



A5 LLANGOLLEN GOLF CLUB BENDS, CLWYD

NORTH WALES

Record of Determination



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SUMMARY

North and Mid Wales Trunk Road Agency (NMWTRA) are proposing improvements to the A5 to the east of Llangollen, in the vicinity of Llangollen Golf Club to improve the safety of the road and in relation to the club. The design of the improvements has not yet been finalised and may extend to the bends both east and west of the club and to any of the side roads and private accesses. Consequently, Axis, on behalf of NMWTRA, commissioned Oxford Archaeology North (OA North) to undertake archaeological desk-based research to contribute to a Record of Determination to assess whether an Environmental Impact Assessment (EIA) for the proposed scheme is required. This was carried out in July and August 2013.

The study area for the Record of Determination comprises an area 500m in radius centred on the stretch of A5 proposed for road improvements. The Record of Determination comprised desk-based research including a search of records held by the Clwyd-Powys Historic Environment Record (HER), and the archives and library held at OA North. In addition to this, a site visit was carried out, in order to relate the landscape and surroundings to the results of the desk-based research, and identify any additional features that would not be procured solely from documentary sources.

In total, 40 heritage assets have been collated in a gazetteer compiled for the study area, 12 of which (Sites **01-12**) were identified through a search of the HER, with the remaining 28 sites (Sites **13-40**) recorded through map regression and the site visit.

The earliest archaeological evidence within the study area is represented by a Bronze Age findspot (Site **10**), and further prehistoric sites are known in the environs of the study area. The putative route of a Roman Road (Site **05**) is recorded towards the east end of the proposed road improvement scheme. Medieval sites include land holdings (Site **08**); and a farmhouse, Bryn-Dethol, within the study area that has been found to have medieval origins (Site **03**). Post-medieval sites include a barn associated with Bryn-Dethol Farmhouse (Site **04**); a summerhouse (Site **01**); a house (Site **06**); and the findspot of a pendant (Site **11**), a house, Aber-cregan (Site **13, 37** and **14**), the route of the former Llangollen Railway (Site **12**); relict field boundaries and lynchets (Sites **15-9, 23-5**); a stone trough (Site **40**); and a former drive to a house (Site **22**).

The most notable of the sites relate to the construction of the Holyhead Road in 1815-26; this was designed by Thomas Telford and was the first large civilian civil engineering project ever to be directly funded by government. As such, it was a well-funded, well-constructed, road that incorporated a consistent and high quality aspect that paved the way for road design that followed. Within the study area, 13 sites relating to the historic road were noted, including six stone storage depots (Sites **26-31**); four stretches of walling (Sites **32-34** and **36**); an embankment (Site **35**); and a milestone (Site **07**). Three quarries were also recorded close to the road, which may be associated with its construction, though this is not certain (Sites **02, 20** and **21**).

It should also be noted that the entirety of the study area is located within the buffer zone of the Pontcysyllte Aqueduct and Llangollen Canal World Heritage Site. Once designs for the road improvements are finalised, consultation will need to be made as to any requirements for mitigation of the scheme pertinent to the archaeological sites and World Heritage Site buffer zone. Recommendations have also been made in this

report for further desk-based archaeological investigation, recording of the historic road features and sympathetic reconstruction of any of the road features that require renovation.

ACKNOWLEDGEMENTS

OA North would like to thank Alex Radley at Axis for commissioning the project. Thanks are also due to Mark Walters at Clwyd-Powys Archaeological Trust (CPAT) and Sophie Watson at CPAT Historic Environment Record (HER) for their assistance with the project.

The desk-based research was undertaken by Kathryn Blythe, the site visits were carried out by Jamie Quartermaine and Peter Schofield, and the drawings were produced by Mark Tidmarsh and Ann Stewardson. The project was managed by Jamie Quartermaine, who also edited the report.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF PROJECT

- 1.1.1 North and Mid Wales Trunk Road Agency (NMWTRA) are proposing improvements to the A5 to the east of Llangollen, in the vicinity of Llangollen Golf Club. The design of the improvements has not yet been finalised but they are required for safety when accessing the golf club and may extend to the bends both east and west of the club and to any of the side roads and private accesses. The improvements are likely to be minor and may include: carriageway widening; provision of a footway or cycleway; wider or longer visibility splays; and changes to the gradient or camber. Consequently, Axis, on behalf of NMWTRA, commissioned Oxford Archaeology North (OA North) to undertake archaeological desk-based research to contribute to a Record of Determination to assess whether an Environmental Impact Assessment (EIA) for the proposed scheme is required. This was carried out in August 2013.
- 1.1.2 The study area for the Record of Determination comprises an area of 500m in radius centred on the stretch of A5 proposed for road improvements. The Record of Determination comprised desk-based research including a search of records held by the Clwyd-Powys Historic Environment Record (HER), and the archives and library held at OA North. In addition to this, a site visit was carried out, in order to relate the landscape and surroundings to the results of the desk-based research, and identify any additional features that would not be procured solely from documentary sources.
- 1.1.3 This report sets out the results of the work in the form of a short document, outlining the findings, followed by a statement of requirements for further archaeological work.

1.2 LOCATION, TOPOGRAPHY AND GEOLOGY

- 1.2.1 The proposed scheme is for improvements along an approximate 1km stretch of the A5 (from SJ 2339 4183 to SJ 2409 4139), some 1.5km to the east of Llangollen (Fig 1). At this point the road, aligned approximately west-north-west / east/south-east and lying at approximately 91m aOD, takes a bend towards the north-east. To the north-east the land slopes down steeply for some 90m, to the Caregan Brook, which runs approximately parallel to the A5. North-eastwards again the land slopes down much more gradually to the River Dee in the Vale of Llangollen, which is approximately 400m from the road, and again runs roughly parallel with it. To the south-west of the road the land rises steeply away (Figs 1 and 6).
- 1.2.2 The Vale of Llangollen is a steep-sided valley, with the Llantysilio and Ruabon Mountains to the north and the Berwyn Mountains to the south. Ruabon Mountain, to the immediate north of the study area, is composed of carboniferous limestone, overlain by a band of sandstone and coal measures including sandstones and marls (Britnell 2005, 17). Overlying this are alluvial

deposits, which have built up within the floor of the Vale. Ice action during the last Ice Age has also resulted in a scattering of erratic boulders (*ibid*).

2. METHODOLOGY

2.1 INTRODUCTION

- 2.1.1 This desk-based research was carried out in accordance with the relevant IfA and English Heritage guidelines (Institute for Archaeologists 2012 *Code of Conduct*; Institute for Archaeologists, 2011 *Standard and Guidance for Archaeological Desk-based Assessments*; English Heritage, 2006 *Management of Research Projects in the Historic Environment* (MoRPHE)) and generally-accepted best practice.

2.2 DESK-BASED RESEARCH

- 2.2.1 Guidance given in Planning Policy Wales 2012 stresses the importance of preserving the historic environment. Advice to local planning authorities on dealing with archaeological and cultural heritage issues within the planning process is given in the Welsh Office Circular 60/96 - *Planning and the Historic Environment: Archaeology*, and Welsh Office Circular 61/96 - *Planning and the Historic Environment: Historic Buildings and Conservation Areas*. In addition, Policy VOE 1 of the Denbighshire Local Development Plan (Denbighshire County Council 2013, 64) stresses the importance of protecting the historic environment.
- 2.2.2 The aim of the desk-based research is not only to give consideration to the heritage assets in and around the proposed scheme, but also to put the site into its archaeological and historical context. All statutory and non-statutory sites within a 500m radius of the proposed site were identified and collated into a gazetteer (*Section 4*), and their location has been plotted on Figures 6 and 7. The principal sources of information consulted were historical and modern maps of the study area, although published and unpublished secondary sources were also reviewed. The results of the assessment were analysed using the set of criteria used to assess the national importance of an ancient monument (DCMS 2010). Sources consulted include:
- 2.2.3 **Clwyd Powys Archaeological Trust (CPAT):** maintains the Historic Environment Record (HER), which is a Geographical Information System (GIS) and linked database of records relating to known heritage assets (Copyright CPAT HER partnership, 2012 (and in part Crown, 2012)). It also includes information on the Register of Landscapes of Historic Interest in Wales and is supported by an extensive paper archive, including reports, site records and publications. It was consulted to establish heritage assets already known within the study area;
- 2.2.4 **Oxford Archaeology North:** OA North has an extensive archive of secondary sources relevant to the study area, as well as numerous unpublished client reports on work carried out both as OA North and in its former guise of Lancaster University Archaeological Unit (LUAU). LUAU undertook an extensive survey of the Welsh section of Thomas Telford's Holyhead Road on behalf of CADW (Quartermaine *et al* 2003), and the archive for this survey was consulted as part of the present study.

2.3 SITE VISIT

- 2.3.1 The site was visited on the 19th June and 22nd August 2013 to relate the existing topography and land use with the results of the desk-based assessment, as well as to check for any additional sites of archaeological potential that would not be identified through documentary sources (Plates 1-11). The site visits also allowed for an understanding of potential areas of impact by the proposed development, as well as areas of more recent disturbance that may affect the potential for the survival of archaeological deposits.

2.4 ARCHIVE

- 2.4.1 Copies of this Record of Determination will be deposited with Clwyd-Powys Archaeological Trust for reference purposes.

3. BACKGROUND

3.1 INTRODUCTION

- 3.1.1 The following section presents a summary of the historical and archaeological background of the general area. This is presented by historical period, and has been compiled in order to place the study area into a wider archaeological context.

Period	Date Range
Palaeolithic	30,000 – 10,000 BC
Mesolithic	10,000 – 4,000 BC
Neolithic	4,000 – 2,500 BC
Bronze Age	2,500 – 700 BC
Iron Age	700 BC – AD 43
Romano-British	AD 43 – AD 410
Early Medieval	AD 410 – AD 1066
Late Medieval	AD 1066 – AD 1540
Post-medieval	AD 1540 – c1750
Industrial Period	cAD1750 – 1901
Modern	Post-1901

Table 1: Summary of British archaeological periods and date ranges

3.2 GENERAL HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

- 3.2.1 **Prehistoric period:** the fertile land around the river Dee has resulted in widespread evidence for prehistoric activity in the environs of the study area. In addition, this valley has been an important access route into central Wales from early times (Britnell 2005, 20).
- 3.2.2 Woodland clearance and hunting during the Neolithic and Early Bronze Age are represented by findspots of stone axes (for instance from Ty'n Celyn approximately 1km to the south of the study area, and Trevor Hall approximately 1km to the north-east of the study area) and flint arrowheads. There is a lack of known settlement sites in the area, but burial mounds on Llantysilio Mountain to the north-west of Llangollen, and on the hills to the south of Llangollen indicate that there was permanent settlement in the area from the Early Bronze Age onwards (*op cit*, 20-1). There are also monuments on Ruabon Mountain to the north of the study area, comprising stone cairns, ring banks and a stone circle. These possibly indicate ceremonial activity, and are thought to be associated with the use of upland areas for summer grazing. No evidence for contemporary settlement is yet known (*op cit*, 21).

- 3.2.3 Later Bronze Age activity is indicated by the chance finds of metalwork, possibly associated with continued woodland clearance (*ibid*). Within the study area is a Bronze Age hoard (Site **10**), which comprised a fragment of a possible lead socketed axe head, a fragment of another lead axe and four fragments of lead alloy.
- 3.2.4 The first evidence for defended settlements appears in the Iron Age. A fort, which preceded the medieval castle at Dinas Brân (Scheduled Monument (SM) DE 021), is located approximately 500m north-west of the study area. This hill fort, and others in the surrounding area, appear to have been located not only in good defensive positions, but also in areas where upland grazing was available. The fort at Dinas Brân also appears to have controlled the Dee valley (*ibid*).
- 3.2.5 **Roman Period:** Roman activity in the area is evidenced by findspots including a brooch from Trevor Hall (*ibid*). A Roman road is recorded within the study area (Site **05**), and is the putative east/west route of a road from Rhug to Rhyn Park in Shropshire. Though cropmarks and earthworks have been recorded on the line of the road in the Llangollen area, the remainder of the road is a predicted route thought to have been fossilised by Maesmawr Road which heads eastwards out of Llangollen (Silvester and Owen 2003, figs 58-9).
- 3.2.6 At this time, much of the lowlands would have been given over to arable farming, with associated settlement comprising dispersed farmsteads. Woodland resources on the valley edge would have continued to have been utilised and upland grazing would have continued, leading to extensive areas of heather moorland on the hills (Britnell 2005, 21).
- 3.2.7 **Medieval period:** the early medieval landscape is likely to have looked very much as it did during the Roman period. Between the sixth and eleventh centuries the Welsh system of land tenure, through extended family groupings, emerged (*op cit*, 22). The Vale of Llangollen became part of the Welsh Kingdom of Powys from about the seventh or eighth century, the eastern border of which was formed by Offa's Dyke, to the east of the study area. This area frequently came under attack by the neighbouring Anglo-Saxon Kingdom of Mercia. In the ninth century Eilseg's Pillar, the lower portion of a stone cross, was erected near the confluence of the rivers Dee and Eglwyseg (approximately 3km to the north-west of the study area), which commemorated the re-taking of land from the English by Eilseg. The siting of this monument suggests the presence of a royal estate here; it is located close to the Cistercian Abbey of Valle Crucis, which was founded in 1201 by Madog ap Gruffudd (*op cit*, 11, 17 and 22).
- 3.2.8 Madog's son, Gruffudd ap Madog Maelor, built the castle at Dinas Brân in the 1260s, which then became the administrative centre of Powys Fadog (Powys having been divided into Powys Fadog in the north and Powys Wenwynwyn in the south in 1191). In 1282, Edward I took possession of Powys Fadog, which then ceased to exist and, consequently, Dinas Brân lost its military and administrative powers. Land, including Dinas Brân and Valle Crucis to the north of the Dee, and land to the south of the Dee, was then granted to Roger Mortimer, son of Roger, Lord of Wigmore and became part of the marcher Lordship of Chirkland, which was administered by Chirk Castle, to the east of the study area (*op cit*, 20). Land which may have been part of the Isclawdd

Forest and held by the marcher Lordship of Chirkland is included within the study area (Site **08**). Land held by Valle Crucis was farmed through its home grange or a number of other granges in the surrounding area. These are known at Trevor Mill to the north of the study area and Pengwern Hall to the south (*op cit*, 23). Included within the study area, immediately south of the Dee, are two fields with the name Tir Y Saint, which may have been part of the Valle Crucis lands (Site **09**). In 1536 the Act of Union formed the Hundred of Chirk from the former Marcher Lordship of Chirkland, and this became part of Denbighshire (*ibid*).

- 3.2.9 There is one further site of Medieval origin within the study area, comprising Bryn-Dethol Farmhouse (Site **03**).
- 3.2.10 **Post-medieval and Industrial periods:** the dissolution of Valle Crucis in 1537 led to the sale of its estates, which were bought up by a number of prominent local families. This led to the consolidation of the freehold farm holdings, which had emerged towards the end of the medieval period. The land associated with these is characteristically of both large and small irregular-shaped fields which evolved from the gradual clearance of woodland and resultant piecemeal enclosure; the fields within the study area appear to fit with this description. Some farm buildings within these holdings survive from the late sixteenth century onwards and a number were rebuilt in the late eighteenth/early nineteenth centuries (*op cit*, 23-4).
- 3.2.11 Changes in the wider landscape took place in the nineteenth century with the planting of conifers to support the construction and mining industries. Also emerging in the post-medieval period were limestone and slate quarrying and lead mining (*op cit*, 25); a limestone quarry near Aber-cregan (Site **02**), is located within the study area.
- 3.2.12 Also within the study area are a findspot of a pendant (Site **11**), and three post-medieval buildings: Pen-y-bryn (Site **06**), Cwm Alis summerhouse (Site **01**); and a barn associated with Bryn-Dethol Farmhouse (Site **04**).
- 3.2.13 The nineteenth century saw much improvement in transport and communications to this area with the construction of the canal, the Holyhead Road (Section 3.2.15 below), and the railway. The Llangollen branch of the Shropshire Union Canal was constructed by William Jessop and supported by Thomas Telford and opened in 1805 (Quartermaine *et al* 2003, 14; Hadfield 1993). The canal runs just north of the study area boundary, although the entire study area is located within the buffer zone of the Pontcysyllte Aqueduct and Llangollen Canal World Heritage Site (<http://whc.unesco.org/en/list/1303>).
- 3.2.14 The Vale of Llangollen Railway (Site **12**) from Ruabon to Llangollen was opened in 1861. The railway was then the principal form of transport, taking the traffic formerly carried by the canal and the road. Freight services from Ruabon to Llangollen were stopped in 1968 and the railway in the vicinity of the study area has been dismantled and survives as a farmtrack (Britnell 2005, 34).
- 3.2.15 **Background to the Holyhead Road:** the Holyhead Road (the modern A5), was constructed between 1815 and 1826. The road was directly financed by the Government following an Act of Parliament, and is still used and maintained

as a highway. The construction of the Holyhead Road developed from the passing of the Act of Union between the Irish Parliament in Dublin and the British Parliament in Westminster, which came into force on 1 January 1801 (OA North 2007; Quartermaine *et al* 2003). From then on, the Irish MPs and peers sat in the parliament of the United Kingdom. The need for fast and reliable communication between the two largest cities of the United Kingdom, for the transport of mail, Irish parliamentarians, and government officials became of pressing importance. The Holyhead Road was to provide this link between Ireland and the rest of Britain. The need for communications through North Wales was set within the context of the earlier road system, which was the result of turnpike trusts. These were developed around the main centres of population and their markets, whilst in rural areas, such as North Wales, they did not afford adequate communications. At the end of the eighteenth century, travellers in North Wales and on their way to Ireland from London faced long and often dangerous journeys despite these new turnpike roads, and had to cross the Afon Conwy and the Menai Straits by ferry (*ibid*).

- 3.2.16 In 1810, a Parliamentary Select Committee was established to inquire into the possible routes that could be improved from London to Holyhead. It was chaired by Sir Henry Parnell (1770-1842), the MP for Queen's County in Ireland, and it was this committee that appointed Thomas Telford to prepare a survey and report on the line of the Holyhead Road (Telford 1838, 228). The Parliamentary Select Committee recommended that the Government should take direct control for the financing and building of the improvements from Shrewsbury to Holyhead, and was to be achieved by buying out the interests of six turnpike trusts and two ferry operators, and putting Telford in charge of specifying, commissioning and managing the building works (Telford 1838). In 1815 an Act of Parliament provided the powers and finance for a newly-founded Parliamentary Commission to carry out the construction of the Holyhead Road, making this the first major civilian, state-funded infrastructure scheme of modern times (OA North 2007).
- 3.2.17 Work on the road began in the autumn of 1815, and Telford made it his first priority to improve what he regarded as the worst sections of the road in Wales, particularly that from Betws-y-Coed across the Afon Conwy and along the three miles long (5km) face of Dinas Hill to Rhydylanfair (LUAU 1999). Within 11 years of the establishment of the Holyhead Road Commission, the principal engineering works in Wales were completed. The road through the pass of Nant Ffrancon, the pass of Ty Nant, the new road across Anglesey (completed in the spring of 1822), the Stanley Embankment, Chirk Bank, and the Menai Suspension Bridge, were all opened by 30 January 1826. Later in that year Telford reported that 'this great length of road in North Wales continues to be maintained by the Commissioners in a perfect state, and the merits of the substantial plan on which it has been constructed become every year more apparent' (LUAU 1999, 9), and in 1827 he reported that 'from Chirk along the Parliamentary Road to Holyhead, the surface of the road is uniformly hard and smooth, constant attention being bestowed in maintaining it in perfect order' (*ibid*).
- 3.2.18 **Thomas Telford's Road:** the A5 was constructed according to detailed specifications drawn up by Thomas Telford, which are considered to be the key to the success of the road. Copies of the specifications were obtained from

the Public Record Office (PRO WORK 6/89) for the A5 Archaeological Survey (LUAU 1999).

- 3.2.19 Following a detailed land survey, Telford chose the route, had it marked on the ground with posts and divided it into 123 'lots' of varied length; a detailed specification was then written for each lot. Each specification had an allotted start and end point and explained in yard-by-yard detail exactly what should be done. For example, instructions were provided on raising or lowering the surface of an existing road, responding to obstacles, the materials to be used etc. Each could also include a professionally surveyed map, plans and elevations of significant structures and an undertaking by the contractor to perform the work to the specification by a certain date. In addition to the lot specifications were general specifications for the main elements of the road, details of these follow (*Sections 3.2.20-26 below*).
- 3.2.20 **General Specifications - Drainage:** Telford's initial survey of the Holyhead road route highlighted the inadequacy of the drainage of the existing turnpikes. Telford knew that the siting of the road was crucial to improving the drainage of the road, and the design of the drainage was complex and expensive but efficient and provided for the longevity of the road. The road was cambered and the run-off water led into side channels between the edge of the cambered road and the dyke walls. The side ditches were then drained by well-covered cross drains that channelled the water away under the dyke walls to side ditches beyond (Quartermaine *et al* 2003, 29).
- 3.2.21 **General Specifications - Embankments:** Telford determined that the Road should not have a gradient of more than 1:22, and that the undulations of the landscape should be evened out as far as possible. This was achieved partly by careful design of the route to follow more gentle inclines, but in the more upland areas this involved the construction of large and smaller embankments which were required to provide a generally uniform gradient.
- 3.2.22 As Telford's road was set into the valley side rather than the valley bottom it was set into the slope with a corresponding requirement for an embankment on the downslope side. It was Telford's aim to minimise the gradient of the road and to even-out the undulations of the road as far as possible. As with modern road construction Telford made every effort to match up the volume of the embankment with that of the cutting to minimise the quarrying and transportation of materials, and consequently lengths of cutting were invariably found in the proximity of equivalent areas of embankment. Where the road ran through flat, poorly drained ground, embankments were used to raise it and minimise the impact of flooding (*op cit*, 30).
- 3.2.23 **General Specifications - Retaining walls and breast walls:** where embankments were necessary, retaining walls formed the lower side of the road structure, and in many cases they formed a huge barrier which retained hundreds of tons of earth. Telford specified that the strength of the walls should not rely on the retained soil but were constructed with a revetment facing on both sides and were internally backfilled to provide the platform of the road (PRO WORK 6/89). Consequently they were constructed with revetment facing on both sides and were internally backfilled to provide the platform for the Road. The walls were to be 18 inches wide at the top, 'to have a curved batter at the rate of one inch and a half in every foot from the top'

(Parnell 1838, 186-7), and to have a proportionately larger width at the base. The external faces of the walls were to have large facing stones set in good quality mortar (Quartermaine *et al* 2003, 31). One section of embankment retaining wall survives on the down-slope side of the present section of the road (Site **35**).

- 3.2.24 **General Specifications - Parapet or dyke walls:** these walls provided a boundary to the road, and walls were preferred to hedges partly for their appearance, but also to prevent water damage to the road. They were not, however, structural components and had a lower level of specification. Nevertheless, their construction was precisely defined to be 4ft 6in high, 2ft 6in at the base and built in local stone, laid lengthways through the wall (PRO WORK 6/89). The section of road within the current impact area included several sections of parapet or dyke walls, and followed Telford's General Specifications.
- 3.2.25 **General Specifications - Depots:** following the construction of a section, the road was left to weather over the first winter, during which time the surface became compacted. The workmen then returned in the spring to fill potholes and replace surfaces where necessary. To allow for ongoing maintenance, Telford's design provided for roadside storage of surfacing or 'blinding' stone in small 'depots' (LUAU 1999, 34). These are characteristic of the Holyhead Road and were specified to be no more than a quarter of a mile apart and to be 12 yards long, with two dyke walls each 2 yards and a half wide at the bottom. They should be paved, with an earth bank round the outside. These depots were either splayed and rectangular in plan or rectangular without splays and a considerable number were semi-circular. Most were built of dry-stone walling, but occasionally they were built with hedges. Six depots were identified within the study area (Sites **26-31**).
- 3.2.26 **General Specifications - Milestones:** these were intended as visible markers, to be seen and read clearly from a moving carriage. They were again constructed to a detailed specification which provided for a large pillar of hard limestone to be 6ft 11in in height, of which 2ft was to be buried foundation. It was designed to have a shallow, triangular head with a cast-iron plate set into a recess at the top. Only five of the original eighty-three milestones are missing and most are in reasonably good repair, although thirty-nine of the original plates are missing (LUAU 1999). One milestone was identified within the study area (Site **07**). In 2000 a programme of restoration was undertaken to replace the missing plates with cast-iron replicas (LUAU 2000) and the plate on the Site **07** milestone is one of these replicas.
- 3.2.27 **General Specifications - Quarries:** in order to build the new road Telford's engineers and workman needed a plentiful supply of local building materials, which were integral to the detailed specifications. Roadside quarries would have been a necessity during construction, but such features were not included in Telford's general conditions or specifications and the position, form and size of the quarries were instead dependent on local conditions and terrain. Three quarries have been identified on the south side of the road (Sites **02, 20** and **21**); however, it is not certain that these related specifically to the construction of the Telford road.

3.3 LANDSCAPES OF SPECIAL HISTORIC INTEREST

- 3.3.1 The study area is within The Vale of Llangollen and Eglwyseg, which is on The Register of Landscapes of Special Historic Interest in Wales (Area 40). There are two Historic Landscape Character Areas within the study area, Cwm Alys (1148) to the south, and Dol-Isaf (1153) to the north (Cadw 2003).
- 3.3.2 **Cwm Alys:** this area comprises woodland, scrub and small irregular fields on the steep valley slopes (100-360m aOD) on the southern side of the Vale of Llangollen. Present day settlement constitutes dispersed farms, and buildings such as Bryn-Dethol (Site **03**), a late medieval cruck building, indicate that there is a survival of early building traditions in the area (Britnell 2005, 65)
- 3.3.3 **Dol-Isaf:** this area constitutes the valley floor and lower lying ground on the valley sides of the River Dee (100-200m aOD). The irregular fields in this area probably represent ancient enclosure of land. The present day settlement constitutes dispersed farms, cottages and larger country houses, such as Trevor Hall to the north of the study area, and Tyn-dwr, which is an 1860s Tudor style mansion (now converted to a youth Hostel) situated to the immediate south of the study area (*op cit*, 81-2).

3.4 MAP REGRESSION ANALYSIS

- 3.4.1 **Introduction:** a series of historic OS maps obtained from Promap.co.uk were examined and these provide an indication of the development of the site since the time of the first edition Ordnance Survey map (1873-4).
- 3.4.2 **Ordnance Survey, First Edition 25": 1 mile, 1873-4 (Fig 2):** the A5 had been constructed prior to this mapping, and the milestone (Site **07**) towards the western end of the study area is indicated on this map. The area is characterised by irregular fields and dispersed settlement including Abercregan (Site **13**) at the east end of the proposed scheme, Pen-yr-hygryn to the south of the road, and, further south again Pen-y-bryn (Site **06**) and Bryndethol (Sites **03** and **04**). A well (Site **14**) is marked in a field on the west side of Abercregan.
- 3.4.3 **Ordnance Survey, 25":1 mile, 1899-1900 (Fig 3):** this map shows little change within the proposed development area aside from an area of woodland which is marked on the north side of the A5, and to the south of Caregan Brook. A trough (Site **40**) is marked on the south side of the road, to the south-east of Abercregan.
- 3.4.4 **Ordnance Survey, 6":1 mile, 1914 (Fig 4):** Llangollen Golf Course is marked on this mapping, to the north of the A5. A pavilion building is shown to the immediate north of the road, on the west side of the woods that are noted on the 1899-1900 mapping.
- 3.4.5 **Ordnance Survey, 6": 1 mile, 1963 (Fig 5):** this mapping is very similar to the 1914 OS mapping. The pavilion is now marked as a clubhouse, and the wooded area to the east of it is shown as cleared.
- 3.4.6 **Later mapping:** a consultation of modern mapping and aerial photograph coverage shows that the golf club has expanded since 1963. There is now a new club house building on the north side of the A5, to the east of the earlier

building, which is now named The Willows. The golf club has an associated car park, and the golf course is located mainly to its north and east, and on the north side of the A5.

3.5 PREVIOUS ARCHAEOLOGICAL WORK

- 3.5.1 Aside from the 1999 archaeological survey of the A5 (LUAU), no record of any archaeological work having previously taken place within the study area is known.

3.6 SITE VISIT

- 3.6.1 The site was visited on 19th June and 22nd August 2013 (Plates 1-11; Figs 6 and 7). The current route of the A5 was walked, as well as the land that immediately surrounds the road. In some areas the land could not be accessed, in which case it was viewed from the road. This included the golf club and the land to its south, including Aber-cregan (Site **13**), and the land on the opposite side of the road from the golf club, east of Pen-y-rhogfryn.
- 3.6.2 Eleven sites associated with the A5 were added to the gazetteer. These include six depots (Sites **26-31**), four sections of wall (Sites **32-34** and **36**) and one section of embankment wall (Site **35**). The embankment wall was on the north side of the road, whilst the depots and Telford road side walls were all on the south side. A short stretch of wall (Site **33**; Plate 1) was noted towards the western end of the proposed scheme, approximately opposite the milestone (Site **07**; Plate 2). East of this was bedrock, and then depot Site **26** (Plate 3), was situated at a bend in the road. A wall (Site **34**; Plate 4) was located between depots **26** and **27**, and was noted as being in good condition, standing approximately 0.4m high. On the east side of depot **27** was a stretch of bedrock, although towards depot **28** was a further stretch of wall. Depots **29** (Plate 5), **30** and **31** were recorded as semi-circular, and no wall was noted between depots **28** and **30**. A wall was located both to the north and south of depot **31**, although this was recorded as being in poor condition.



Plate 1: Section of Telford road side wall (Site 33), looking north-west



Plate 2: Milestone 78 (Site 07), looking north



Plate 3: Overgrown depot (Site **26**), looking north



Plate 4: Section of Telford roadside wall (Site **34**), looking north



Plate 5: Depot (Site **29**), looking north-east

- 3.6.3 In addition, two quarries were noted on land to the south of the road (Sites **20-21**), which may have been associated with the road construction; Site **20** in particular was very close to depot Site **26**.
- 3.6.4 Aber-cregan house (Site **13**) is shown on the OS map of 1873-4. It has a drive (Site **37**; Plate 6), with a retaining wall to the south, which extends eastwards from the A5. At the entrance to the drive are gate piers with a bench mark. A shelter belt of woodland (Site **38**; Plate 7) is marked to the south between the house and garden and the A5. A culvert (Site **39**) is located within the shelter belt of woodland on the immediate north side of the A5, and a gap for the stream can be seen in the wall on the opposite side of the road. To the east of this, a trough (Site **40**; Plate 8) is located within a stretch of modern wall.



Plate 6: Drive to Aber-cregan house (Site **37**), looking south-east



Plate 7: Woodland shelter belt (Site **38**), looking south-east



Plate 8: Stone trough (Site **40**) set into modern concrete walling, looking north-east

- 3.6.5 On the opposite side of the road to the Aber-cregan drive is the road which is the postulated route of the Roman road (Site **05**) to Rhyn Park in Shropshire (Plate 9). No evidence for the road could be seen above ground. The former drive to Ty-isaf (Site **22**), on the north side of the A5 at the west extent of the proposed scheme, was also noted on the site visit.



Plate 9: Putative line of Roman road (Site **05**), looking north-west

- 3.6.6 A number of possible former field boundaries (Sites **15**, **17-18** and **23** (Plate 10)), and lynchets (Sites **16**, **19**, **24** and **25**) were noted on the land surrounding the road. Of these all but two (Sites **15** and **25**) are shown on the OS first edition map of 1873-4 as field boundaries. Site **24** is indicated by a line of trees on the 1873-4 map, and therefore appears to have already fallen out of use as a field boundary by this time.



Plate 10: Relict field boundary (Site **23**), looking north-east

- 3.6.7 It should be noted that the medieval castle at Dinas Brân (SM DE 021) was visible from the road (Plate 11).



Plate 11: View from the road to Dinas Brân, looking south-east

4. GAZETTEER OF SITES

NB Information for sites 01-12 were obtained from the Clwyd-Powys Historic Environment Record curated by Clwyd-Powys Archaeological Trust.

Site number	01
Site name	Cwm Alis Summerhouse
NGR	SJ 2447141257
HER no.	126341
Site type	Summerhouse. Rank: 1
Period	Post-Medieval
Sources	HER
Description	A summer house noted on early Ordnance Survey mapping during Glastir private woodland project

Site number	02
Site name	Aber-cregan Quarry
NGR	SJ 2430841283
HER no.	93463
Site type	Quarry. Rank: 1
Period	Post-Medieval
Sources	HER
Description	A quarry shown on the OS 25-inch 1st edition map,

Site number	03
Site name	Bryn-Dethol Farmhouse
NGR	SJ 2393141374
HER no.	31730
Designation	Grade II Listed 1313
Site type	House. Rank: 1
Period	Medieval
Sources	HER
Description	Grade II Listed building: increasing dereliction of the farmhouse has exposed a medieval core that includes a base-cruck.

Site number	04
Site name	Bryn-Dethol Farm barn
NGR	SJ 2393941429
HER no.	31731
Designation	Grade II Listed 1314
Site type	Barn. Rank: 1
Period	Post-Medieval
Sources	HER
Description	Grade II Listed building: an eighteenth century barn that was repaired in 1919. It has lost its roof covering and the trusses are very vulnerable. It is an unusual 4-bay barn with large opposed doorways. It is stone-walled except on the east side where there is half-height timber framing.

Site number	05
Site name	Rhyn Park to Rhug
NGR	SJ 2401641458
HER no.	47511
Site type	Roman road. Rank: 1
Period	Roman
Sources	HER

Description	The predicted line of a roman road. It possible follows the line of a terrace leading onto a lane, that predated the turnpike road and Telford's road, and then joins the Maesmawr road to Llangollen.
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Site number	06
Site name	Pen-y-bryn Buildings
NGR	SJ 2362341423
HER no.	126340
Site type	Building. Rank: 1
Period	Post-Medieval
Sources	HER
Description	A building noted on early Ordnance Survey mapping during the Glastir private woodland project.

Site number	07
Site name	Ty-isaf Milestone
NGR	SJ 2347241851
HER no.	93467
Site type	Milestone. Rank: 1
Period	Modern
Sources	HER; Quartermaine <i>et al</i> 2003
Description	A milestone shown on OS 25-inch 1st edn. It was erected by Thomas Telford as part of his Holyhead Road.

Site number	08
Site name	Isclawdd Forest
NGR	SJ 2442
HER no.	17082
Site type	Medieval Park. Rank: 1
Period	Medieval
Sources	HER; Pratt 1990
Description	Forest of Chirk Lordship. This cannot be mapped from contemporary documentary references. It is either in Cysyllte or north of Dee in Trevor Isaf or Trevor Uchaf. It included Chirk Castle, borough, demesne, 2 signeurial parks, a former Meardreff, and a grange and a wood belonging to Valle Crucis. There is a 1524 reference to a 'parcel of land of the King's waste in a place called Coyde Treveor in the Bailiwick of Isclawith'. This may allude to a relict of the Forest.

Site number	09
Site name	Tir y saint Placename
NGR	SJ 23894208
HER no.	101628
Site type	Medieval Monastic holding. Rank: 1
Period	Medieval
Sources	HER
Description	Two fields which may have once belonged to Valle Crucis.

Site number	10
Site name	Llangollen hoard
NGR	SJ 233413
HER no.	122115
Site type	Findspot. Rank: 1
Period	Bronze Age
Sources	HER

Description A possible Bronze Age hoard, consisting of 1 fragment of a possible lead socketed axehead, 1 fragment of another lead axe and 4 fragments of lead alloy (metal working debris). It is classed as treasure - treasure number 2012W11.

Site number 11
Site name Llangollen, pendant
NGR SJ 233413
HER no. 122117
Site type Railway. Rank: 1
Period Post-Medieval
Sources HER
Description The find spot of a cast lead pendant dating from the post-medieval period. The object is circular in plan and oval in cross-section. At the top of the object is a broken protrusion which probably formed an attachment loop. On one side of the object is a face, below which appears to be a Jacobean ruff. Above the face is a projecting lump of iron corrosion. On the opposite side of the object is a possible standing figure; however, the detail is unclear. In the centre of the figure is a raised oval of iron. One side of the object has broken away and it has a light brown patina.

Site number 12
Site name Vale of Llangollen Railway (section)
NGR SJ 2314942335
HER no. 86646
Site type Railway. Rank: 1
Period Post-Medieval
Sources HER
Description The route of a railway marked on 1st edition (1880) 6 inch, and 1975 1:10000 OS maps, but which is now disused. The track bed of the railway survives as a raised earthwork some 12m wide in places and aligned south-west/north-east. A cutting can be seen to the south-west. The track bed is currently used as a farm track and as an area for storing farmyard manure.

Site number 13
Site name Aber-cregan
NGR SJ 24128 41486
HER no. -
Site type House
Period Industrial
Sources Map regression/Site visit
Description Aber-cregan house is shown on the OS map of 1873-74. A walled garden is marked to the south of the house, with steps at its southern end, between the garden and a shelter belt of woodland to the south (Site 38).

Site number 14
Site name Well, Aber-cregan
NGR SJ 24060 41545
HER no. -
Site type Well
Period Industrial
Sources Map regression
Description A well is marked in a field on the west side of Aber-cregan house on the OS map of 1873-74.

Site number	15
Site name	Relict Field Boundary
NGR	SJ 24049 41507
HER no.	-
Site type	Relict field boundary
Period	Industrial
Sources	Site visit
Description	A possible relict field boundary noted during the site visit. It is aligned approximately north/south, and is not shown on the first edition OS map of 1873-74.

Site number	16
Site name	Lynchet
NGR	SJ 23733 41780
HER no.	-
Site type	Lynchet
Period	Industrial
Sources	Site visit
Description	A lynchet noted during the site visit. It is aligned approximately north/south. A field boundary is shown in this area on the first edition OS map of 1873-74.

Site number	17
Site name	Relict Field Boundary
NGR	SJ 23635 41698
HER no.	-
Site type	Relict field boundary
Period	Industrial
Sources	Site visit
Description	A relict field boundary noted during the site visit. It is aligned approximately east/west. It is shown on the first edition OS map of 1873-74.

Site number	18
Site name	Relict Field Boundary
NGR	SJ 23522 41782
HER no.	-
Site type	Relict field boundary
Period	Industrial
Sources	Site visit
Description	A possible relict field boundary noted during the site visit. It is aligned approximately north/south and turns at north end to be aligned approximately west/east heading eastwards. It is shown on the first edition OS map of 1873-74.

Site number	19
Site name	Lynchet
NGR	SJ 23592 41834
HER no.	-
Site type	Lynchet
Period	Industrial
Sources	Site visit
Description	A large lynchet noted during the site visit. It is aligned approximately north/south. A field boundary is shown in this area on the first edition OS map of 1873-74.

Site number	20
Site name	Quarry scoop
NGR	SJ 23571 41853
HER no.	-
Site type	Quarry scoop
Period	Industrial
Sources	Site visit
Description	A quarry scoop noted during the site visit. It is located immediately south of the A5 and to the south west of a depot (Site 26). It was possibly associated with the construction of the Holyhead Road.

Site number	21
Site name	Quarry scoop
NGR	SJ 23431 41755
HER no.	-
Site type	Quarry scoop
Period	Industrial
Sources	Site visit
Description	A quarry scoop noted during the site visit. It is located a short distance south of the A5, and was possibly associated with the construction of the Holyhead Road.

Site number	22
Site name	Former drive to Ty-isaf
NGR	SJ 23339 41851
HER no.	-
Site type	Former drive
Period	Industrial
Sources	Site visit
Description	A road which heads north from the A5 to a property named Ty-isaf is shown on the OS first edition map of 1873-4. The road is still marked on the OS map for 1963, but on current mapping the southernmost part of the road is not shown, with the road joining the A5 a little further to the east. The old road was visible on the site visit.

Site number	23
Site name	Relict Field Boundary
NGR	SJ 23462 41890
HER no.	-
Site type	Relict field boundary
Period	Industrial
Sources	Site visit
Description	A possible relict field boundary noted during the site visit. It is aligned approximately north/south and is shown on the first edition OS map of 1873-74.

Site number	24
Site name	Lynchet
NGR	SJ 23578 41916
HER no.	-
Site type	Lynchet
Period	Industrial
Sources	Site visit
Description	A slight lynchet noted during the site visit. It is aligned approximately north/south. A line of trees shown on the first edition OS map of 1873-74 indicates that it was a probable former field boundary in this area.

Site number	25
Site name	Lynchet
NGR	SJ 23721 41898
HER no.	-
Site type	Lynchet
Period	Industrial
Sources	Site visit
Description	A slight lynchet noted during the site visit. It is aligned approximately north/south. It does not match any of the field boundaries shown on the first edition OS map of 1873-74.

Site number	26
Site name	Depot
NGR	SJ 23591 41840
HER no.	-
Site type	Depot
Period	Industrial
Sources	Site visit; LUAU 1999
Description	A depot that was noted during the site visit on the south side of the A5. The depot was a walled material storage area for the Telford Holyhead Road. It is recorded as Site 288 in the gazetteer for the 1999 archaeological survey of the A5 (LUAU 1999), when it was recorded as partially intact.

Site number	27
Site name	Depot
NGR	SJ 23699 41830
HER no.	-
Site type	Depot
Period	Industrial
Sources	Site visit; LUAU 1999
Description	A depot noted during the site visit on the south side of the A5. The depot was a walled material storage area for the Telford Holyhead Road. It is recorded as Site 290 in the gazetteer for the 1999 archaeological survey of the A5 (LUAU 1999), when it was recorded as partially intact.

Site number	28
Site name	Depot
NGR	SJ 23784 41801
HER no.	-
Site type	Depot
Period	Industrial
Sources	Site visit; LUAU 1999
Description	A depot noted during the site visit on the south side of the A5. The depot was a walled material storage area for the Telford Holyhead Road. It is recorded as Site 292 in the gazetteer for the 1999 archaeological survey of the A5 (LUAU 1999), when it was recorded as partially intact.

Site number	29
Site name	Semi-circular Depot
NGR	SJ 23859 41731
HER no.	-
Site type	Depot
Period	Industrial
Sources	Site visit
Description	A semi-circular depot noted during the site visit on the south side of the A5. The depot was a walled material storage area for the Telford Holyhead Road.

Site number	30
Site name	Semi-circular Depot
NGR	SJ 23927 41659
HER no.	-
Site type	Depot
Period	Industrial
Sources	Site visit
Description	A semi-circular depot noted during the site visit on the south side of the A5. The depot was a walled material storage area for the Telford Holyhead Road.

Site number	31
Site name	Semi-circular Depot
NGR	SJ 23960 41566
HER no.	-
Site type	Depot
Period	Industrial
Sources	Site visit
Description	A semi-circular depot noted during the site visit on the south side of the A5. The depot was a walled material storage area for the Telford Holyhead Road.

Site number	32
Site name	Wall
NGR	SJ 23955 41589
HER no.	-
Site type	Wall
Period	Industrial
Sources	Site visit; LUAU 1999
Description	A section of roadside wall noted during the site visit on the south side of the A5; it is situated both north and south of depot Site 31 . It is in poor condition. It is part of Site 286 that was recorded in the gazetteer for the 1999 archaeological survey of the A5 (LUAU 1999).

Site number	33
Site name	Wall
NGR	SJ 23489 41848
HER no.	-
Site type	Wall
Period	Industrial
Sources	Site visit; LUAU 1999
Description	A section of wall noted during the site visit on the south side of the A5, situated west of depot Site 26 . It is part of Site 286 and recorded in the gazetteer for the 1999 archaeological survey of the A5 (LUAU 1999).

Site number	34
Site name	Wall
NGR	SJ 23650 41853
HER no.	-
Site type	Wall
Period	Industrial
Sources	Site visit; LUAU 1999
Description	A section of wall noted during the site visit on the south side of the A5, situated between depots 26 (to the west) and 27 (to the east). It is in good condition, standing approximately 0.4m high. Part of Site 286 was recorded in the gazetteer for the 1999 archaeological survey of the A5 (LUAU 1999).

Site number	35
Site name	Embankment
NGR	SJ 23814 41794
HER no.	-
Site type	Embankment
Period	Industrial
Sources	Site visit
Description	A section of embankment retaining wall noted during the site visit on the north side of the A5. It includes a conventional Telford infilled, free-standing retaining wall and has a drain extending from it.

Site number	36
Site name	Wall
NGR	SJ 23764 41812
HER no.	-
Site type	Wall
Period	Industrial
Sources	Site visit; LUAU 1999
Description	A small section of wall noted during the site visit on the south side of the A5, situated west of depot 28 . Part of Site 286 was recorded in the gazetteer for the 1999 archaeological survey of the A5 (LUAU 1999).

Site number	37
Site name	Aber-cregan drive and gate piers
NGR	SJ 24039 41453
HER no.	-
Site type	Drive and gate piers
Period	Industrial
Sources	Map regression/Site visit
Description	Aber-cregan is shown on the OS map of 1873-74. It has a drive, with a retaining wall to the south, which extends eastwards from the A5. At the entrance to the drive are gate piers with a bench mark.

Site number	38
Site name	Aber-cregan woodland
NGR	SJ 24089 41421
HER no.	-
Site type	Woodland
Period	Industrial
Sources	Map regression/Site visit
Description	Aber-cregan is shown on the OS map of 1873-74. A shelter belt of woodland is marked to the south between the house and garden (Site 13) and the A5.

Site number	39
Site name	Aber-cregan Culvert
NGR	SJ 24113 41403
HER no.	-
Site type	Culvert
Period	Industrial
Sources	Map regression/Site visit
Description	A culvert is located within the shelter belt of woodland (Site 38) to the south of Aber-Cregan (Site 13), on the immediate north side of the A5, and a gap for the stream can be seen in the wall on the opposite side of the road.

Site number	40
Site name	Aber-cregan Trough
NGR	SJ 24129 41368
HER no.	-
Site type	Trough
Period	Industrial
Sources	Map regression/Site visit
Description	A trough is located within a stretch of modern wall on the south side of the A5, to the south of Aber-Cregan (Site 13). The trough is marked on the 1899-1900 OS map.

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

- 5.1.1 Desk-based research is the first stage of an iterative process that investigates the presence and significance of heritage assets within or surrounding a proposed development area. Having identified the potential for such assets, further investigation is required to determine the exact nature, survival, extent, and date of the remains. However, in terms of the requirement for further archaeological investigation, it is necessary to consider only those heritage assets identified in the desk-based research that will be affected by the proposed scheme. At present, the design proposals have not been refined and, therefore, it is not possible to determine the impact that the development will have upon the archaeological resource. Once the design proposals for the proposed scheme are finalised, the significance of impact on the heritage assets can be determined along with a mitigation strategy for the affected assets.

5.2 CONCLUSIONS

- 5.2.1 The present study has demonstrated that the most significant archaeological resource within the road corridor is the road itself. Designed and constructed by Thomas Telford between 1815 and 1826, the Holyhead Road was the first large civilian civil engineering project ever to be directly funded by government (Quartermaine *et al* 2003). As such, it was a well-funded, well-constructed, road that incorporated a consistent and high quality aspect that paved the way for road design that followed. Much of the road and its furniture had a distinctive character and it is a testament to the design that many of the original features still survive as part of the present road despite considerable widening and modifications. Some of the more visible elements, such as toll houses and bridges, are designated listed buildings, but much of the other furniture, such as road side walls, depots, embankments and milestones, are not afforded the same level of protection, but together are elements of a significant linear archaeological landscape.
- 5.2.2 Within the present section of road are a series of six depots (Sites **26-31**), which were originally used to store surface stone for the ongoing maintenance of the road surface. There are also sections of original road side walling (Sites **32-4**, and **36**), a section of retaining wall (Site **35**) for an embankment, and a milestone (Site **07**). Overall, this section of the road represents a good survival of the original Telford road by comparison with other sections of the road, and warrants an appropriate level of preservation and management.

5.3 REQUIREMENTS FOR FURTHER ARCHAEOLOGICAL INVESTIGATION

- 5.3.1 **World Heritage Site:** the proposed scheme falls within the buffer zone for the Pontcysyllte Aqueduct and Canal World Heritage Site. Once the design of the proposed scheme is finalised, consultation will therefore be required with Denbighshire Council as to any pertinent requirements. These may include the

production of a Design and Access Statement (DAS), which would demonstrate how the development proposal has considered the impact of the proposed scheme on the setting of the World Heritage Site (Shropshire Council *et al* 2011, 1 and 4).

- 5.3.2 **Further Archaeological Work:** the preliminary desk-based research has sought to provide a brief summary of the historical background and development of the study area. This has been compiled from readily available sources including the HER, OA North library, websites and historic mapping. In light of the historical importance of the road, it is recommended further work is undertaken in advance of any ground works. This would include further documentary studies and archaeological recording of the original features of the A5 (eg milestone, the surviving stretches of roadside wall, depots and embankment).
- 5.3.3 **Further Documentary Studies:** additional documentary sources should be consulted to review and refine the existing documentary study and to examine all available cartographic sources. In particular, the study would include:
- **Denbighshire Archives, Ruthin:** a search should be made of the catalogue of Denbighshire Archives for documents pertinent to the study area. The relevant tithe map and apportionment should be consulted along with any other historic mapping such as estate maps or further historic OS maps.
 - **OA North Archives:** a detailed search should be made of the historic archive (held by OA North) to determine which of Telford's lots the scheme falls within and to consult the specific Lot Specifications for details of the construction of the road in this area.
 - **Visual impact:** consideration should be given to the impact of the proposed scheme on the settings of two scheduled monuments in the environs of the study area: Pen y Gaer Hillfort (SM DE231), 1.5km to the north-east; and Castell Dinas Brân (SM DE 021) 1.9km to the north-west.
 - **Consultation with Cadw and CPAT:** a consultation with Cadw will be required to assess the impact of the proposed scheme on the settings of the above mentioned Scheduled Monuments. The Development Control Archaeologist (DCO) at CPAT should be consulted in advance of any archaeological work taking place. A Written Scheme of Investigation (WSI) should be produced for the proposed work, which will need to be approved by the DCO.
- 5.3.4 **Archaeological Recording:** prior to any work being undertaken on the road a detailed record should be made of any extant original features of Telford's road which will be impacted (Sites **07** and **26-36**) as well as any other archaeological features that will be impacted by the development .
- 5.3.5 **Reconstruction of the Roadside Features:** if any Telford features are to be renovated then this should be done utilising original materials and matching the current makeup and design of the historic walling.

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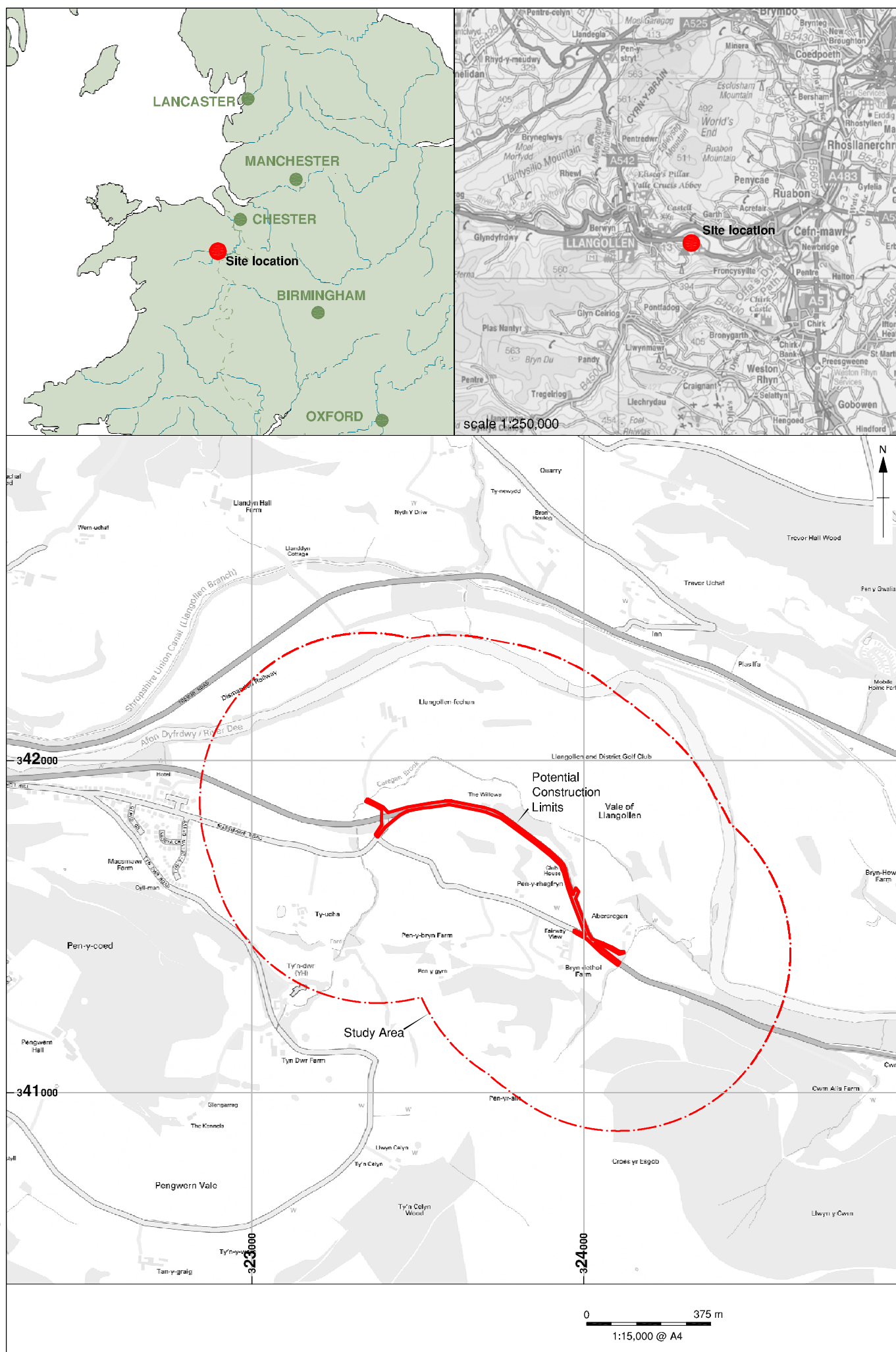


Figure 1: Site location

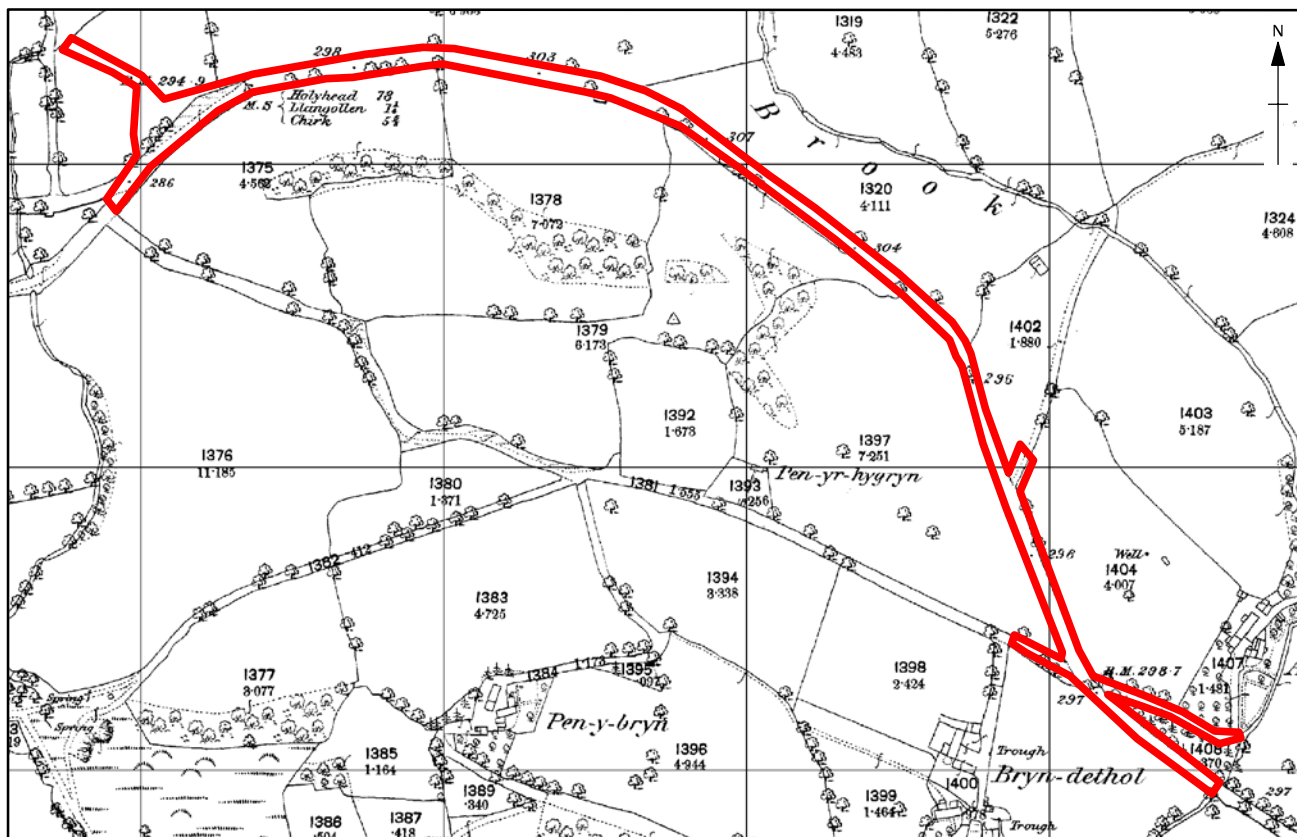


Figure 2: Proposed scheme superimposed on the Ordnance Survey 25" to 1 mile map of 1873-4

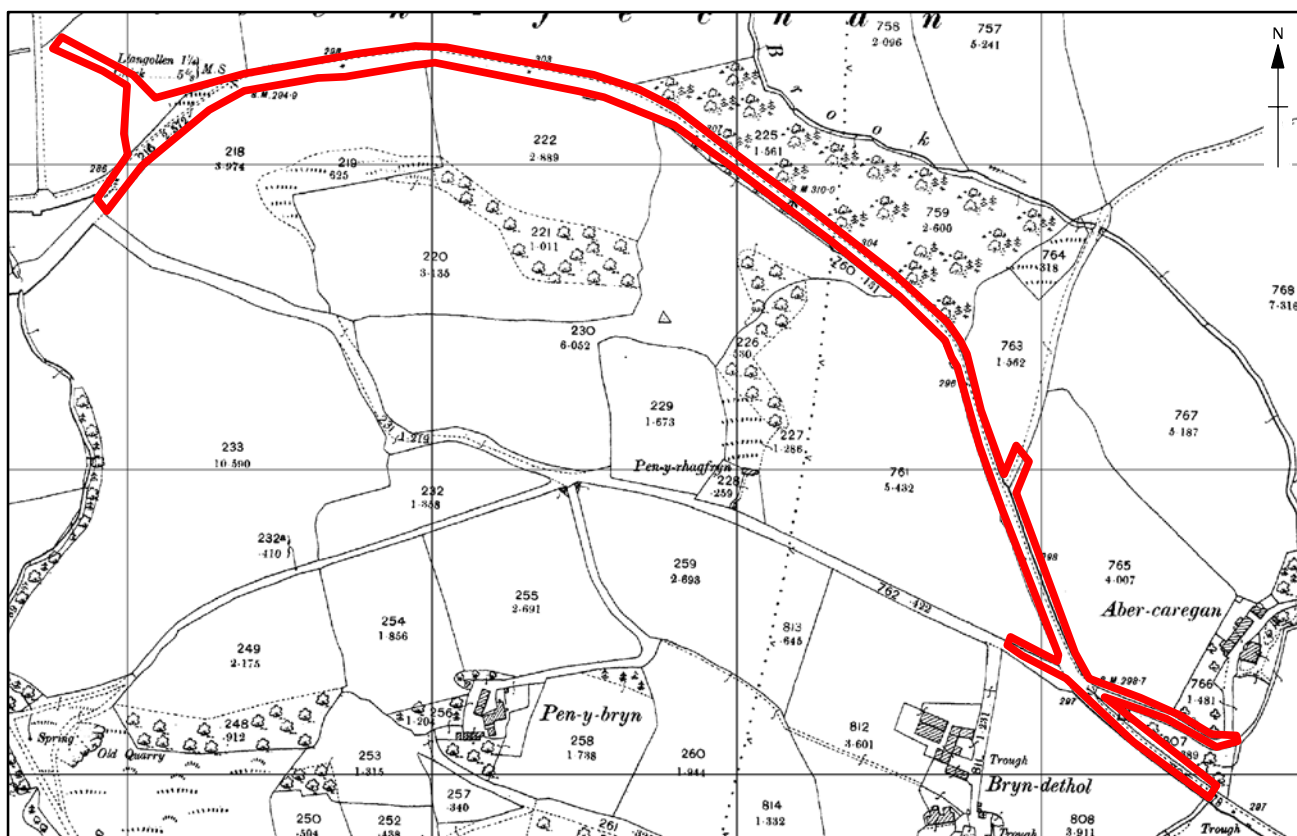


Figure 3: Proposed scheme superimposed on the Ordnance Survey 25" to 1 mile map of 1899-1900

 Site boundary

0 100 m
1:5000 @ A4

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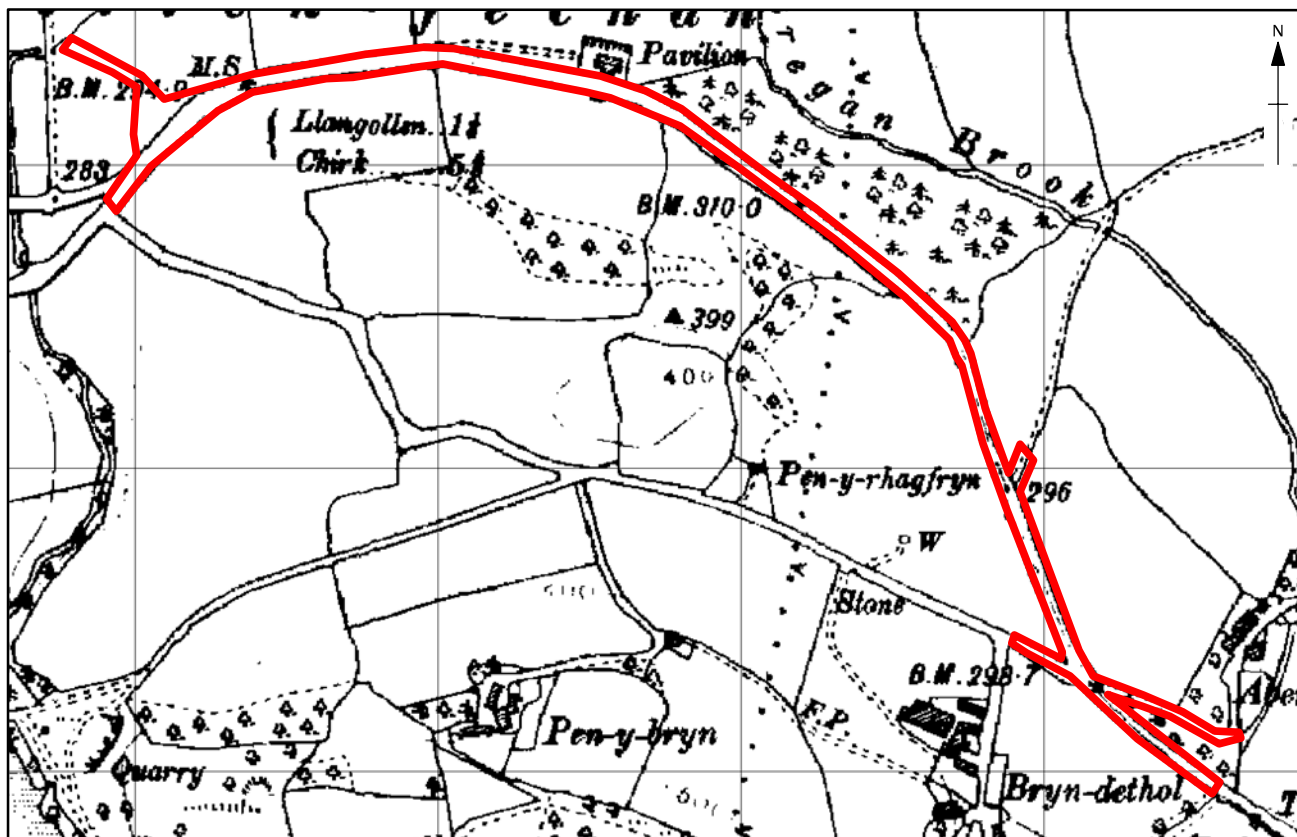


Figure 4: Proposed scheme superimposed on the Ordnance Survey 6" to 1 mile map of 1914

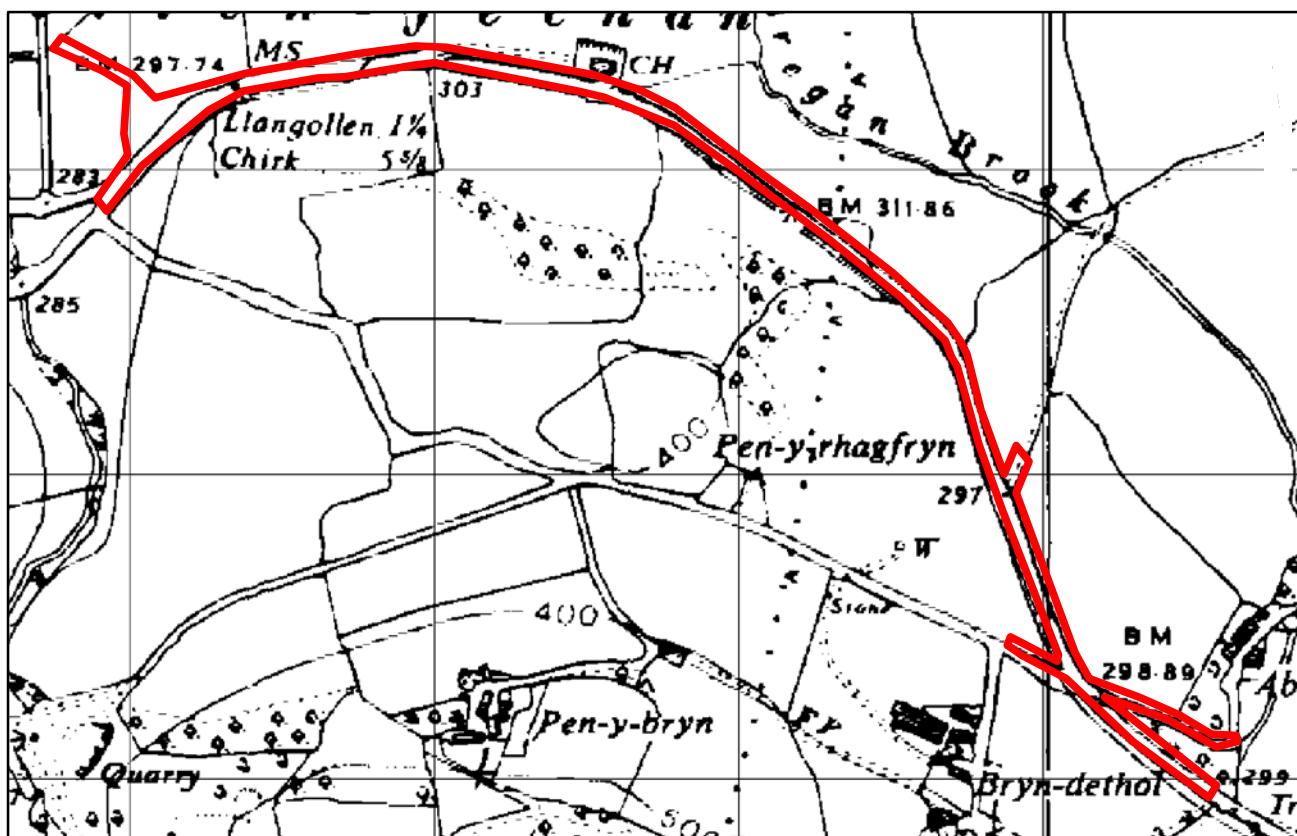
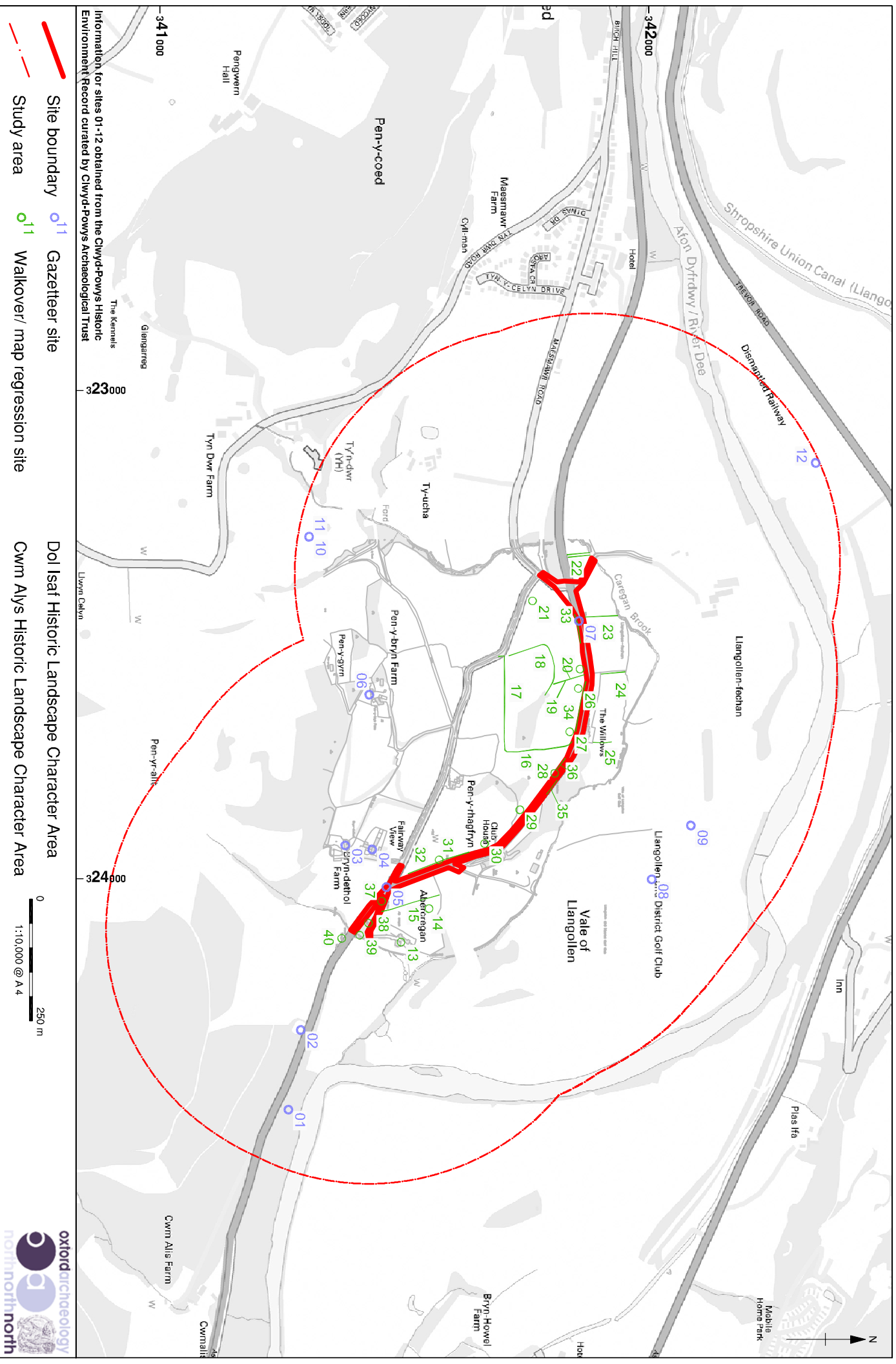


Figure 5: Proposed scheme superimposed on the Ordnance Survey 6" to 1 mile map of 1963

Site boundary

0 100 m
1:5000 @ A4

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northnorthnorth



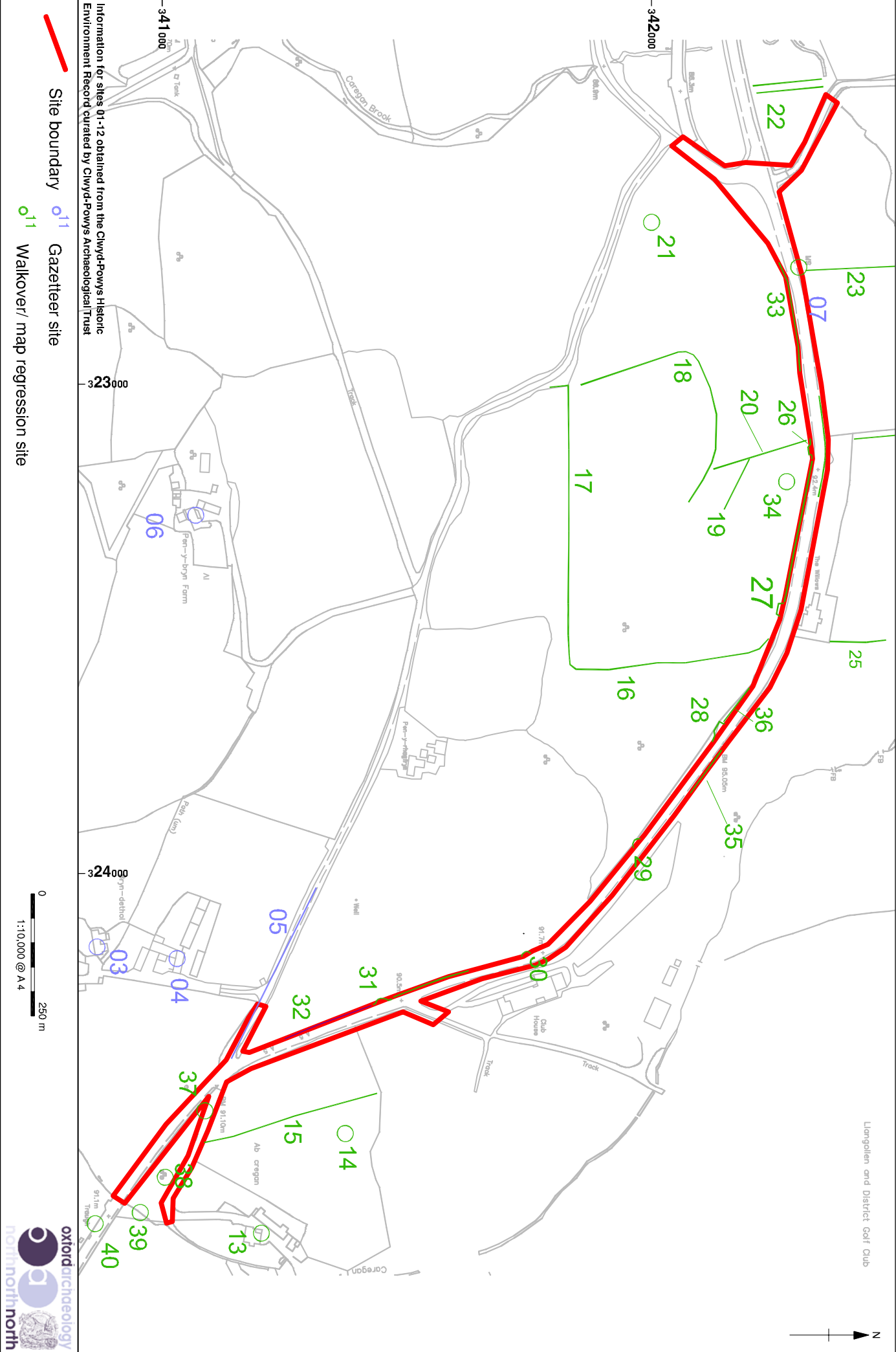


Figure 7: Detailed plan of gazetteer sites