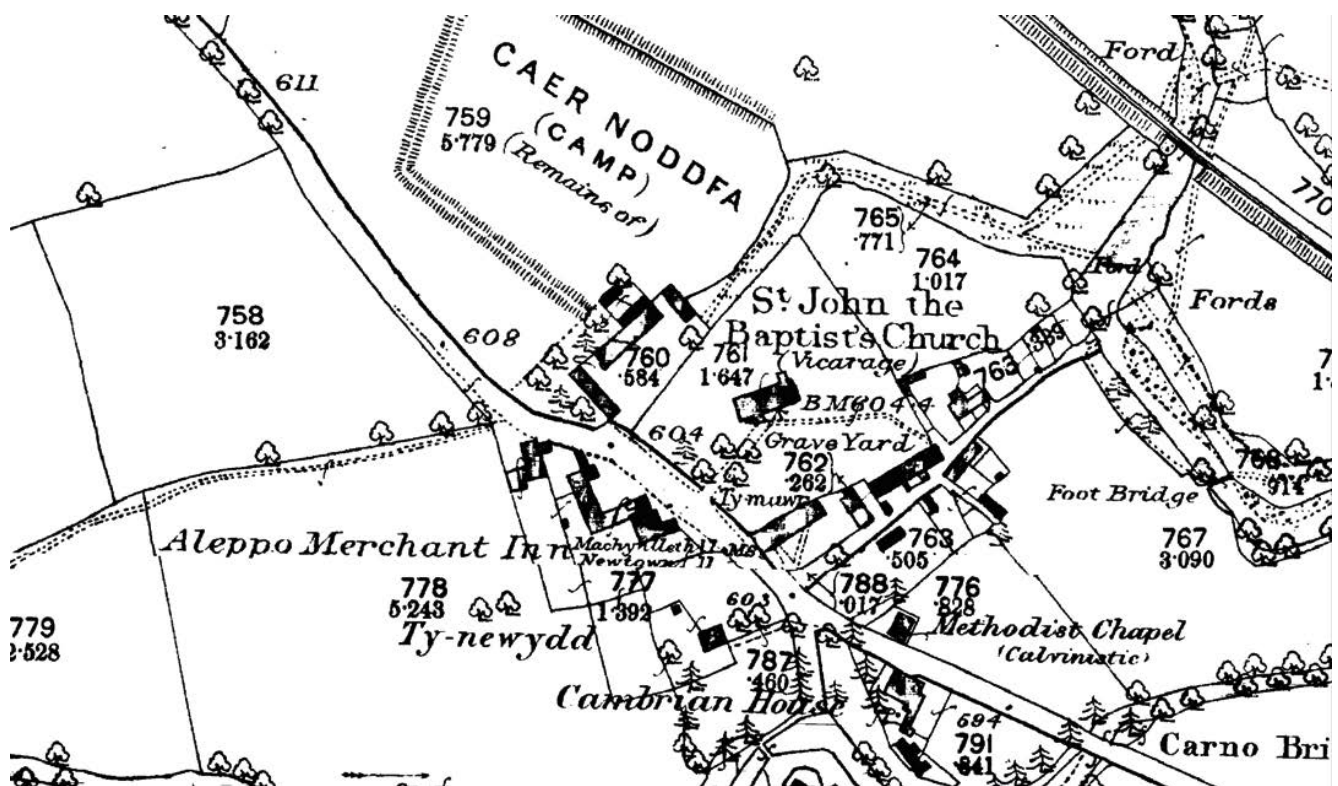


Archaeology Wales

Land at Post Office Lane, Carno, Powys

Field evaluation and Desktop Study



By

Irene Garcia Rovira, PhD MCIfA

Report No . 1993

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Summary

In July 2021, Philip Humphreys commissioned Archaeology Wales (AW) to carry out a Desk Based Assessment (DBA) and a field evaluation associated with the proposed development of two pairs of semidetached houses at Post Office Lane, Carno SY17 5LW centred on SN 96369 96423.

The Desk Based Assessment highlighted that the development area is located within the settlement core of Carno, medieval in origin. Saint John the Baptist church (PRN 7619) as well as Caer Noddfa (SM 052; PRN 919) are located N/NE of the site.

A field evaluation composed of three trenches, highlighted the impacted nature of the plot. The work did not reveal any archaeological find/feature/deposit of archaeological significance other than a soakaway and a number of field drains of post-medieval/modern date.

It was ascertained that the development will not trigger indirect impacts over any heritage asset. The setting of Caer Noddfa (SM 052; PRN 919) might be impacted but the magnitude of the impact is considered Negligible given the distance of the site from the asset as well as its built surroundings.

Crynodeb

Ym mis Gorffennaf 2021, comisiynodd Philip Humphreys Archaeology Cymru i gynnal Asesiad Desg a gwerthusiad maes mewn perthynas â datblygiad arfaethedig dau bâr o dai pâr yn Post Office Lane, Carno SY17 5LW, y mae ei ganolbwynt wedi'i leoli yn SN 96369 96423.

Amlygodd yr Asesiad Desg fod yr ardal i'w datblygu o fewn craidd setliad Carno, sy'n deillio o'r canol oesoedd. Mae Eglwys Sant Ioan y Bedyddiwr (PRN 7619) yn ogystal â Chaer Noddfa (SM 052; PRN 919) wedi'u lleoli i'r Gogledd/Gogledd-ddwyrain o'r safle.

Gwnaeth gwerthusiad maes a oedd yn cynnwys tair ffos amlygu natur gywasgedig y llain. Ni wnaeth y gwaith ddatgelu unrhyw ganfyddiadau/nodweddion/gwaddodion archeolegol arwyddocaol ar wahân i ffos gerrig a nifer o geuffosydd cae o'r cyfnod ôl-ganoloesol/modern.

Daethpwyd i'r casgliad na fydd y datblygiad yn sbarduno unrhyw effeithiau anuniongyrchol ar unrhyw ased treftadaeth. Mae'n bosibl y bydd lleoliad Caer Noddfa (SM 052; PRN 919) yn cael ei effeithio ond ystyrir bod maint yr effaith yn Ddibwys ar sail pellter y safle o'r ased yn ogystal â'r adeiladau o'i gwmpas.

1. Introduction

- 1.1. In July 2021, Philip Humphreys commissioned Archaeology Wales (AW) to carry out a Desk Based Assessment (DBA) and a field evaluation associated with the proposed development of two pairs of semidetached houses at Post Office Lane, Carno SY17 5LW centred on SN 96369 96423 (Figure 1). Planning application 21/1121/FUL.
- 1.2. Both the Desk Based Assessment and the Field Evaluation focused on the examination and assessment of features that may exist within the proposed development area. The area has been identified as having high potential for previously unrecorded archaeology.
- 1.3. The results obtained are presented in the present report. The work has been undertaken in accordance with best practice and ClfA Guidelines.

2. Site description

- 2.1. The proposed development site is located in the village of Carno, c 8km NW of Caersws. The site measures 862m² and it is located at c 186m AOD. It is largely covered in undergrowth and bordered by a number of dwellings and by Post Office Lane.
- 2.2. The underlying geology is defined by the Glanyrafon Formation, with interbedded mudstone and sandstone formed during the Silurian Period. The superficial deposits are Alluvial Fan Deposits consisting of Sand and Gravel formed during the Quaternary Period (BGS 2021).

3. Methodology

Desk Based Assessment

- 3.1. The primary objective of a Desk Based Assessment (DBA) is to assess the impact of the development proposals on the historic environment; this will help inform future decision making, design solutions and potential mitigation strategies. The aim is to make full and effective use of existing information in establishing the archaeological significance of the site, to elucidate the presence or absence of archaeological material, its character, distribution, extent, condition, and relative significance.
- 3.2. The work includes a comprehensive assessment of regional context within which the archaeological evidence rests and aims to highlight any relevant research issues within national and regional research frameworks.
- 3.3. This report provides information of sufficient detail to allow informed planning decisions to be made that can safeguard the archaeological resource. Preservation in situ has been advocated where at all possible, but where

engineering or other factors could result in the loss of archaeological deposits, preservation by record has been recommended.

3.4. This work conforms to the *Standard and Guidance for Historic Environment Desk Based Assessment*, as produced by the Chartered Institute for Archaeologists (CIfA Update 2020).

Methodology

3.5. This assessment considers the following:

- Collation and assessment of all relevant information held in the regional HER within 1km radius of the proposed development site.
- Collation and assessment of the impact on all designated archaeological sites within 1km radius.
- Assessment of all available excavation reports and archives including unpublished and unprocessed material affecting the site and its setting.
- Assessment of archive records held at the County Archive.
- Map regression analysis using all relevant cartographic sources e.g. all editions of the Ordnance Survey County Series, Tithe and early estate maps (as available).
- Aerial photographs and LiDAR imagery
- Place-name evidence.
- Historic documents (e.g. charters, registers, estate papers).

3.9. In assessing the value of archaeological assets, and the potential impacts upon them by the proposed development, the terms and guidance used in the *Design Manual for Roads and Bridges*, Volume 11, Section 3 (Highways England 2007) has been used. Values are given as:

- Very High (World Heritage Sites and other sites of international importance);
- High (Scheduled Monuments, undesignated assets of schedulable quality, assets of National importance that can contribute significantly to acknowledged national research objectives);
- Medium (Designated or undesignated assets of Regional importance that contribute to regional research objectives);
- Low (assets of local importance, assets compromised by poor preservation or poor survival of contextual associations);
- Negligible (assets with little or no surviving archaeological interest);
- Unknown (the importance of the resource has not been ascertained).

3.10. The magnitude of the potential impact on the archaeological assets (which can be either positive or negative), is given as:

- Major (change to most or all key archaeological materials, such that the resource is totally altered; comprehensive changes to setting);
- Moderate (changes to many key archaeological materials, such that the resource is clearly modified; considerable changes to setting that affect the character of the asset);
- Minor (changes to key archaeological materials, such as the asset is slightly altered; slight changes to setting);
- Negligible (very minor changes to archaeological materials, or setting);
- No Change

Field evaluation

3.11. The objective of the intrusive trial trench evaluation will be to locate and describe archaeological features that may be present within the development area as suggested. The work will elucidate the presence or absence of archaeological material, its character, distribution, extent, condition and relative significance. The work will include an assessment of regional ,within which the archaeological evidence rests and will aim to highlight any relevant research issues within national and regional research frameworks.

Methodology

- 3.12. The work was undertaken to meet the standard required by The Chartered Institute for Archaeologist's *Standard and Guidance for Archaeological Field Evaluation* (2020).
- 3.13. The archaeological Project Manager in charge of the work was satisfied that all constraints to ground works have been identified, including the siting of live services and Tree Preservation Orders.
- 3.14. The agreed evaluation areas were positioned to maximise the retrieval of archaeological information within accessible areas, and to ensure that the archaeological resource was understood.
- 3.15. Three trenches measuring 20m long x 1.8m wide, were machine-excavated within the planned development area and positioned in areas where the potential presence of archaeological features.
- 3.16. The evaluation trenches were excavated to the top of the archaeological horizon by a 360 excavator or similar machine fitted with a toothless grading bucket under close archaeological supervision.
- 3.17. All areas were subsequently hand cleaned using pointing trowels and/or hoes to prove the presence, or absence, of archaeological features and to determine their significance.
- 3.18. Sufficient excavation was undertaken to ensure that the natural horizons were reached and proven.

4. Report structure

- 4.1. Sections 5-11 present the results obtained during an initial period of research. Section 12 compiles the results obtained during the Site Visit and during the trenched evaluation carried out at the site in August 2021.
- 4.2. A summary of the results and a final assessment is carried out in Section 13 and 14 of the present report.

5. Historic Environment Records (HER) (Figure 2)

- 5.1. A HER search within the applied search area has retrieved 74 records. No entries are located within the bounds of the development.
- 5.2. The HER records the village itself (PRN 15638), describing its nature, morphology and history of development, with information obtained during a survey of historic settlements in Montgomeryshire produced by Silvester and Martin in 2012.
- 5.3. The survey noted that the settlement is multifocal and therefore with three clusters of activity: 1) the old village of Carno, 2) the area NW containing a number of former mills, and the Laura Ashley complex.
- 5.4. It is noted that the position¹ of the church within the old village suggest that it dates to early medieval chronologies. The only set of evidence that may corroborate this is the cross-inscribed pillar found within the church (PRN 918; SM 146). The latter was found acting as a gate post near Laura Ashley Factory (PRN 130959).
- 5.5. Further sets of evidence suggesting a village of medieval origin are found with the name of the village which is directly associated to Nant Carnion – a place name documented between 1143 and 1151 (PRN 3572).
- 5.6. Sometime during the 12/13th centuries, the manor of Carno was taken by the Knights Hospitallers. Caer Noddfa (PRN 919; SM 052) has traditionally been associated with the knights; a conclusive answer regarding its date and function has yet to be ascertained.
- 5.7. The enclosure has been partly excavated three times – 1909, 1964 and 1965 – evidencing a Roman V-shaped ditch and a possible medieval building. The latter revealed pottery fragments dating to the 12th and 13th centuries.
- 5.8. The present church of Saint John the Baptist (PRN 7619) – built in 1863, appears to have replaced an earlier church. The HER records documents that a mounded platform is located to the west of the church, and that the platform could contain the rubble of the former church.
- 5.9. The church graveyard is also recorded in the HER as having possible medieval origins (see PRN 16699). The latter was extended in 1926 and contains several early gravestones dating to 1674, 1696 and 1769.

¹ Beside the river.

- 5.10. Further evidence of medieval origin is documented in the form of ridge and furrow (PRN 7620).
- 5.11. While the village origins are markedly medieval in date, it is significant to note that evidence of prehistoric and Roman chronologies is documented within the applied search area.
- 5.12. This is evidenced by aerial photographs dating to the 1940s document a series of cropmarks traditionally identified as the remains of a Bronze Age round barrow cemetery (PRN 1428). A Bronze Age flat axe was also identified as an isolated find from an unknown location near Carno (PRN 32934).
- 5.13. As already noted, a V-shaped ditch was found during excavations at Caer Noddfa suggesting that the enclosure complex may have originated in Roman times.
- 5.14. The Roman Road leading from Caersws to Carno has been projected following a similar line to that currently occupying the A470 (PRN 14407). The HER documents that the line of the road is clearly visible in some stretches. PRN 11518 also represents a projected line of a Roman Road leading from Carno to Penycrocbren.
- 5.15. The rural nature of the area is well-attested by the number of records documenting either existing farms or farm complexes evidenced during the examination of cartographic sources. These include PRN 191187, 187486, 191115, 187382, 169276, 169304, 191183, 187473, 191182, 191186, 187482, 88556, 187476, 1877489, 91188, 187304, 191116, 187490, 191189, 88589, 191124, 187299, 31150.
- 5.16. A number of industrial structures are also recorded:
- 5.16.1. Carno New Mill: a former corn mill known to have been in good condition still by the 1970s (PRN 20905).
- 5.16.2. Felin Fach Mill: a fulling mill already recorded map editions pre-dating pre-enclosure.
- 5.17. Post-medieval infrastructure is also recorded within the HER:
- 5.17.1. Cambrian Railway (PRN 55841): running east of the proposed site and recorded in a number of OS map editions postdating the 1880s.
- 5.17.2. Three bridges recorded in historic OS map editions: PRNs 88587, 13149 and 8896.
- 5.17.3. A milestone (PRN 41875) currently listed as Grade II (LB 17575).
- 5.18. A summary of all entries can be found on the table below:

Table 1 HER within assessment area

PRN	Site Name	Period
32934	Carno find V	BRONZE AGE
1428	Cae Garn Cropmarks	BRONZE AGE;PREHISTORIC

14407	Caersws - Carno - Pennal	ROMAN
14409	Caersws - Carno - Pennal	ROMAN
14412	Caersws - Carno - Pennal	ROMAN
11518	Carno - Penycrocbren	ROMAN
918	Carno Church (St John the Baptist), cross	EARLY MEDIEVAL
58093	Caer Noddfa Fort, 'hospice'	MEDIEVAL
16699	Carno Church (St John the Baptist), yard	MEDIEVAL
3572	Wtra'r Abbot Placename	MEDIEVAL
7620	Caer Noddfa Fort, ridge and furrow	MEDIEVAL;POST MEDIEVAL
919	Caer Noddfa Fort	MEDIEVAL;ROMAN
191187	Brithdir farm	POST MEDIEVAL
187483	Brithdir farm, farm building	POST MEDIEVAL
187484	Brithdir farm, farm building	POST MEDIEVAL
187485	Brithdir farm, farm building	POST MEDIEVAL
187486	Brithdir farm, farm building	POST MEDIEVAL
55841	Cambrian Railway, section	POST MEDIEVAL
7619	Carno Church (St John the Baptist)	POST MEDIEVAL
17658	Carno Church (St John the Baptist), bells	POST MEDIEVAL
3575	Carno Cockpit	POST MEDIEVAL
191115	Carno farm	POST MEDIEVAL
187300	Carno farm, farm building	POST MEDIEVAL
187301	Carno farm, farm building	POST MEDIEVAL
187302	Carno farm, farm building	POST MEDIEVAL
20905	Carno New Mill	POST MEDIEVAL
8823	Carno Pump	POST MEDIEVAL
37491	Carno, Felin Fach mill	POST MEDIEVAL
41875	Frankwell milestone	POST MEDIEVAL
169276	Glanrhyd Barn, Carno	POST MEDIEVAL
169304	Glanrhyd, outbuilding	POST MEDIEVAL
191183	Hendre-Cerniog farm	POST MEDIEVAL
187472	Hendre-Cerniog farm, farm building	POST MEDIEVAL
187473	Hendre-Cerniog farm, farm building	POST MEDIEVAL
8832	Llwyn Hen House Site	POST MEDIEVAL
191182	Pen-ddol farm	POST MEDIEVAL
187470	Pen-ddol farm, farm building	POST MEDIEVAL
187471	Pen-ddol farm, farm building	POST MEDIEVAL
88588	Pentre-isaf	POST MEDIEVAL
191186	Pentre-isaf farm	POST MEDIEVAL
187480	Pentre-isaf farm, farm building	POST MEDIEVAL
187481	Pentre-isaf farm, farm building	POST MEDIEVAL
187482	Pentre-isaf farm, farm building	POST MEDIEVAL
88587	Pentre-isaf footbridge	POST MEDIEVAL
88586	Pentre-uchaf	POST MEDIEVAL
187474	Pentre-uchaf farm, farm building	POST MEDIEVAL

187475	Pentre-uchaf farm, farm building	POST MEDIEVAL
187476	Pentre-uchaf farm, farm building	POST MEDIEVAL
88589	Pentre-uchaf outbuilding	POST MEDIEVAL
13149	Perthincwys, bridge	POST MEDIEVAL
191114	Plas-newydd farm	POST MEDIEVAL
187296	Plas-newydd farm, farm building	POST MEDIEVAL
187297	Plas-newydd farm, farm building	POST MEDIEVAL
187298	Plas-newydd farm, farm building	POST MEDIEVAL
187299	Plas-newydd farm, farm building	POST MEDIEVAL
31150	Plas-newydd farm, house	POST MEDIEVAL
41876	Tegfan	POST MEDIEVAL
191189	Trawsgoed-isaf farm	POST MEDIEVAL
187490	Trawsgoed-isaf farm, farm building	POST MEDIEVAL
187491	Trawsgoed-isaf farm, farm building	POST MEDIEVAL
191116	Tu-hw'nt-i'r-afon farm	POST MEDIEVAL
187303	Tu-hw'nt-i'r-afon farm, farm building	POST MEDIEVAL
187304	Tu-hw'nt-i'r-afon farm, farm building	POST MEDIEVAL
41874	Ty Brith	POST MEDIEVAL
191188	Ty-nant farm	POST MEDIEVAL
187487	Ty-nant farm, farm building	POST MEDIEVAL
187488	Ty-nant farm, farm building	POST MEDIEVAL
187489	Ty-nant farm, farm building	POST MEDIEVAL
41877	Ynyth	POST MEDIEVAL
8896	Llwyn Hen Bridge	POST MEDIEVAL;ROMAN
130959	Carno, Laura Ashley factory	MODERN
14410	Caersws - Carno - Pennal	MODERN;ROMAN
15638	Carno	MULTIPERIOD
16736	Carno Church	MULTIPERIOD

Portable Antiquity Scheme (PAS)

5.19. No objects are recorded within the search area.

6. Scheduled Ancient Monuments (SM) (Figure 3)

- 6.1. There are no Scheduled Monuments within the boundaries of the proposed development. Caer Noddfa (MG 052) is located 100m NW of the proposed site. The date and function of the SM is unknown; however, it is thought to either the remains of a medieval hospice or a Roman fort (Historic Settlement Survey – Montgomeryshire).
- 6.2. Morphologically it is defined by a sub-rectangular structure bounded by a low bank (0.5m in height) with traces of a ditch on its northern end. The monument is located in pasture on a floodplain.
- 6.3. Previous intrusive work has revealed the remains of a medieval building and a V-shaped ditch of Roman date. The latter was found during the excavation of a

trench on the W corner of the bank, yet it did not reveal finds of Roman date (Pryce 1936). In 1964-5, Putnam excavated a feature defined by a hollow enclosed by a bank and interpreted as a medieval hospice (Putnam 1972). The latter inference was made taking into consideration written documents that denote the presence of a hospital of the Knights of Saint John in Carno by 1253. Furthermore, works at the site have revealed pottery fragments dating to the 12th and 13th centuries.

- 6.4. The monument is considered of national significance, and it is defined as a central feature within the wider historic landscape of the area.

7. Listed Buildings (LB) (Figure 3)

- 7.1. No Listed Buildings are located within the proposed development. Five LBs are located within the assessment area (see table below).
- 7.2. LB 17575 is located 54m W from the proposed development. The LB is a milestone set into the boundary wall of Llys-ywen.
- 7.3. All other LBs are located at a sufficient distance to be protected from any indirect impact set by the development.

Table 2 LBs within assessment area.

NUMBER	NAME	GRADE
17574	Ty Brith	II
17575	Milestone	II
17576	Tegfan	II
17577	Ynyth	II
7583	Plasnewydd	II*

8. The Landscape (Figures 2)

- 8.1. No Conservation Areas, Registered Historic Landscapes or Registered Parks and Gardens are located within the site or the assessment area. The closest Conservation area is Bont Dolgadfan (WAL/POWY/11) located 9km NW from the development area. The Registered Historic Landscape of Caersws Basin (HLW (P) 5) is located almost 6km SE of the site.
- 8.2. The site is located within the Historic Landmap Characterisation Area of Carno - MNTGMHL278. The latter is a small, nucleated settlement around a church of possible Early Medieval origin. The village grew during the 18th and 19th centuries resulting from the position of the Newtown to Machynlleth turnpike road and the Cambrian Railway. The village has evidence of early settlement in the form of a ditched enclosure of either Roman or Medieval chronologies - Caer Noddla (MG

052). Furthermore, the village is defined by buildings and structures of post-medieval date, including corn and woollen watermills.

- 8.3. CPAT Historic Settlement Survey – Montgomeryshire further describes the nature of the location of the site. They define the village as polyfocal with the old village and church; an area defined by dynamics of Afon Cerniog and the Laura Ashley complex.
- 8.4. The survey also highlights that some evidence (e.g. the position of the church beside a river) suggest an early medieval origin for the village. The earliest reference to Carno is dates to 950 associated with a battle. However, the village is only fully known to have existed from the 12/13th centuries as the manor of Carno becomes a possession of the Knights Hospitallers.

9. Map Regression

Tithe map of Carno (parish), Montgomeryshire 1849 (Figure 4)

- 9.1. The tithe map of 1849 already documents St John the Baptist Church and graveyard to the west of the site. Ty-Mawr is already depicted as a long rectangular structure bounding the SE boundary of the church yard and bounded by a lane (currently Old Post Office lane).
- 9.2. The site falls within plot 1225. The latter is defined by a meadow owned and occupied by Andrew Davies. At this point, the plot is devoid of structures.

OS County Series Montgomeryshire 1889 – 1:2500 (Figure 4)

- 9.3. This is the first detailed map of Carno. The development area is occupied by a rectangular structure (approximately 10m in length) located toward the NW of the development.
- 9.4. A Calvinist Chapel is situated immediately S of the proposed development area. Ty-Mawr as well as a row of dwellings is documented bordering St John the Baptist Church – this will be documented as 1-4 Post Office Lane in subsequent map editions.

OS County Series Montgomeryshire 1902 – 1:2500 (Figure 4)

- 9.5. This map edition does not document substantial changes to the site surroundings. However, it is significant to note that the building evidenced on the 1889 map edition is no longer recorded.
- 9.6. Subsequent map editions going up to the 1980s represent the site as one devoid of structures.

10. LiDAR Imagery (Figure 5)

- 10.1. LiDAR data 2m DTM was processed (Hillshade) to observe the presence/absence of sub-surface remains within or around the development area.
- 10.2. No detail regarding the proposed site was obtained due to the scale of the LiDAR dataset used. The region occupied by Caer Noddfa (MG 052) and its surroundings was also inspected to assess the nature of the monument and to observe the possibility of associated features to be adjacent and within the Scheduling polygon. A very faint oval feature measuring around 17m in length was observed at SN 96238 96581 – New Site C001. No further detail could be obtained regarding the abovementioned feature due to the lack of clarity obtained when doing a closer look to the processed data.

11. Aerial Photographs (Figure 6-7)

- 11.1. 1948 4823 RAFCPE UK 2531 3048: This oblique black and white photograph focuses on St John the Baptist Church and its surroundings. The proposed development area is depicted as a field devoid of any trees and other vegetation. A series of lines almost creating little rectangular parcels are observed. No further detail is observed as the photograph loses resolution when zooming in.
- 11.2. 1976 7633 OS76_046 128: This oblique black and white photograph focuses on St John the Baptist Church and its surroundings. The proposed development area appears to be clear. The Calvinistic Chapel, seen in historic maps is located adjacent to the SE corner of the site. Ffordd Dol-Llin is yet not documented on this aerial view of the site and its surroundings.
- 11.3. 1984 8401 JAS0584 204: This oblique-coloured photograph focuses on St John the Baptist Church and its surroundings. At this point the development area is used, as suggested, by the presence of a small outbuilding to the NE end of the development area. The photograph does not support obtaining further information regarding the site; it is likely that at this point it is used as an allotment or similar.
- 11.4. Google Earth views of the site dating to 2006-2009 appear to further evidence the possible use of the site as an allotment or a garden area.

12. Site Visit and field evaluation (Plates 1-13;Figure 8-9)

Site visit

- 12.1. A site visit was carried out on the 23rd of August 2021 prior the commencement of the field evaluation. Visibility was good.
- 12.2. The site along with its boundaries appeared to have been neglected for quite some time as noted with the overgrown vegetation found within and defining

the limits of the site. Covering the site were plants consistent with soil disturbance. The plants included couch grass, nettle, dock, bramble, ivy and goosefoot. There were tree stumps scattered across the site with one recognisable species of poplar. Located throughout the site were stacks of felled tree limbs, rubbish deposits and type 1 gravel dumps, glass window frames and paving slabs. Located within the topsoil were plastic compost bags and tarpaulin.

12.3. No features of archaeological significance were observed during its inspection.

12.4. The site, while in close proximity, does not have direct views over LB 17575, located further NW on the opposite side of the A470. No views toward Caer Noddfa (MG 052) were observed during the site visit.

Field Evaluation

12.5. The field evaluation was carried out on the 23rd and 24th of August 2021. Three T-shaped trenches measuring a total of 20m in length each were cut in the areas selected for the construction of dwellings. The position and size of the trenches, as well as any alterations, were agreed with CPAT-DC prior the commencement of works.

12.6. The trenches were excavated under close archaeological supervision using a 14T 360 utilising a toothless grading bucket within the planned development area. All trenches were sufficiently excavated to ensure that the natural horizon was reached across the site.

▪ *Trench 1*

12.7. Trench 1 was T-shaped and measured 1.8m in width, and 10m in length (each axis). It was excavated to a depth of between 0.7m and 1.2m below the ground level.

12.8. The base geology (102) was moderately compacted white-brown in colour and consisted of sandy clay. The deposit contained terrace gravels and angular and sub-angular smaller than fist size stones.

12.9. The subsoil – (101) – was defined as a compacted light-yellow sandy silt with frequent small sub-rounded and sub-angular stone inclusions. The deposit was around 0.4m in depth and was truncated by [100].

12.10. Cut [100] was a cut for a post-medieval soakaway. The cut was in its upper regions around 1.63m in width, and c 0.8m on its base. The real width of the feature (on the upper regions) was not visible as it was found close to the SE trench edge, and truncated by a modern test pit to the NW.

12.11. Structure 103 was found within cut [100]. The structure was linear in plan and was defined by solid white concrete blocks bound with cement. The blocks were approximately 0.25m in length and 0.20m in height, the depth was

indeterminate. Covering the soak away was a backfill (102). The backfill was friable and light brown silty clay measuring 1.12m in depth.

12.12. As noted, the soakaway was truncated by [104], a modern test pit. The feature was cut through the topsoil. It had straight edges and a flat base. It measured 1.8m in width (within the trench) and 1.2m in depth. The cut was backfilled with (104), a deposit of friable mid-brown clayey silt with frequent roots and sub-angular stones.

12.13. A further feature was recorded within the trench. Feature 106 was cut through (101) and defined as a post-medieval/modern field drain oriented E/W and measuring 0.35m in width. The sides and base of the cut were lined with slate and brick fragments, and within it, fill (108) was encountered. The latter was a deposit of loose brown-grey sandy silt with occasional subrounded stones and slate fragments.

12.14. The topsoil – (109) - consisted of loose dark grey-brown sandy loam. It contained pebbles and small to large angular stones. The topsoil contained thick frequently appearing roots.

▪ *Trench 2*

12.15. Trench 2 was T-shaped and measured 1.8m in width, and 10m in length (each axis). It was excavated to a depth of between 0.8m below the ground level.

12.16. The base geology (202) was moderately compacted white-brown in colour and consisted of sandy clay. The deposit contained terrace gravels and angular and sub-angular smaller than fist size stones.

12.17. A land drain – [200] - cut through the natural substrate. The latter was 0.35m in width and 0.23m in depth. The feature's fill – (201) – was composed of loose brown, grey sandy silt with occasional sub-rounded stones and slate fragments. Like drain [106], its sides and base were lined with fragments of brick and slate.

12.18. The subsoil – (201) – was defined as a compacted light-yellow sandy silt with frequent small sub-rounded and sub-angular stone inclusions. The deposit was around 0.4m in depth.

12.19. The topsoil – (203) - consisted of loose dark grey-brown sandy loam. It contained frequent pebbles and small to large angular stones. The topsoil contained thick frequently appearing roots.

▪ *Trench 3*

12.20. Trench 2 was T-shaped and measured 1.8m in width, and 7m in length (each axis). It was excavated to a depth of between 0.65m below the ground level.

12.21. The base geology (302) was moderately compacted white-brown in colour and consisted of sandy clay. The deposit contained terrace gravels and angular and sub-angular smaller than fist size stones.

- 12.22. The subsoil – (301) – was defined as a compacted light-yellow sandy silt with frequent small sub-rounded and sub-angular stone inclusions. The deposit was around 0.4m in depth.
- 12.23. The topsoil – (303) - consisted of loose dark grey-brown sandy loam. It contained frequent pebbles and small to large angular stones. The topsoil contained thick frequently appearing roots and measured 0.15m in depth.
- 12.24. No archaeological finds/features/deposits were encountered within the trench.

13. Impact Assessment

- 13.1. Research carried out for the present report has considered all heritage assets contained within the applied search area. It has also been informed by a field evaluation consisting of three 20m T-shape trenches in locations known to be subjected to groundworks during the development.
- 13.2. This section assesses the impact that the development may have over heritage assets and offers several recommendations which are, in section 14, summarised as mitigation measures.
- 13.3. The proposed development foresees the construction of three dwellings with associated garden and parking space (Figure 10). The evaluation trenches were located within the location of Plots 1-3.
- 13.4. The area selected for the proposed development was considered to have archaeological potential as it is located within Carno settlement core, close to Saint John the Baptist (PRN 7619) – built in 1863, possibly replacing an earlier church, and only 115m SE from Caer Noddfa (SM 052; PRN 919).
- 13.5. The potential for sub-surface structures relating to medieval chronologies (or other) was tested through a field evaluation which emphasised that the area has been heavily impacted through time. Some of the impacts were evidenced on site in the form of post-medieval and modern land drains as well as a soakaway. Furthermore, the research carried out for this report noted that the field has been used possibly for gardening/allotment purposes from, at least, 1948.
- 13.6. This is best evidenced in cartographic and photographic sources. The tithe map of 1849 highlights that the area was at that time used as a meadow. Although the aerial photographs consulted were not sufficiently clear to ascertain its exact use through time, it was possible to note that the field had been divided into parcels both in images dating to 1948 and 1984. The continued use of this field for such purposes is also attested during the observation of satellite imagery dating from 2006-9.
- 13.7. The research also examined the potential that the development may have to indirectly affect designated assets or their setting.
- 13.8. The closest Listed Building is milepost LB17575. The latter is located 54m W from the proposed development. Despite its close distance, the development is set back from the A470, therefore, not presenting any visual impacts over the

listed asset. All other Listed Buildings are either at a sufficient distance to allow for indirect impacts or concealed by the existing built environment.

13.9. While Caer Noddfa (SM 052; PRN 919) will also not be visually impacted by the proposed development, a Negligible impact is anticipated over its setting.

13.10. The Roman Road leading from Caersws to Carno has been projected following a similar line to that currently occupying the A470 (PRN 14407). While it would be possible that the road could be impacted by the effects of the development, this possibility was rejected through the results obtained during the field evaluation.

14. Mitigation and Conclusion

14.1. In July 2021, Philip Humphreys commissioned Archaeology Wales (AW) to carry out a Desk Based Assessment (DBA) and a field evaluation associated with the proposed development of three semidetached houses at Post Office Lane, Carno SY17 5LW centred on SN 96369 96423 (Figure 1). Planning application 21/1121/FUL.

14.2. The Desk Based Assessment highlighted that the development area is located within the settlement core of Carno, medieval in origin. Saint John the Baptist church (PRN 7619) as well as Caer Noddfa (SM 052; PRN 919) are located N/NE of the site, therefore, triggering questions over the archaeological potential of the proposed site.

14.3. A field evaluation composed of three trenches, highlighted the impacted nature of the plot. The work did not reveal any archaeological find/feature/deposit of archaeological significance other than a soakaway and a number of field drains of post-medieval/modern date.

14.4. The development will not trigger indirect impacts over any heritage asset. The setting of Caer Noddfa (SM 052; PRN 919) might be impacted but the magnitude of the impact is considered Negligible given the distance of the site from the asset as well as its built surroundings. It is recommended that the development is concealed with soft screening.

14.5. A potential New Site – C001 – was revealed during the inspection of LiDAR imagery. It is not known at present whether the cropmark has already been recorded as part of the Scheduled Monument². The details are summarised below:

ID	C001
Name	Circular feature
Summary	Circular feature observed within MG052
Welsh Summary	Ôl-cnwd crwn
Description	Circular feature observed in Lidar 2m DTM

² The site is visible on LiDAR 2m DTM processed Hillshade. However, it is very faint and might require further processing to map it with accuracy.

NGR	SN 96238 96581
Eastings	296238
Northing	296581
Type	Unknown
Period	Unknown
Survival condition	Unknown
Condition Rating	Unknown
Broad Class	Cropmark
Evidence	LiDAR imagery 2m DTM
Record compiled by	Irene Garcia Rovira
Record compiled on	1.9.21
Copyright	Archaeology Wales

15. Sources

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Putnam W.G. 1972. The excavations at Caer Noddfa, Carno. Montgomeryshire Collections 62.2 , 195-201.

Online sources

Archaeological Data Service (ADS) 2020: Archsearch & Grey Literature

British Geological Survey 2021: Geology of Britain Viewer.

<https://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html>

Design Manual for Roads and Bridges (DMRB) 2016: Volume 11, Cultural Heritage

<http://www.standardsforhighways.co.uk/DMRB/vol11/index.htm>

Standard and Guidance for Historic Desk Based Assessments

https://www.archaeologists.net/sites/default/files/ClfAS&GDBA_2.pdf

Portable Antiquity Scheme

<https://finds.org.uk/database>

British Listed Buildings

<https://britishlistedbuildings.co.uk/>

Landmap HLCA

https://landmap-portal.naturalresources.wales/view_survey.php?survey_id=7713

<https://cpat.org.uk/ycom/mont/carno.pdf>

Cartographic Sources

Tithe map of Carno (parish), Montgomeryshire 1849

OS County Series Montgomeryshire 1886 – 1:2500

OS County Series Montgomeryshire 1902 – 1:2500

Ordnance Survey map 1981, 1:2500

Aerial photographs

1948 4823 RAFCPE UK 2531 3048

1976 7633 OS76_046 128

1984 8401 JAS0584 204

1995 9581 OS95_541 161



Figure 1. Site location.

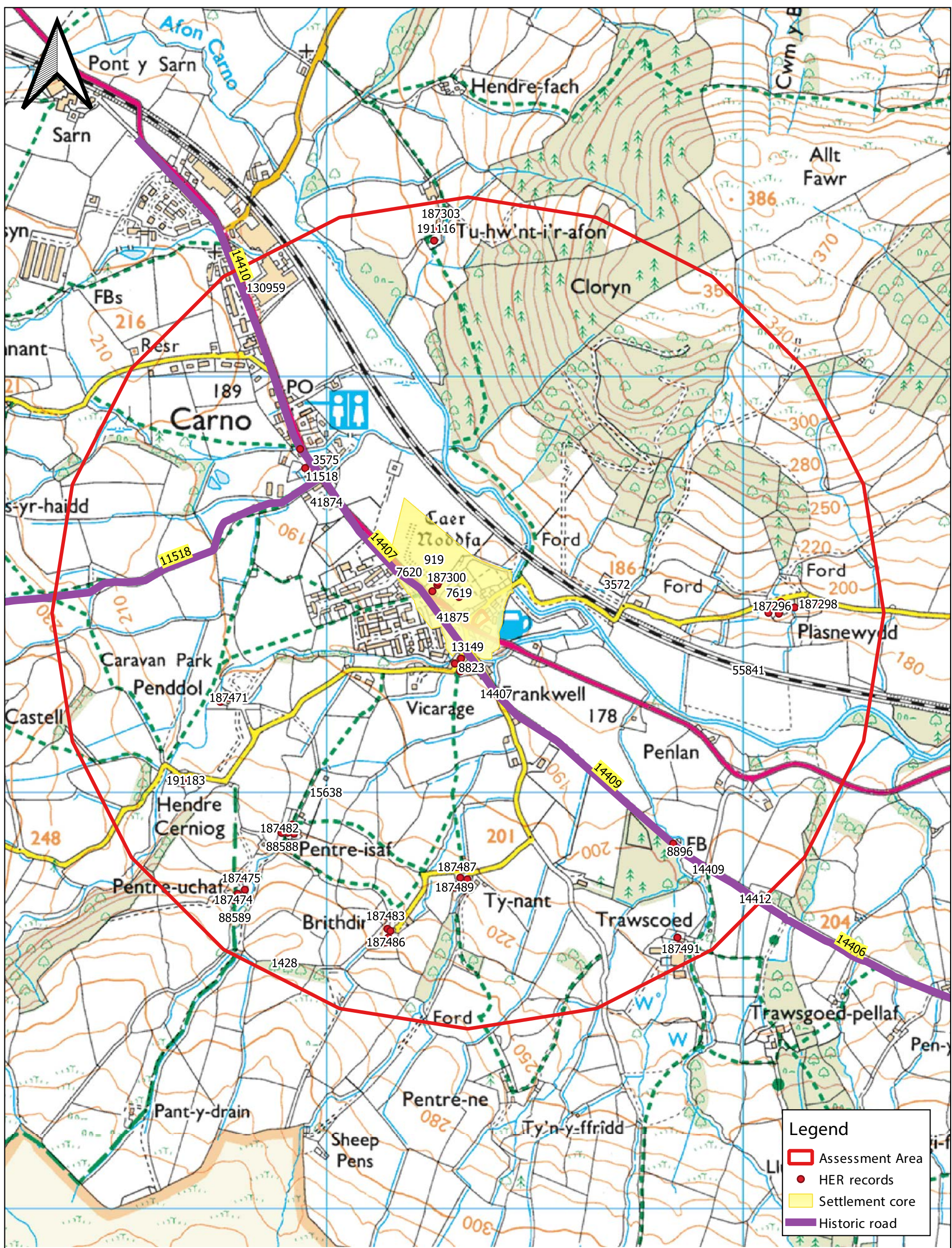
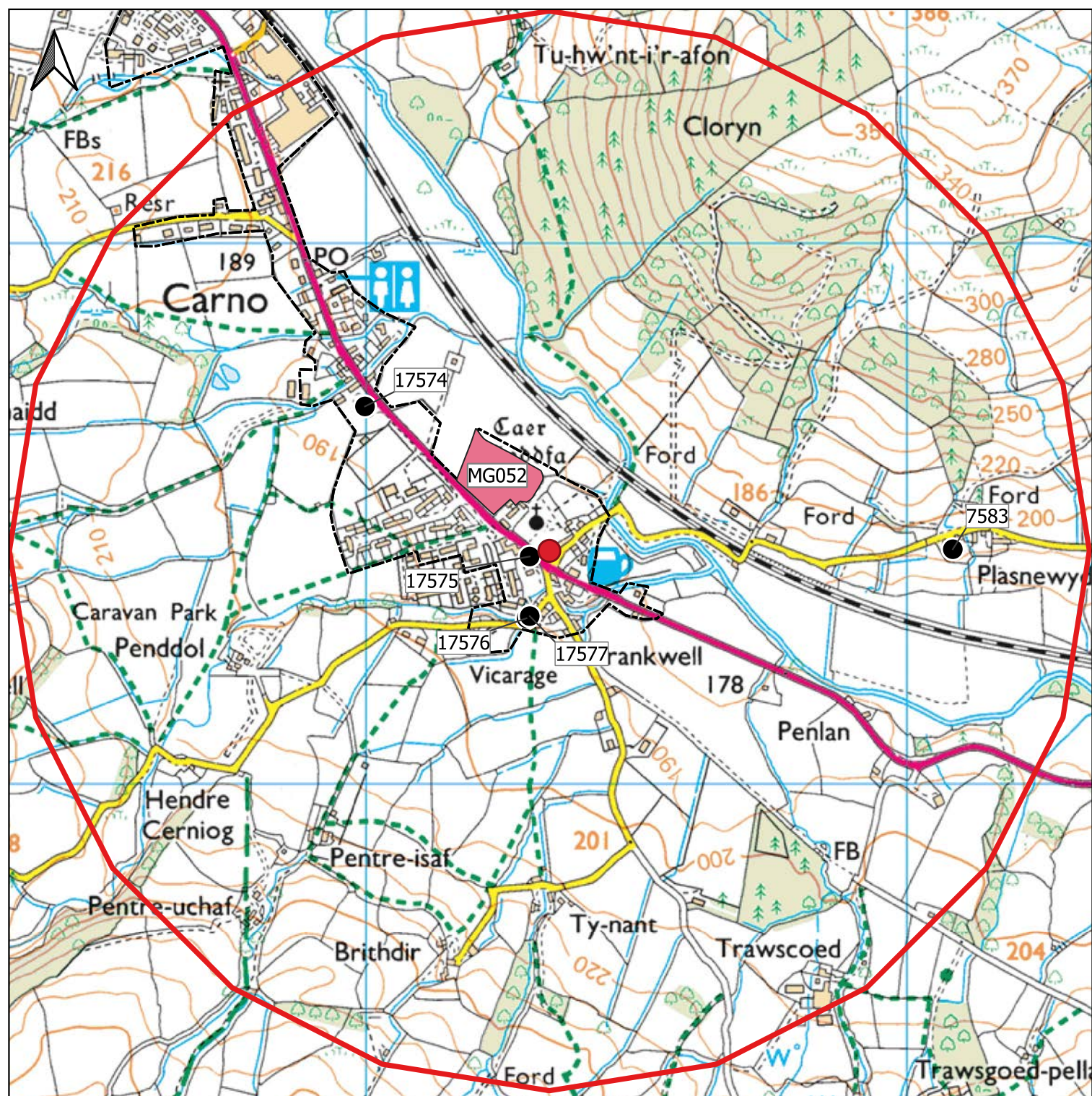


Figure 2. Non-designated data within applied search area.

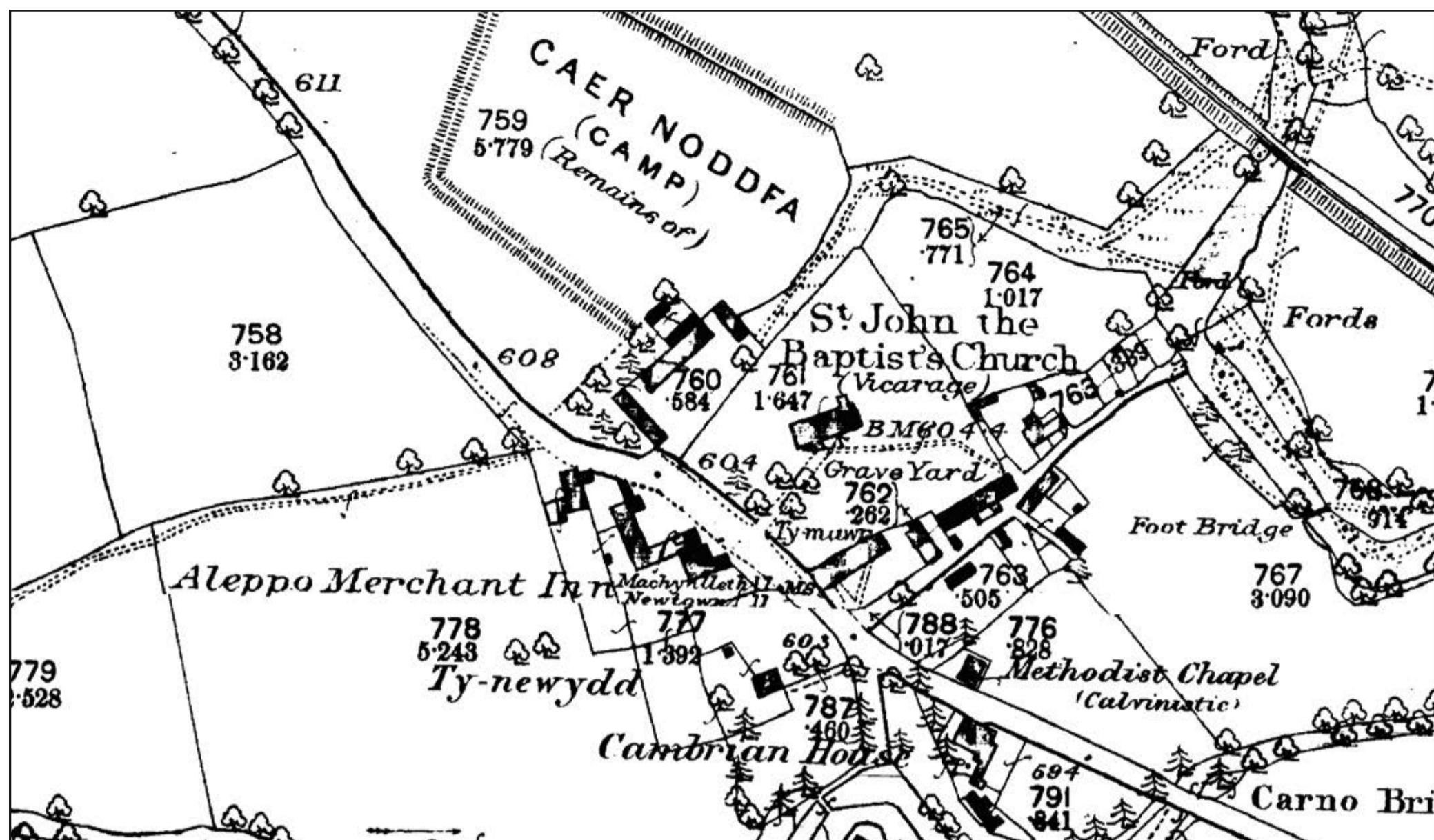


0 500 1000 m

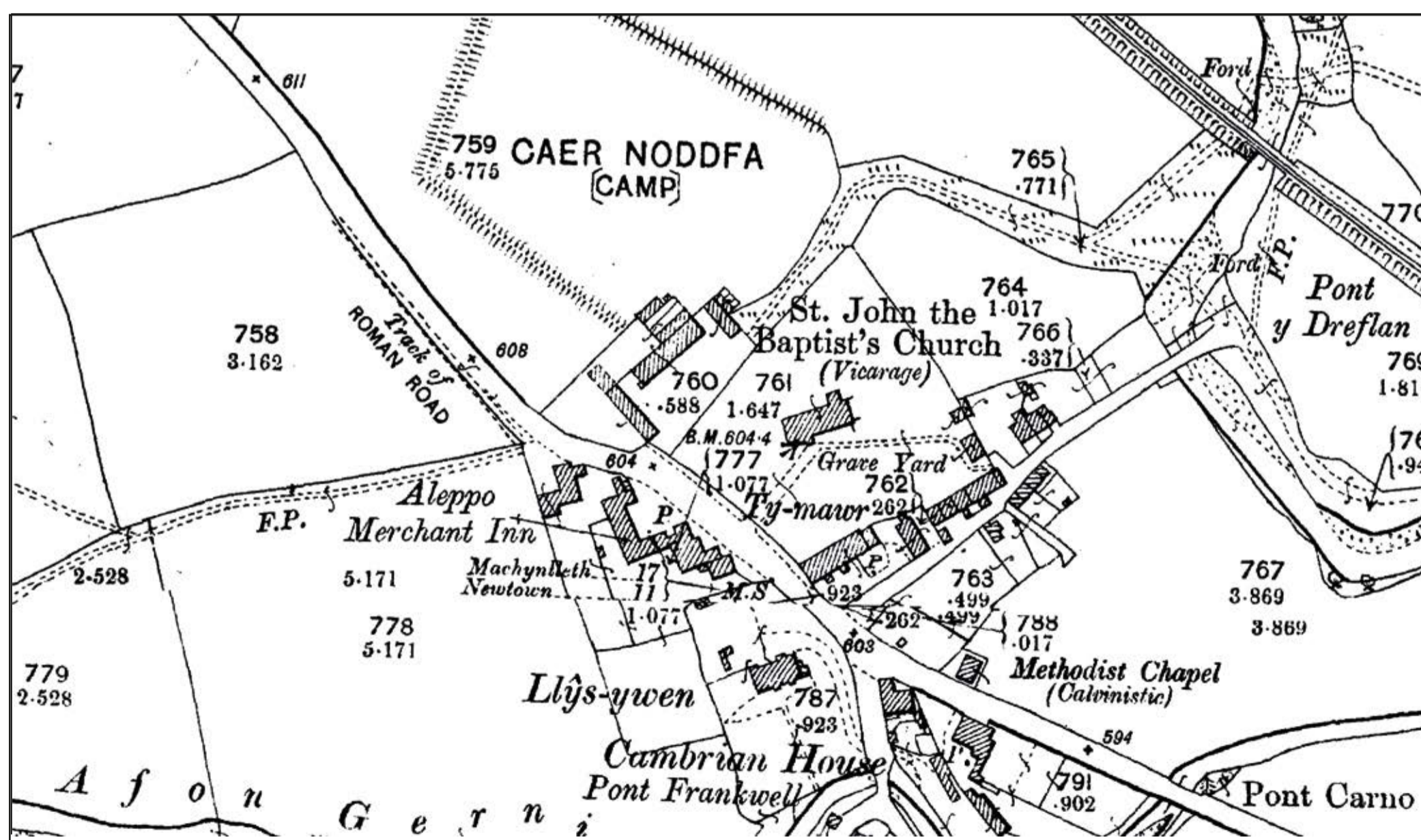
Legend

- The site
- Applied search area
- Scheduled Monument
- Listed Buildings

Figure 3. Listed Buildings and Scheduled Monuments within search area.



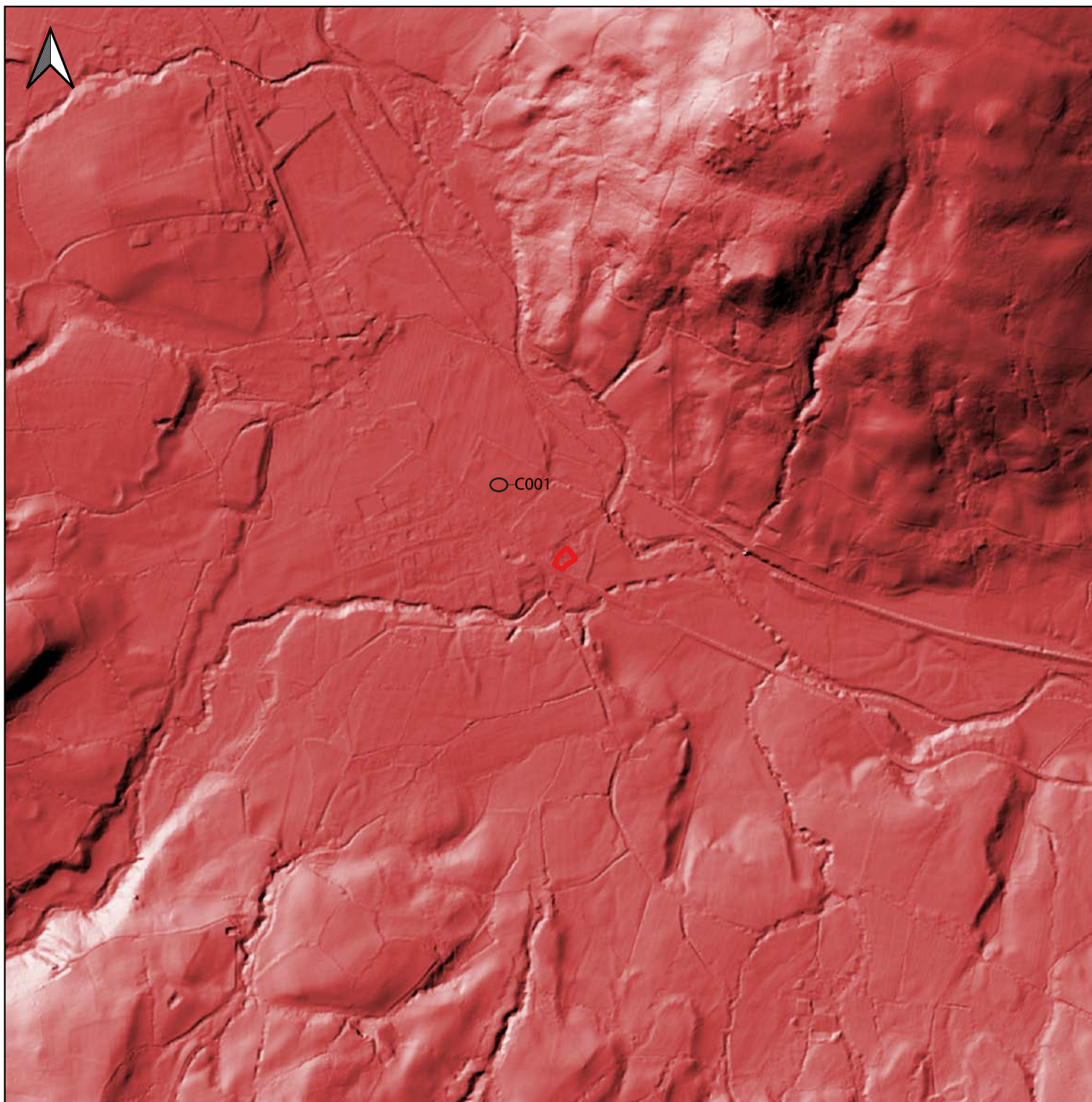
OS County Series 1889.



OS County Series 1902.



Figure 4. Tithe map of Carno (parish), Montgomeryshire 1849.



0 500 1000 m

Figure 5 LiDAR 2m DTM - Hillshade.



Figure 6. Aerial photograph - 1948.



Figure 7. Aerial photograph - 1984.

South-west facing section showing Test pit [100] within Trench set 1, Trench 1

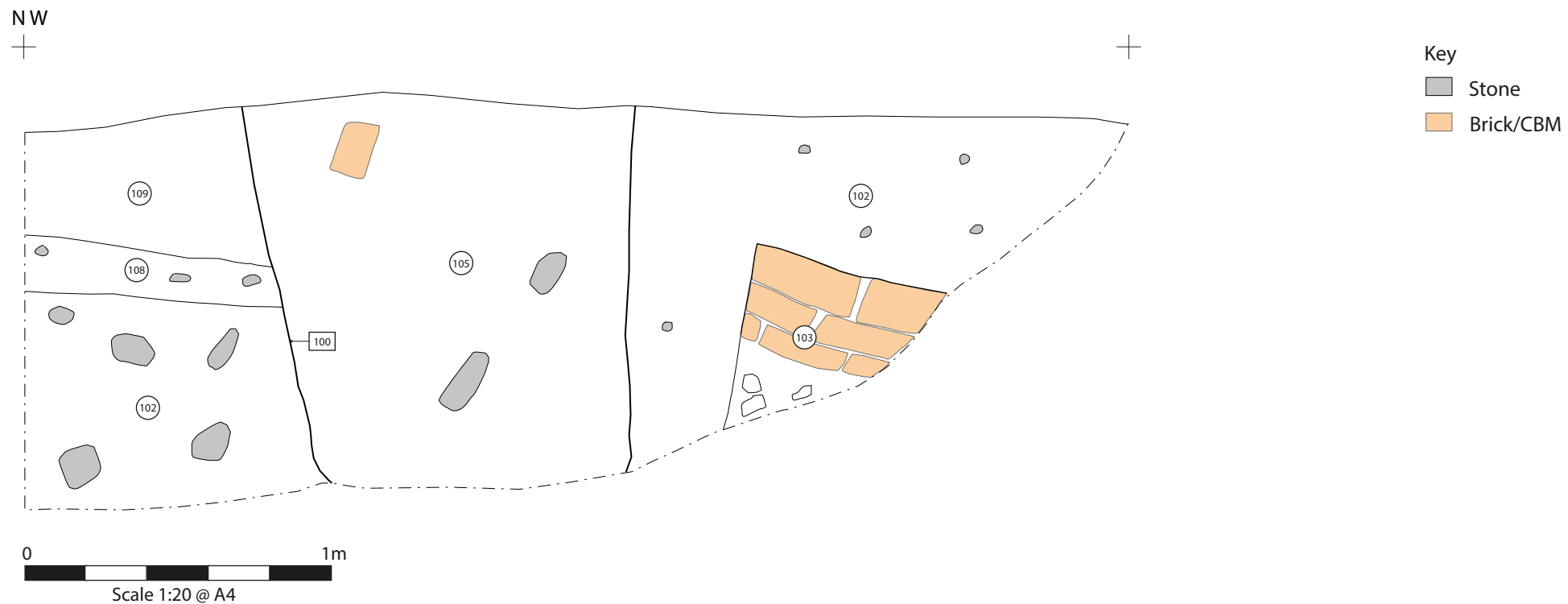


Figure 9
Sections within Trench set 1 & 3

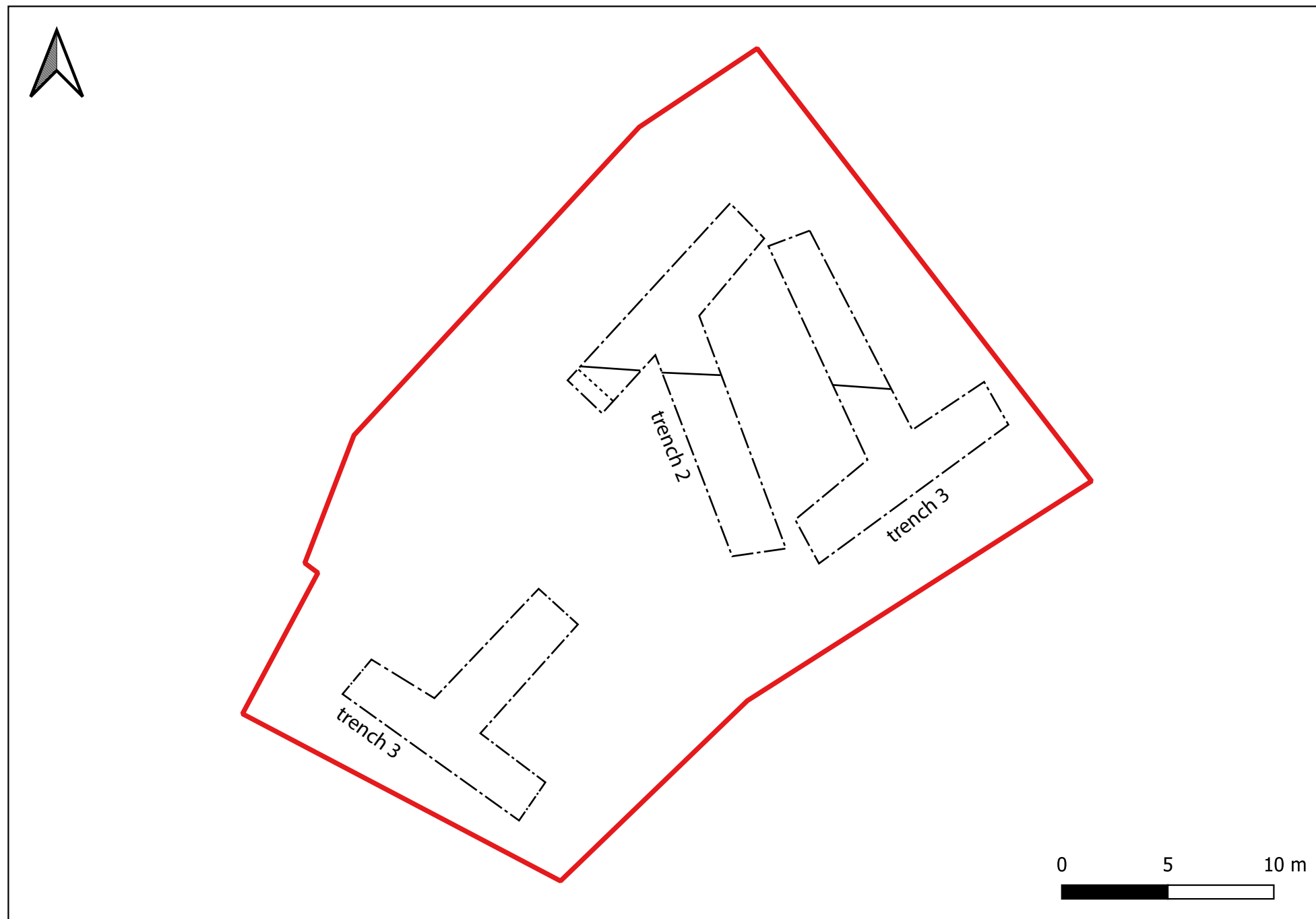


Figure 3. Site plan.



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Plate 1. Trench 1, soakaway looking N. Scale 1m



Plate 2. Trench 1, section showing previous test pit looking NW. Scales 2 x 1m



Plate 3. Trench 1 NW end. Scales 2 x 2m



Plate 4. Trench 1 looking SE



Plate 5. Trench 2 looking NE. Scales 2 x 2m



Plate 6. Trench 2, SE representative section . Scale 1m



Plate 7. Trench 3 looking NW. Scales 2 x 2m



Plate 8. Trench 3 looking SE. Scales 2 x 2m



Plate 9. Trench 3 NE facing representative section. Scale 1m



Plate 10. View of site looking NW.



Plate 11. View of site looking SW.



Plate 12. View of the site looking SE.



Plate 13. View of the site looking NE.

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WRITTEN SCHEME OF INVESTIGATION

FOR AN ARCHAEOLOGICAL

DESK BASED ASSESSMENT AND TRENCHED

EVALUATION AT

AT POST OFFICE LANE, CARNO SY17 5LW

Prepared for:

Philip Humphreys Architects

Project No: 2919

August 2021



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Figure 1. Site location

Figure 2. Assessment area

Figure 3. Development details

Figure 4. Trench location

Summary

This Written Scheme of Investigation (WSI) details the proposal for an archaeological Desk Based Assessment, Site Visit and trenched evaluation associated with the proposed development of semidetached houses at Post Office Lane, Carno SY17 5LW, centred on SN 96369 96423. It has been prepared by Archaeology Wales Ltd for Philip Humphreys Architects.

The purpose of the proposed Desk Based Assessment and Site Visit is to highlight and assess the impact of the proposed development on the archaeological resource. CPAT-DC have also requested that a trenching evaluation is carried out in order to confirm the nature and extent of any buried archaeological remains that may be affected by groundworks associated with the proposed development.

All work will be undertaken in accordance with the standards and guidelines of the Chartered Institute for Archaeologists (2020).

1. Introduction and planning background

- 1.1. This WSI details the proposal for an archaeological Desk Based Assessment (DBA), Site Visit and trenched evaluation to be undertaken in association with the proposed development of two pairs of semidetached houses at Post Office Lane, Carno SY17 5LW centred on SN 96369 96423 (Figure 1). Planning application 21/1121/FUL.
- 1.2. Clwyd-Powys Archaeological Trust - Development Control (CPAT-DC) requested that an archaeological assessment and a trenched evaluation is carried out prior determination to assess the potential impact of the development on the archaeological resource.
- 1.3. This WSI has been prepared by Irene Garcia Rovira, Archaeology Wales Ltd (henceforth - AW) at the request of Philip Humphreys Architects.
- 1.4. The methodology set out in this WSI has been agreed with CPAT-DC in its capacity as archaeological advisors to the local planning authority (PCC). The purpose of the proposed Desk Based Assessment and Trenched Evaluation is to provide the local planning authority with the information they are likely to request in respect of the proposed development, the requirements for which are set out in Planning Policy Wales Revised Edition.11, Section 6.1 (2021) and Technical Advice Note (TAN) 24: The Historic Environment (2017). The work is to highlight and assess the impact of the proposed development on the archaeological resource.
- 1.5. All work will conform to the Standard and Guidance for Historic Environment Desk Based Assessment and Standard and Guidance for Archaeological Field Evaluation (ClfA 2020) and be undertaken by suitably

qualified staff to the highest professional standards. AW is a Registered Organisation with the ClfA.

2. Site Description

- 2.1. The proposed development site is located at the village of Carno, c 8km NW of Caersws. The site is largely covered in overgrowth and bordered by a number of dwellings and by Post Office Lane. The site measures 862m² and it is located at c 186m AOD.
- 2.2. The underlying geology is defined by the Glanyrafon Formation, with interbedded mudstone and sandstone formed during the Silurian Period. The superficial deposits are Alluvial Fan Deposits consisting of Sand and Gravel formed during the Quaternary Period (BGS 2021).

3. Historic background

- 3.1. In a letter dating to the 28th of June 2021, CPAT-DC highlighted that:

The plot lies within the medieval historic core of Carno [...] and includes an undeveloped street frontage plot which is considered to have been within the medieval village layout. Post Office Lane was potentially one of the earliest thoroughfares through the village on a north/south axis and may have been lined with dwellings and their associated rear gardens and light industrial areas. The 1840's tithe map indicates dwellings on the north side of the road and a small structure at the western end of the plot. The potential for sub-surface archaeology of medieval date is at least moderate here.

4. Objectives

Desk Based Assessment

- 4.1. The primary objective will be to assess the impact of the development proposals on the historic environment by means of a Desk Based Assessment and Site Visit. This will help inform future decision making, design solutions and potential mitigation strategies. The aim will be to make full and effective use of existing information in establishing the archaeological significance of the site, to elucidate the presence or absence of archaeological material, its character, distribution, extent, condition and relative significance.
- 4.2. The work will include a comprehensive assessment of regional context within which the archaeological evidence rests and will aim to highlight any relevant research issues within national and regional research frameworks.

- 4.3. The work will result in a report that will provide information of sufficient detail to allow informed planning decisions to be made which can safeguard the archaeological resource. Preservation *in situ* will be advocated where at all possible, but where engineering or other factors result in loss of archaeological deposits, preservation by record will be recommended.

Field evaluation

- 4.4. The objective of the intrusive trial trench evaluation will be to locate and describe archaeological features that may be present within the development area as suggested. The work will elucidate the presence or absence of archaeological material, its character, distribution, extent, condition, and relative significance. The work will include an assessment of regional context within which the archaeological evidence rests and will aim to highlight any relevant research issues within national and regional research frameworks.
- 4.5. A report will be produced that will provide information which is sufficiently detailed to allow the archaeological resource to be better understood. The information could then be used to help inform further archaeological work undertaken in association with the proposed development.

5. Timetable of works

- 5.1. It is planned that the trenched evaluation will start on the 24th of August 2021. CPAT-DC will be informed of any changes to the schedule.
- 5.2. The report¹ will be submitted to the client and to CPAT-DC within a month of the completion of the fieldwork. A copy of the report will also be submitted to PCC. A copy of the report will also be sent to the regional Historic Environment Record.

¹ The report will include the results obtained through the DBA and the trenched evaluation.

6. Methodology

Desk Based Assessment

6.1. The aim of the work will be to establish and make available information about the archaeological resource existing on the site. The work will include the following elements:

- Desk Based Assessment (Stage 1)
- A site visit (Stage 2)
- The production of an illustrated report (Stage 3)

Stage 1 – Assessment

6.2. The assessment will consider the following:

a) The nature, extent and degree of survival of archaeological sites, structures, deposits and landscapes within the study area through assessment of various readily available primary sources:

- Collation and assessment of all relevant information held in the regional HER, including listed building records, within a 1km radius of the assessment area boundary.
- Collation and consideration of the impact on Designated archaeological sites (Scheduled Ancient Monuments, Historic Parks & Gardens, registered historic landscapes, Conservation Areas) within a 1km radius of the assessment area boundary.
- Assessment of all available excavation report and archives including unpublished and unprocessed material affecting the site and its setting.
- Assessment of all relevant extant aerial photographic (AP) evidence. This will include those held by the regional HER and the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW), in Aberystwyth.
- All sources indexed in the County Archive, and as appropriate, site files held by the RCAHMW.
- Records held by the developer e.g. bore hole logs, geological/geomorphological information, aerial photographs, maps, plans
- Map regression analysis using all relevant cartographic sources e.g. All editions of the Ordnance Survey County Series, Tithe and early estate maps (as available).
- Place name evidence
- Internet sourced satellite imagery and LiDAR imagery as available.
- Assessment of records held at the Portable Antiquities Scheme.
- Historic documents (e.g. Charters, registers, estate papers).

- b) The significance of any remains in their context both regionally and nationally and in light of the findings of the desk-based study.
- c) The history of the site based on the areas of research outlined above.
- d) The potential impact of any proposed development on the setting of known sites of archaeological importance (this will constitute a brief assessment, rather than a formal assessment such as that detailed in the Cadw guidelines of 2017).
- e) The potential for further archaeological remains to be present, which have not been identified in pre-existing archaeological records.
- f) The potential for further work, with recommendations if requested and where appropriate for a suitable investigative and/or mitigation methodology.

The Site Visit (Stage 2)

- 6.3. The site visit will be a visual walked search of the entire development area. The ground surface will be visually inspected for all earthworks, structures and finds. The location of any environmental archaeological deposits, or areas which may have a potential for such deposits, will also be taken into account along with the more traditional 'visible' archaeology.
- 6.4. All located sites or finds will be accurately fixed by means of GPS. Each individual find or site location will have an accurate NGR reference attached. Where a close cluster of related features is identified a single NGR for the centre of the cluster will be used, and each constituent feature separately described in the text.
- 6.5. The character, function, condition, vulnerability, potential dating and relationship to other features of each identified site or find will be described fully. The importance of the site or find will be assessed in terms of local, regional or national significance.
- 6.6. A sketch survey of each identified site layout will be made with accompanying metric measurements
- 6.7. Written, drawn and photographic records of an appropriate level of detail will be maintained throughout the course of the project. Digital photographs, including metric scales, will be taken using cameras with resolutions of 10 mega pixels or above. Photographs will be taken in RAW format.
- 6.8. Illustrations will be drawn to a scale of 1:50, 1:20 and 1:10 as required, and these will be related to Ordnance Survey datum and published boundaries where appropriate.

The production of an illustrated report and the deposition of the site archive
(Stage 3)

- 6.9. A report will be produced which synthesises the results of stages 1 and 2 and thereby assesses the total archaeological resource within the development area.
- 6.10. The results will be presented in such a way that data and supporting text are readily cross-referenced. The regional HER Officer will be contacted to ensure that any sites or monuments not previously recorded in the HER are given a Primary Record Number (PRN) and that data structure is compatible with the *Guidance for the Submission of Data to the Welsh Historic Environment Records* (2018). The historical development of the site will be presented in phased maps and plans comprising clearly, the outline of the site.
- 6.11. Within the report an attempt will be made to indicate areas of greater or lesser archaeological significance and the sites will be ranked in level of overall archaeological importance (locally, regionally and nationally).
- 6.12. All relevant aerial photographs and historic maps will be included and be fully referenced. Any site photographs included in the report will be appropriately captioned and clearly located on a suitably scaled site plan.
- 6.13. The report will be used to inform future decision making regarding further stages of archaeological work (Field Evaluation, Watching Brief etc), the development construction and processes used.
- 6.14. The report will specifically include the following:
- a copy of the design brief
 - a location plan
 - all identified sites plotted on an appropriately scaled plan of the proposal site
 - a gazetteer of all located sites and finds with full dimensional and descriptive detail including grid reference and period.
- 6.15. Copies of the report will be sent to: The client, CPAT-DC, and for inclusion in the regional HER. Digital copies will be provided in pdf format if required.
- 6.16. Any further stages of archaeological work, after the submission of the report for stages one and two outlined above, will be the subject of an additional CPAT-DC curatorial brief against which a further AW specification will be drawn up.

Field Evaluation

- 5.17. The work will be undertaken to meet the standard required by The Chartered Institute for Archaeologists' Standard and Guidance for Archaeological Field Evaluation (2020).
- 5.18. The archaeological project manager in charge of the work will satisfy herself that all constraints to ground works have been identified, including the siting of live services and Tree Preservation Orders.
- 5.19. The agreed evaluation areas (Figures 4) will be positioned to maximise the retrieval of archaeological information within accessible areas, and to ensure that the archaeological resource is understood.
- 5.20. It is proposed that three trenches measuring 20m long x 1.8m wide², will be machine-excavated within the planned development area (Figures 4), positioned in areas where the potential presence of archaeological features.
- 5.21. The exact positioning of the trenches will depend on the position of any extant services or other obstructions that come to light during the initial phase of ground works. The locations and dimensions of the trenches have been agreed with CPAT-DC.
- 5.22. The evaluation trenches will be excavated to the top of the archaeological horizon by a 360 excavator or similar machine fitted with a toothless grading bucket under close archaeological supervision.
- 5.23. All areas will be subsequently hand cleaned using pointing trowels and/or hoes to prove the presence, or absence, of archaeological features and to determine their significance. The excavation of the minimum number of archaeological features will be undertaken, to elucidate the character, distribution, extent and importance of the archaeological remains. As a minimum small discrete features will be fully excavated, larger discrete features will be half-sectioned (50% excavated) and long linear features will be sample excavated along their length - with investigative excavations distributed along the exposed length of any such feature and to investigate terminals, junctions and relationships with other features. Should this percentage excavation not yield sufficient information to allow the form and function of archaeological features/deposits to be determined full excavation of such features/deposits may be required.
- 5.24. Sufficient excavation will be undertaken to ensure that the natural horizons are reached and proven, where this can be practically and safely achieved. If safety reasons preclude manual excavation to natural, hand

² L-shaped trenches – 10m each axis

augering may be used to try to assess the total depth of stratification within each area. The depth of the excavation will conform to current safety requirements. If excavation is required below 1m the options of using shoring will be discussed with the client and CPAT-DC, but the intention would be to stop at safe depths.

Contingency

- 5.25. Should potentially significant archaeological features be encountered during the course of the evaluation then CPAT-DC and the client will be informed at the earliest possible opportunity.
- 5.26. CPAT-DC may subsequently request that further archaeological work is undertaken in order to fully evaluate areas of significant archaeological activity. Such work may require the provision of additional time and resources to complete the archaeological investigation. The scope of such work will be agreed with CPAT-DC and the client prior to any extended works being undertaken.

Recording

- 5.27. Recording will be carried out using AW recording systems (pro-forma context sheets, etc.) using a continuous number sequence for all contexts.
- 5.28. Plans and sections will be drawn to a scale of 1:50, 1:20 or 1:10 as required and related to Ordnance Survey datum and published boundaries where appropriate.
- 5.29. All features identified will be tied into the OS survey grid and fixed to local topographical boundaries.
- 5.30. Photographs will be taken in digital format with an appropriate scale, using a 10MP+ camera with photographs stored in Tiff format.

Finds

- 5.31. The professional standards set in the Chartered Institute for Archaeologists' Standard and guidance for the collection, documentation, conservation, and research of archaeological (2020) will form the basis of finds collection, processing, and recording.
- 5.32. Finds will be carefully excavated by hand. The excavation of fragile or particularly significant finds will be undertaken in consultation with an appropriate archaeological conservator. Finds will be bagged by archaeological context, the location of special finds and flint working deposits will be recorded three dimensionally.

- 5.33. All manner of finds regardless of category and date will initially be retained. These will be suitably bagged, boxed and marked. Following cataloguing and initial analysis finds of little archaeological significance may be discarded .
- 5.34. Finds recovered that are regarded as Treasure under The Treasure Act 1996 will be reported to HM Coroner for the local area.
- 5.35. Any finds which are considered to be in need of immediate conservation will be referred to a UKIC qualified conservator (normally Phil Parkes at Cardiff University).

Environmental Sampling Strategy

- 5.36. Deposits with a significant potential for the preservation of paleoenvironmental material will be sampled, by means of the most appropriate method (bulk, column etc). Where sampling will provide a significant contribution to the understanding of the site AW will draw up a site-specific sampling strategy alongside a specialist environmental archaeologist. All environmental sampling and recording and will follow English Heritage's Guidelines for Environmental Archaeology (2nd Edition 2011)._

Human remains

- 5.37. In the event that human remains are encountered, their nature and extent will be established, the client, CPAT-DC and the coroner informed. Measures will be put in place to ensure that any such remains are fenced off, covered, and protected from deterioration and damage, and that human remains, and burial goods will be treated in a respectful manner.
- 5.38. Where preservation in situ is not possible the human remains will be fully recorded and removed under conditions that comply with all current legislation and include acquisition of licenses and provision for reburial following all analytical work.
- 5.39. Human remains will be excavated in accordance with the Chartered Institute for Archaeologist's Updated Guidelines to the Standards for Recording Human Remains (2017). A Ministry of Justice Licence will be obtained before remains can be lifted, this applies to both inhumation and cremated remains.

Specialist advisers

5.40. In the event of certain finds, features or sites being discovered, AW will seek specialist opinion and advice. A list of specialists is given in the table below although this list is not exhaustive.

Artefact type	Specialist
Flint	Julie Birchenall (Freelance)
Animal bone	Richard Madgwick (Cardiff University)
CBM, heat affected clay, Daub etc.	Rachael Hall (APS)
Clay pipe	Charley James-Martin (Archaeology Wales)
Glass	Rowena Hart (Archaeology Wales)
Cremated and non-cremated human bone	Richard Madgwick (Cardiff University)
Metal work and metallurgical residues	Dr Tim Young (GeoArch)
Neo/BA pottery	Dr Alex Gibson (Bradford University)
IA/Roman pottery	Jane Timby (Freelance)
Roman Pottery	Rowena Hart (Archaeology Wales)/ Peter Webster (Freelance)
Post Roman pottery	Stephen Clarke (Monmouthshire Archaeology)
Charcoal (wood ID)	John Carrot (Freelance)
Waterlogged wood	Nigel Nayling (University of Wales - Lampeter)
Molluscs and pollen	Dr James Rackham
Charred and waterlogged plant remains	Wendy Carruthers (Freelance)

5.41. Specialist finds and paleoenvironmental reports will be written by AW specialists, or sub-contracted to external specialists when required.

Monitoring

- 5.42. CPAT-DC will be contacted approximately two weeks prior to the commencement of archaeological site works, and subsequently once the work is underway.
- 5.43. Any changes to the WSI that AW may wish to make after approval will be communicated to CPAT-DC for approval on behalf of PCC.
- 5.44. CPAT-DC will be given access to the site so that they may monitor the progress of the mitigation work. No area will be back-filled until CPAT-DC has had the opportunity to inspect it unless permission has been given in advance. CPAT-DC will be kept regularly informed about developments, both during the site works and subsequently during post-excavation.

6. Post-Fieldwork Programme

Site Archive

- 6.1. An ordered and integrated site archive will be prepared in accordance with: Management of Research Projects in the Historic Environment (MoRPHE) (2015) upon completion of the project.
- 6.2. The site archive - including all artefacts, soil samples, paper, and digital records - will be subjected to selection in order to establish those elements that will be retained for long term curation. The selection strategy will be agreed with all stakeholders and will be detailed in the Selection Strategy and Data Management Plan (ClfA 2020). It will be developed taking into consideration the aims and objectives of the project and will be informed through a detailed consideration of the *Research Agenda of the Archaeology of Wales* and other relevant research frameworks. The manner in which the records will be prepared for long time storage will be guided by the requirements established by the repositories. A detailed justification for the disposal of both records and materials will be written and included within the Data Management Plan.
- 6.3. The site archive (including artefacts and samples) will be prepared in accordance with the National Monuments Record (Wales) agreed structure and deposited with an appropriate receiving organisation, in compliance with ClfA Guidelines (*Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives*, 2014). It will also conform to the guidelines set out in *The National Standard and Guidance to Best Practice for Collecting and Depositing Archaeological Archives in Wales* (National Panel for Archaeological Archives in Wales 2017). The

legal landowner's consent will be gained for deposition of finds. The project will adhere to the Welsh Archaeological Trust's joint *Guidance for the Submission of Data to the Welsh Historic Environment Records* (2018).

Analysis

6.4. Following a rapid review of the potential of the site archive, a programme of analysis and reporting will be undertaken.

6.5. This will result in the following inclusions in the report:

- A bilingual non-technical summary
- The aims and methods adopted in the course of the archaeological works, and the background and circumstances of the report (including development proposals and planning background)
- Location plan showing the area/s covered by the trenched evaluation, including the locations of all artefacts, structures and features found
- Plans and section drawings (if features are encountered) with ground level, ordnance datum and vertical and horizontal scales.
- A written description and interpretation of all deposits identified, including their character, function, potential dating, and relationship to adjacent features. Specialist descriptions and illustrations of all artefacts and soil samples will be included as appropriate. An indication of the potential of archaeological deposits which have not been disturbed by the development, and proposals for further necessary analysis
- The report will contain a discussion of the local, regional, and national context of the remains by means of reviewing published reports, unpublished reports, historical maps, documents from local archives and the regional HER as appropriate.
- A detailed archive list at the rear listing all contexts recorded, all samples, finds and find types, drawings and photographs taken. This will include a statement of the intent to deposit, and location of deposition, of the archive.

Report to Client

- 6.6. Copies of all reports associated with the mitigation, together with inclusion of supporting evidence in appendices as appropriate, including photographs and illustrations, will be submitted upon completion to CPAT-DC for comment and approval. Following approval, a copy will be sent to the client, and for formal submission to PCC.

Additional Reports

- 6.7. After an appropriate period has elapsed, copies of all reports will be deposited with the relevant county Historic Environment Record (CPAT), the National Monuments Record and, if appropriate, Cadw. The report and all relevant information will be submitted to the Historic Environment Record following the guidelines and procedures laid out in the *Guidance for the Submission of Data to the Welsh Historic Environment Records* (WAT 2018).

Summary Reports for Publication

- 6.8. Short archaeological reports will be submitted for publication in relevant journals; as a minimum, a report will be submitted to the annual publication of the regional CBA group or equivalent journal.

Notification of Important Remains

- 6.9. Where it is considered that remains have been revealed that may satisfy the criteria for statutory protection, AW will submit preliminary notification of the remains to Cadw.

Archive Deposition

- 6.10. The final archive (site and research) will, whenever appropriate, be deposited with a suitable receiving institution. If artefacts are recovered, and dependent on the size of the final archive, the preferred receiving institution would be a suitable local institution. If no artefacts are recovered then the archive will be deposited with the National Monuments Record, RCAHMW, Aberystwyth. Arrangements will be made with the receiving institution before work starts.
- 6.11. Although there may be a period during which client confidentiality will need to be maintained, copies of all reports and the final archive will be deposited no later than 12 months after completion of the work.

- 6.12. Copies of all reports, the digital archive and an archive index will be deposited with the National Monuments Record, RCAHMW, Aberystwyth.
- 6.13. Wherever the archive is deposited, this information will be relayed to the HER. A summary of the contents of the archive will be supplied to CPAT.

Finds Deposition

- 6.14. The finds, including artefacts and ecofacts, excepting those which may be subject to the Treasure Act, will be deposited with the same institution, subject to the agreement of the legal landowners.

7. Staff

- 7.1. The project will be managed by Dr Irene Garcia Rovira MCIfA (AW Project Manager) and the assessment undertaken by suitably trained and experienced AW staff. Any alteration to staffing before or during the work will be brought to the attention of CPAT-DC and the client.

8. Health and Safety

- 8.1. Prior to the commencement of the site visit AW will carry out and produce a formal Health and Safety Risk Assessment in accordance with the Management of Health and safety Regulations 1992. A copy of the risk assessment will be kept on site and be available for inspection on request. A copy will be sent to the client (or their agent as necessary) for their information. All members of AW staff will adhere to the content of this document.

Other Guidelines

- 8.2. AW will adhere to best practice with regard to Health and Safety in Archaeology as set out in the FAME (Federation of Archaeological Managers and Employers) health and safety manual Health and Safety in Field Archaeology (2002).

Insurance

- 8.3. AW is fully insured for this type of work and holds Insurance with Aviva Insurance Ltd and Hiscox Insurance Company Limited through Townergate Insurance. Full details of these and other relevant policies can be supplied on request.

Covid-19 specific Considerations

- 8.4. If a Staff member believes they are at an increased risk from the virus they are to contact management
- 8.5. If anyone is showing symptoms of Covid-19 they are to go home immediately and notify the appropriate people
- 8.6. Staff will drive to site in a private vehicle alone or with someone from their household only. If sites require multiple staff members to attend, they will travel separately and will try to avoid the use of public transport (walking, cycling etc)
- 8.7. Staff will stay at least 2m away from any person, who does not live within their own household, AT ALL TIMES. This includes on site, within office space, in the canteen and all other parts of the compound
- 8.8. Staff will wash hands regularly and thoroughly, especially on arriving to site, leaving site and before eating.
- 8.9. The staff members should take their own food and drink to site.
- 8.10. Once returning home, appropriate care should be taken to ensure that contamination does not spread (change clothes, shower etc)
- 8.11. Staff will avoid touching surfaces if possible. If they have to touch a surface, such as a door handle or toilet seat, staff must either wear gloves or wash their hands/ relevant body part with sterilising hand wash immediately afterwards. DO NOT touch your face after touching any surface. Staff should also disinfect surfaces before and after touching. Staff must bring their own sterilising handwash, wipes and gloves and dispose of them safely after use.
- 8.12. All staff will read, sign, and adhere to the separate Site Operating Procedures and work in accordance with them
- 8.13. If any staff, contractor, or any other persons on site are not abiding by these rules, the staff member will remove themselves from the risk and contact the Project Manager immediately.

9. Quality Control

Professional standards

- 9.1 AW works to the standards and guidance provided by the *Chartered Institute for Archaeologists*. AW fully recognise and endorse the Chartered

Institute for Archaeologists' *Code of Conduct, Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology* and the *Standard and Guidance for archaeological watching briefs* currently in force. All employees of AW, whether corporate members of the Chartered Institute for Archaeologists or not, are expected to adhere to these Codes and Standards during their employment.

Project tracking

- 9.2 The designated AW manager will monitor all projects in order to ensure that agreed targets are met without reduction in quality of service.

10. Arbitration

- 10.1 Disputes or differences arising in relation to this work shall be referred for a decision in accordance with the Rules of the Chartered Institute of Arbitrators' *Arbitration Scheme for the Institute for Archaeologists* applying at the date of the agreement.

11. References

Chartered Institute for Archaeologists, 2014. *Standard and guidance for the archaeological investigation and recording of standing buildings or structures*.

Chartered Institute for Archaeologists, 2020. *Standard and guidance for historic environment desk-based assessment*

Jones C, 2018. *Guidance for the submission of Data to the Welsh Historic Environment Records (HERs)*. Welsh Archaeological Trusts

National Panel for Archaeological Archives in Wales, 2019. *Archaeological archives: selection, retention and disposal guidelines for wales*.

Welsh Archaeological Trust's, 2018. *Guidance for the Submission of Data to the Welsh Historic Environment Records*



Figure 1. Site location.

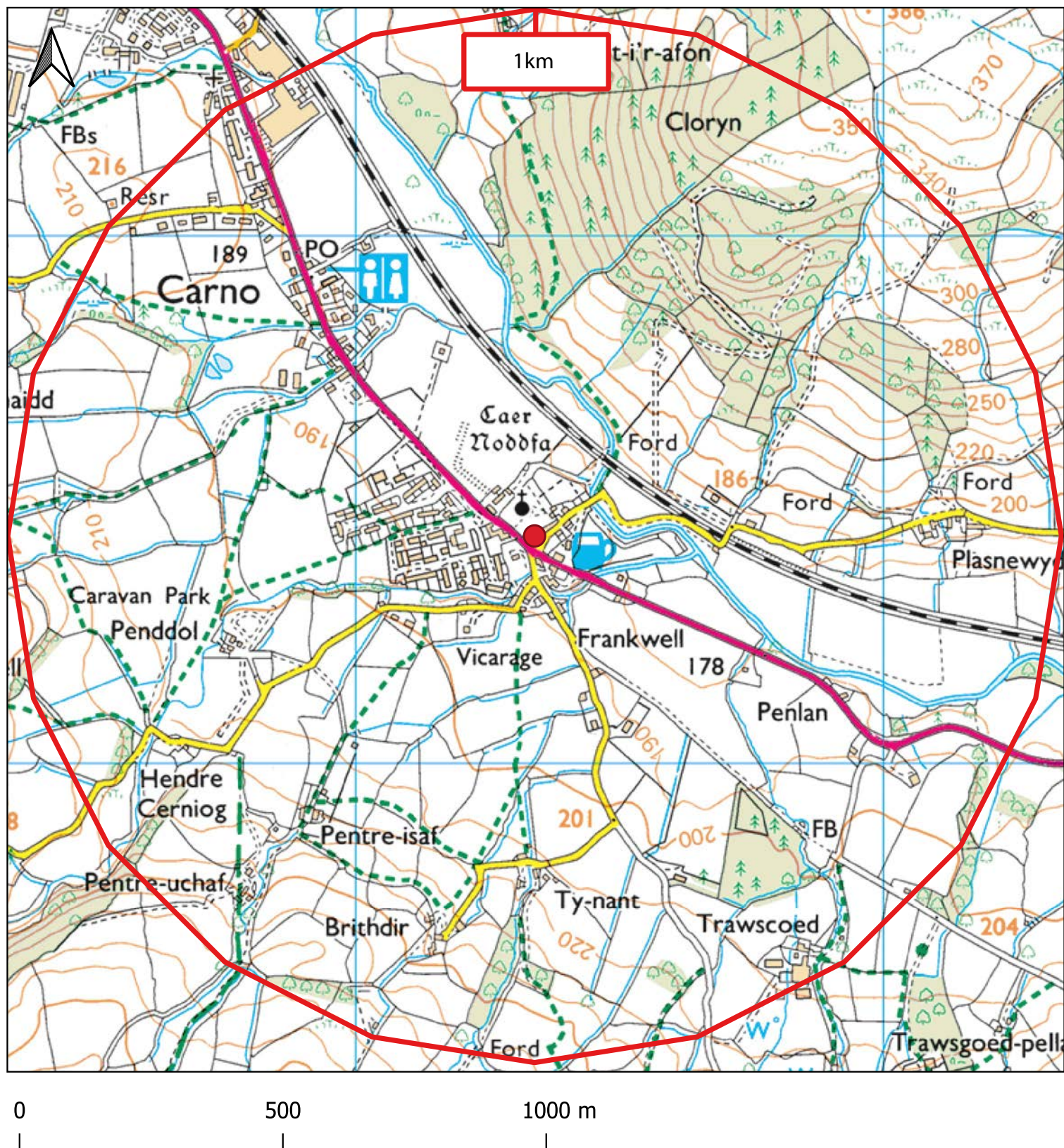


Figure 2. Applied search area.



