

# TOMEN FAWR SETTING IMPACT ASSESSMENT

Stages 1 and 2





# Tomen Fawr Setting Impact Assessment

## Stages 1 and 2

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# 1 INTRODUCTION

Gwynedd Archaeological Trust (GAT) has been commissioned by Mr Harri Parry to prepare a Setting Impact Assessment in advance of the application for planning permission for a proposed loading and unloading facility, a new waste transfer area and an associated access road, at Glanllynnau Farm, Chwilog, Gwynedd (NGR SH45543734; Figure 01). This assessment is part of a pre-planning consultation with Gwynedd Council and has been undertaken further to feedback from Cadw. In correspondence with Gwynedd Council in March 2017 (ref.: Y17/000175), Cadw stated that the proposed access road will be within 170m of the Scheduled Monument CN031 Tomen Fawr (Medieval Ringwork), with the base for the crane within 300m. Due to the proximity of the Scheduled Monument and the limited vegetation screening within the proposed development area, a report assessing the impact of the development on the setting of the Scheduled Monument is required as part of the planning application. The layout of the proposed development has changed since March 2017, and this report is based up on the most recent proposal as supplied by Mr Parry in August 2018. The methodology used for this impact assessment has been approved by Cadw and is in accordance with the guidance set out in Setting of Historic Assets in Wales (Cadw, 2017), a four stage assessment process (cf. sec. 3.0). This report contains the findings of stages 1 and 2 for review and approval by Cadw before the assessment proceeds to stages 3 and 4.

The first two stages of the Setting Impact Assessment were completed in September 2018 and were undertaken in accordance with the following guidance:

- Guidelines for digital archives (Royal Commission on Ancient and Historic Monuments of Wales, 2015).
- Historic Environment Record (HER) Guidelines for Archaeological Contractors (Version 1.3; draft) (Gwynedd Archaeological Trust, 2014);
- Management of Archaeological Projects (English Heritage, 1991);
- Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide (Historic England, 2015);
- Planning Policy Wales (Welsh Government 2016);
- Setting of Historic Assets in Wales (Cadw, 2017); and
- Standard and Guidance for Desk-Based Assessment (Chartered Institute for Archaeologists, 2014).

Gwynedd Archaeological Trust 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).

This project is monitored by Cadw and the content of this GAT report must be approved by Cadw prior to final issue.

The Historic Environment Record (HER) Event Primary Reference Number for this project is 45279; the HER Enquiry number is GATHER962.



## **2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND**

As specified on *Archwilio*, scheduled monument CN031 is a medieval ring motte without a bailey, defended by a ditch on all sides except the south, where the natural slope was scarped to produce the same effect and the material used to emphasise the bank encircling the top. The Tomen Fawr ringwork now stands in isolation, but was a Norman defensive enclosure, later reused by the Welsh Princes and eventually serving as the centre of the township of Ffriddlwyd (Evans 2008). The township was later given to the Cistercians and became a grange of the Aberconwy Abbey, but returned to the Crown through an exchange. Traces of a possible rectangular structure survive within the ringwork and small depressions in the grass may indicate the positions of gateposts. No associated field systems have been identified within the surrounding area (ibid.). In 2004, GAT completed a programme of archaeological work, including evaluation, excavation and watching brief, in advance of, and during, the construction of the A497 Road Improvement Scheme between Abererch and Llanystumdwy and an associated gas pipeline realignment scheme (Smith and Roberts 2006; Davidson, Smith and Roberts, 2007). Ninety-nine evaluation trenches were opened across the 6.5km length of the scheme. Evidence for archaeological activity within these was mainly limited to post-medieval agricultural activity, but six of the trenches contained archaeology of greater significance, including evidence for Romano-British domestic activity identified at the western end of the scheme and Early to Late Bronze Age burnt mound and funerary activity within the central and eastern portions of the scheme. The Late Bronze Age site included a fragmented vessel made from coarse pottery buried in a small pit. An Early Bronze Age funerary site was excavated towards the eastern end of the scheme, northeast of Afon wen Farm and c.400m from Glanllynnau Farm. The site incorporated a large enclosure ditch forming a ring barrow, at the centre of which were two burial pits each containing a cremation urn. The archaeological watching brief followed on from the excavation phase and was conducted across the entire length of the road scheme but no further activity was identified during this phase. In 2007 and 2008, GAT completed an archaeological assessment and controlled strip at Glanllynnau Farm in advance of a storage yard extension, located 150m east of Tomen Fawr (Roberts 2007; Evans 2008). Archaeological activity was limited to two suspected prehistoric pits; no evidence for medieval activity was identified within the controlled strip area.

## **3 METHODOLOGY**

### **3.1 Impact Assessment**

The impact assessment has been undertaken in accordance with the best-practice guidance set out in *Setting of Historic Assets in Wales* (Cadw, 2017). As stated in the guidance, the document “outlines the principles used to assess the potential impact of development or land management proposals within the settings of World Heritage Sites, ancient monuments (scheduled and unscheduled), listed buildings, registered historic parks and gardens, and conservation areas” (ibid.,: ii). 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.

The assessment of the impact of the proposed development on the setting of the Tomen Fawr Scheduled Monument was carried out in the four stages specified in the guidance document:

- Stage 1: Identify the historic assets that might be affected by a proposed change or development;
- 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;
- Stage 3: Evaluate the potential impact of a proposed change or development on that significance; and
- Stage 4: If necessary, consider options to mitigate or improve the potential impact of a proposed change or development on that significance.

This report contains the findings from Stages 1 and 2. Cadw will review and review comment on the findings before Stage 3 of the process is initiated.

More detailed information regarding the individual assessment stages is included overleaf.

### **3.1.1 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.

The historic asset that is affected by the proposed development has been identified by Cadw as the Tomen Fawr Scheduled Monument CN031 (ref.: Y17/000175).

The regional Historic Environment Register ((HER) Gwynedd Archaeological Trust, Craig Beuno, Ffordd y Garth, Bangor, Gwynedd LL57 2RT) was examined for information concerning the affected monument and nearby assets; The National Monuments Record of Wales (Royal Commission on the Ancient and Historical Monuments of Wales, Plas Crug, Aberystwyth SY23 1NJ) was also checked for additional data including aerial photographs; and LiDAR digital terrain model data, supplied online by Natural Resources Wales (<http://lle.gov.wales/Catalogue/Item/LidarCompositeDataset?lang=en>), was also examined to provide topographic information.

### **3.1.2 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.**

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 two 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 ringwork and how is it 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

### **3.1.3 Stage 3: Evaluate the potential impact of a proposed change or development on that significance.**

The Setting of Historic Assets in Wales states that at the end of stage 3, the assessment should be able to identify the impact that the proposed development will have within the setting of a historic asset. The impact will be expressed as positive, neutral or negative and an indication of its magnitude given. The photographs from the viewpoints identified in Stage 2 will be used to assess and explain the impact of the proposed development along with the use of MapInfo GIS for data gathering and digital modelling.

For Stage 3, the Setting of Historic Assets in Wales lists 11 factors to be considered:

1. the visual impact of the proposed change or development relative to the scale of the historic asset and its setting;
2. the visual impact of the proposed change or development relative to the location of the historic asset; this will include an assessment of the distance of the development from the asset;
3. whether the proposed change or development would dominate the historic asset or detract from our ability to understand and appreciate it — for example, its functional or physical relationship with the surrounding landscape and associated structures and/or buried remains;
4. the presence, extent, character and scale of the existing built environment within the surroundings of the historic asset and how the proposed change or development compares with this;
5. the lifespan of the proposed change or development and whether or not the impact might be reversible.
6. the extent of tree cover, whether it is deciduous or evergreen, and its likely longevity;
7. the impact of artificial lighting — for example, on night-time view;
8. the capability of a landscape setting to absorb change or new development without the erosion of its key characteristics;
9. the impact of the proposed change or development on non-visual elements of the setting and character of the historic asset, such as sense of remoteness, evocation of the historical past, sense of place, cultural identity or spiritual responses;

10. the impact of non-visual elements of the proposed change or development, such as the removal or addition of noises and smell; and

11. the cumulative effect of the proposed change or development — sometimes relatively small changes, or a series of small changes, can have a major impact on our ability to understand, appreciate and experience a historic asset.

At the end of stage three the impact of the proposed development on the setting of the Tomen Fawr Scheduled Monument is expressed as **positive**, **negative** or **neutral**. Following the guidance set out in Design Manual for Roads and Bridges (Volume 11, Section 3, Part 2) (Highways Agency, 2007), an indication of the magnitude of the impact is given as either **major**, **moderate**, **minor**, **negligible** or **no change** using the criteria shown in Table 1.

<b>Magnitude of Impact</b>	<b>Criteria</b>
<b>Major</b>	Comprehensive changes to the setting of an historic asset
<b>Moderate</b>	Considerable changes to the setting of an historic asset that significantly modify the setting and affect the character of the historic asset
<b>Minor</b>	Slight but noticeable changes to the setting of an historic asset
<b>Negligible</b>	Very minor changes to setting of an historic asset that hardly affect it
<b>No change</b>	No change to the setting of an historic asset

Table 1 Criteria used to assess the magnitude of impact of proposed development on setting

#### **3.1.4 Stage 4: If necessary, consider options to mitigate or improve the potential impact of a proposed change or development on that significance**

Mitigation is defined as actions taken to avoid or minimise any harm to the significance of the historic asset and its setting, should a negative impact of significant magnitude have been identified at the conclusion of Stage 3. The measures need to be within the planning application boundary being considered and could include relocation of the development or elements therein or the introduction of screening. The impact of the proposed development is then reassessed in the light of mitigation recommendations.



## **4 RESULTS**

### **4.1 Stage 1: Identify the Historic Assets**

#### **4.1.1 The location, size and scale of the proposed development**

The proposed development consists of an unloading and loading facility and weighbridge adjacent to the railway line, 241m to the south east of the Glanllynnau Waste Facility, Chwilog (SH SH4566537660); a new waste processing and storage area in a field to the south west of the Waste Facility; and an associated access track that runs north from the north western corner of the loading and unloading facility, and then generally westwards towards the processing and storage area (Figure 01; Figure 02). The unloading and loading area is to be constructed within a quarried out area; the north south aligned section of the access track will run along an existing trackway and its western end lies within the existing waste facility; the rest of the development will take place on farmland currently under pasture. More detail regarding the individual elements of the scheme are included below. All dimensions are based on an outline drawing of the proposed works supplied by Ceri Environmental Consulting Ltd (Figure 02).

#### **Unloading and loading facility**

The unloading and loading facility is approximately 87 m long and 66m wide, and covers an area of 0.44 ha. It is to be constructed within a quarried out area, the level of which will be raised to that of the railway sleepers to create an area of hardstanding. A weighbridge and a rectangular concrete pad are to be constructed in the south western corner of the area, on the northern side of the railway line. The facility will be bounded by the existing trackway and proposed access road to the west, the current field boundary and railway line to the south, and will remain unfenced to the north and east. The concrete pad, measuring 5m by 5m, will be used to support a mobile crane to enable the transfer of waste materials to and from the railway network. The crane will not be deployed permanently and will be stored in the new processing and storage area in periods of disuse. The northwestern corner of the proposed loading and unloading facility lies approximately 421m to the south east of the Tomen Fawr Scheduled Monument.

#### **Waste processing and storage area**

The waste processing and storage area covers 1.11 ha and incorporates a sub rectangular area approximately 137m wide and 108m with a spur to the north to provide vehicular access via an existing roadway. It is located to the south west of the waste facility, on the eastern side of the field to the south east of the Tomen Fawr Scheduled Monument. It will be

bounded to the south by the existing field boundary, to the west by a new screening bund, and to the north and east by the existing waste facility. The area will be constructed of hardcore stone at the level of the current ground surface. In addition to providing a storage area for the crane, the area will be used for the storage of materials delivered by rail prior to processing and their subsequent transport off site either by road or over the rail network. It is envisaged that the tree planted bund along the western side of the processing and storage area will screen views from the west. The waste processing and storage area is the closest part of the proposed development to Tomen Fawr. At its closest point, the area lies 89m to the east of the Scheduled Monument.

### **Access road**

The access road will run from the eastern side of the waste processing and storage area, along a trackway within the existing waste facility for a distance of 60m, before emerging into a field to the south east of the waste facility. From here it runs south east for approximately 138m to join an existing north south aligned trackway. It then runs southwards along the existing track for approximately 89m before it reaches the north western corner of the unloading and loading facility. The outline plan suggests it will be approximately 4m wide with an area at its southern end widened to 15m to provide a turning area for vehicles. It will cover an area of approximately 0.25 ha. The trackway is to be constructed at the level of the current ground surface using hardcore stone. At its closest point, the access track lies approximately 205m east of the Tomen Fawr Scheduled Monument.

#### **4.1.2 The Tomen Fawr Scheduled Monument CN031**

The scope of this assessment is limited to the impact of the proposed development at Glanllynau on the setting of the Tomen Fawr Scheduled Monument CN031 (Gwynedd HER PRN 1329; RCAHMW NPRN 95294; SH4543037680), as specified by Cadw in a letter to Gwynedd Planning Service dated 15 March 2017 (ref Y17/000175).

The Tomen Fawr Scheduled monument is a medieval ringwork, a defensive structure consisting of a circular ditch and bank enclosing an area approximately 12m in diameter. The northern part of the interior is overgrown with gorse, broom and bramble. The top of the bank is between 2m and 4m above the interior, although this diminishes to 0.5 m on the southern edge of the bank where part of it may have collapsed outward.

It lies in fields on the edge of a ridge of clay drift, 375 m from the sea and approximately 100m to the west of the existing Glanllynau Waste Facility. The scheduled area covers 1ha, is approximately 184m long and 76m wide and consists of a circular area around the ringwork itself and a sub rectangular area to the south that extends into the marshy ground downslope that encloses earthworks associated with the ringwork. The southern extent of the scheduled area lies within Glanllynau a Glannau Pen-ychain i Gricieth SSSI (SSSI ID 326).

### **The visibility of the proposed works from the Tomen Fawr Scheduled Monument**

The three elements of the proposed works lie in fields to the east and south east of the monument at distances of between 89m and 421m (Figure 01). A multipoint digital terrain model viewshed was constructed to simulate potential views from 16 points distributed around the top of the bank of the monument (observer height of 1.8m). The viewshed model does not account for the obstruction of views by vegetation, buildings or the proposed screening bund to the west of the waste processing and storage area, and as such provides a 'worst case scenario' model.

The viewshed demonstrates that the majority of the footprint of the proposed works will be potentially visible from all of the highest parts of the ringwork (Figure 03). The parts of the works that will not be visible are parts of the spur linking the northern part of the and the existing access road, and most of the length of the parts of the access track that lie within the existing waste facility and the field to its south east.

A further multipoint viewshed model was constructed for 18 points distributed across the slope and lower ground in the southern part of the scheduled area. It demonstrates that the visibility of the proposed scheme is greatly reduced from within this area. Only the western side of the waste processing and storage area is visible from all 18 assessed points. The eastern and southern fringes of the unloading and loading facility and the extreme western end of the access track will be visible from between 1 and 4 of the 18 assessment points.

## **4.2 Stage 2: Define and analyse the setting**

### **4.2.1 The current surroundings of the Tomen Fawr Scheduled Monument**

Tomen Fawr Ringwork lies in agricultural fields on the edge of a floodplain in a low lying coastal farming landscape. The general settlement pattern of the wider landscape is of scattered farmhouses and cottages dating from the 18th century and later, a pattern that remains largely unaltered from the mid-19<sup>th</sup> century (Roberts 2007, 10).

To the immediate south and south west of the monument lie salt marsh and pools which form part of the Glanllynau a Glannau Pen-ychain i Gricieth SSSI. An embankment for the Cambrian Railway PRN68477, built in 1867, runs east – west approximately 260m south of the monument and separates the marshy ground from the sea (Figure 05).

Around 140m to the north, the modern A497 runs east – west along the route of a road shown on John Evans' 1795 map of North Wales, a route which was turnpiked in 1803 but is thought to have been in use since at least the 12th century (Roberts 2007, 10). An old tollgate cottage PRN11368 NPRN16627 is located 174m to the north west of the scheduled area, on the northern side of the A497 just to the west of Pen-y-groes (Figure 05). With no public access to the monument, the view from the A497 in this area is probably the most accessible to the general public.

100m to the east of the monument lies the Glanllynau Waste Facility, a relatively recent, 21<sup>st</sup> century diversification into industrial activity at the site of the Glanllynau farm PRN 68506 (Figure 05). A modern access road, built following the improvements to the A497 in the early 21<sup>st</sup> century, runs northwards from the west side of the Waste Facility site to provide access from it to the main road (Davidson, Smith and Roberts 2007). Post medieval farmbuildings still stand to the east of the Waste Facility and a farm at Glanllynau is recorded in documentary sources and historic maps from the 18<sup>th</sup> century onwards (Roberts 2007, 9).

The area to the west includes the post-medieval Afonwen Farm PRN68502 (Figure 05), 830m distant, whilst beyond that, at a distance of 2km across the fields and the Afon Wen is the 20th century Hafan y Môr Holiday Park (PRN31505; NPRN401382), the former naval training camp HMS Glendower PRN7248 (Figure 05).

In addition to the works to the A497 and expansion of activity Glanllynau, other recent development in proximity to the Scheduled Monument includes warehouses, access roads

and parking areas for food processing and distribution units at Parc Amaeth. The Parc was constructed in the early 21st Century on the northern side of the A497, 320m to the northwest of the scheduled area.

The ringwork element of the scheduled monument commands good views southwards across the sea marsh and railway into Cardigan bay and westwards across the fields and coastal plain towards Hafan y Môr (Figure 04). It's location on the south west facing slope of a scarp means views northwards towards the higher ground inland and eastwards along the coastal plain are more restricted. The location of only one Scheduled Monument within a 5km radius, the medieval Criccieth Castle CN015, is just visible to the east of the ringwork, though at a distance of almost 5km its visibility is limited.

The general impression of the setting of Tomen Fawr is that of an overgrown monument set in a pleasant rural coastal landscape that has been encroached upon by small scale agri-industrial development in its immediate vicinity to the east, and larger scale infrastructure works such as the nineteenth century railway and the modern A497 to the south and north respectively.

#### **4.2.2 Our present understanding and appreciation of the Tomen Fawr Scheduled Monument**

The Tomen Fawr Scheduled Monument is classified as a ringwork, a medieval defensive fortification first introduced to Britain by the Normans in the 11th century AD. These sites are rare in north west Wales and only three sites classified as medieval ringworks are known in Gwynedd and Anglesey: Tomen Fawr; Castell Crwn, Llanrhwydrys, Anglesey, PRN3615, Scheduled Monument AN029; and Penucha'r-Ilan at Llanfor near Bala, PRN321, Scheduled Monument ME042.

As a defensive structure, Tomen Fawr was sited strategically and its topographic location is important for our understanding the sites function and the choice of its location. It lies on a scarp slope, taking advantage of the natural slope to form the southern part of the defences. It is situated on the coast between the mouths of the Afon Wen to the west and the Afon Dwyfor to the east. With good views out to sea, it is perfectly located to monitor or control river traffic at the points where each meets Cardigan Bay. The ringwork is also perfectly situated to control and monitor traffic along the east – west running route way 140m to the north, which, as was mentioned above, is thought to have been in existence since at least the middle of the twelfth century.

The Tomen Fawr ringwork is part of a group of 4 medieval timber and earth fortifications on the Llwn peninsula that may have been constructed during the historically documented Norman incursions into the Llwn and Gwynedd in the late 11<sup>th</sup> century. The Llwn group also includes the mottes at Abersoch PRN1239 and Nefyn PRN1535, and the Ty Newydd Motte and Bailey Castle at Llannor PRN1532, Scheduled Monument CN096. The monument has not been subject to modern archaeological excavation however, and the precise date of its construction, or indeed whether it was built by invading Normans or the local Welsh, is uncertain (Davidson 2003, 3).

Whoever it was built by, its function changed from that of a purely military defensive structure during its period of use. Tomen Fawr went on to be used by the Welsh Princes and eventually served as the administrative centre of the medieval township of Ffriddlwyd PRN7351 (Davidson, Smith and Roberts 2007, 7). In the late 12th or early 13th century the township was given to the Cistercian Abbey of Aberconwy and became a grange. At this point any nearby settlement would most likely have been cleared and the ringwork abandoned (Gresham cited in Kenney 2013, 25).

No other historic associations or significant factors such as artistic depictions have been identified.

#### **4.2.3 What if anything survives of its historic surroundings?**

Very little of the medieval surroundings of Tomen Fawr survive. There are no earthworks suggestive of an associated medieval settlement nearby. The closest (possible) medieval settlement earthwork remains are located at Botach, Broom hall PRN1825, 4.34km to the west of the site. Archaeological evidence for nearby industrial activity contemporary with the use of the ringwork was however discovered in 2011 during the replacement of a gas pipeline (Kenney 2013). A medieval smithing site, dated to the late 12th or early 13th century was identified in the field, just south of the A497 and 169m to the north of the ringwork (Figure 05). It seems likely that is associated with the ringwork and its siting in proximity to the medieval roadway is intentional (Kenney 2013, 25). Though modernised, the route of the A497 at least, would have been a familiar element in the landscape during the medieval period. The identification of the smithing site also raises the possibility that more buried archaeological evidence for contemporary settlement survives in the field between the metalworking site and the monument.

The ringwork would have been built within a medieval coastal agricultural landscape. Though as an agricultural landscape, the current fields that surround the site may have an air of familiarity to the medieval occupants of the ringwork, the pattern of enclosed fields

around Tomen Fawr largely dates from the 19th century, as shown on the First Edition Ordnance Survey map (Figure 06). Earlier maps such as the 1839 Llanystumdwy Parish Tithe Map (Figure 07) and the c.1815 Glanllynau Farm Glynllifon Estate Map (Figure 08) show that the amalgamation of smaller more irregular fields into the current pattern of larger more regular enclosures in the vicinity of the monument was an on-going process throughout the 19th century. The nearest surviving medieval field systems are recorded 2.58km to north east where curving field boundaries to the north and east of Llanystumdwy PRN34121 may preserve the layout of medieval strip fields (Figure05).

The landscape of sea marsh and pools with causeways of slightly dryer ground that lie to the south of the monument may have been familiar to those who built and used the ringwork. They were certainly present at the beginning of the 19th century when the c.1815 Glanllynau Farm Glynllifon Estate Map (Figure 08) and 1839 Tithe Map (Figure 07) were produced. They were certainly present at the beginning of the 19th century when the c.1815 Glynllifon Estate Map and 1839 Tithe Map were produced. Both maps show field boundaries extending down to the present day coastline formed by the later 1867 railway embankment, and the Tithe Apportionment records pools and fieldnames indicative of flooded or marshy ground.

Other archaeological or architectural evidence for medieval activity nearby is scarce. The nearest medieval church is located 3.54km to the north west, Llanarmon Parish Church, Llanystumdwy PRN6939 (Figure 05). A church at the site here is recorded in 1254 though it is most likely an earlier foundation. A medieval mill PRN68503 PRN29705 is known from documentary sources to have been located on the west bank of the Afon Wen, around 1.60km to the west of the site (Figure 05). Its exact location is however unknown. The stone built castle at Criccieth CN015 5km to the east was built by Llywelyn Fawr in 1239, possibly slightly earlier, and seems to be unlikely to contemporary with the use of the ringwork as an administrative centre of the Welsh Princes.

It is possible that nearby archaeological features from earlier periods may have been familiar sight for the medieval occupants of the ringwork. Prehistoric features including a sub circular ditch, PRN19659, around 28m in diameter, were identified 475m to the west of the ring work during the A497 road improvements in 2004 (Figure 05). The ditch and cremations were most likely once covered by a barrow which would have formed an imposing sight in the landscape. The barrow was most likely ploughed out as a result of post medieval farming activity (Davidson, Smith and Roberts 2007, 14).

#### 4.2.4 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 a scheduled monument, the significance of Tomen Fawr is rated as high. The monument is of national significance for its **evidential** value as a rare type of archaeological site that has significant potential to enhance our knowledge and understanding of medieval settlement and defence. It is of high **historical** value as it is linked to nationally important historic events such as the Norman invasion of North Wales and the rule of the Welsh Princes. Tomen Fawr's **aesthetic** value derives from its relatively isolated location in a coastal agricultural landscape. Its **communal** value is high because of its historical links to the Welsh Princes, their importance in Welsh culture and the significant role they played in shaping Welsh national identity. The primary contribution of the setting of the Tomen Fawr Scheduled Monument to its significance is **aesthetic**.

#### 4.2.5 Viewpoints

The viewpoints identified in Table 2 have been identified as those from which the impact of the proposed development on the setting of the Tomen Mawr Scheduled monument should be assessed.

Viewpoint	Reason
Views southwards from the ringwork across the salt marsh towards Cardigan Bay.	Strategically designed view
View south west from the ringwork towards the mouth of the Afon Wen and south east towards the mouth of the Afon Dwyfor	Strategically designed view
View north west from the ringwork towards both the route of the 12 <sup>th</sup> century routeway, now the modern A497, and the location of the smithing site.	Strategically designed view / historic viewpoint
View south east over the smithing site from the side of the modern A497 towards the monument	Historic viewpoint / current visitor viewpoint
Views northwards from the coastline towards the scheduled monument (access permitting)	Historic viewpoint / current visitor viewpoint



<b>Viewpoint</b>	<b>Reason</b>
View east from the ringwork towards the current Glanllynnau Waste Facility.	Potentially impacted modern view
View east and south east from the monument towards the proposed works.	Potentially impacted modern view
Views east and south east from the lower, southern part of the scheduled area towards the proposed works.	Potentially impacted modern view
View east from the ringwork towards Criccieth castle	Modern visitor viewpoint towards a visible historic landmark.

Table 2 Assessment viewpoints

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## **Archive sources**

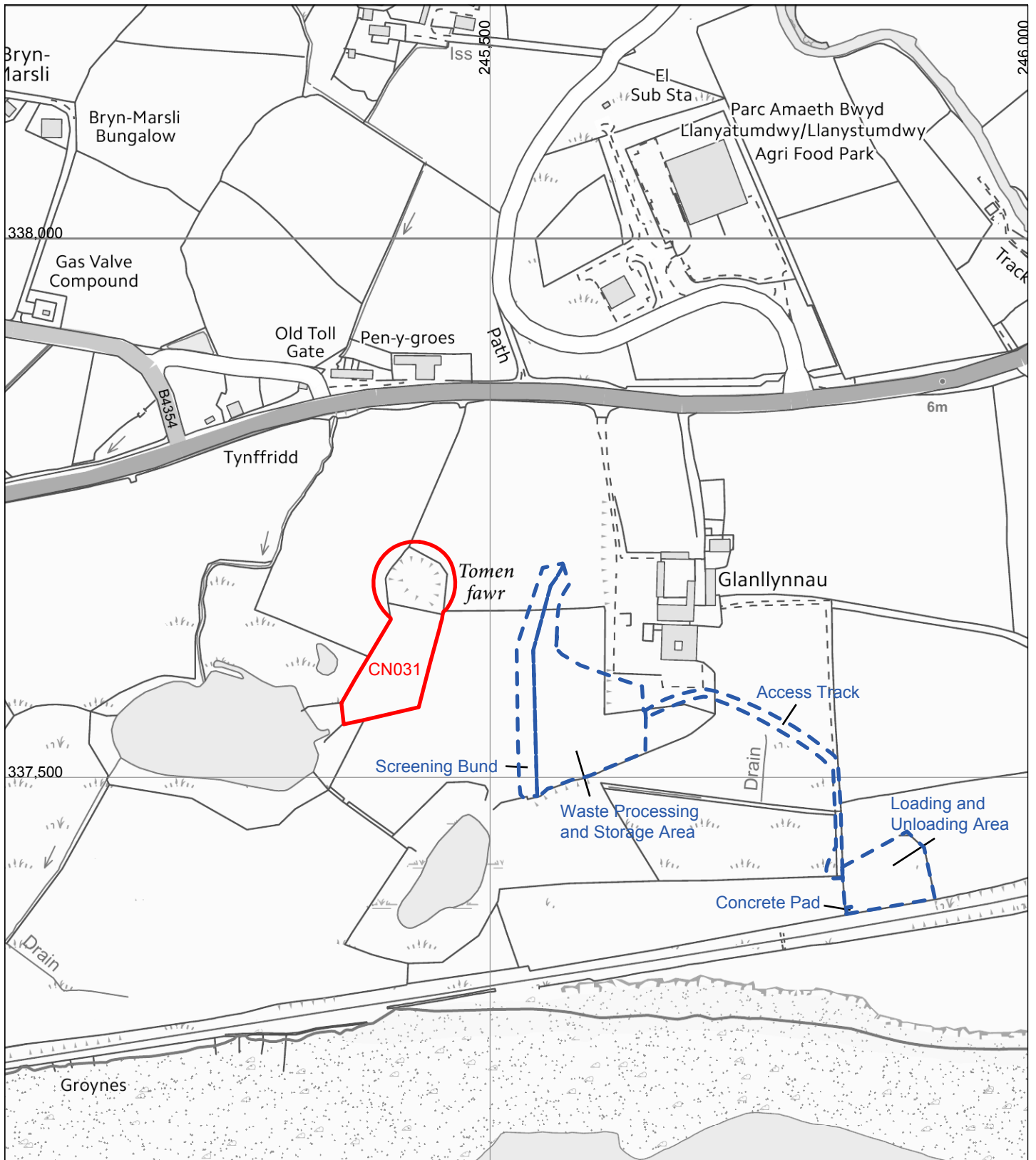
### **Historic Environment Record (Gwynedd)**

1839 Tithe Map: Llanystumdwy Parish

Caernarvonshire County Series 25" ordnance survey XXXIII.14, XXXIII.15, XLI.2, XLI.3 (1889, 1900, 1917)

### **Gwynedd Archives**

XD2/8356 Glanllynau Farm, from Glynllifon Estate Map Book c.1815



 Gwynedd Archaeological Trust

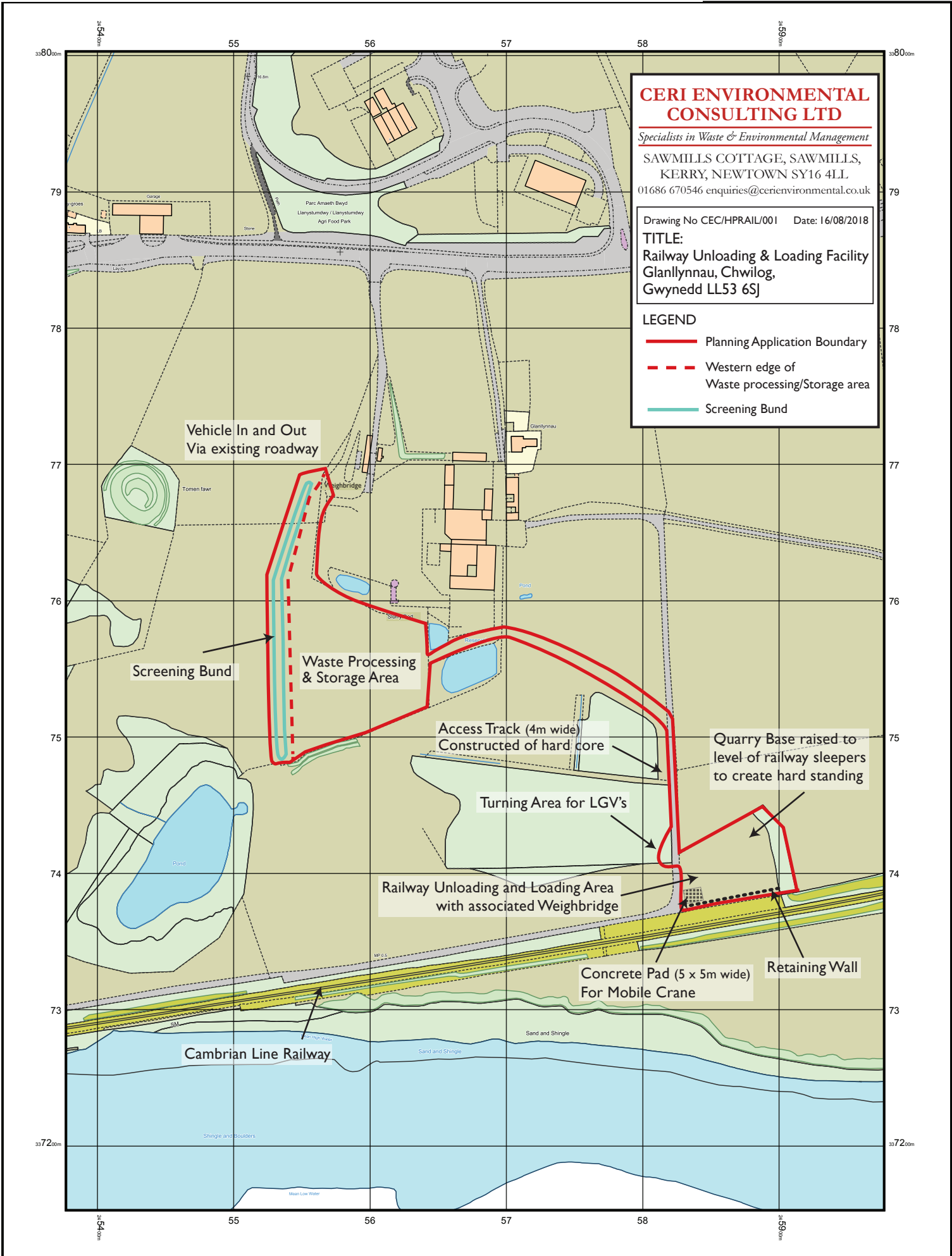
Figure 01: Location and extent of the proposed development

  Location and extent of development element  
 Extent of Tomen Fawr Scheduled Monument CN031

Date: 19/07/2018  
 Author: NMC  
 Office:  
 Drawing: G2964/  
 WSI/FIG01  
 Scale: 1:5000@A4

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0 25 50 100  
 metres



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Drawing No CEC/HPRAIL/001 Date: 16/08/2018  
**TITLE:**  
 Railway Unloading & Loading Facility  
 Glanllynau, Chwilog,  
 Gwynedd LL53 6SJ

**LEGEND**

- Planning Application Boundary
- - - Western edge of Waste processing/Storage area
- Screening Bund

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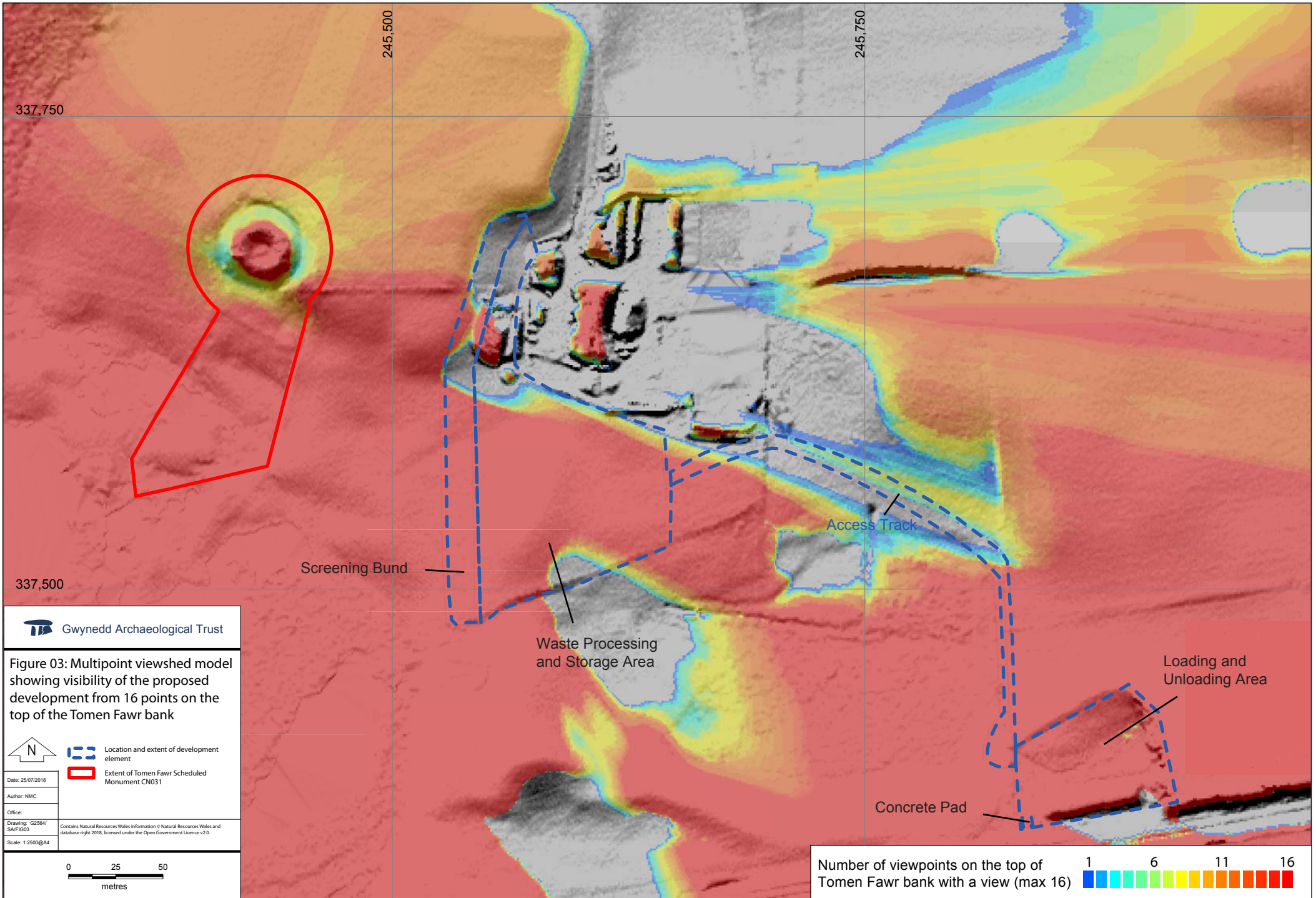
100m

Scale 1:2500






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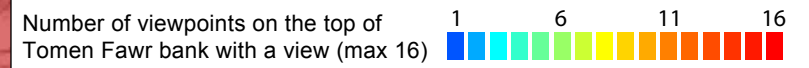
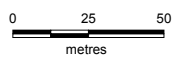
Figure 02: Pre-application proposal drawing (Ceri Environmental Consulting Ltd)

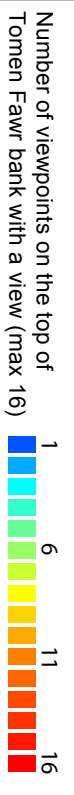
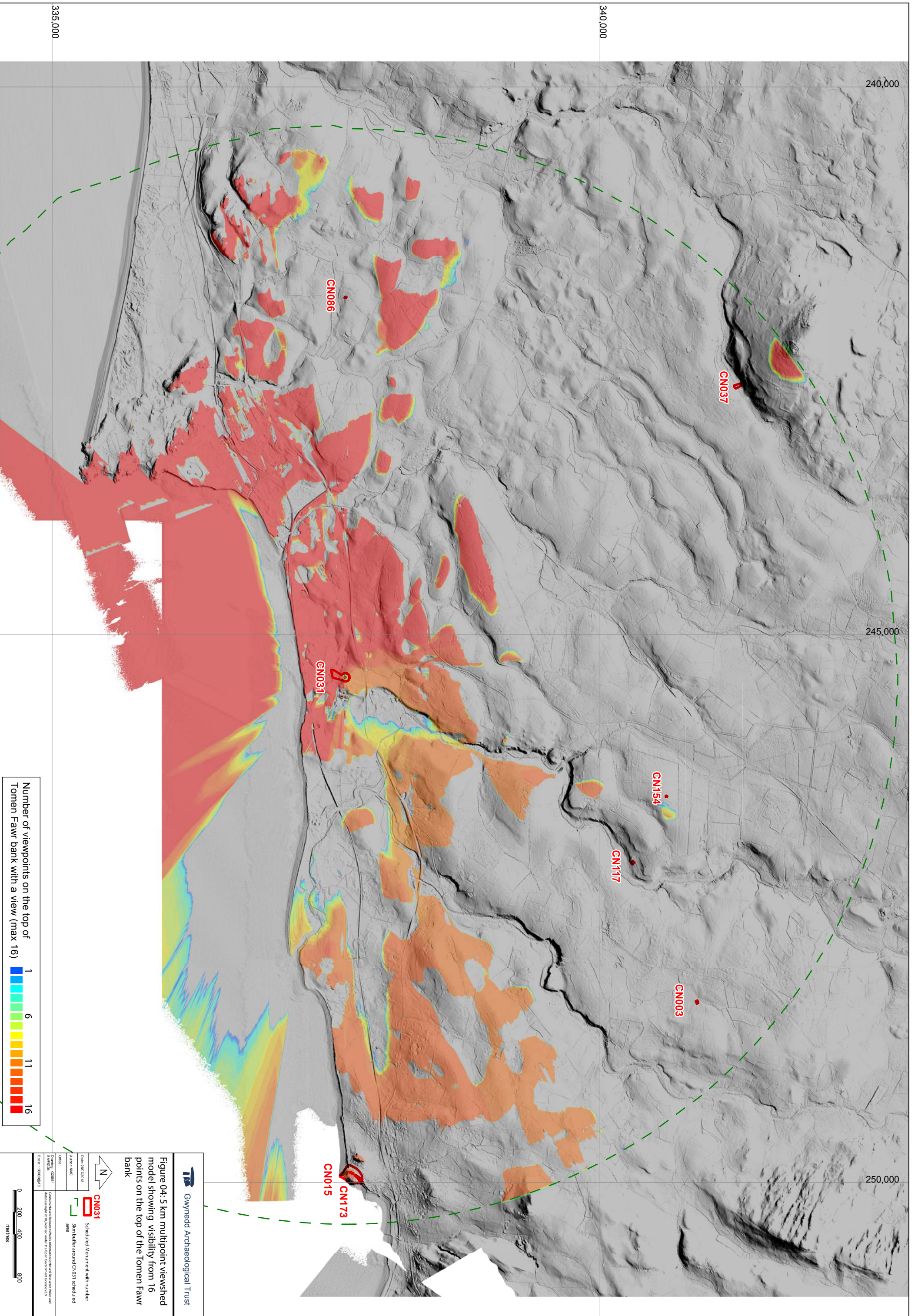


 Gwynedd Archaeological Trust

Figure 03: Multipoint viewshed model showing visibility of the proposed development from 16 points on the top of the Tomen Fawr bank

	 Location and extent of development element
Date: 25/07/2018	 Extent of Tomen Fawr Scheduled Monument CN031
Author: NMC	
Office:	
Drawing: G2564/SAFJGG3	Contains Natural Resources Wales information © Natural Resources Wales and database right 2018, licensed under the Open Government Licence v2.0.
Scale: 1:2500@A4	





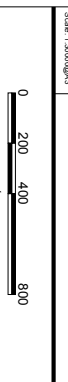
**Gwynedd Archaeological Trust**

Figure 04: 5 km multipoint viewshed model showing visibility from 16 points on the top of the Tomen Fawr bank

**CN031** Scheduled Monument with number

**5km** buffer around CN031 scheduled area

Date: 28/07/2016  
 Author: MJC  
 Other: CN031  
 Data File: G22841  
 Distribution: 2016, licensed under the Open Government Licence v2.0  
 Scale: 1:350000





**TA** Gwynedd Archaeological Trust

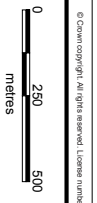
**Figure 05: HER sites discussed in the text**



68,477 Gwynedd HER site mentioned in the text with PIN

Extent of Tomten Fawr Scheduled Monument (M051)

Scale: 1:25000  
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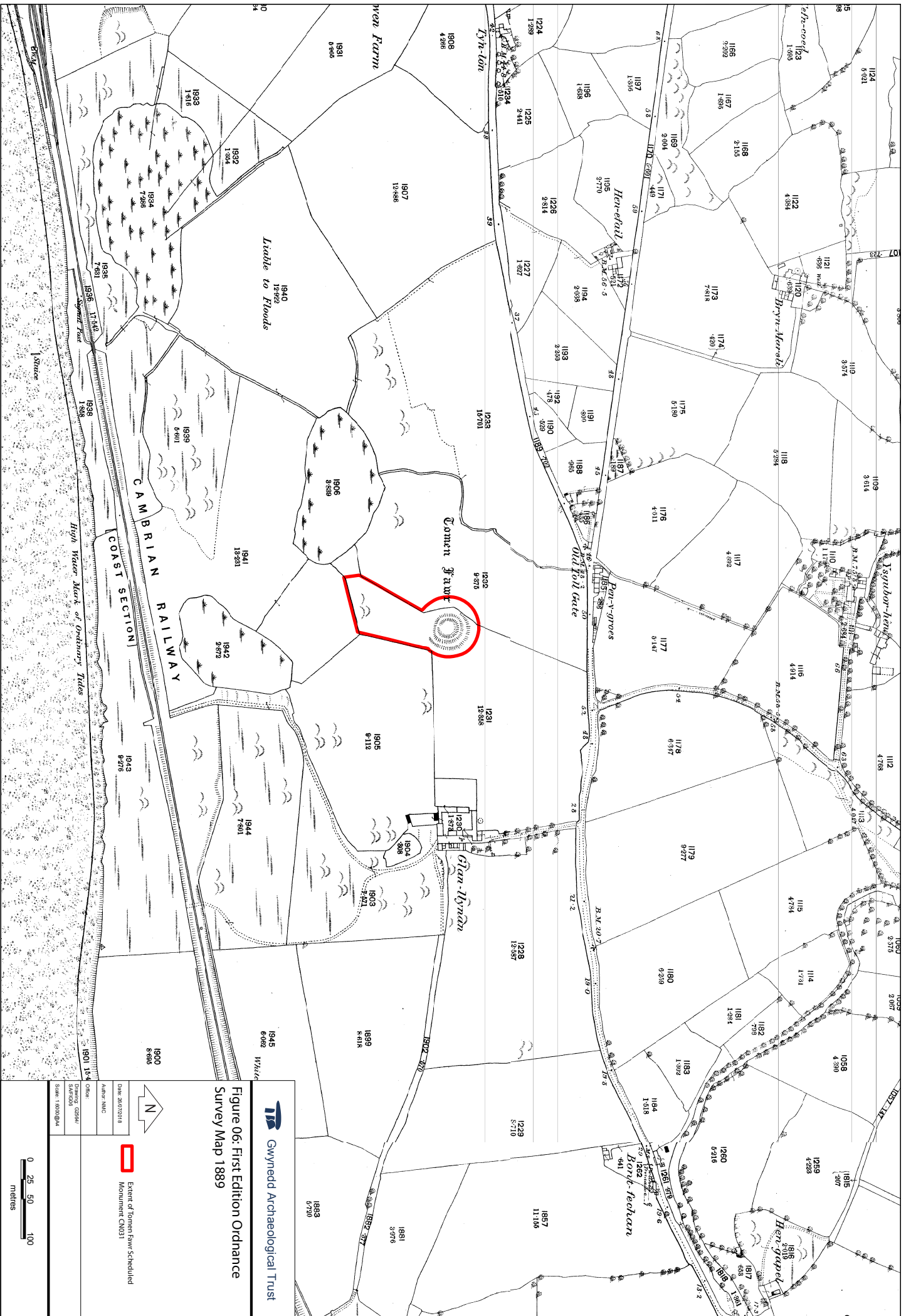



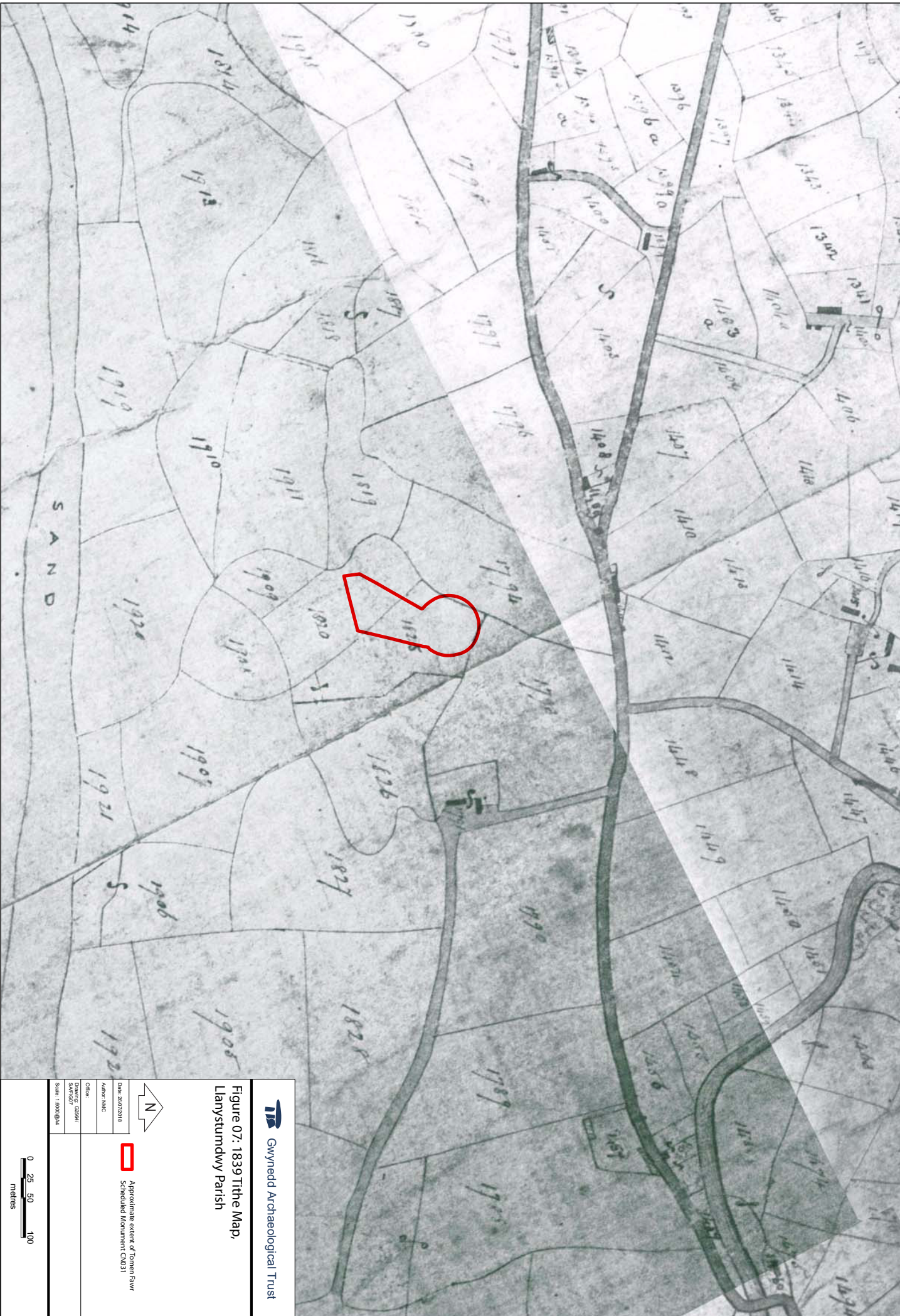
Figure 06: First Edition Ordnance Survey Map 1889

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 Date: 20/07/2018
   
 Author: NMC
   
 Drawing: GCHM
   
 SW/2018
   
 Scale: 1:5000 @ A4


 Extent of Tomen Fawr Scheduled Monument (CND51)

0 25 50 100
   
 Metres



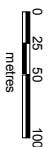
**TfA** Gwynedd Archaeological Trust

Figure 07: 1839 Tithe Map,  
Llanystumdwy Parish



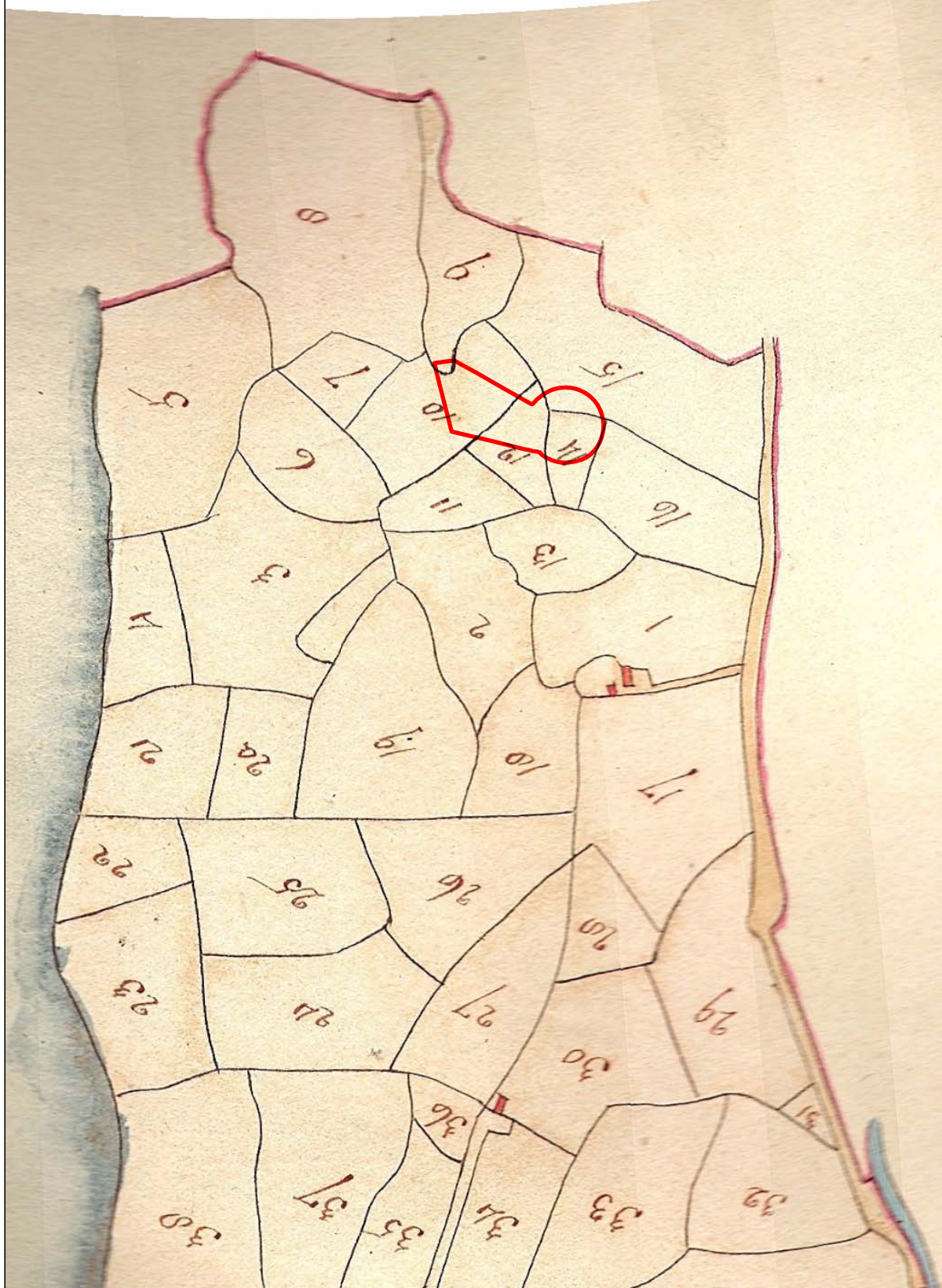
Appropriate extent of Tithe Pawr  
Scheduled Monument (CH331)

DATE: 20/07/2018
MAP: NMC
ORIG:
DRAWING: GOSKI
SCALE: 1:5000



Glanlynau Farm

15 Glanlynau 51 vicar P



Gwynedd Archaeological Trust

Figure 08: Glanlynau Farm, from the Glynllifon Estate Map Book c.1815



Approximate extent of Roman Saw  
Scheduled Monument CH2571

DATE: 28/07/2018
AMPC: NMC
CLIENT: Gwynedd Archaeological Trust
PROJECT: Glynllifon Estate Map Book c.1815
SCALE: 1:1000/GM

