

Recording Traditional Farm Buildings and Historic Farmsteads

South Anglesey 2018-19



 Cadw

Recording Traditional Farm Buildings and Historic Farmsteads

Project: South Anglesey 2018-19

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Cover photograph: View of Llanfairpwll and Plas Newydd along the Menai Straits
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G2469 Recording Historic Farmsteads

Location - South Anglesey

Crynondeb Prosiect/Project summary

Mae'r prosiect hwn yn rhan o fenter Cymru gyfan sydd â'r bwriad o greu cyfres o bolygonau GIS o adeiladau fferm traddodiadol sydd wedi goroesi er mwyn cael data ar gyfer cynlluniau amaeth-amgylcheddol nawr ac yn y dyfodol. Mae ail elfen y prosiect wedi creu cofnod o gymeriad y ffermydd sy'n cynnwys yr adeiladau traddodiadol gan ddilyn y dull a nodwyd mewn dogfen ganllaw a luniwyd gan English Heritage. Mae Ymddiriedolaeth Archaeolegol Clwyd-Powys wedi llunio methodoleg gyffredinol mewn astudiaeth beilot flaenorol, a rhoddwyd y dull hwn ar waith yn ne Ynys Môn wrth fynd i'r afael â'r prosiect hwn. Mae mwyafrif y ffermydd yn yr ardal yn cyd-fynd â chynlluniau cyrtiau llac neu reolaidd gyda chyfran sylweddol o ffermydd unionlin.

This project forms part of a pan-Wales initiative designed to create a set of GIS polygons of surviving traditional farm buildings in order to produce data for current and future agri-environmental schemes. A second element of the project has produced a record of the character of the farmsteads containing the traditional buildings following the approach laid out in a guidance document produced by English Heritage. An overall methodology had been devised by Clwyd-Powys Archaeological Trust in a previous pilot study and this was applied to southern Anglesey in the current project. The majority of the farmsteads in the area conformed to loose or regular courtyard plans along with a significant proportion of linear farmsteads.

1. INTRODUCTION

The project was designed with the principal aim of producing polygons of traditional farm buildings that would inform management within the Glastir agri-environmental scheme. A program of polygonisation of features in farmland and woodland had previously been carried out by the Welsh Archaeological Trusts.

The repair of farm buildings as part of the Glastir scheme has been widespread. A large proportion of farms retain *traditional farm buildings*; a category defined by Glastir as buildings predating the end of the First World War. The current project aims to record buildings falling into this category thus providing a register of *traditional farm buildings* that may be eligible for Glastir grant-aid.

A pilot project was carried out by Clwyd-Powys Archaeological Trust in 2015/16 which examined an area in Radnorshire (CPAT Report No 1359). This allowed an efficient methodology to be formulated. The project was continued in Wrexham (CPAT Report No 1501) and North Arduwy (GAT report No 1422) in 2016/17.

Glastir is a sustainable land management scheme in Wales launched by the Welsh Assembly Government in 2012. Its goals include "combating climate change, improving water management and maintaining and enhancing biodiversity". A targeted element has been focussing on six areas of concern: soil carbon management, water quality, water quantity management, biodiversity, the historic environment and improved access. The scheme is funded by the Welsh Government and the European Union. The introduction of Brexit has implications for future of the scheme. The government has stated that it will support agri-environmental schemes at their current level of funding until 2020. It is likely the schemes will continue in some form after Brexit, so it was decided the data being produced by the Traditional Farm Buildings Project would continue to be relevant and that the project should continue in its current form.

A second element was added to the project in the form of a study of the character of farmsteads following a methodology developed by English Heritage (now Historic England). This aims to "provide a consistent understanding of farmstead character at a landscape level, through recording the distribution, plan-type and degree of change seen between historic mapping and the present" (Lake 2014 and Lake and Edwards 2017).

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3. METHODOLOGY

3.1 Introduction

Pilot projects were carried out by Clwyd-Powys Archaeological Trust in 2015/16 and 2016/17. The rest of the Welsh Archaeological Trusts (WATs), including GAT started work on the project in 2017/18 in the form of limited pilot projects designed to develop and implement a consistent methodology for the identification and recording of historic farmsteads across Wales. A meeting was held in the CPAT offices before the project commenced. Abi McCulloch and Chris Martin described the methodology that they had developed for the polygonisation of buildings and Jeremy Lake, who had previously worked on the English Heritage farmstead characterisation project, presented a manual for recording historic farmstead character (Lake and Edwards 2017). It was recognised that the characterisation element was potentially the most time consuming element of project so this was streamlined and 14 different fields were identified as the core features that should be recorded. Jeremy Lake subsequently visited all of the WAT offices in order to provide guidance for the characterisation project.

Gwynedd Archaeological Trust agreed to carry out a pilot project covering Northern Arudwy in 2018. The methodology established by CPAT and Jeremy Lake was used and CPAT provided a template MapInfo Table for the characterisation process. It was, however, necessary to add an additional 18 fields of metadata to conform to Gwynedd Historic Environment's spatial data standards. All digitisation was carried out using MapInfo desktop geographic information system (GIS) and two tables were produced, G2496_traditional_farm_buildings containing individual building polygons and G2496_farmsteads containing the farmstead characterisation data.

Following the methodology used during the pilot farmstead projects of 2016/2017, Gwynedd Archaeological Trust undertook the recording of the characterisations of the historic farmsteads of South Anglesey for 2018/2019.

3.2 Digitisation

The data was derived from Epoch GIS registered versions of the Ordnance Survey 2nd edition (1900-1901) 25" to the mile maps for Anglesey. The 2nd edition maps were used because they were the closest to the end of the First World War cut-off point for the designation of traditional farm buildings by Glastir. These were overlaid with building polygons that were extracted from the *TopographicArea* layer of Mastermap 2012. These were used in a MapInfo workspace along with recent Next Perspectives Aerial photographic cover.

Any Mastermap 2012 polygons that corresponded to buildings on the 25 inch map were copied and pasted into the traditional_farm_buildings table. These were then manually cross referenced with existing HER data and any existing Primary Record Numbers (PRNs) were added to the table. Those buildings that were not already recorded in the HER were then allocated new PRNs. The rest of the standard HER data fields were then filled in for

each entry. NGRs and X-Y coordinates were derived automatically from MapInfo. Other politico-geographic data was derived from existing MapInfo tables along with spatial correspondences to Cadw's listed buildings database.

The farmstead characterisation data was added to a second MapInfo table. The extent of each farmstead was defined by a single polygon drawn around the buildings and yards. Each farmstead was assigned a new PRN and data fields relating to layout and condition as defined in table 1 below were manually filled in. Additional metadata fields were added to the table to conform to Gwynedd Historic Environment Records spatial data standards.

Table 1 Farmstead Mapping Attribute Table

PRN	Unique No.	Unique reference number to fit with any existing data sets
Site Name	Modern Name (historic name)	Modern farm name with historic name (if different) recorded in brackets
Classification Primary Attribute	FARMSTEAD OUTFARM	Defined as a site with farmhouse and associated working buildings and areas for the working of a farm Defined as a site (outfarm) or individual building range (field barn) remote from the farmstead
PLAN TYPE	This results from combination of Primary and Secondary Plan Attributes e.g. LC3 = Loose Courtyard with buildings to 3 sides of yard; RCmy = Regular Courtyard multi-yard plan	
Plan Type Primary Attribute	DISP LC LIN LP PAR RC ROW SING UNC	Dispersed Loose Courtyard Linear L-plan (attached house) Parallel Regular Courtyard Row Plan Single building (use for field barns etc. where there is no yard) Uncertain

Plan Type Secondary Attribute	1, 2, 3, 4 L3 or L4 L u e ful cl dw my cov d y	No. of sides to loose courtyard formed by <i>working</i> agricultural buildings Yard with an L-plan range plus detached buildings to the third and/or fourth side of the yard (may be used with LC or RC dependent on overall character) Regular Courtyard L-plan Regular Courtyard U-plan Regular Courtyard E-plan Full Regular Courtyard plan Cluster (Used with DISP) Driftway (Used with DISP) Multi-yard (Used with DISP or RC) Covered yard forms an element of farmstead Additional detached elements to main plan Presence of small second yard with one main yard evident
Tertiary Attribute	Codes as per Secondary Attribute table e.g. LC1d = Loose Courtyard with building to one side of yard with additional detached buildings; DISPmyL = Dispersed multi-yard group including a prominent Regular L-plan within it	
Survival	EXT ALT ALTS DEM HOUS LOST	Extant – no apparent alteration Partial Loss – less than 50% change Significant Loss – more than 50% alteration Site remains but no OS 2nd edition buildings legible Farmhouse only survives No evident trace of farmstead/outfarm site
Sheds	SITE SIDE	Large modern sheds on site of historic farmstead – may have destroyed historic buildings or may obscure them Large modern sheds to side of historic farmstead – suggests farmstead probably still in agricultural use
Farmhouse Position	ATT DET UNC	Attached to agricultural range Detached Uncertain (cannot identify which is farmhouse)
Confidence	H M L	High Medium Low
Area	Rapid polygonal capture of the area of the farmstead, capable of analysis after an area mapping project has completed	
Notes	Free text field to add notes relating to the character or identification of a record or confidence score	

The majority of the fields describe variations in the layout of the farm. The fields were filled using the range of farmstead plans identified in the National Farmsteads Character Statement (Lake 2014, 10).

The completed tables were submitted to the HER.

4. RESULTS

An area of approximately 89.95 square kilometres of South Anglesey was digitised comprising 3,062 building polygons in 558 farmsteads and outfarms (Figure 01). This included full characterisation of the farmsteads which was found to be considerably more time consuming than the production of the individual building polygons.

The area included a wide range of topography extending from the banks of the Menai Strait at the south, the dunes at Aberffraw and Newborough in the west, through fertile undulating farmland around Gaerwen and Llangefni to the coastline of Red Warf Bay and Penmon in the east.

The most common plan type (primary attribute) of farmsteads in the study area was “loose courtyard” (37%). The most common secondary attribute plan type associated with loose courtyards was recorded as courtyards with three (35%) or two (27.4%) sides formed by working agricultural buildings (see Table 1). Some of the loose farmyards in the study group also had L-plan farm buildings as a secondary attribute (10%).

Linear farmyard plans (23%) were also a frequent primary attribute, particularly towards the west coast and further inland. These farmsteads were not particularly large and in some regards could be classed as small holdings as they each covered an area between c. 0.03 – 0.35 hectares.

Regular courtyards plans were also common in southern Anglesey (21%), with the second attributes mostly recorded as L-plan (39%) and U-plan (37%) layouts. Full regular court yard plans also featured within the study area (10%). Regular courtyards were mostly found along the banks of the Menai Strait and, as in Ardudwy, were suggestive of high-status or well-established farmsteads. These were particularly common in gentry farmsteads associated with large estates, such as Plas Newydd and Baron Hill (Figures 02 and 03).

As previously mentioned, the L-plan layout was commonly found as a secondary attribute in loose and regular court yards. However, farmyards with L-Plan as their primary attribute were recorded in 11% of farmsteads within the study area, most of which had a detached element to the farmyard. Nearly all of them bore evidence of a secondary yard (66%) with two expectations having multiple yards (Bont Marquis and Ty'n-y-morfa in Bodorgan). The 17th century farmstead of Plas-Berw is a very good example of an L-plan loose court yard (Figure 04).

Farmyards with dispersed plans as their primary attribute were not particularly common (5.3%) in southern Anglesey. A total of 30 were recorded, the majority of which had been laid out amongst multi yards (73%) rather than along driftways (40%) (Figure 05). The proportion of dispersed plans was very different to Ardudwy where they were the most common layout forming 57% of the total.

Outfarms were uncommon in southern Anglesey comprising only 3.2% of the total. This can also be contrasted with Ardudwy where there was a high proportion of outfarms (43%) mostly in the form of isolated field barns.

On Anglesey the outfarms were either part of an estate's home farm or a single outbuilding (0.53%) associated with a farmstead; there is a good example at Quirt Farm in Dwyran (Figure 06). An unusual layout of outfarms was attached to the farmstead of Dragon-Wen in Penmynydd. To the east of the main farmstead are two outfarms with livestock pens and enclosures; Dragon-bach beyond the field east from Dragon-wen's farmhouse and Dragon-goch located just south-west from Dragon-bach. Further east along the driveway is a quarry named Dragon-isaf. The outfarms here may have been adapted from old quarry buildings subsequently becoming an extension to Dragon-wen farm (Figure 07).

The survival of farm buildings shown on the 25" map was generally high although some had been lost or could be seen on aerial photographs as roofless ruins. Survival and condition could only be determined from the mapping and aerial photographic evidence. This gave a reliable estimate of the general survival of buildings and showed that 78% of farmsteads were intact with no significant loss of structures. A total 205 of which were still completely intact, and 235 has less than 50% alteration. Only 22% of the farmsteads have been converted. The majority of these were once smaller farmsteads which appear to now be in use as domestic dwellings, usually as a result of expansions of towns and villages, such as Llanfair PG, Llangefni and Gaerwen. The other converted farmsteads, were mostly recorded along the coastline and are currently in use as a holiday dwellings or caravan parks. The data for the "converted" field was derived from aerial photography and in some cases a brief google search of the place name, or estate agents property information. It proved to be very useful particularly when establishing that buildings had been converted holiday lets.

5. DISCUSSION

5.1 Methodology

The project followed the methodology established in 2017-18 thus ensuring an efficient workflow and making sure that outcomes were compatible with the Gwynedd HER. The digitisation of the individual farm buildings is a relatively swift process. The input table contains 52 fields but only 3 require manual entry and the rest can be batch filled at the end of the project. This process was the main purpose of the project.

The farmstead characterisation was added to the project as a secondary element but is more complex and time consuming than the digitisation of individual farm buildings. The input table contains 34 fields but crucially 12 of these fields require manual input and the process includes reference to aerial photographs, the existing HER, Cadw listed building records and RCAHMS records. The categorisation process requires confirmation of the current status and condition of the buildings, the identification of the farmhouse, and the allocation of the plan to one of 8 basic plan types and 18 sub-plan types.

The main categories of farmstead plans as defined in the Historic Farmsteads manual (Lake and Edwards 2017) proved to be readily identifiable although smaller more irregular farmsteads could sometimes be interpreted in more than one way. It was in many cases possible to reliably identify secondary and tertiary attributes such as multi-yards, drift-ways, clusters and numbers of buildings around courtyards. Some of the other attributes seem to require more subjective judgement and could be regarded as being on a continuum of irregular plans.

5.2 Characterisation

The characterisation study identified a distinctive agricultural settlement pattern in the survey area. The Historic Landscape Characterisation for south Anglesey notes that the use of loose and regular courtyard plans is particularly characteristic of the island in general, and contrasts with the more dispersed settlement patterns in many upland areas in Caernarfonshire and Arduwy.

The settlement pattern on Anglesey is mostly a result of the relatively benign conditions found on the island. It is a relatively low-lying island, with highlands restricted to small hills on north of the island. The climate is more temperate than that of the upland areas of the mainland, with relatively small seasonal variations in temperature and rainfall. The cover of deciduous woodland is relatively low in comparison to other parts of Gwynedd. Agriculture flourished as a result, the island provided an ideal landscape for arable farming (particularly during the medieval period), and was known as the granary of Wales. The medieval hamlets, with shared open-field systems, were gradually broken up and taken over by more compact farm units and a number of landed Estates. Arable farming subsequently declined by the 17th century with the increase of livestock rearing and dairy farming. The medieval open-field systems were enclosed forming the island's current field patterns bordered by clawdds and hedgerows (Longley 2006). The construction of the Menai Suspension bridge by Thomas Telford in 1826 along with the later rail link over Britannia Bridge meant that fat stock production had become increasingly important with animals brought from the rearing

districts in the mainland. As a result the size of individual farms increased, mainly through the amalgamation of small holdings (Steele & William 2006).

Southern Anglesey contains a few high-status farmsteads such as Llanidan, Trefarthen, and Lledwigan (Figure 08). The two most notable and high-status farmstead/estates within the study area are Plas Newydd in Llanddaniel Fab, now owned by the Marquis of Anglesey, and Baron Hill in Beaumaris, belonging to the Buckley family. These higher status farms were built to a substantial regular court yard plan. Other regular courtyard plans within the study area tended to be much smaller in size, but also appeared to be of relatively high status and were either affluent farmsteads or parts of a manor estate. Many of the smaller farms developed in an *ad hoc* fashion and could probably be seen as variations of a loose courtyard or linear plans that developed from a core farmstead over time. In these cases the variations in plan appear to have been driven more by the change and development in agriculture and perhaps, to a certain degree by topographic constraints.

6. REFERENCES

Gwynedd Archaeological Trust, undated, *Historic Landscape Characterisation - Ardudwy Historical Themes* <http://www.heneb.co.uk/hlc/ardudwythemes.html>

Lake J. and Edwards B. 2017 *Historic Farmsteads: A Manual for Recording, adapted as working document for the Welsh Farmstead Mapping Programme*

Lake J. 2014, *National Farmsteads Character Statement* English Heritage

Longley, D., 2006, Deserted rural settlements in north-west Wales in Roberts, K., *Lost Farmsteads: deserted rural settlements in Wales*, CBA Research Report 148

McCullough, A. E. and Martin, C. H. R., 2015, *Polygonisation of Traditional Farm Buildings in Radnorshire, Glastir Pilot Project*, CPAT Report 1359

McCullough, A. E., Watson, S. W. and Martin, C. H. R., 2017, *Polygonisation of Traditional Farm Buildings in Wrexham*, CPAT Report 1501

Steele, P. & Williams, R. 2006. *Mon Mam Cymru: The Guide to Anglesey*, 3rd Edition, Llyfrau Magma

FIGURES

Figure 01:

View of historic farmstead of south Anglesey study area in green with historic farmstead polygons noted in turquoise.

Figure 02:

Plas Newydd regular U-plan courtyard, named as “Farmyard” on OS 2nd Edition map 1901.

Figure 03:

Baron Hill farmstead displaying multiple L-plan and multi-yards linear and parallel courtyard plan.

Figure 04:

17th cen. Plas-berw loose court yard farmstead with a detached L-plan yard.

Figure 05:

Example of a dispersed multi yard farmstead, Clafdy.

Figure 06:

Quirt farm, with singular outbuilding situated in the south.

Figure 07:

Two outfarms situated to the east of Dragon-wen, unusual example, likely old quarry buildings adapted into animal pens.

Figure 08:

Lledwigan full court farmyard plan.

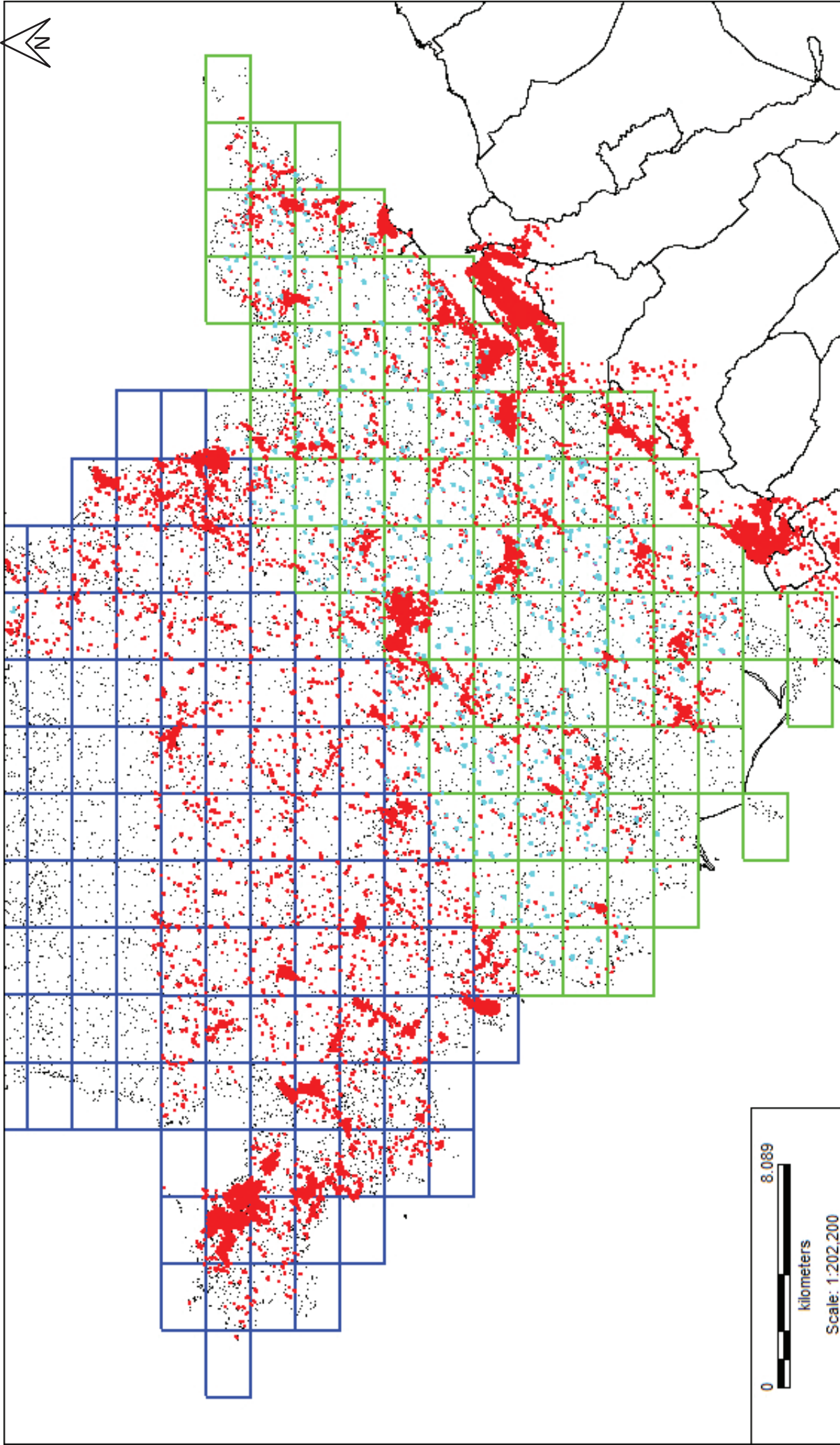


Figure 01: View of historic farmstead of south Anglesey study area in green with historic farmsteads polygons noted in turquoise.



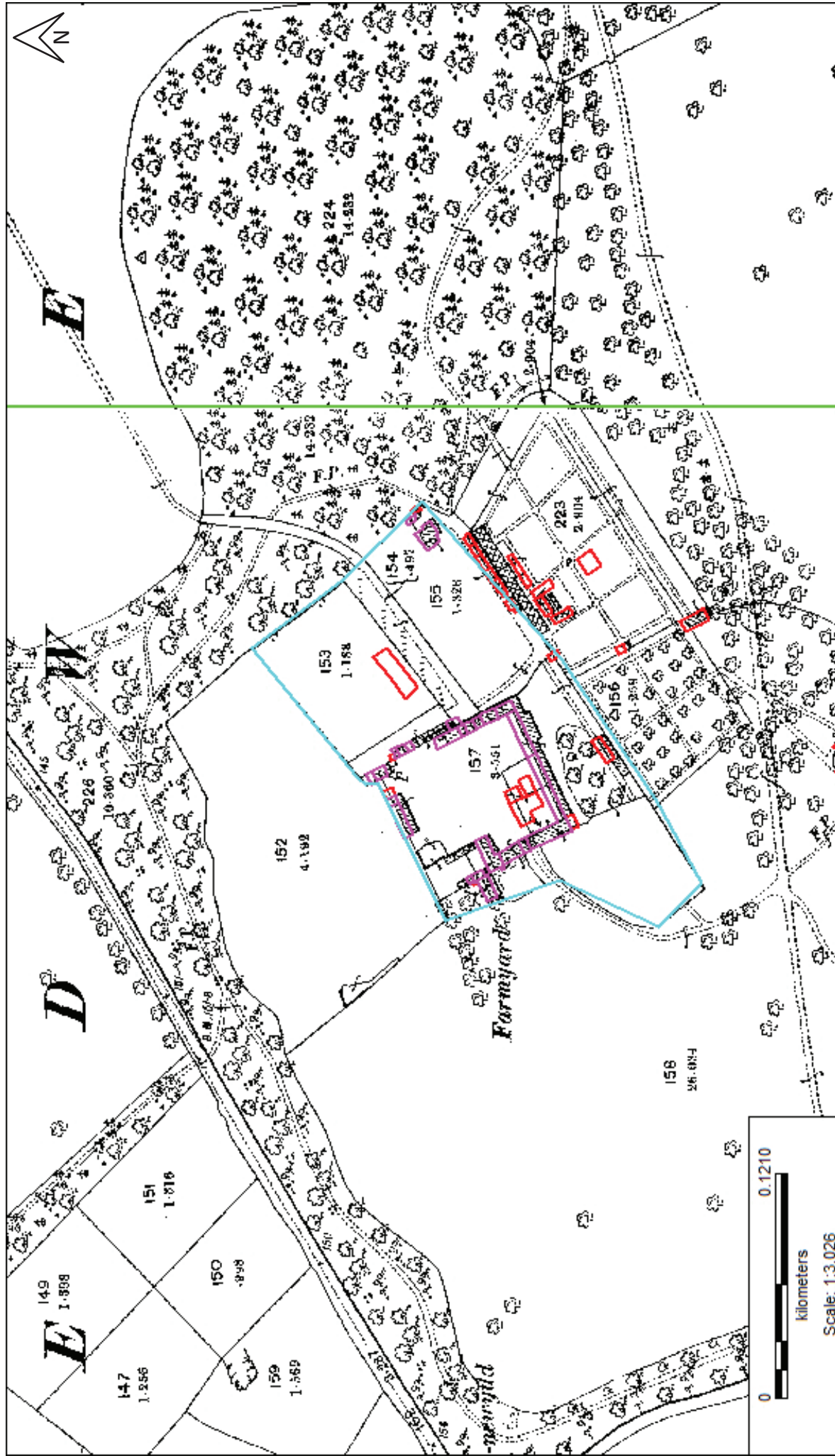


Figure 02: Plas Newydd regular U-plan courtyard, named as “Farnyard” on OS 2nd Edition map 1901.



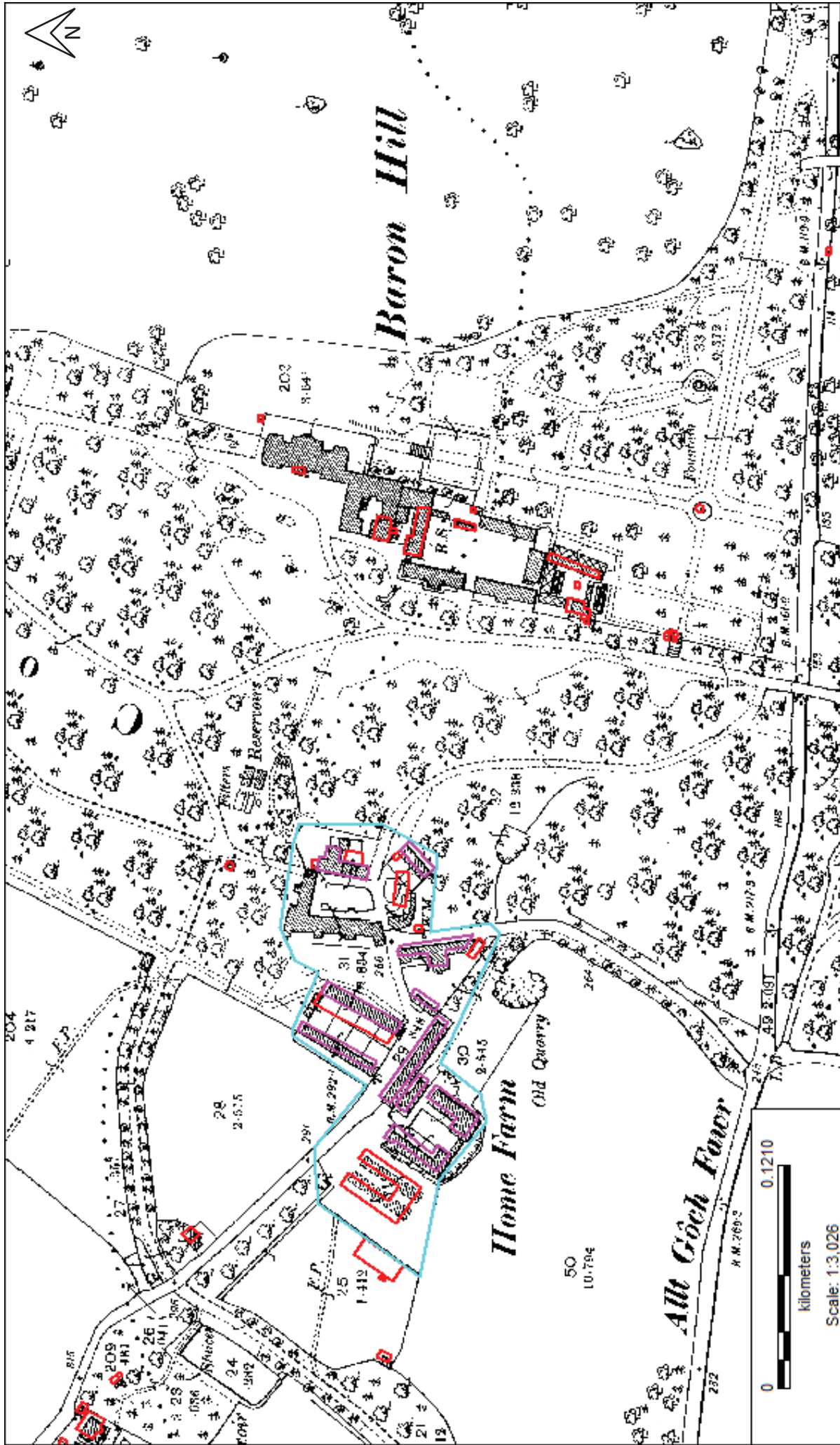


Figure 03: Baron Hill farmstead displaying multiple L-plan and multiyards linear and parallel courtyard plan.



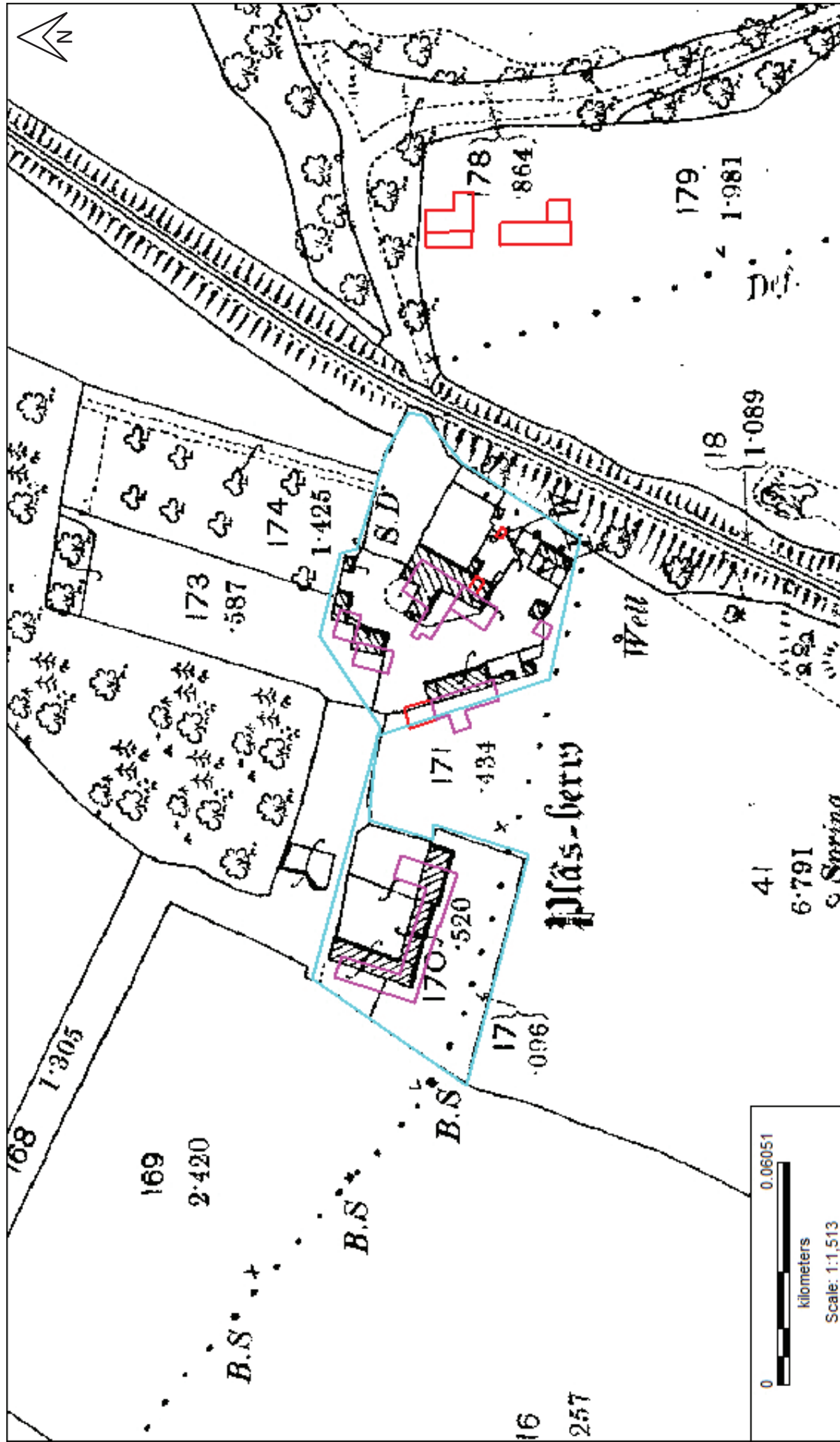


Figure 04: 17th cen. Plas-berw loose court yard farmstead with a detached L-plan yard.



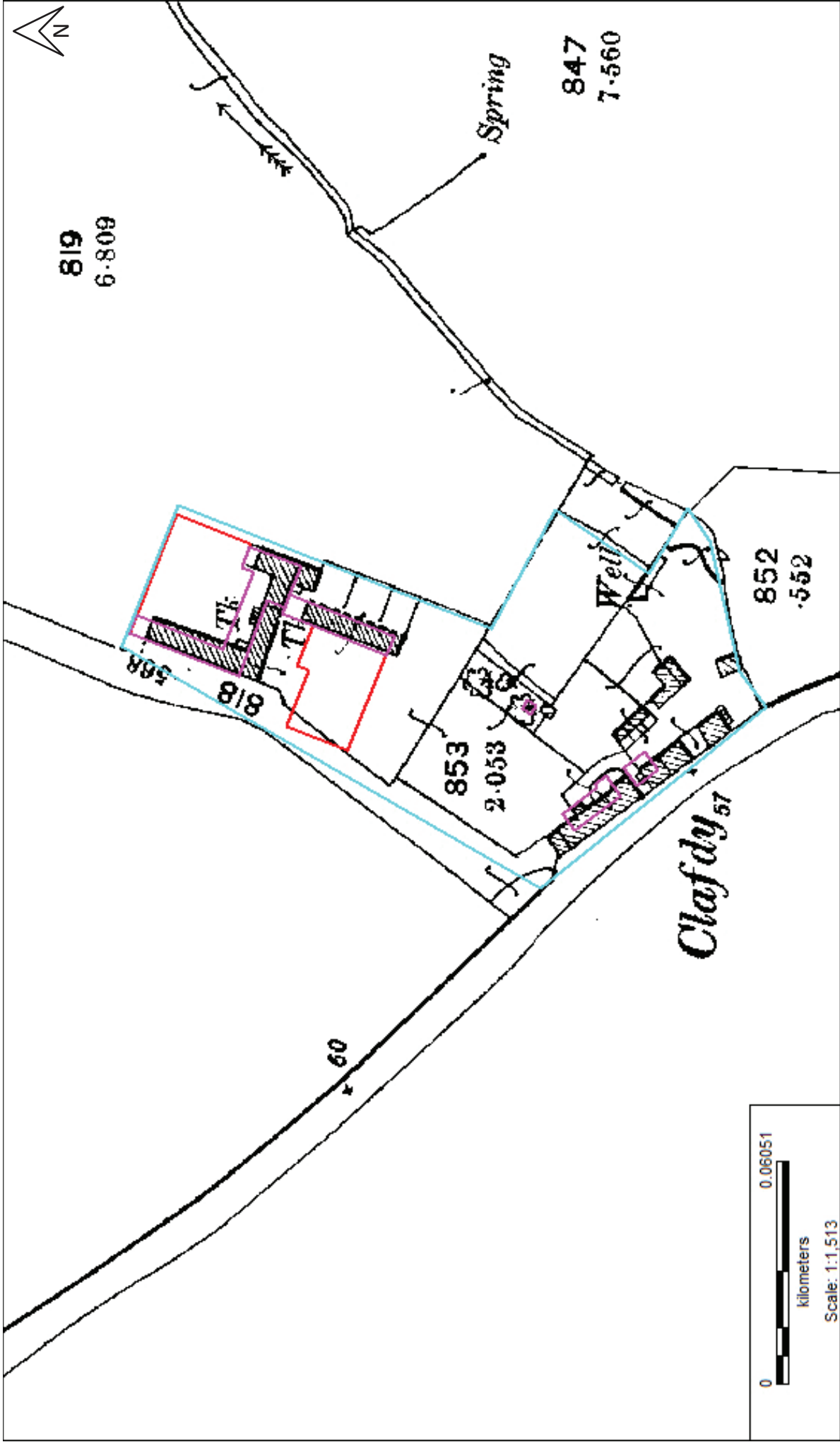


Figure 05: Example of a dispersed multi yard farmstead, Clafdy



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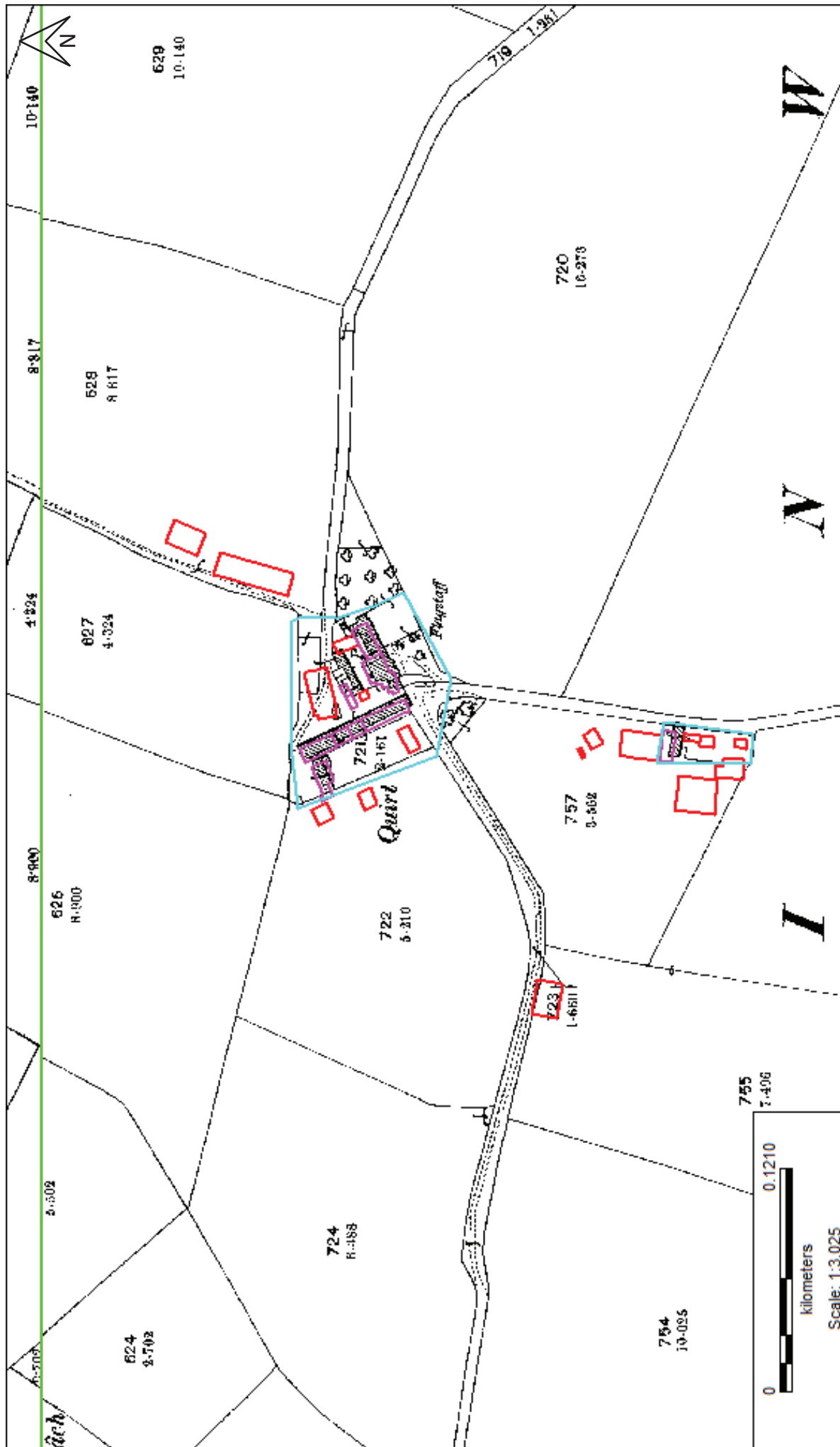


Figure 06: Quirt farm, with singular outbuilding situated in the south.



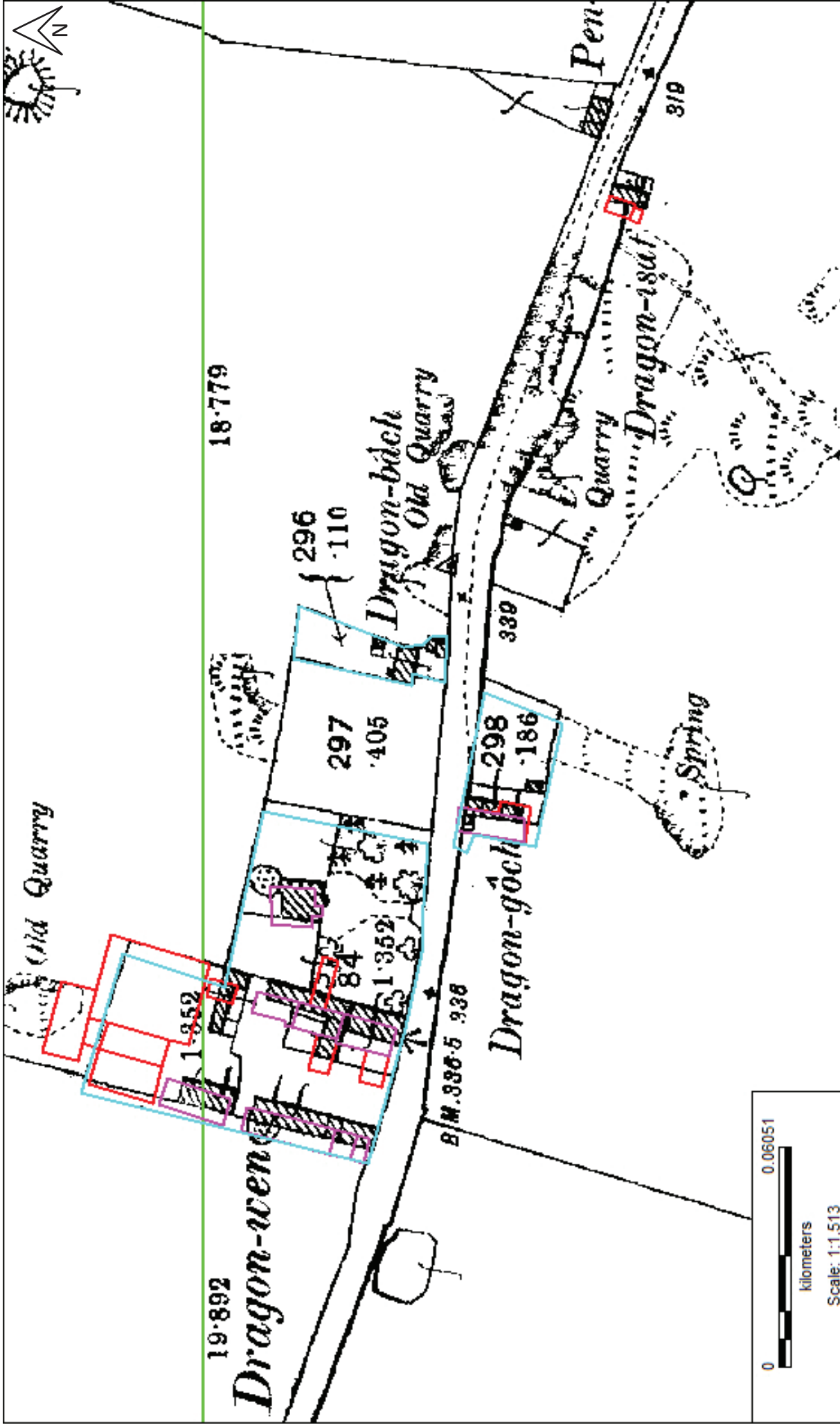


Figure 07: Two outfarms situated to the east of Dragon-wen, unusual example, likely old quarry buildings adapted into animal pens.

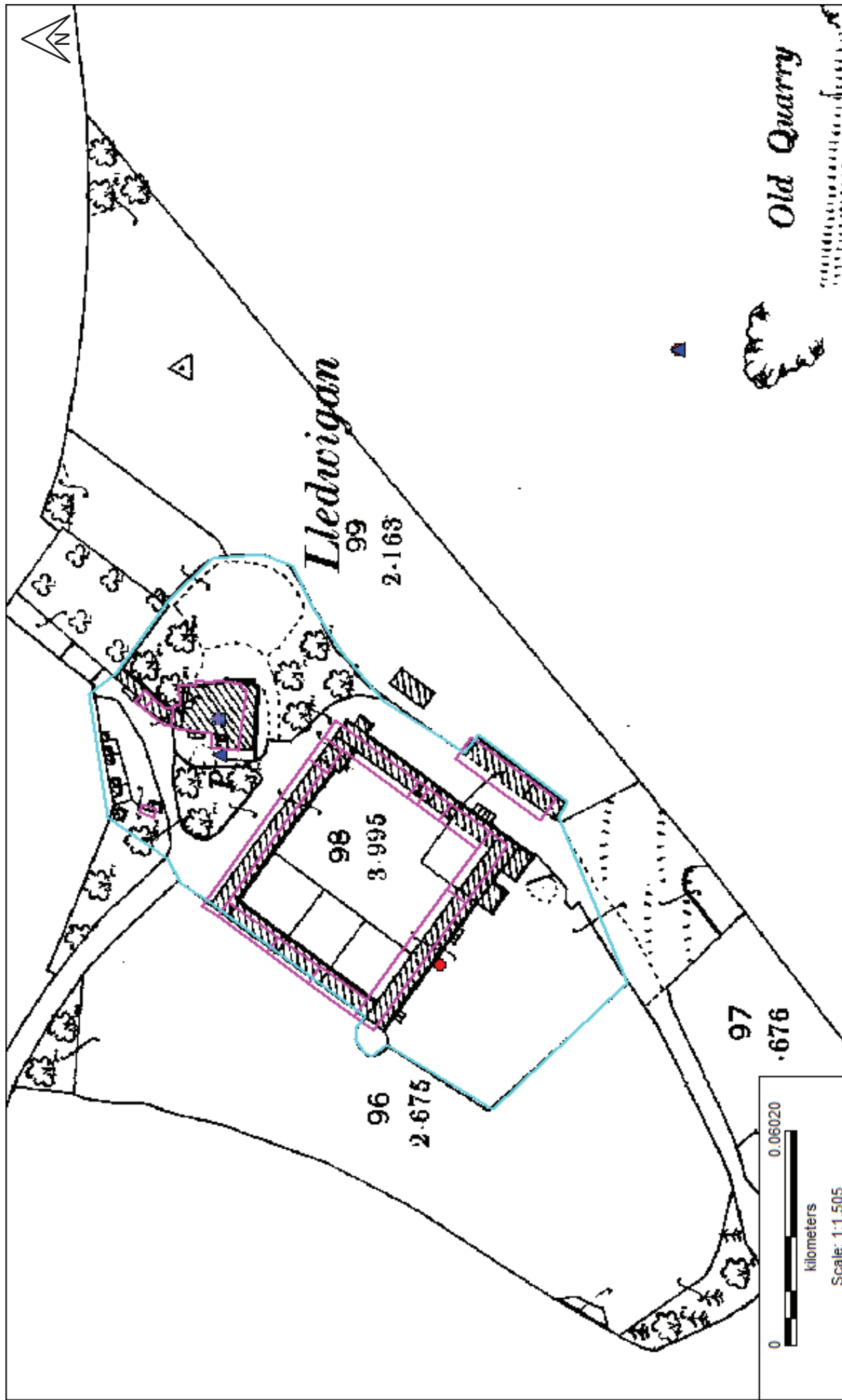


Figure 08: Lledwigan full court farmyard plan.



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