category indicates sites that fall within the band of interest but are unlikely to be directly affected. This includes sites such as standing and occupied buildings at the margins of the band of interest.

Likely:

Sites towards the edges of the study area, which may not be directly affected, but are likely to be damaged in some way by the construction activity.

Significant:

The partial removal of an asset affecting its overall integrity. Assets falling into this category may be linear features such as roads or tramways where the removal of part of the feature could make overall interpretation problematic.

Considerable:

The total removal of an asset or its partial removal which would effectively destroy the remainder of the site.

Unknown:

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

3.4 Data processing and report compilation

Following completion of the stages outlined above, a report will be produced incorporating the following:

1. Front cover;
2. Inner cover;
3. Figures and Plates List
4. Non-technical summary;
5. Introduction;
6. Methodology
 - a. Desk-based assessment
7. Results
 - a. Desk based assessment
 - i. Location and geological summary
 - ii. Statutory and non-statutory designations
 - iii. Environmental remains and soil morphology
 - iv. Historical and archaeological background
 - v. Cartographic evidence
 - vi. Artefact potential
 - vii. Aerial photographs and LiDAR;
 - b. Gazetteer of features
8. Conclusions and recommendations
 - a. Conclusion
 - b. Table of sites and recommendations
9. Acknowledgements
10. Bibliography
 - a. Primary sources
 - b. Secondary sources
11. Figures; inc.:
 - location plan;
 - historic mapping;
 - location plan with identified features
12. Appendix I (approved written scheme of investigation)
13. Appendix II (Sites listed on GAT Historic Environment Record)
14. Appendix III (Definition of mitigation terms)
15. Appendix IV Photographic metadata (walkover survey)

Illustrations will include plans of the location of the study area and archaeological sites. Historical maps, when appropriate and if copyright permissions allow, will be included.

A full archive including plans, photographs, written material and any other material resulting from the project will be prepared. The archaeological assessment outlined in this written scheme of investigation will be submitted in draft format in May 2019; a final report will be submitted to the Historic Environment within six months of submitting the draft report (September 2019).

The following dissemination will apply:

- A paper report(s) plus digital report(s) will be provided to the client and GAPS (draft report then final report);
- A paper report plus a digital report will be provided to the regional Historic Environment Record, Gwynedd Archaeological Trust; this will be submitted within six months of project completion (final report only), along with any relevant, digital information such as the project database, GIS table(s) and photographs. All digital datasets submitted will conform to the required standards set out in *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (Version 1);
- A digital report and archive (including photographic and drawn) data will be provided to Royal Commission on Ancient and Historic Monuments, Wales (final report only), in accordance with the *RCAHMW Guidelines for Digital Archives Version 1*. Digital information will include the photographic archive and associated metadata;

4 PERSONNEL

The project will be managed by John Roberts, Principal Archaeologist GAT Contracts Section. The assessment will be completed by a project archaeologist who will have responsibility for completing the desk based assessment, maintaining the site archive, liaising with GAPS and *Brenig Construction* and submitting the draft report and final report. The project manager will be responsible for reviewing and approving the report prior to submission.

5 INSURANCE

5.1 Public/Products Liability

Limit of Indemnity- £5,000,000 any one event in respect of Public Liability

INSURER Aviva Insurance Limited

POLICY TYPE Public Liability

POLICY NUMBER 24765101CHC/UN/000375

EXPIRY DATE 21/06/2019

5.2 Employers Liability

Limit of Indemnity- £10,000,000 any one occurrence.

The cover has been issued on the insurers standard policy form and is subject to their usual terms and conditions. A copy of the policy wording is available on request.

INSURER Aviva Insurance Limited

POLICY TYPE Employers Liability

POLICY NUMBER 24765101 CHC / UN/000375

EXPIRY DATE 21/06/2019

5.3 Professional Indemnity

Limit of Indemnity- £5,000,000 in respect of each and every claim

INSURER Hiscox Insurance Company Limited

POLICY TYPE Professional Indemnity

POLICY NUMBER 9446015

EXPIRY DATE 22/07/2019

6 SOURCES CONSULTED

1. English Heritage, 1991, Management of Archaeological Projects
2. English Heritage, 2015, Management of Research Projects in the Historic Environment (MoRPHE).
3. *Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)* (Version 1)
4. https://landmap-portal.naturalresources.wales/view_survey.php?survey_id=7695
5. Ordnance Survey (Sheets III.9, III.10, III.13 and III.14, First to Third Edition 25-inch to 1 mile)
6. Royal Commission on Ancient and Historic Monuments of Wales 2015 *Guidelines for digital archives*
7. Standard and Guidance for Historic Environment Desk-Based Assessment (Chartered Institute for Archaeologists, 2014).

FIGURE 01

Location of assessment area (outlined red) and local archaeological assets. Based on Ordnance Survey 1:10000 County Series Map Sheet SH87NW. Scale 1:17500 @ A4. © Crown Copyright. All Rights Reserved. License Number AI100020895.

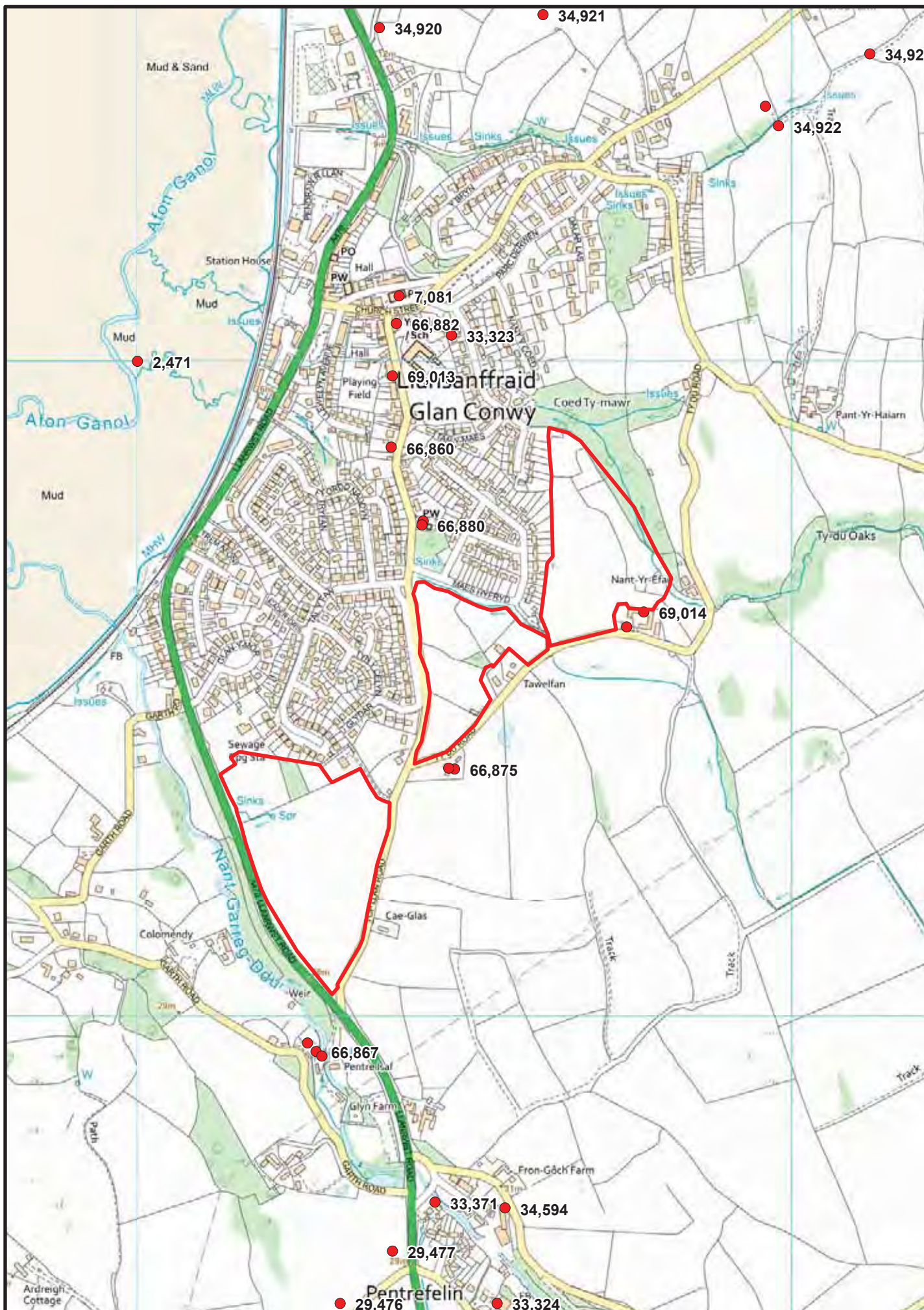


Figure 01: Location of assessment area (outlined red) and local archaeological assets.
 Based on Ordnance Survey 1:10000 County Series Map Sheet SH87NW. Scale 1:17500 @ A4.
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FIGURE 02

Reproduction of Ordnance Survey First Edition 25-inch to 1-mile Denbighshire County Series Map Sheets III.9, III.10, III.13 and III.14, published 1875-1887. Assessment Area highlighted Red. Scale 1:7500@A4

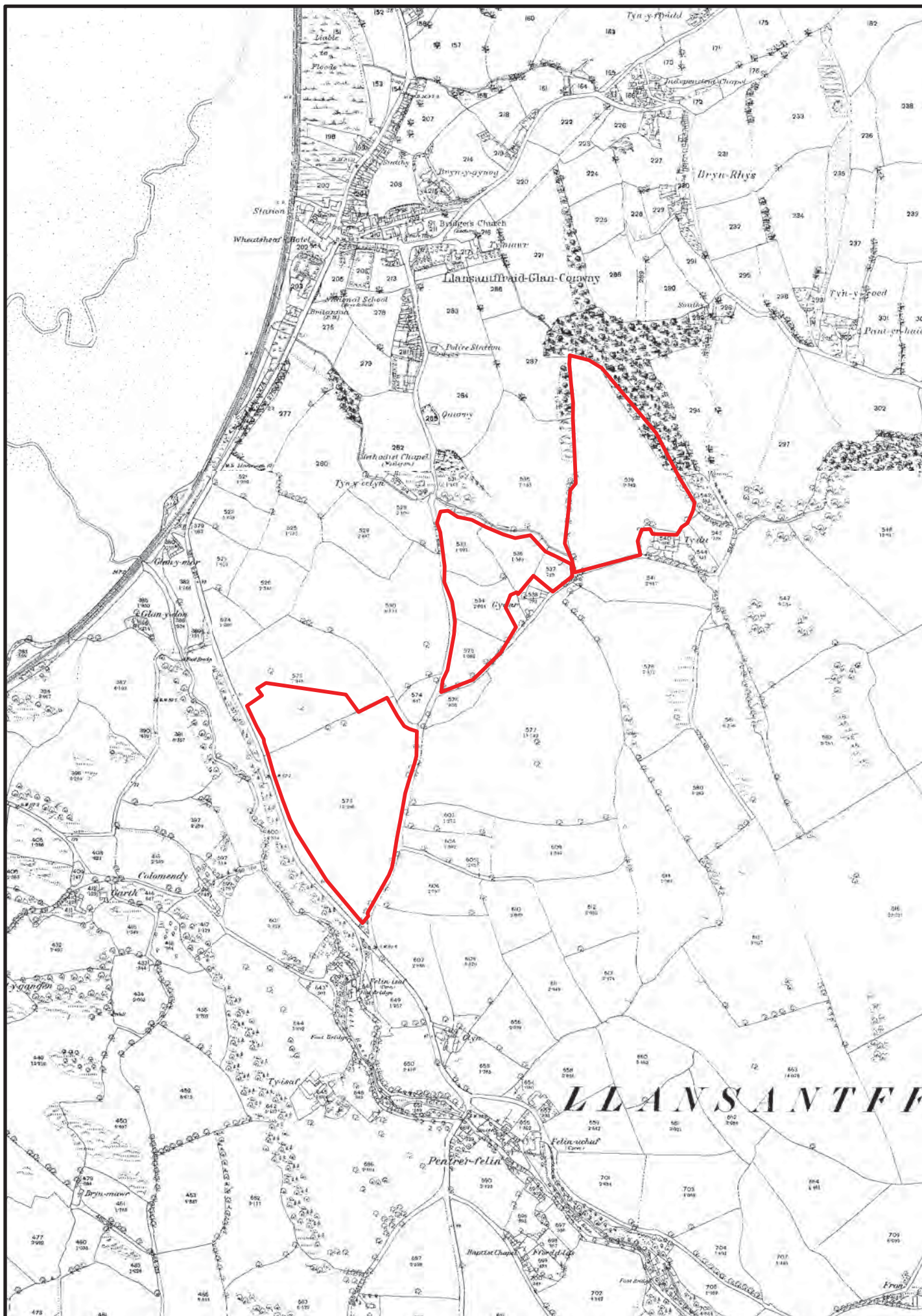


FIGURE 02: Reproduction of Ordnance Survey First Edition 25-inch to 1-mile Denbighshire County Series Map Sheets III.9, III.10, III.13 and III.14, published 1875-1887. Assessment Area highlighted Red. Scale 1:7500@A4

FIGURE 03

Reproduction of Ordnance Survey Second Edition 25-inch to 1-mile Denbighshire County Series Map Sheets III.10, III.13 and III.14, published 1900. Assessment Area highlighted Red. Scale 1:7500@A4

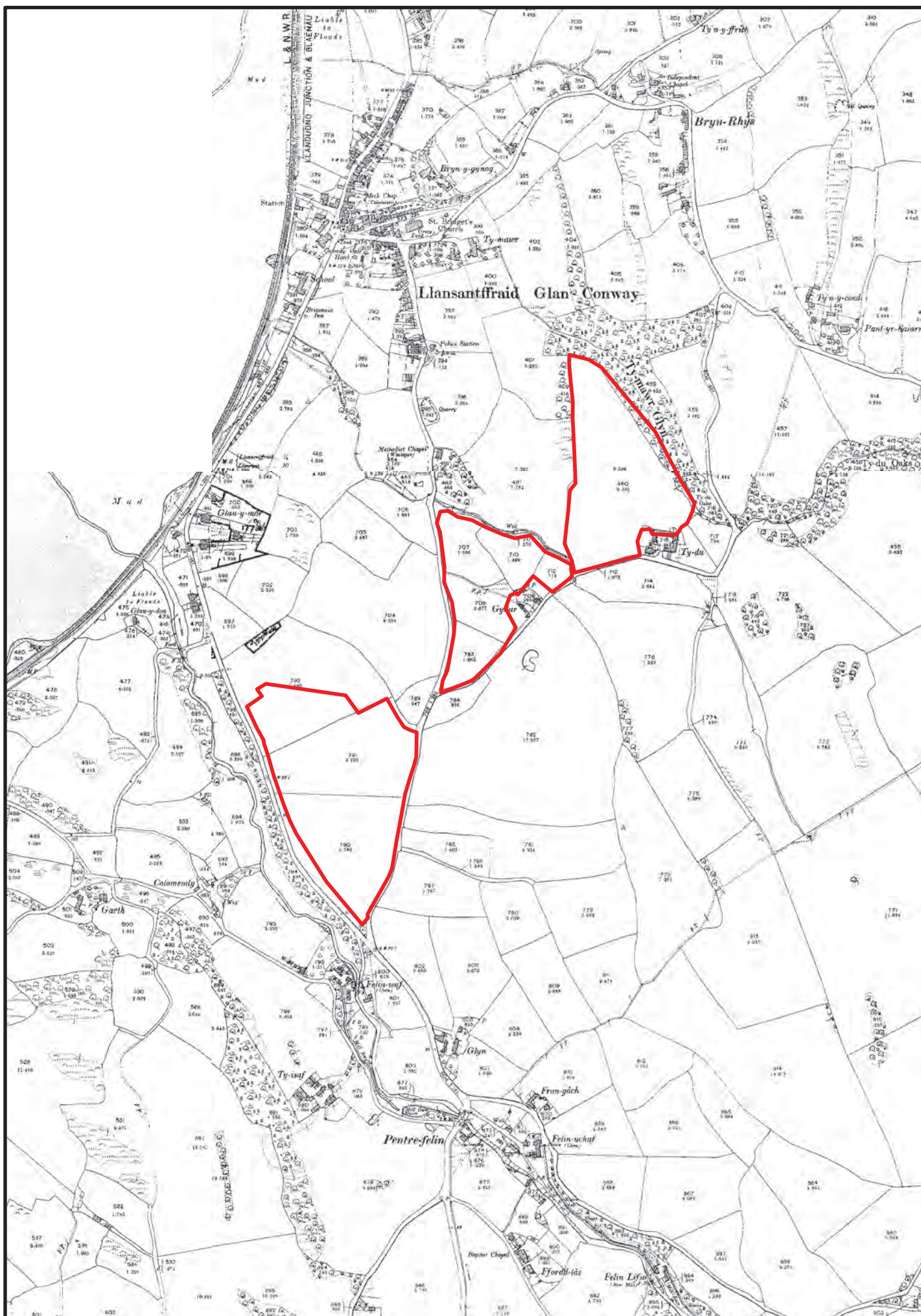


FIGURE 03: Reproduction of Ordnance Survey Second Edition 25-inch to 1-mile Denbighshire County Series Map Sheets III.10, III.13 and III.14, published 1900. Assessment Area highlighted Red. Scale 1:7500@A4

FIGURE 04

Reproduction of Ordnance Survey Second Edition 25-inch to 1-mile Denbighshire County Series Map Sheets III.10, III.13 and III.14, published 1913. Assessment Area highlighted Red. Scale 1:7500@A4

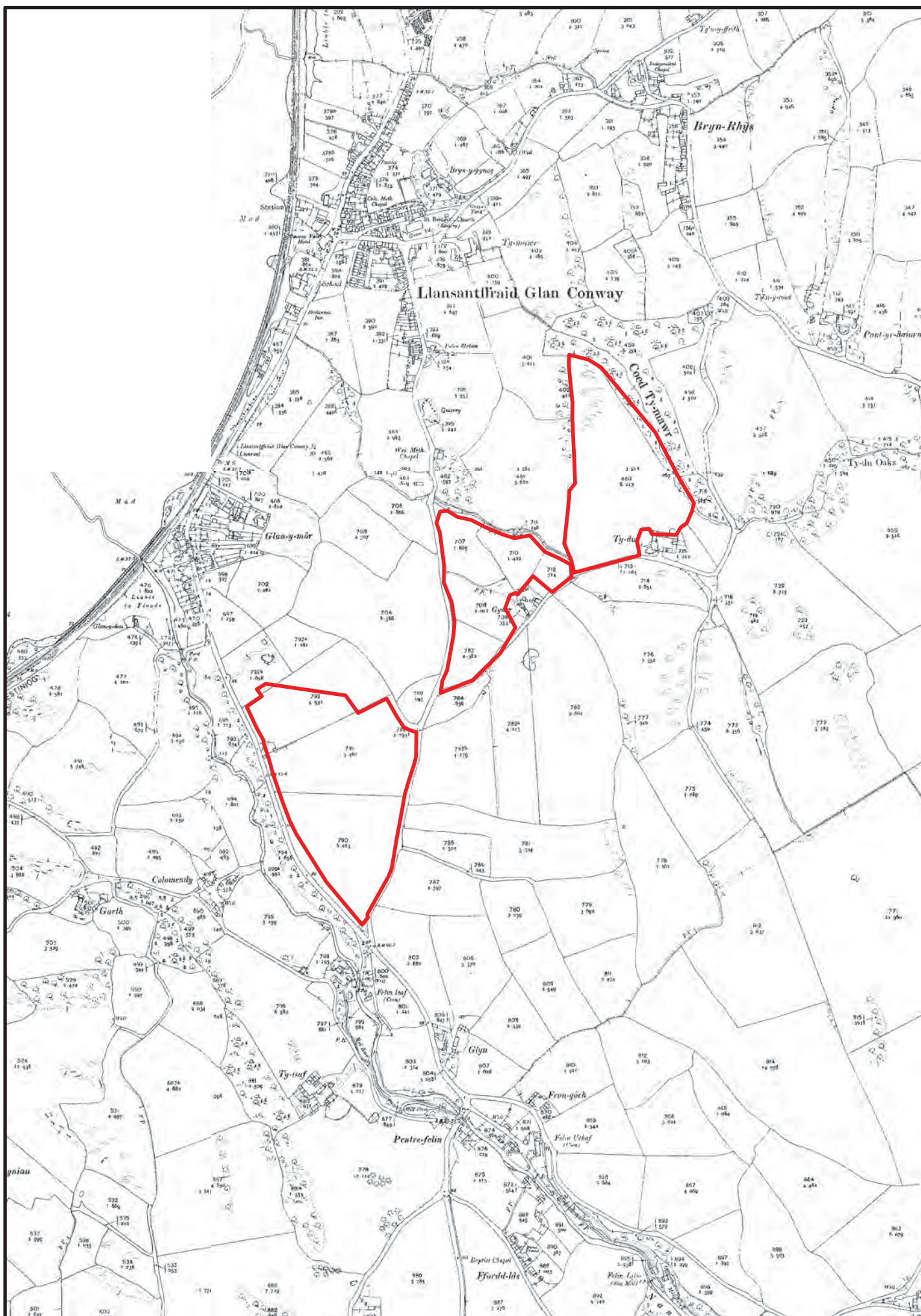


FIGURE 04: Reproduction of Ordnance Survey Second Edition 25-inch to 1-mile Denbighshire County Series Map Sheets III.10, III.13 and III.14, published 1913. Assessment Area highlighted Red. Scale 1:7500@A4

APPENDIX II

Gwynedd Archaeological Trust photographic metadata

PHOTO RECORD NUMBER	DESCRIPTION	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO	DATE OF CREATION OF DIGITAL PHOTO	ORIGINATING ORGANISATION	PLATE
G2615_001	View of gate access from Ty Du road	SE	1x1m	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	01
G2615_002	View of field from gate	E	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	02
G2615_003	View of field from gate	SE	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	03
G2615_004	View of field from gate	SE	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_005	View towards Hafod down Ty Du Road	NE	1x1m	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	06
G2615_006	View of large tree lined border opposite Hafod Bordering G1	NE	1x1m	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	07
G2615_007	Gated access to Hafod	NNE	1x1m	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	08
G2615_008	Gated access to Hafod	W	1x1m	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_009	Boundary between Ty Du Road and G1 opposite Hafod entrance	SSE	1x1m	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_010	Hafod from Ty Du Road	N	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_011	View up Ty Dy Road to Ty Du Farm from G7 area	W	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	Cover
G2615_012	Access gate to G7 from Ty Du Road	SE	1x1m	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	04
G2615_013	View of G7	E	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_014	View of G7	SE	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	05

PHOTO RECORD NUMBER	DESCRIPTION	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO	DATE OF CREATION OF DIGITAL PHOTO	ORIGINATING ORGANISATION	PLATE
G2615_015	View of G7	S	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_016	High zoom view towards G4 from gate at G7	SE	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_017	Ty Du farm from Ty Du Road	W	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	09
G2615_018	Ty Du farm from Ty Du Road	W	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_019	Ty Du farm from Ty Du Road	ESE	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_020	Fields opposite Ty Du farmstead (not development area)	ENE	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_021	Outbuilding and entrance at Ty Du Farmstead	S	1x1m	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	11
G2615_022	Ty Du farmhouse	SE	1x1m	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	10
G2615_023	Outbuilding and Barn at Ty Du	SW	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	12
G2615_024	Outbuilding and Barn at Ty Du	SE	1x1m	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_025	Outbuilding and Barn at Ty Du and access gate	S	1x1m	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_026	View opposite farm (not development area)	E	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_027	View of G7 from cut through to estate to the north	NE	1x1m	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_028	View of G7 from cut through to estate to the north	ESE	1x1m	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	

PHOTO RECORD NUMBER	DESCRIPTION	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO	DATE OF CREATION OF DIGITAL PHOTO	ORIGINATING ORGANISATION	PLATE
G2615_029	Lane/cut through to Ty Du Road from estate showing Bridge over stream	N	1x1m	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_030	View of G4 from estate	NE	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_031	Gate access from Top Llan Road	SE	1x1m	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_032	View of O1 from gate	NNE	1x1m	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_033	View of O1 from gate	SSW	1x1m	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_034	View across O1 from E boundary	NNE	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_035	View across O1 from E boundary	ENE	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_036	View across O1 from E boundary	ESE	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_037	View across O1 from E boundary	SSE	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_038	View across O1 from E boundary	SSW	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_039	Evidence of recent excavation	E	1x1m	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_040	View over field O1 showing patches indicating recent excavation spots	E	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_041	Access gate NE edge of O1	W	1x1m	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_042	Stone gate post NE edge of O1	W	1x1m	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	

PHOTO RECORD NUMBER	DESCRIPTION	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO	DATE OF CREATION OF DIGITAL PHOTO	ORIGINATING ORGANISATION	PLATE
G2615_043	View over O1 from NE corner	SSE	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_044	View over O1 from NE corner	ESE	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_045	View over O1 from NE corner	E	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_046	View over O1 from NE corner	NE	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_047	View over O1 from NE corner	NNE	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_048	View over O1 from top of rock outcrop NE corner	NNE	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_049	View over O1 from top of rock outcrop NE corner	NE	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_050	View over O1 from top of rock outcrop NE corner	E	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_051	View over O1 from top of rock outcrop NE corner	ESE	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_052	View over O1 from top of rock outcrop NE corner	SE	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_053	View over O1 from top of rock outcrop NE corner	SSE	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_054	View over O1 from top of rock outcrop NE corner	SSW	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_055	View over O1 from top of rock outcrop NE corner	WSW	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_056	View over O1 from top of rock outcrop NE corner	WNW	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	

PHOTO RECORD NUMBER	DESCRIPTION	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO	DATE OF CREATION OF DIGITAL PHOTO	ORIGINATING ORGANISATION	PLATE
G2615_057	Exposed bedrock halfway down steep SW side of outcrop	W	1x1m	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_058	View from base of rock outcrop	W	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_059	Excavation evidence	SE	1x1m	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_060	View over rock outcrop - shorter vegetation	S	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_061	Access gate from A470	ENE	1x1m	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_062	View of W boundary with possible old ditch along boundary	NNW	1x1m	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_063	View across O1 from A470 access gate	NW	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_064	View across O1 from A470 access gate	W	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_065	View across O1 from A470 access gate	WSW	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_066	View across O1 from A470 access gate	SW	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_067	View across O1 from A470 access gate	SSE	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_068	View of O2 from access gate on A470	NNW	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_069	View of O2 from access gate on A470	NW	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_070	View of O2 from access gate on A470 - O3 in distance	WSW	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	

PHOTO RECORD NUMBER	DESCRIPTION	VIEW FROM	SCALE(S)	CREATOR OF DIGITAL PHOTO	DATE OF CREATION OF DIGITAL PHOTO	ORIGINATING ORGANISATION	PLATE
G2615_071	View over O2 from gate	SSW	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_072	View over O2 from gate	S	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_073	High zoom view of O3 from O2 access gate	WSW	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_074	Signs of recent excavations	SW	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	
G2615_075	Signs of recent excavations	W	-	Carol Ryan Young	17/05/2019	Gwynedd Archaeological Trust	

APPENDIX III

Categories of importance

Category A - Sites of National Importance.

Scheduled Monuments, Listed Buildings of grade II* and above, as well as those that would meet the requirements for scheduling (ancient monuments) or listing (buildings) or both. Sites that 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.

Grade II listed buildings and 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 that are of minor importance or are 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, the importance of which is as yet undetermined and which will require further work before they can be allocated to categories A - D are temporarily placed in this category, with specific recommendations for further evaluation. In this report several sites of unknown potential have been allocated to this category.



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