Sarn Helen Multipurpose Trail Feasibility Study

Archaeological Assessment

NGR SH 72668 31537 (Start Point)



Report Number CR181-2019



CR ARCHAEOLOGY Compiled by C. Rees and M. Jones On Behalf of Cadarn Consulting Engineers

Summary

CR Archaeology have been instructed by Cadarn Consulting Engineers to conduct an Archaeological Desk Based Assessment and Walkover Survey as an element of the Sarn Helen Multipurpose Trail Feasibility Study. The application site is currently in use as a trackway.

This Assessment examines the historic context and archaeological potential of the study area and determines the possible impact of proposed drainage works on known and potential archaeological elements within the vicinity.

Crynodeb

Mae Archeoleg CR dan gyfarwyddyd gan Beirianwyr Ymgynghorol Cadarn i ymgymryd Asesiad Wrth Ddesg ac Arolwg Tros-gerdded fel elfen o'r Astudiaeth Posibilrwydd Llwybr Amlbwrpas Sarn Helen. Ar hyn o bryd, mae'r safle cais mewn defnydd fel llwybr.

Mae'r Asesiad hon yn archwilio'r cyd-destun hanesyddol a'r potensial archeolegol o'r ardal astudiaeth ac yn penderfynu'r effaith posib o'r gwaith draeniad awgrymedig ar yr elfennau archeolegol potensial a gwybyddus tu mewn i'r cyffiniau.

Results of Archaeological Works for Sarn Helen Multipurpose Trail **Feasibility Study** Planning Application Number: N/A National Grid Reference: 72668 31537 (Start Point) Client: Cadarn Consulting Engineers **Report Author:** Catherine Rees and Matthew Jones **Report Number:**

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1.0 Introduction

1.0.1 CR Archaeology have been instructed by Cadarn Consulting Engineers to conduct an Archaeological Desk Based Assessment and Walkover Survey along the route of an existing trackway within the Snowdonia National Park (figure 1). Snowdonia National Park Authority (SNPA) are examining ways in which an existing track can be improved to foster greater connectivity between Trawsfynydd and Coed-y-Brenin. The improved trackway will require consideration of the following: improvement of existing drainage systems and potential development of new drainage systems, improvement of access arrangements to the track and the improvement of the track's surface together with any change in level which may be required.

1.0.2 This document has been prepared to supply information as to the potential archaeological implications of the aforementioned scheme.

1.0.3 The trackway start point is located near Bronaber, and the route is within the Afon Eden river basin. This river has a predominantly upland catchment and a flashy flow regime. The land use within this catchment is mainly low intensity agriculture and forestry. Afon Eden - Cors Goch Trawsyfynydd (henceforth Afon Eden) is a Special Area of Conservation (SAC) designated under the Habitats Directive 1992 (Council Directive 92/43/EEC).

1.0.4 Known archaeological sites within the vicinity of the track section proposed for improvement include Prehistoric monuments (standing stone and stone circles), later Prehistoric settlement sites, Early Medieval inscribed stone, potential section of Roman road, medieval bloomeries, post-medieval mining/farming remains, and twentieth century military activity associated with Bronaber.

1.0.5 The Sarn Helen Roman road is a 260km route dated to the late 4th century which followed a meandering course through mid-Wales connecting Aberconwy in the north with Carmarthen in the west. The section of the road connecting the Roman fort of Tomen y Mur, near Trawsfynydd, and Brithdir runs through the Afon Eden catchment and the proposed trackway improvement site is one of three possible routes through the area.

1.0.6 Although not proven to be of Roman origin, this trackway stretch is known to be a historic route, following the Turnpike Road, which itself is likely to have incorporated an earlier Medieval or earlier route which was created in association with the bloomeries and/or nearby settlements.

1.0.7 This Desk Based Assessment examines the historic context and archaeological potential of the proposed improvement area and determines the possible impact of the works.

2.0 Project Aims & Objectives

2.0.1 This programme of works aimed to undertake a Desk Based Assessment and Walkover Survey for the proposed track improvement area.

2.0.2 The aim of this scheme of works was to undertake desk based historical research exploring the history/archaeology of the site. This information included a map progression and archival research in order to compile a coherent narrative history of the site and its environs.

2.0.3 The Gwynedd Historic Environment Record (HER), the Royal Commission on the Ancient and Historical Monuments Wales (RCAHMW) database, Gwynedd Archives, Bangor University Archives and relevant publications were consulted to compile a record of known archaeological sites in the vicinity. Aerial imagery was also examined (Google Earth).

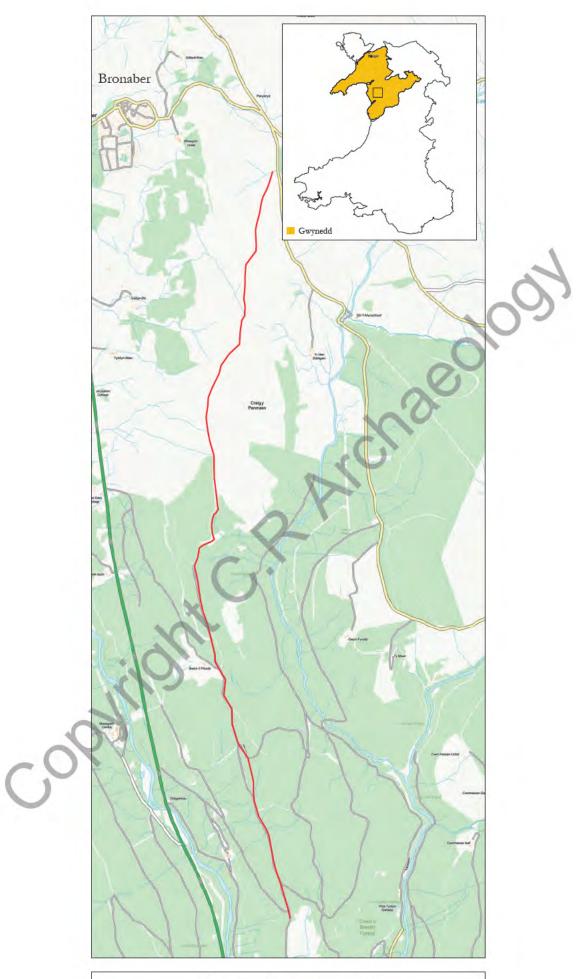


Figure 1. Site Location Plan (Source: OS Open Data Mapping Contains Ordnance Survey data © Crown copyright and database right 2019) **2.0.4** It is intended that this document be utilised to inform potential future archaeological mitigation strategies associated with any groundworks undertaken.

2.0.5 The objectives of this programme of works were:

- To make full and effective use of existing information to establish the archaeological significance of the track
- To assess the impact of the development proposals on surviving sites, monuments or remains both within the development area and in the surrounding landscape
- To help inform future decision making, design solutions, further evaluation & mitigation strategies

3.0 Scheme of Works - Methodology

3.0.1 The archaeological works were conducted in three sections and each is detailed separately below.

3.1 Desk Based Research

3.1.1 A complete and coherent history of the site was compiled utilising material sourced from Gwynedd Archives and the Bangor University Archives. This allowed as comprehensive a history as possible to be compiled. A full map progression of the area was undertaken and the archive information was supplemented with information from the HER, local libraries and specialist interest websites & journals.

3.1.2 In order to identify the character of archaeological remains in the vicinity of the proposed development site a search of the Gwynedd HER was conducted examining a 500m corridor along the trackway route. The RCAHMW and Cadw databases together with aerial imagery of the site were examined. The information collected is discussed within the main report text.

3.1.3 The works were carried out accordance with the CIfA Standards and Guidance for historic environment desk-based assessment (CIfA (Revised 2014).

3.1.4 This material forms the historical background for an archaeological report which includes the results of the walkover survey.

3.2 Walk Over Survey

3.2.1 Site visits were conducted one May 21st and 23rd and a photographic record was compiled detailing the route, identifying archaeological features and illustrating the general topography of the trackway. Further photographs were taken to illustrate the setting of the site. The location of all photographs/features are noted on site maps included as Figure 2 and Appendix A.

3.2.1 Equipment

3.2.1.1 Survey photographs were undertaken using a 14.2 mega-pixel Sony A350 digital camera with a variety of standard and other lenses. Images were captured in RAW format for later processing into high resolution JPG and TIF files.

3.4 Timetable for Proposed Works

3.4.1 Two walkover surveys were undertaken, the first on the 21st May and a second on 23rd May. Time was allotted for archive research, report compilation and site archiving.

3.5 Staffing

3.5.1 The project was managed and undertaken by Catherine Rees (BA (Archaeology), MA (Archaeology) Postgraduate Diploma (Historic Environment Conservation) & Matthew Jones (BA (Archaeology), MA (Archaeology).

3.5.2 All staff have a skill set equivalent to the CIFA MCIFA/ACIFA level. All projects are carried out in accordance with CIFA *Standard and Guidance* documents.

3.6 Monitoring

3.6.1 The project was not subject to monitoring by local planning services although the project was discussed with Gwynedd Archaeological Planning Services. Should any further works be undertaken these will be monitored by the SNPA Archaeologist.

3.7 Health and Safety

3.7.1 A risk assessment was conducted prior to the commencement of works and site staff were familiarised with its contents. A first aid kit was located in the site vehicle.

3.7.2 All staff were issued with appropriate Personal Protective Equipment (PPE) for the site work. This consisted of:

- Hi-visibility vests (EN471)
- Mobile Telephone (to be kept in site vehicle)
- Suitable Walking Boots & Waterproofs

3.7.3 All staff have passed at least a CITB health and safety test.

3.8 The Report

3.8.1 The report clearly and accurately incorporates information gained from the programme of archaeological works. It presents the documentary evidence gathered in such a way as to create a clear and coherent record. This includes illustrations of cartographic/pictorial sources. The report contains a site plan showing the locations of any photographs taken.

3.8.2 The desk-based assessment considered the following:

- the nature, extent and degree of survival of archaeological sites, structures, deposits and landscapes within the study area
- the significance of any remains in their context both regionally and nationally
- the history of the site
- the potential impact of any proposed development on the setting of known sites of archaeological/historic importance
- the potential for further work with appropriate recommendations

3.8.3 The report also includes:

- a bilingual summary
- a copy of the design brief and agreed specification
- a location plan
- a full bibliography of sources consulted
- a digital copy of the report and an archive compact disc/USB file

3.8.4 It is intended that this report will inform decisions as to the necessity and/or nature of any further archaeological mitigation strategies which may be required.

3.8.5 A digital Adobe PDF version and a paper copy of the final report and will be lodged with the Gwynedd Historic Environment Record within six months of completion of the project.

3.8.1 Copyright

3.8.1.1 CR Archaeology and sub-contractors shall retain full copyright of any commissioned reports, tender documents or other project documents, under the Copyright, Designs and Patents Act 1988 with all rights reserved; excepting that it hereby provides a licence to the client and the local authority for the use of the report by the client and the local authority in all matters directly relating to the project as described in the Project.

4.0 Topographical and Geological Background

4.1 Topography

4.1.1 The track start point is located near Bronaber, and the route is within the Afon Eden river basin. This river has a predominantly upland catchment and a flashy flow regime. The land use within this catchment is mainly low intensity agriculture and forestry. Afon Eden - Cors Goch Trawsyfynydd (henceforth Afon Eden) is a Special Area of Conservation (SAC). The track is within the Snowdonia National Park boundary.

4.1.2 The trackway which is being considered for improvement is approximately 6km in length and runs through open moorland, scrub grazing and forestry.

4.2 Geology

4.2.1 Due to the length of the study area the bedrock geology at the site is varied. At the northern end of the trackway the bedrock is recorded as Gamlan Formation – Sandstone. Moving southwards, the track moves through an area of Gamlan Formation - Mudstone and Siltstone before following a ridge of Hafotty Formation – Mudstone (www.mapapps.bgs.ac.uk).

4.2.2 This line is between two differing geologies, Barmouth Formation - Sandstone and Mudstone to the east, and Rhinog Formation - Sandstone And Mudstone to the west. There are also small areas of Maentwrog Formation - Mudstone, Siltstone and Sandstone. All these geologies are sedimentary rocks of marine origin (www.mapapps.bgs.ac.uk).

4.2.3 Also recorded are veins of Unnamed Igneous Intrusion, Ordovician - Microtonalite. These igneous rocks are magmatic (intrusive) in origin. Rich in silica, they form intruded batholiths, plutons, dykes and sills (www.mapapps.bgs.ac.uk).

4.2.4 The superficial deposits in the study area are largely unrecorded. Where recorded the superficial geology of the site is "Till, Devensian - Diamicton. Superficial Deposits formed up to 2 million years ago in the Quaternary Period. Local environment previously dominated by ice age conditions (U). These sedimentary deposits are glacigenic in origin. They are detrital, created by the action of ice and meltwater, they can form a wide range of deposits and geomorphologies associated with glacial and inter-glacial periods during the Quaternary" (www.mapapps.bgs.ac.uk).

5.0 Historical Background

5.0.1 In order to identify the character of archaeological remains in the vicinity of the trackway a search of the Gwynedd HER was conducted examining the trackway and adjacent area. A 1000m corridor centred around the trackway was selected as a search area to include features immediately adjacent to the trackway. The search was conducted on 15th May 2019. The following section is derived from information held by the GAT HER Charitable Trust Database Right.

5.0.2 The search returned 121 records, predominately of Post Medieval/Modern date. Three of the records returned had been assigned the broader attribution of Prehistoric and two areas had been identified as believed likely to have been favoured for Mesolithic/Neolithic settlement. Two records were attributed to the Bronze Age. There were 13 entries of Roman dates – predominantly related to the possible Roman Road which is believed by some to have been at least partially followed by the current trackway. There was one entry of Early Medieval date, and 8 entries of Medieval date. There were 73 entries of Post Medieval and six of Modern date. The remaining entries were 3 multiperiod designations and 10 entries of unassigned/unknown date.

5.0.3 The northern section of the trackway lies within the Trawsfynydd - Area 21 Upland enclosures - Dôl-gain Historic Landscape Characterisation area (PRN 18287). It is recorded as "an upland area of somewhat mixed character, based on a series of large, irregular enclosures but with no modern settlement. Relict archaeological features include a standing stone, part of the route of the former Roman road and Penystryd Roman tile kilns alongside it, Bedd Porus (early Christian inscribed stone), the remains of a quarry on the lower slopes of Pig Idris, where there is also a series of small encroachment-like enclosures. There was also a look-out for the firing range down at Bronaber built on the top of Craig y Penmaen between the wars. A number of trackways cross the area and the western parts are covered by scrubby woodland where there are also a number of former mines and related remains. Despite these important individual archaeological monuments, there is no real historical cohesion about the area." The key historic landscape characteristics are recorded as "Stone walled enclosures, trackways, relict archaeological features" and described thus "the enclosures here are large and irregular without forming any particular pattern: they are fairly typical of remote, upland areas. The area is bisected north-south by the route of the former Roman road, and there are three other (later) roads which demonstrate the important of this area (rather than the later, lower route to the west currently occupied by the main A470) as a means of communication in past times. Other features are minor in landscape" (www.heneb.co.uk /hlc/trawsfynydd/traws21.html).

5.1 Prehistoric Sites Within Trackway Vicinity

5.1.1 Within the search area 3 sites have been assigned a Prehistoric date, 2 areas identified as of high potential for Mesolithic and Neolithic settlement and 2 sites have been assigned a Bronze Age date. These features are shown on figure 2 and are labelled with a red hexagon.

5.1.2 PRN 1603 Stone Circle, Pen y Stryd. The site was initially recorded as a small stone circle located on the crest of low ridge near Pen y Stryd. It was described as consisting of 6 stones at present all of which are very small and have had their tops broken off so they are now almost level with the ground surface. 5 stones lie exactly on a circle with a diameter of 56ft and spaced at 21ft intervals. It is noted in the HER that this site has been recorded twice at slightly different locations and the duplicate record has been assigned number PRN 2894.

5.1.3 This has however since been modified and a later description recorded "A small circle of stones without bank or ditch lies at SH72553125, on the crest of a small ridge. It is 56ft in diameter with 6 small stones spaced at intervals round the circumference, a number of naturally occurring stones can be seen in the area indicated but no grouping of them could be said to represent a circle such as is described".

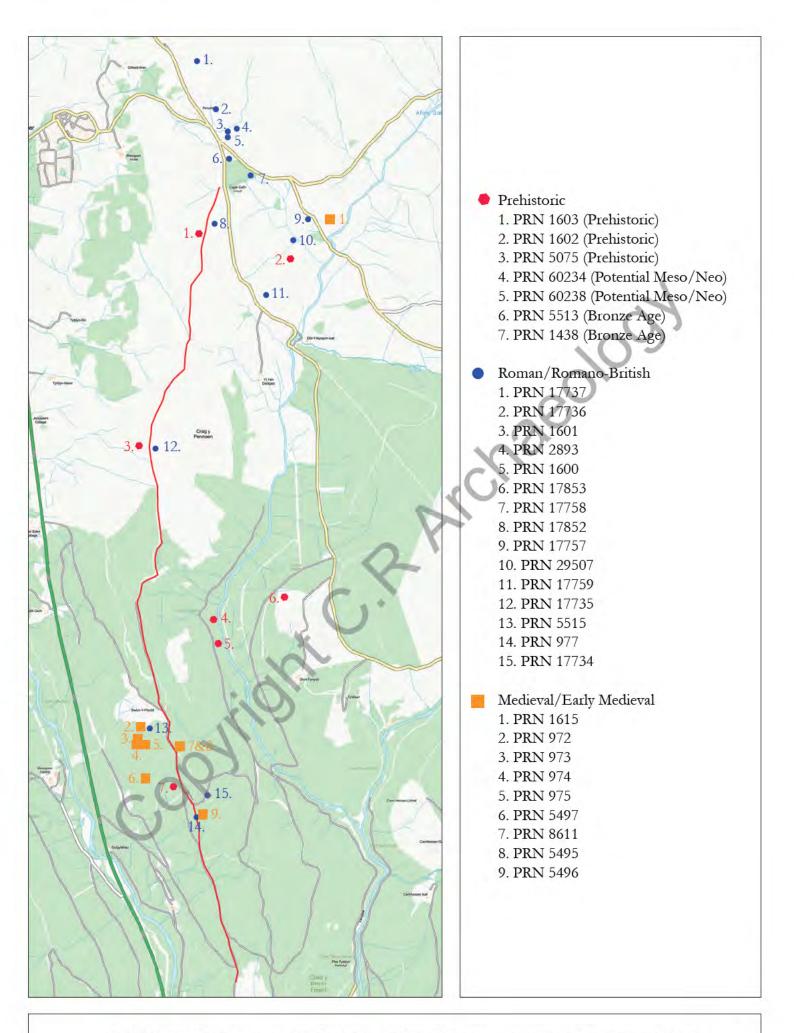


Figure 2. Prehistoric, Roman, Early Medieval & Medieval Sites Recorded in the Gwynedd HER (Source: OS Open Data Mapping Contains Ordnance Survey data © Crown copyright and database right 2019) **5.1.4** The site was surveyed and re-assessed in 2001 and described "only one stone now visible at the edge of an approximately circular slight platform that could be a remnant of the circle" (Smith 2001).

5.1.5 PRN 1602 (Scheduled Ancient Monument ME 072) Llech Idris Standing Stone – "Made from a slice of flat-bedded rock, with its broad sides on the south-west and north-east. It overlooks and dominates the stretch of the valley of the Afon Gain running up to the north-east of it. A number of interesting marks can be seen on the NE face. These are clearest towards the base of the face, where sheep rub means there is less vegetation growth, though there are also a number on the right-hand (north) side of the face, which appear similar to Ogam marks. These appear to be artificial, and do not look like random scratches. The monument is of national importance for its potential to enhance our knowledge of prehistoric practises. It retains significant archaeological potential, with a strong probability of the presence of associated archaeological features and deposits. The scheduled area comprises the remains described and areas around them within which related evidence may be expected to survive" (www.cadwpublic-api.azurewebsites.net/reports/sam/FullReport?lang=en&id=3218).

5.1.6 PRN 5075 was initially recorded as a Prehistoric Stone Alignment. This interpretation has however been questioned and the description records "*the possibly wandering wall may be prehistoric but the other features are probably WWII slit trenches and camp site features*". The remains of a small wall were identified at this location during the walkover but this site did not have the appearance of a Prehistoric monument.

5.1.7 Two areas were also identified which would likely have been favoured for Mesolithic/Neolithic settlement. PRN 60234 Natural Island, Afon Gain This small area constitutes an island at times of flooding. As a well-drained area close to the river it would be a favoured site for early post glacial settlement in the Mesolithic or Neolithic period. It bears no signs of human activity, but none would be expected for this period for which only the hearths and artefact scatters of a temporary camp site would be likely to survive and which might be revealed through excavation (Smith 1996).

5.1.8 PRN 60238 is a natural terrace, west of Afon Gain. It is a small natural terrace, possibly an old hay meadow, suggested by its demarcation by a low wall, c. 0.3m high, at the east, river side. Like PRN 60234 this site is believed to likely be favoured for early settlement. (Smith 1996).

5.1.9 Two records of Bronze Age date were returned within the study area. PRN 5513, a cairn site was previously recorded at the upper end of a steep enclosure on the farm of Gwynfynydd. It had been entirely destroyed by 2001 when the area was visited by Smith.

5.1.10 PRN 1438 records a Bronze Age burnt mound. It is located approximately 100m west of the forest road junction near Cae Cyrrach and was recorded as two well defined oval mounds 10m apart were recorded. When a site visit was made in 2001 it was noted that "despite a fairly extensive search around this NGR - the site was not located. It is semi-mature forestry but with much regrowth so either destroyed or not visible".

5.2 Roman/Romano-British Sites Within Trackway Vicinity

5.2.1 There are 13 features assigned a Roman or Romano-British date within the study area. These features are shown on figure 2 and are labelled with a blue circle.

5.2.2 There is a Romano-British settlement site located near to the trackway length. PRN 5515 (Scheduled Ancient Monument ME046) - Hut Groups S of Bwlch-y-Ffordd. "The monument comprises the remains of an enclosed settlement of multiple hut circles, which probably dates from the first millennium BC. It consists of three huts in a NW to SE line probably forming one side of a rectangular courtyard, and part of a fourth attached to the N side of the south-easternmost hut. A considerable quantity of material has been piled

onto the site, making the plan difficult to interpret. The huts appear to be angular rather than round, with walls up to 1m high of piled stones and 1.5mwide. The internal measurements of the three main huts from SE-NW are 9m, 6m and 5m. Sixteen metres SE of the huts is another walled structure with walls 1m high and 2.5m wide. It is 7m square internally. Traces of terraced fields lie all around the site. The monument is of national importance for its potential to enhance our knowledge of prehistoric settlement practices. It is an important relic of the prehistoric landscape and retains significant archaeological potential. There is a strong probability of the presence of environmental and structural evidence, including preserved internal and external floor levels. The scheduled area comprises the remains described and areas around them within which related evidence may be expected to survive" (www.cadwpublic-api.azurewebsites.net/reports/sam/FullReportPlang=en&id=2465). This site was on private land and could not be accessed during the walk over survey. It was however possible to ascertain that due to the tree cover and nature of the proposed works there would not be a negative impact on the Scheduled Ancient Monument site.

5.2.3 PRN 1600 is a grass mound 36ft diameter, 3/4ft high composed of burnt and fused material including tiles and bricks of the same type found at the Roman fort of Tomen Y Mur. It is situated at the side of the Roman road near Pen y Stryd. It was described by Pennent that one of the mounds contained five urns which were found in it, protected from damage by fragments of brick placed around them.

5.2.4 Others have suggested that rather than having been a tumulus the mound was a military brickworks or tilery but it would have been very small. The is no evidence of large quantities of clay at hand for the purpose of brickmaking on any scale. The site has also been interpreted as a possible pottery kiln. There is replication between this entry and those for the kilns which are described below.

5.2.5 The remaining Roman/Romano-British sites are represented by kiln sites and entries related to the Sarn Helen Roman Road (Tomen y Mur – Brithdir section) which connected Aberconwy in the north with Carmarthen in the west.

5.2.6 There are four Roman kiln sites recorded along the trackway. Three are grouped together at Pen-y-Stryd with a fourth is located to the south at Llech Idris.

5.2.7 The group of three mounds PRN's 1600, 2893 and 1601 have identical HER descriptions: "grass mound 36ft diameter, 3/4ft high composed of burnt and fused material including tiles and bricks of the same type found at the Roman fort of 'Tomen Y Mur'. It is situated at the side of the Roman road near 'Pen y Stryd.' Pennent describes what was probably one of the mounds as a tumulus, and says that five urns were found in it, protected from damage by fragments of brick placed around them. Opposing points of view as to the origins of the mound is as described on the N.A.R. card.

5.2.8 Suggested military brickworks or tilery but it much have been very small. No evidence of large quantities of clay at hand for the purpose of brickmaking on any scale. Possible pottery kilns".

5.2.9 Two of the three mounds are incorporated into the area of Scheduled Ancient Monument ME071 - Roman Kilns 225m SE of Pen-y-Stryd. The site is described as "Three mounds lying E of the Roman road at Pen y Stryd, and S of a small stream. Mound 1 at SH72693190. An oval mound measuring 11 m WNW-ESE and 8 m NNE-SSW. It is open on the N side, which faces the stream, and is typical of a prehistoric burnt mound, although in this case the hollow centre is probably due to the excavations mentioned by Pennant. The stream is presently some 2 m below the mound. Mound 2 at SH72753192. Situated 70 m WNW of 1 and 27 m SE of the stream. An irregular mound 8 m in diameter, with a path skirting round the W side. There is a dip in the centre which probably marks an early excavation. Mound 3 at SH72693189. This mound is not scheduled. It lies 15 m S of 1. It is a low oval mound 8 m \times 4 m. Some burnt stone is visible on the surface.

5.2.10 The monument is of national importance for its potential to enhance our knowledge of Roman production techniques. It retains significant archaeological potential, with a strong probability of the presence of associated archaeological features and deposits. The structures themselves may be expected to contain archaeological information concerning chronology and building techniques. The scheduled area comprises the remains described and areas around them within which related evidence may be expected to survive". This site is located to the north of the trackway and the setting will not be impacted by the proposed works which will be below ground.

5.2.11 There is a fourth kiln site within the study area - PRN 29507 Roman Tile Kiln, Llech Idris, Dolgain, Trawsfynydd. The excavation report from the site details a rather well-preserved Roman tile kiln excavated by Pete Crew. During a 2010 site inspection visit it was recorded as "now only faintly visible 25m N of Llech Idris. Burnt material in mole hills. Site apparently in good condition" (Hopewell and Smith, 2010)

5.2.1 Roman Road References - Tomen y Mur - Brithdir

5.2.1.1 The Sarn Helen Roman road is a 260km route dated to the late 4th century which followed a meandering course through mid-Wales connecting Aberconwy in the north with Carmarthen in the west. The section of the road connecting the Roman fort *Tomen y Mur*, near Trawsfynydd, and Dolgellau runs through the Afon Eden catchment and the proposed trackway improvement site is one of three possible routes through the area.

5.2.1.2 The route of the Roman Road to the north of the trackway is clearly visible, with the road traceable mostly as a terrace for a distance of approximately 1km from Fridd Glap. Road section PRN 17737 (Roman point 1 on figure 2) is described as "the most easily accessible and most easily understood length of Roman Road in Gnynedd". It is very well-preserved with a 5 to 5.5m wide agger and surviving side ditches. This road is however difficult to trace beyond Pen-y-stryd where it is cut by the modern road, a gas pipeline and a small area of forestry.

5.2.1.3 Hopewell (2013: 61) summarises the three possible routes which the road may take from Pen-y-stryd. Route One runs along the western side of Coed y Brennin and then along a modern road, via Llanelltyd, to Dolgellau. This is the route partially followed by the trackway under study.

5.2.1.4 At the northern end of the stretch PRN's 17853 (point 6) & PRN 17758 (point 7) lie within the triangle formed by two modern roads and the forestry plantation. This area has been disturbed by a modern pipeline. PRN 17853 records the line of Roman Road at Penystryd which is shown turning on 1889 OS map which provides evidence of the route before it was disturbed by the modern gas pipeline.

5.2.1.5 Point 8 (PRN 17852) is an earthwork approximately 4m wide, which has been interpreted as the possible agger and terrace. This stretch joins with PRN 17735, Sarn Helen/Turnpike Road which is also shown on 1889 First Edition Ordnance Survey map. There are no proven Roman features associated with this trackway and if this was the route of the Roman Road then it lies beneath the existing trackway.

5.2.1.6 Point 12 (PRN 17735) is recorded as the "course represented generally by minor road, as a terrace way along W side of Craig Penshilen. Main road not Sarn Helen as shown on 1 inch OS". There are two further sites noted that indicate the possibility that the Roman Road passes along this route. Point 14 (PRN 977) records a well-defined hollow way which survives for a stretch of approximately 250m (see plate 37). Point 15 (PRN 17734) records the place name evidence for a farm and cliffs named Bwlch y Ffordd which is considered to be a significant name and possible indicator of the Roman Road. Due to the presence of forestry tracks and modern road, in this area no trace of the Roman Road could be identified.

5.2.1.7 Although not proven to be of Roman origin, this trackway stretch is a historic route, following the Turnpike Road, which itself was likely to have incorporated an earlier Medieval or earlier route which was created in association with the bloomeries and/or nearby settlements (see below).

5.2.1.8 The two other possible routes of the Sarn Helen Road are marked by points PRN's 17757 (*"short length of possible road 15yds NE of destroyed farmhouse of Llech Idris and 100yds S of Bedd Porus"*) and 17759 (*"route favoured by Col. H C Irvine (unpublished) How it got to be shown on some OS maps as Sarn Helen is uncertain"*) represented as points 9 and 11 on figure 2.

5.2.1.9 Hopewell (2013) describes route 2 (PRN 17757) as having initially been proposed by Bowen and Gresham as following a route to the east of Moel Hafod Owen via Abergeirw, and route 3 (PRN 17759) as described by Prys Morris in 1890 and more recently examined by Toller in 2008. Route 3 proposed that the Roman Road runs further to the east than route 2, following the current road from Pen-y-stryd as far as Abergeirw before running eastwards along the upper Mawddach valley. It is proposed to run across improved pasture to the north of the river before crossing and following the modern road to Dolcynafon.

5.2.1.10 Hopewell appears to slightly favour route 3 but concludes that "there is clearly potential for further research here, possibly enabling a conclusion to be made about a road that has puzzled researchers for over 200 years" (2013: 63).

5.3 Early Medieval/Medieval Sites Within Trackway Vicinity

5.3.1 The is a single Early Medieval entry within the study area. This feature is shown on figure 2 and is labelled with an orange square.

5.3.2 PRN 1615 records the Bedd Porius Stone, Trawsfynydd. The stone bears the inscription "HIC IN TUMULO IACIT PORIUS HOMO PLANTUS FUIT". When Pennant saw it in 1773 it had been moved to a farmhouse and was re-erected in 1830 in the middle of a field, which is not the original site. It was later recorded as lying flat upon a low mound of stones, almost certainly not at its original site. The lettering had been tampered with and added to during the occupation of the neighbourhood as a military centre. The stone is now preserved in the National Museum of Wales and is dated to late C5th or early C6th A.D.

5.3.3 The area within which the stone was set is bounded by iron railings which enclose an area 4m square. The inside of these is lined with slabs and some broken slabs are lying on the ground - none appear inscribed. The presence of this stone in close association with a routeway has been used as supporting evidence for route 2 of the proposed Roman Road in this area (Hopewell 2013: 62).

5.3.4 The Medieval archaeological remains along this trackway predominantly fall into two groups – bloomery sites and rectangular/sub rectangular structures. All are located within the same area at the southern end of the trackway and are presumably related. The presence of these structures at a location near to the trackway which later becomes a Turnpike Road does imply the formalisation of an earlier route and if not Roman in origin, a good case might be made for a Medieval date for this trackway.

5.3.1 Medieval Structures

5.3.1.1 There are four Medieval structures near the trackway recorded in the HER. All are just south of Bwlch-Y-Ffordd Farm. These features are shown on figure 2 and are labelled with an orange square.

5.3.1.2 PRN 972 (figure 2 point 2 Medieval) is recorded as a "sub-rectangular structure, aligned E-W and measuring 6.5m \times 4.5m internally with a wall thickness of 1m. Situated on a west facing shelf below a craggy outcrop. Possible entrance in north wall, near NW corner. West wall collapsing down slope".

5.3.1.3 PRN 973 (figure 2 point 3 Medieval) is recorded as "aligned N-S, measuring $5m \times 2$. 5m internally. Possible entrance in W wall. Walls damaged by vehicles. Situated further S than Bwlch Ffordd, on level ground at the foot of the crags".

5.3.1.4 PRN 974 (figure 2 point 4 Medieval) is recorded as "aligned SE-NW and measuring 7m x 4.5m internally. Possible entrance in W wall. Walls approx. 1m wide".

5.3.1.5 PRN 975 (figure 2 point 5 Medieval) is recorded as "sub-square enclosure, about $12m \times 11m$, walls well defined and surviving to 1-2 courses high. Situated just N of Tap Mawr bloomery. The site is marked and cleared of trees".

5.3.2 Medieval Bloomery Sites

5.3.2.1 There are four HER entries relating to bloomery sites along the trackway. These features are shown on figure 2 and are labelled with an orange square.

5.3.2.2 PRN 5495 is recorded as a Medieval bloomery. It is described as "seven or eight mounds covered with heather, moss and grass, below the covering of which is discoverable heaps of slag, like the refuse from copper smelting.

5.3.2.3 At a number of places in the neighbourhood of Pont Dolgyfeiliau are remains of iron smelting activity in the form of large heaps of slag. 300yds SE of Bwlch-y-ffordd site (settlement) where one heap is 6ft high. This iron working may be of medieval origin, but a piece of the slag was picked up in the Enclosed Homestead, although it may have come there by chance.

5.3.2.4 In the area to the E and N of Dol Gyfeliau are a number of mounds all of which consist of characteristic bloomery slag. They are assumed to be of medieval origin and may have been connected with Cymmer Abbey. Llwyn Dy 300m SE of the Bwlch y Ffordd settlement site. Two mounds, now flattened by forest planting. 20m due N of the surviving mound, near the mouth of an adit is a platform covered with a thick layer of charcoal, possibly the site of a charcoal clamp.

5.3.2.5 All of the sites have one element in common in that they are situated in exposed locations away from water sources, which suggests that the bellows were man-powered. All of the sites are situated quite close to each other, along the line of the early (and putative Roman) road through this area within a distance of 1.5 km. This may suggest that the furnaces were being opened in sequence, using locally coppiced timber in a regulated cycle. It is also notable that each of the bloomeries lies on the land of different (modern) farmstead^o.

5.3.2.6 PRN 5496 is recorded as "bloomery mound, Cae Cyrach. Seven or eight mounds covered with heather, moss and grass, below the covering of which is discoverable heaps of slag, like the refuse from copper smelting.

5.3.2.7 At a number of places in the neighbourhood of Pont Dolgyfeiliau are remains of iron smelting activity in the form of large heaps of slag.

5.3.2.8 In the area to the E and N of Dol Gyfeliau are a number of mounds all of which consist of characteristic bloomery slag. They are assumed to be of medieval origin and may have been connected with Cymmer Abbey. Cae Cyrach just to the E of the original road (now overgrown) between Bwlch y Ffordd and Cae Cyrach. A very large mound, 12m in diameter, 3m high and spreads of slag 30m to the NNE and from 50-100m to the SSW.

5.3.2.9 All of the sites have one element in common in that they are situated in exposed locations away from water sources, which suggests that the bellows were man-powered. All of the sites are situated quite close to each other, along the line of the early (and putative Roman) road through this area within a distance of 1.5 km. This may suggest that the furnaces were being opened in sequence, using locally coppiced timber in a regulated cycle. It is also notable that each of the bloomeries lies on the land of different (modern) farmstead².

5.3.2.10 PRN 5497 is recorded as "Medieval bloomery. Seven or eight mounds covered with heather, moss and grass, below the covering of which is discoverable heaps of slag, like the refuse from copper smelting.

5.3.2.11 At a number of places in the neighbourhood of Pont Dolgyfeiliau are remains of iron smelling activity in the form of large heaps of slag.

5.3.2.12 In the area to the E and N of Dol Gyfeliau are a number of mounds all of which consist of characteristic bloomery slag. They are assumed to be of medieval origin and may have been connected with Cymmer Abbey. Tap Mawr to the E of the crag of that name. Two low curving banks and several smaller heaps of slag.

5.3.2.13 All of the sites have one element in common in that they are situated in exposed locations away from water sources, which suggests that the bellows were man-powered. All of the sites are situated quite close to each other, along the line of the early (and putative Roman) road through this area within a distance of 1.5 km. This may suggest that the furnaces were being opened in sequence, using locally coppiced timber in a regulated cycle. It is also notable that each of the bloomeries lies on the land of different (modern) farmstead^o.

5.3.2.14 PRN 8611 is recorded as "Medieval bloomery. A bloomery site surveyed and partly excavated in 1997 and 2001, yielding evidence for a large furnace with clay superstructure and a refining hearth within a 15m by 4.5m building, a tank made from sloping stones sealed with clay, perhaps for temporary storage of hot charcoal, and the remains of structural timbers. It has now been partly reconstructed and consolidated for public view.

5.3.2.15 One or two furnaces were set within a rectangular timber building whose south-east end had been buried in a slag heap up to 2.0m high. To the south-west is a stone walled horseshoe shaped charcoal store. Seven ostensibly similar sites (one of which is known as Tap Mawr [SH 7219 2772] another as Cae Cyrach [SH 7253 2750] others, badly damaged, at Gelli Goch [SH 7173 2890, 7168 2877, 7169 2869] have been recorded in the immediate vicinity, though these were observed to have been obscured by forestry or to be inaccessible due to tree-felling. The iron ore (bog ore) was brought in from a distance as it was the charcoal from Coed-y-Brenin that was at a premium. The Lhuyn Du bloomeries are thought to have been peripatetic iron works, occupying a site for perhaps a decade before moving on in search of charcoal across the wood".

5.4 Post Medieval/Modern Sites Within Trackway Vicinity

5.4.1 The Post Medieval/Modern HER entries for the study area were the most numerous with 81 of the 121 records falling within these periods. Within these sites are 5 Listed Buildings. The records are not discussed individually but rather by their broad "type groupings" as related to the land use over time, dominated as it was by agricultural and industrial (in particular metal mining) use.

5.4.2 The records have been categorised as Agriculture and Subsistence (18 records), Domestic (2 records), Industrial (31 records), Monument (1 record), Transport (9 records), Water Supply (6 records) and Unassigned (6 records).

5.4.3 Within the agricultural and subsistence category, record type can be further subdivided to reveal the types of agriculture with sheepfolds, clearance cairns, field boundaries, farms and barns all recorded along the length of the track and clearly marked on the 1889 First Edition Ordnance Survey map. The 2 recorded domestic structures are also of agricultural origin with one recorded as a farmhouse/barn and the other as having originally been a byre.

5.4.4 Industrial is the largest of the site type groups, with mining activity well represented within the data reflecting that the area is a rich source of minerals including gold, lead and copper. There were also slate quarry remains and the remains of processing structures such as mills, winding houses, turbines and a smithy together with associated transport links. A gunpowder works is also recorded. These structures are now largely hidden within the forestry area and difficult to access although they are clearly visible on the Ordnance Survey mapping.

5.4.5 The site recorded as a monument (PRN 60247) is recorded as "a laid stone wall c. 0.7m wide, still standing in places to its full height of c. 1.7m. Built of sub-angular stone of all sizes, many quite small and clearly different in character from the larger squarer blocks in walls 13 and 14. This is probably an estate built wall surrounding the formerly open strip of woodland shown alongside the river on the map of c. 1806 but enclosed on the tithe map of c. 1841".

5.4.6 Transport is perhaps the most interesting of the categories given the uncertainty as to the antiquity of this route. Whether Roman, Medieval or later in date, what is clear is that this route was part of the Turnpike system and was identified as such in GAT Report 1171. Despite being referred to in various reports including Hopewell (2013) and GAT Report 1171, neither the Turnpike Road as a Post Medieval feature or the fine example of a Turnpike milestone found along the route appear to have been assigned separate PRN's.

5.4.7 The transport features recorded in the HER include stepping-stones, bridges and trackway and a multitude of trackways, hollow ways and forestry tracks criss-cross the area. Although some of these features are associated with the mining activities in the area, the role of others are less obvious and the dating uncertain.

5.4.8 The water supply and drainage features consist of a series of sluices and least and a water pipe associated with the aforementioned mill site.

5.4.9 The twentieth century military use of the area begins with small military camp established at Bryn Golau, on the southern outskirts of Bronaber village at the turn of the century. In 1906, a larger, more permanent site was established at Rhiw Goch further south. Further land was purchased by the War Office in the area and the War Department came to own 8,020 acres in the Trawsfynydd parish, which was predominantly used for artillery practice for both the Regular and Territorial Army. During the First World War the camp was utilised for accommodation for soldiers, as an artillery range and as a prisoner-of-war camp (GAT 2004: 25).

5.4.10 By World War II, more-permanent structures had replaced the tents as accommodation. Once again it was also used as a POW camp, though this time mainly for Italian, rather than German, prisoners. After 1945, the camp gradually lost its importance but was used more as a firing range for unused ammunition, conveyed by rail to Trawsfynydd and then by lorries to Rhiw Goch. By 1948 the Trawsfynydd Artillery Range extended to some 8403 acres (ibid).

5.5 Cartographic Evidence

5.5.1 Cartographic evidence for the area was limited and records predating the 1841 Tithe Map could not be sourced. The Tithe Map (figure 3) shows the trackway as a road for the majority of its length, although the exact route at the southern end was unclear and the road appeared to terminate at the farmstead of Bwlch-Y-Ffordd with the line instead following a field boundary.

5.5.2 The 1889 First Edition Ordnance Survey map was examined at Gwynedd Archives (Dolgellau), but it was unfortunately not possible to obtain copies for inclusion in this document due to the condition of the map book. The document is available to veiw at www.maps.nls.uk. There are few changes between this document and the slightly later Second Edition map produced in 1901 and included as figure 4.

5.5.3 This document has Sarn Helen Roman Road marked on the proposed trackway, as is the case on the First Edition Map. The area around the trackway is shown to be dominated by mining activity with multiple trail levels, metal mines and associated sites. The full length of the trackway is now clearly marked as a track from the First Edition Ordnance Survey map onwards.

5.5.4 Records released detailing the Trawsfynydd Artillery Range Bye-Laws dated 1941 (figure 5) show that the northern end of the track forms part of the western boundary of the range, and that the location of Ffrid Cefn Llwyd, a flag post site, corresponds with the site of the buildings identified during the walkover survey (see below).

5.6 Scheduled Ancient Monuments & Listed Buildings

5.6.1 There are three Scheduled Ancient Monuments (ME071 - Roman Kilns 225m SE of Pen-y-Stryd, ME072 - Llech Idris Standing Stone and ME046 - Hut Groups S of Bwlch-y-Ffordd) in the vicinity of the trackway.

5.6.2 There are five Listed Buildings in the vicinity of the trackway:

- PRN 63891, Cadw ID: 15158 Byre (former dower house) at Cefndeuddwr, Grade II Listed
- PRN 63893, Cadw ID 15159 Lower Barn at Cefndeuddwr, Grade II Listed
- PRN 63894 Cadw ID 15157 Upper Barn at Cefndeuddwr, Grade II Listed
- PRN 63895 Cadw ID 15156 Cefndeuddwr Farmhouse, Grade II* Listed
- PRN 65426 Cadw ID 82542 Pont y Llyn-du, Grade II Listed

5.6.3 None of these sites are situated on the route itself and will therefore not be physically impacted by the trackway improvements. The works will not impact upon on the setting of any surrounding Scheduled Ancient Monuments, Listed Buildings or known sites as all works will be below ground/at ground level.

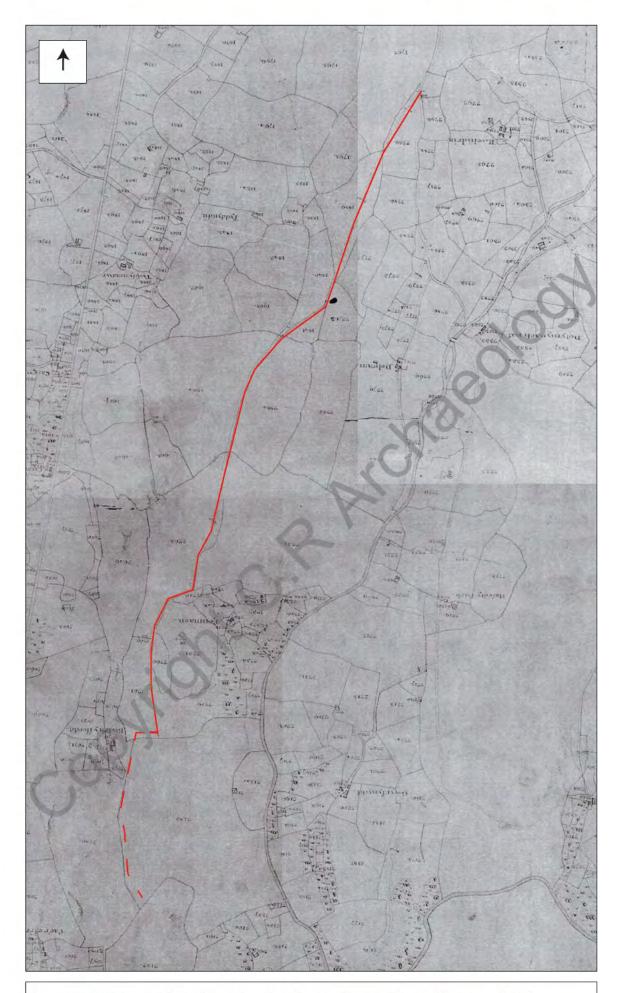
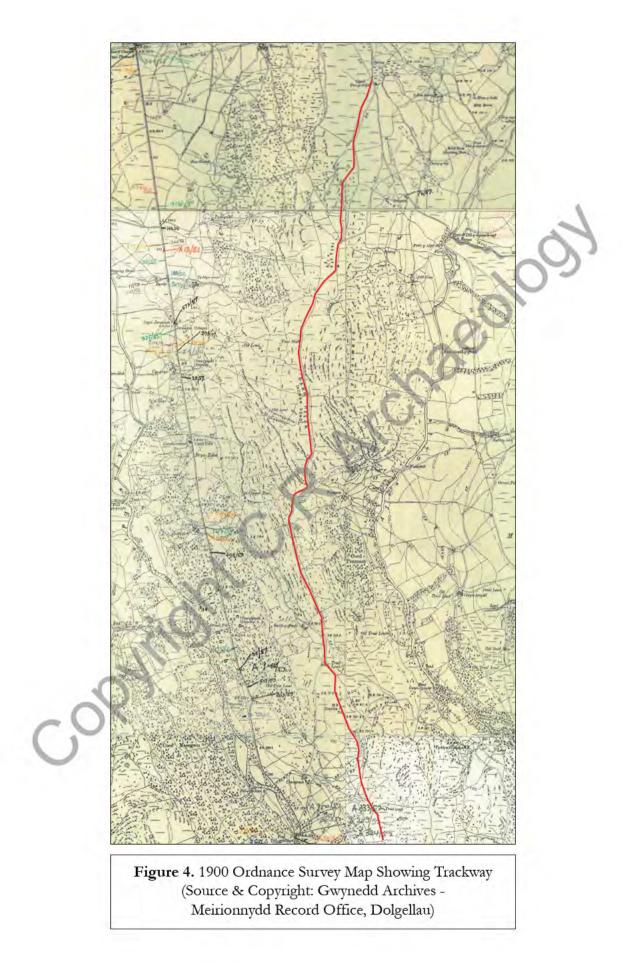
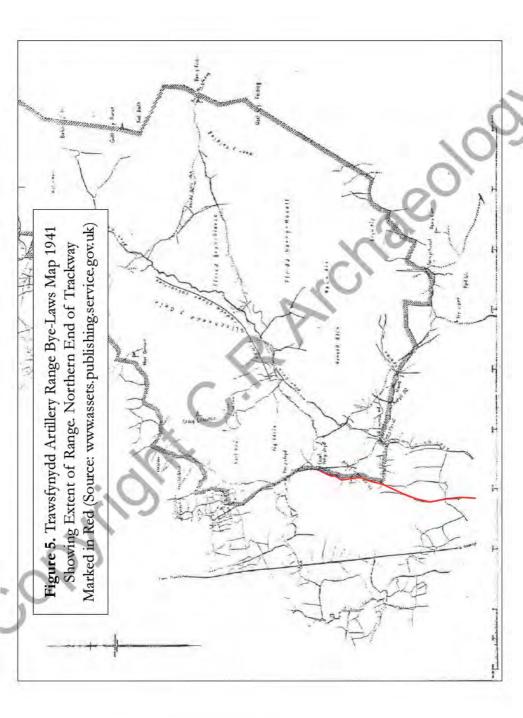


Figure 3. 1840 Tithe Map Showing Trackway - Line is Shown as Solid Where Track is Marked and Dotted to Where Follows Field Boundary (Source & Copyright: Gwynedd Archives - Meirionnydd Record Office, Dolgellau)





6.0 Results of Walkover Survey

6.0.1 The walk over survey commenced at the northern extent of the trackway, adjacent to Pen-Stryd Independent Chapel (NPRN 8597, plates 1-3). The chapel was first built in 1789 and was rebuilt in 1890. The present chapel, dated 1890, is stone-built in the Sub-Classical style of the gable-entry type. The gable facade has round-headed openings, a tall centre plaque above the entrance and flanking windows. The door fanlight and windows have Y-tracery (source: www.coflein.gov.uk).

6.0.2 The trackway runs in a southerly direction across moorland and rough grazing and at the northern extent the route covering is predominantly tarmac with limited areas of rough stone in wheel ruts. These are not laid stone cobbling but rather consolidation measures (plates 4-8). PRN 1603 was recorded as located to the west of the track in this area but could not be identified on the ground. This area of trackway has been assigned PRN 17852 and is highlighted as a possible route for the Tomen Y Mur – Brithdir stretch of the Sarn Helen Roman Road and is the route of the later Turnpike Road.

6.0.3 A number of Post Medieval/Modern features were identified within the moorland zone. Plates 7 & 8 show a small roadside quarry site which is presumed to be Post Medieval in date. This area is marked as a rock outcrop on the first edition Ordnance Survey map onwards but not marked as a quarry site. The corner of the stone field boundary visible in plate 8 is shown as having changed between the Tithe Map of 1841 and the later Ordnance Survey first edition of 1889.

6.0.4 Plates 9-12 show the remains of a series of buildings which do not appear on the Ordnance Survey mapping data but are associated with the Second World War land use of the area. It is possible that the quarry is associated with these buildings although it was noted that the buildings themselves are partially cut into a bedrock outcrop so additional quarrying may not have been necessary.

6.0.5 The twentieth century military use of the area begins with small military camp established at Bryn Golau, on the southern outskirts of Bronaber village at the turn of the century. In 1906, a larger, more permanent site was established at Rhiw Goch further south. Further land was purchased by the War Office in the area and the War Department came to own 8,020 acres in the Trawsfynydd parish, which was predominantly used for artillery practice for both the Regular and Territorial Army. During the First World War the camp was utilised for accommodation for soldiers, as an artillery range and as a prisoner-of-war camp (GAT 2004: 25).

6.0.6 By World War II, more-permanent structures had replaced the tents as accommodation. Once again it was also used as a POW camp, though this time mainly for Italian, rather than German, prisoners. After 1945, the camp gradually lost its importance but was used more as a firing range for unused ammunition, conveyed by rail to Trawsfynydd and then by lorries to Rhiw Goch. By 1948 the Trawsfynydd Artillery Range extended to some 8403 acres (ibid).

6.0.7 Records released detailing the Trawsfynydd Artillery Range Bye-Laws dated 1941 show that the northern end of the track forms the western boundary of the range, and that the location of the Ffrid Cefn Llwyd, a flag post site, corresponds with the site of the buildings identified. The document describes restrictions put in place during live firing exercises and one of the three structures identified is an explosives store. The uses of the two remaining buildings were less clear although they were clearly contemporary military structures. It would seem probable that the initial use of tarmac along this area of the trackway is related to this period of use. These features do not appear to have been previously recorded in the Historic Environment Record.

6.0.8 The trackway continues along a southerly route through open moorland and representative shots are shown as plates 13 - 15. Plates 16 - 17 show a small standing stone, presumably a Turnpike milestone located alongside a drainage ditch. No inscription could be seen on the stone. The trackway in this area is predominantly surfaced with small stone.

6.0.9 The trackway continues south and runs along/near a historic field boundary which predates the Tithe Map of 1841 (plate 19).

6.0.10 Plates 20 & 21 show the remains of a rectangular platform adjacent to the trackway. There are no structures shown in this location on historic mapping from 1841-1953 although it is clearly visible on aerial imagery. Aerial imagery also shows a second structure to the west (plate 22), near the field boundary. Although historic sources show that there is quarrying in the vicinity of these features, they are most likely remnants of Second World War activity in the area.

6.0.11 This stretch of trackway passes PRN 5075 although no trace was observed during the site visit.

6.0.12 The trackway continues along the western side of a stone boundary wall which curves around the lower western slope of Craig y Penmaen (Plates 23 - 31). Within this stretch are areas of well-preserved cobbled surfaces as shown in Plate 31 which appears to retain curb stones indicative of it having been a Turnpike Road.

6.0.13 This area is noted by Hopewell during his Roman Roads study and he records "two phases are clearly visible where the road runs downhill just after entering the plantation (note this plantation had been partially felled by the time of this survey). The earliest phase is however, characteristically eighteenth century in character; an early surface of pitched stone can be seen joining the modern track" (Hopewell 2013: 61).

6.0.14 Plates 32 - 34 show a particularly fine example of a Turnpike milestone which was located in an area bordered by relatively recently felled trees. This stone was noted by Hopewell during his work on the Roman Roads (Hopewell 2013: 15 - 16) in the area although it does not appear to have been given a PRN. When visited by Hopewell it was within an area of forestry although as noted above the eastern forestry has since been cleared.

6.0.15 The southern end of the trackway is within a woodland/forestry area (plates 36 - 42). Within this area there is the localised survival of a cobbled area - although much of the trackway has been resurfaced. Of note is plate 37 which shows an area of cobbling recorded as PRN 977. This surface is located on a small offshoot of the main more modern trackway and it can be seen on the historic Ordnance Survey mapping to be the earlier route (presumably the main track was constructed to bypass this stretch and straighten the road). The level of detail on the Tithe mapping is not sufficient to identify this area.

6.0.16 Within this wooded area are contained multiple areas associated with Medieval iron smelting and SAM ME046 (PRN 5515). Also within this forestry area are concentrations of Post Medieval mining and farming activity. The majority of these metal working/mining sites are concealed within the trees, but PRN 5496 was adjacent to the trackway and clearly visible (plates 40 - 42).

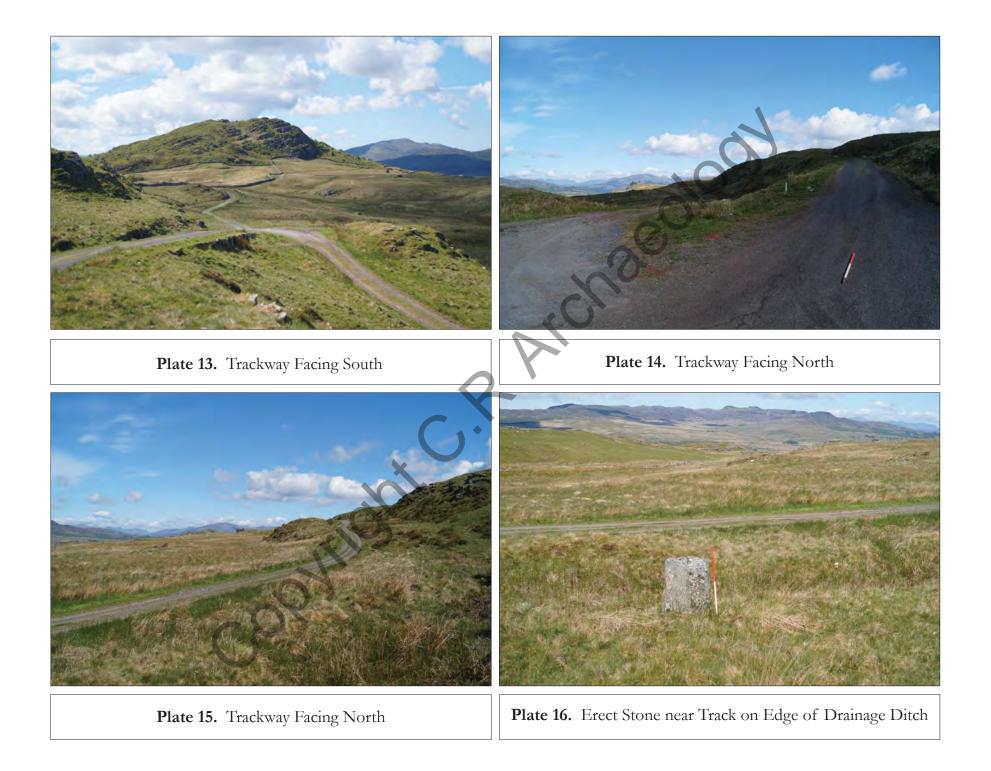


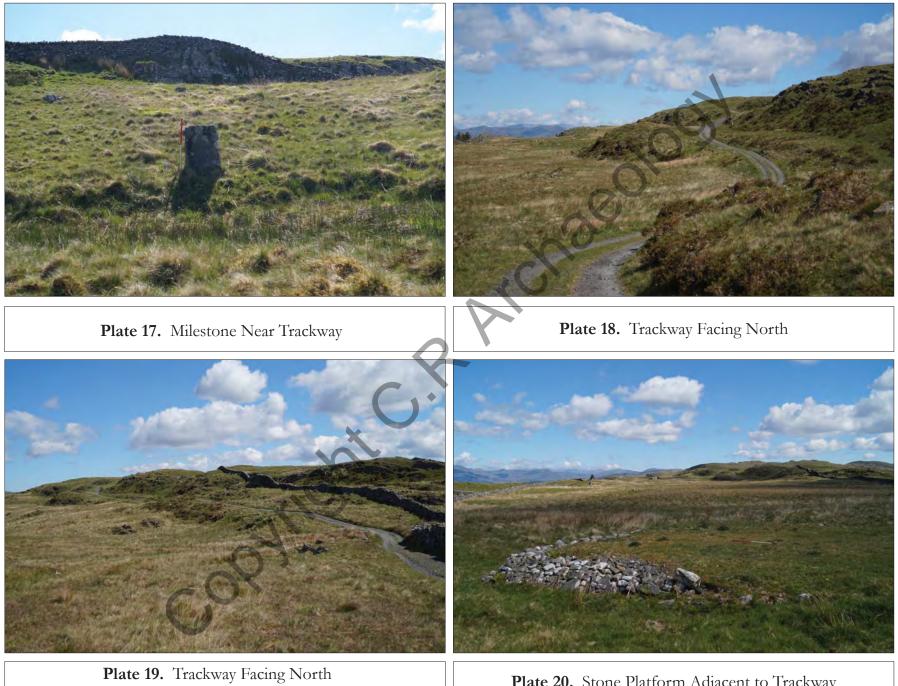




Plate 11. Concrete Platform near Explosives Store

Plate 12. Platform with Iron Fittings near Explosives Store





Showing Historic Boundary Wall

Plate 20. Stone Platform Adjacent to Trackway



Plate 23. Trackway Facing North

Plate 24. Trackway Facing South





Plate 33. Turnpike Milestone

Plate 34. Turnpike Milestone

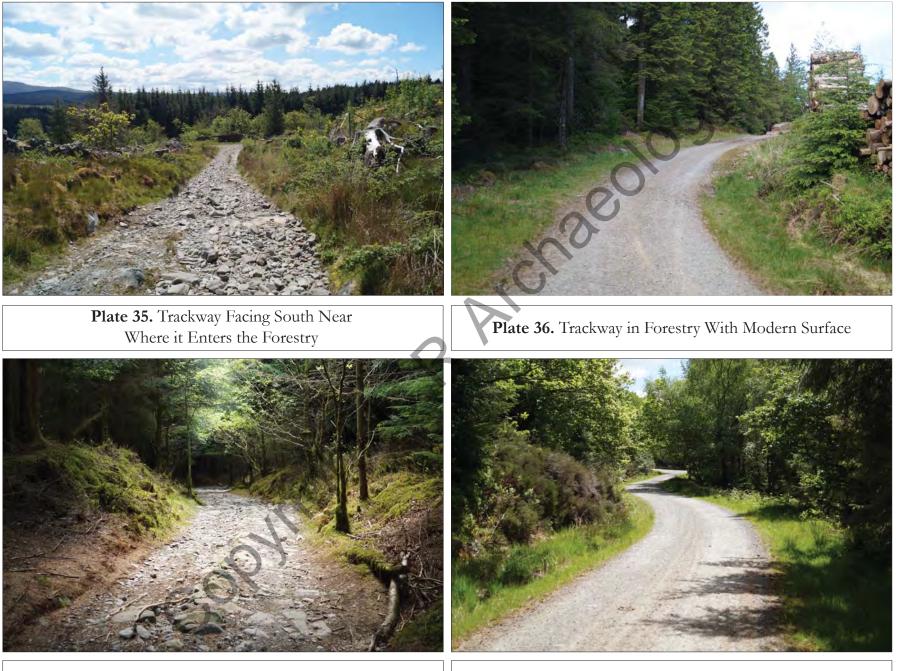


Plate 37. Forestry Trackway With Cobbling

Plate 38. Trackway in Forestry With Modern Surface



7.0 Considerations for Proposed Works

7.0.1 Snowdonia National Park Authority (SNPA) are examining ways in which the existing trackway can be improved to foster greater connectivity between Trawsfynydd and Coed-y-Brenin. The improved track will require consideration of the following: improvement of existing drainage systems and potential development of new drainage systems, improvement of access arrangements to the track and the improvement of the track's surface together with any change in level which may be required.

7.0.2 It is proposed that the enhanced trackway usage will include walking, mountain biking and function as a bridleway. It is planned to integrate the track more fully within the existing route network.

7.0.3 The trackway has a large number of existing drains which run beneath and alongside the route for the majority of its length. Many of these are currently blocked or damaged. There are a number of areas where the bedrock has been eroded which has created areas of standing water.

7.0.4 It is proposed that the improvement works will include the reinstatement/repair of existing drains rather than the excavation of new service trenches. This will minimise the disturbance to the historic fabric of the trackway but may provide opportunities to examine the sections of the structure at various points along the length which may provide dating information – this is of particular significance given the potential to identify/disprove this route as the Tomen y Mur – Brithdir section of the Sarn Helen Roman Road. It is also possible that evidence of previous activity along the route, particularly industrial activity of Medieval and later date might also be revealed.

7.0.5 In sunken areas where water has accumulated it is proposed that the ground level will be raised and new drains will be incorporated within this made ground. The addition of new material is intended to create an even trackway surface.

7.0.6 Surviving cobbled surfaces identified which are believed to be elements of the Turnpike Road are generally located at the highest points along the track, and it is therefore unlikely that any infilling or drainage will be required in these areas and they will not be disturbed. There may however be an implication to any increase in footfall/bike/horse use over these surfaces and erosion may increase. This should be monitored.

7.0.7 The proposed works will not have an implication on the setting of any surrounding Scheduled Ancient Monuments, Listed Buildings or known sites as all works will be below ground/at ground level.

7.0.8 The works will be taking place in an area of known Prehistoric, Roman, Romano-British, Early Medieval, Medieval, Post Medieval and Modern archaeological remains including a number of sites of national significance. The route is considered to be in an area of high archaeological potential and appropriate mitigation is advised.

8.0 Conclusion

8.0.1 The trackway is of unknown date but there are elements along the route which may potentially be of Roman date and form part of the Sarn Helen Roman Road. If not Roman, there is the likelihood that at least the Bwlch-Y-Ffordd stretch northwards is of Medieval date and associated with the bloomery and Medieval structures identified around this area.

8.0.2 The trackway has undergone improvements and resurfacing throughout its history with areas of characteristically eighteenth-century Turnpike cobbling surviving in places. Resurfacing in other areas of the is of 20th century character and associated with military and forestry usage. Parts of the road have eroded down to bed rock.

8.0.3 The northernmost section of the trackway has been tarmacked although it is unclear whether this layer was laid upon an earlier surface or whether the road was stripped down to the underlying natural before construction.

8.0.4 It is recommended that, to minimise disturbance to potentially sensitive deposits, wherever possible existing drains are retained and repaired/replaced. As there is potential to gather significant archaeological information on the period of origin of this trackway it is further recommended that should below ground works be undertaken that it be done under an archaeological watching brief and that all exposed sections should be examined and recorded.

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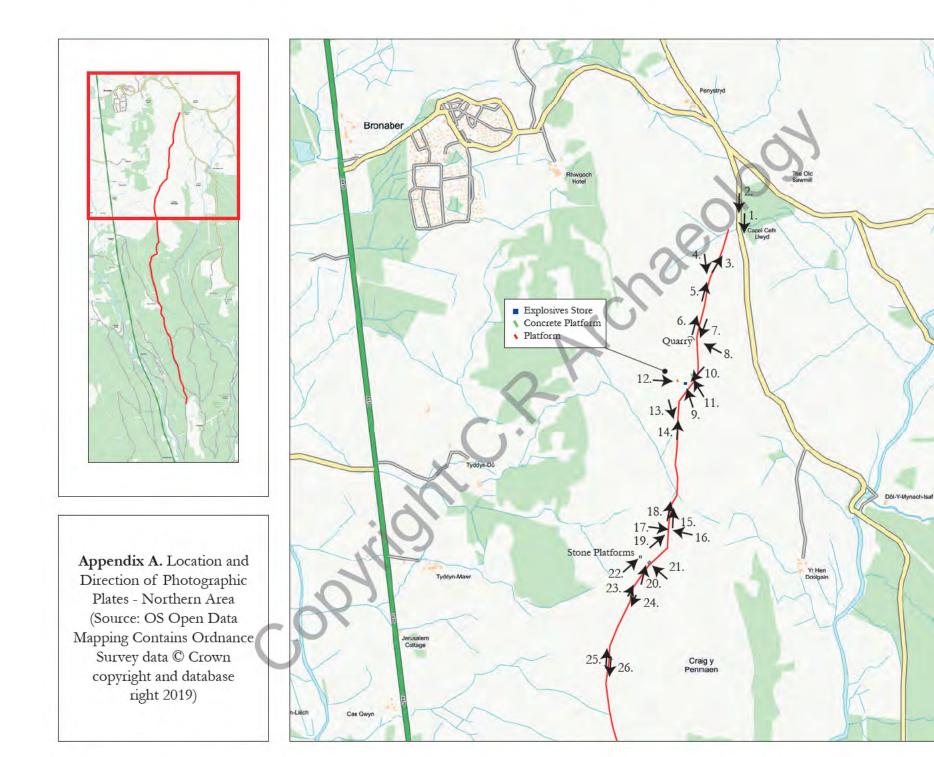
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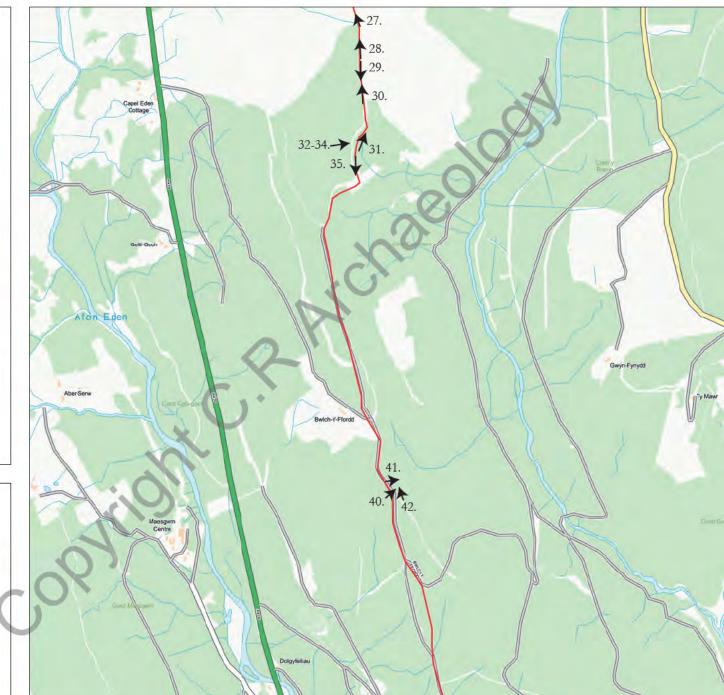
Archive Sources

Gwynedd Archives - Meirionnydd Record Office, Dolgellau

1841 Tithe Map1889 First Edition Ordnance Survey Map1900 Second Edition Ordnance Survey Map



Appendix A. Location and Direction of Photographic Plates - Central Area (Source: OS Open Data Mapping Contains Ordnance Survey data © Crown copyright and database right 2019)





Appendix A. Location and Direction of Photographic Plates - Southern Area (Source: OS Open Data Mapping Contains Ordnance Survey data © Crown copyright and database right 2019)

