LLANGRANOG SEWERAGE SCHEME, CEREDIGION

AN ARCHAEOLOGICAL ASSESSMENT, OCTOBER 2001



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CAMBRIA ARCHAEOLOGY

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AN ARCHAEOLOGICAL ASSESSMENT

By

Neil Ludlow

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Project Record No. 43521

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Copy of John Speed's map of Cardiganshire, 1610

Copy of National Library of Wales, 'Emanuel Bowen's Map of South Wales', 1729

Copy of National Library of Wales, Ordnance Survey Original Surveyors' Drawings, 2" to the mile, Sheet 186, 1811

Sketch copy of National Library of Wales, 'J. C. D.' Deposit Vol., p.19, 'Cwmawen-Fawr, and Llangrannog Mill & Lands', 1833

Copy of Ordnance Survey 1" to the mile, Old Series, Sheet 57, 1834

Copy of National Library of Wales, Parish of Llangrannog, Tithe Map and Apportionment, 1840

Copy of Ordnance Survey, 1:10560, Cardiganshire Sheet XXXI.NW, First Edition, 1881

Copy of Ordnance Survey, 1:10560, Cardiganshire Sheet XXXI.NE, First Edition, 1891

Copy of National Library of Wales, Pigeonsford 1, 'Pigeonsford Yard, Meadow and Garden', c.1900

Copy of Ordnance Survey, 1:10560, Cardiganshire Sheet XXXI.NW, Second Edition, 1906

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APPENDIX 2

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Photo 1: Pigeonsford walled garden (PRN 43535), the exterior from the north-east

Photo 2: Pigeonsford walled garden (PRN 43535), the exterior from the north-west

Photo 3: Pigeonsford walled garden (PRN 43535), the interior from the south-east

APPENDIX 3

Copy of project specification

1.0 INTRODUCTION

1.1 Development proposals

Cambria Archaeology Field Operations was invited, by Thomas, Morgan and Associates, on behalf of Dwr Cymru and Morrison Construction Ltd., to provide costings for an archaeological assessment of a proposed new sewerage system route at Llangranog, Ceredigion, on 26 June 2001. Cambria Archaeology accordingly submitted a specification and quotation on 28 June 2001 and were awarded the contract on 16 July 2001.

1.2 Project objectives

- 1.2.1 to assess the character, extent, significance and vulnerability of the archaeological resource within the project area, namely a 15 metre wide corridor along the midline of the proposed route.
- 1.2.2 to identify new archaeological sites, features and deposits within the project area, and to assess their character, significance and vulnerability.
- 1.2.3 to identify sites, features and deposits that require further archaeological investigation to fully assess their character, extent, significance and vulnerability.
- 1.2.4 the preparation of a report fully representative of the information recovered during 1.2.1 1.2.3, which places the archaeological resource of the project area within its local, regional and national contexts.
- 1.2.5 The preparation of a project archive.

1.3 Project methodology

- 1.3.1 a search of the County Sites and Monuments Record and the National Monuments Record for information of known sites within and around the project area.
- 1.3.2 a search of cartographic sources held in national and county records offices and other repositories for archaeological information.
- 1.3.3 a search of primary historic documents held in national and county records offices and other repositories.
- 1.3.4 a search of secondary, published sources.
- 1.3.5 the examination of relevant aerial photographic coverage.
- 1.3.6 a field visit to review the current state of archaeological sites, features and deposits identified during the searches and to identify new archaeological sites, features and deposits or areas that may contain them. In addition, where necessary, to undertake rapid recording of archaeological sites, features and deposits by photography, site notes and sketch plans, and to assess their vulnerability.

1.4 Categorisation of archaeological sites and features

All sites and features identified within this report have been allocated a category which defines the archaeological importance of that site. The categories are as follows:-

Category A - Sites of national importance

Category B - Sites of regional or county importance

Category C - Sites of district or local importance

Category D - Minor or damaged sites

Category E - Sites needing further investigation

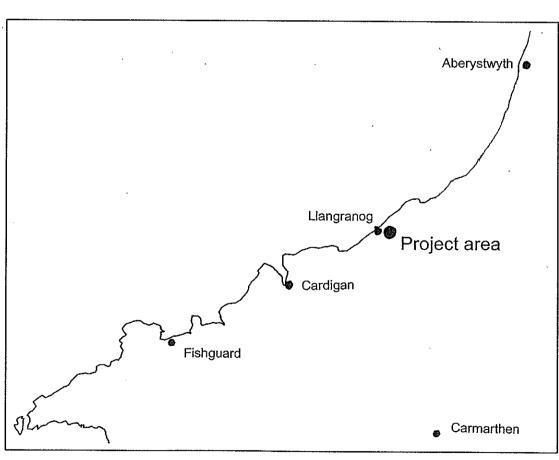
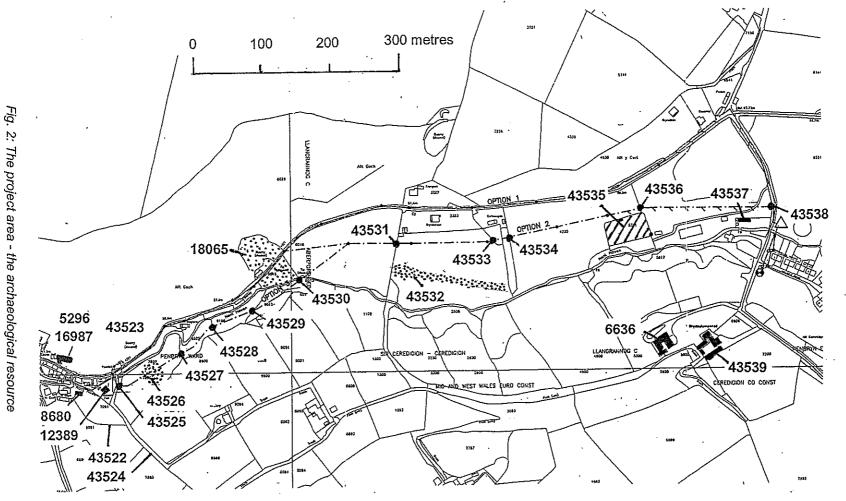


Fig. 1: The project area - location map



2.0 RESULTS OF ASSESSMENT

2.1 Summary of the archaeological resource

This section contains brief descriptions of archaeological/historic sites, features, buildings and deposits within the project area, namely a 15m wide corridor along the midline of the proposed route, and relevant sites and features immediately beyond. They are listed by their type and individual Primary Record Number (or PRN) as allocated in the Sites and Monuments Record for Carmarthenshire, Ceredigion and Pembrokeshire.

Refer to Fig. 2 for PRNs given for the purpose of this project. Categories are as defined in Section 1.4.

See Section 3.3 for a gazetteer and detailed descriptions of sites.

2.1.1 Sites within the proposed route corridor

PRN 18065 – NGR SN 319 543 – ALLT-GOCH QUARRY earthwork; post-medieval; Category D

PRN 43523 – NGR SN 3175 5400 – FFYNNON-FAIR BRIDGE building; post-medieval; Category B

PRN 43524 – NGR SN 317 539 – FFYNNON-FAIR TRACKWAY trackway; post-medieval; Category D

PRN 43526 – NGR SN 3180 5400 – FFYNNON-FAIR ?EARTHWORK earthwork?; date unknown; Category E

PRN 43535 – NGR SN 325 543 – PIGEONSFORD WALLED GARDEN building; post-medieval; Category A (LB2)

2.1.2 Relevant sites immediately beyond the proposed route corridor

PRN 5296 – NGR SN 3165 5403 – ST CARANNOG'S CHURCH documents; medieval; Category A

PRN 6636 – NGR SN 3255 5404 – PIGEONSFORD HOUSE building; post-medieval; Category A (LB2)

PRN 8680 – NGR SN 3168 5398 – FELIN ISAF CORN MILL building; post-medieval; Category B

PRN 12389 – NGR SN 318 539 – FFYNNON-FAIR well; medieval; Category C

PRN 16987 – NGR SN 3165 5403 – ST DAVID'S / ST CARANNOG'S CHURCH building; medieval - post-medieval; Category A

(PRN 25233 – NGR SN 31 54 – LLANGRANOG VILLAGE settlement; post-medieval; Category -----)

PRN 43522 – NGR SN 31 53; SN 31 54; SN 32 54 – FELIN ISAF MILL LEAT earthwork; post-medieval; Category C

PRN 43532 – NGR SN 323 541 – ALLT-GOCH DITCH earthwork; post-medieval?; Category E

PRN 43537 – NGR SN 3270 5444 – FELIN UCHAF CORN MILL building; post-medieval; Category B

PRN 43539 – NGR SN 3265 5405 – PIGEONSFORD HOME FARM building; post-medieval; Category B

2.1.3 Field boundaries

The proposed route pipeline crosses a total of 10 field boundaries, PRNs 43525, 43527, 43528, 43529, 43530, 43531, 43533, 43534, 43536 and 43538. They are mainly represented by hedgebanks, one of which (PRN 43531) is of dry-stone construction, and some are accompanied by drainage ditches. All are Category D sites.

The OS Original Surveyors' Drawings, 2" to the mile, Sheet 186, of 1811, does not show the boundaries clearly, but the field system is shown in its present form on the Llangrannog Tithe Map and Apportionment, of 1840. Much of the enclosure is probably post-medieval, the long, straight boundaries in the eastern half of the project area apparently representing enclosure under the Pigeonsford estate, and largely from the 18th century. The more informal boundaries in the narrower valley floor to the west may be contemporary, but they belong to piecemeal private enclosure and some may be earlier. However further research, and physical analysis of the boundaries, needs to be undertaken.

See Section 3.3 for descriptions of field boundaries past and present.

2.2 Conclusions and recommendations

2.2.1 Conclusions

The route corridor contains only 5 significant archaeological sites. However, one of these – Pigeonsford walled garden (PRN 43535), towards the east end of the route – is a Category A site of national importance, being a Grade II listed walled kitchen garden from the mid-late 18th century (see Photos 1-3), included within the Cadw/ICOMOS register of Parks and Gardens of Special Historic Interest in Wales (Ref No. PGW (Dy) 71 (CER)). The route midline passes very close to the north wall of the garden, and also lies close to Ffynnon-Fair bridge (PRN 43523) at the west end. A possible earthwork site near Ffynnon-Fair (PRN 43526), is of unknown nature and date, but may be natural. The route passes through part of the spoilheap associated with Allt-Goch quarry (PRN 18065). The route also crosses a trackway (PRN 43524) which was present by 1811 at least.

An earthwork ditch of unknown date and function (PRN 43532) lies south of, but significantly close to the corridor.

The route also cuts through a total of 10 field boundaries, mainly represented by post-medieval hedgebanks, but does not appear to affect any significant standard trees. Information regarding Tree Preservation Orders, etc., lies beyond the scope of this study.

The area is not included within the Cadw/ICOMOS register of Landscapes of Outstanding or Special Historic Interest in Wales.

2.2.2 Recommendations (Table 1)

These recommendations have been prepared following consultation with the Development Control Officer of Cambria Archaeology who provides archaeological advice to the local Planning Authority. The Development Control Officer should be informed prior to the commencement of any work on the site.

It is recommended that: -

- The route line is moved 20 metres to the north, towards its east end, to avoid affecting Pigeonsford walled garden (PRN 43535), which is regarded as of national importance (Category A).
- The east end itself might also be diverted 30 metres to the north to pass through an existing gap in field boundary PRN 43538.
- It is suggested that the turf-strip in the area of the possible earthwork site at Ffynnon-Fair (PRN 43526) is carried out using a toothless grading bucket and monitored by a watching archaeologist before further action is decided upon, with a contingency for further archaeological recording if necessary.
- Care should be taken to avoid disturbance to Ffynnon-Fair bridge (PRN 43523) and, to the south of the corridor, Allt-goch ditch (PRN 43532).
- Field boundaries are an integral part of the total historic landscape and have, in the
 present study, been subject only to superficial investigation. Their precise nature, and
 date, are unknown. It is therefore recommended that the sections of all boundaries cut by
 the scheme are recorded; this can, for the sake of convenience, also undertaken during
 the initial turf-strip.

 No archaeological response is necessary in the area of Allt-goch quarry spoilheap PRN 18065, and trackway PRN 43524.

Table 1: The archaeological resource: summary of recommended responses

site	nature of threat	archaeological response
Pigeonsford walled garden PRN 43535 (NGR SN 325 543)	significantly close to route midline	divert route c.20 metres to the north.
Ffynnon-Fair ?earthwork site PRN 43526 (NGR SN 3180 5400)	cut by route midline	watching brief during turf-strip (using a toothless grading bucket) to assess nature of site; contingency for further evaluation/recording
Field boundary PRN 43538 (NGR SN 3274 5425)	cut by route midline	divert route c.30 metres to the north to run through existing gap in boundary
Remainder of field boundaries	cut by route midline	watching brief during turf-strip to record all cut sections of field boundaries

2.3 Acknowledgements

This report was researched and written by Neil Ludlow of Cambria Archaeology. Acknowledgements to: colleagues at Cambria Archaeology and staff of the National Library of Wales for their assistance, landowners for allowing access, particularly Mr David Brinley of the walled garden, Pigeonsford, and staff at the Rescue Foundation, Pigeonsford House.

2.4 Archive deposition

The archive, indexed according to the National Monuments Record (NMR) material categories, will be deposited with the Sites and Monuments Record for Carmarthenshire, Ceredigion and Pembrokeshire, curated by Cambria Archaeology, Shire Hall, 8 Carmarthen Street, Llandeilo, Carmarthenshire. It contains the following:-

- A.1. Copy of the final report
- A.4. Disk copy of report
- B.4. Field notebooks
- D.1. Catalogue of site photographs
- D.2. Colour slides
- D.3. Mono prints and negs
- G.1. Source documentation
- I.4. Final report manuscript
- I.4. Final report typescript
- I.4. Final report disk
- I.4. Proofs
- I.4. Paste-ups
- L.1. Project research design/specification
- L.4. General admin.
- M.1. Non-archaeological correspondence

There is no material for classes C, E, F, H, J, K and N.

2.5 List of sources consulted

Databases

Sites and Monuments Record for Carmarthenshire, Ceredigion and Pembrokeshire, curated by Cambria Archaeology, Shire Hall, 8 Carmarthen Street, Llandeilo, Carmarthenshire.

Cadw listed buildings database, copy held by Sites and Monuments Record for Carmarthenshire, Ceredigion and Pembrokeshire, Shire Hall, 8 Carmarthen Street, Llandeilo, Carmarthenshire.

Manuscript maps

National Library of Wales, 'Emanuel Bowen's Map of South Wales', 1729.

National Library of Wales, Ordnance Survey Original Surveyors' Drawings, 2" to the mile, Sheet 186, 1811.

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Air Photographs Library of Wales, OS 73, 152, 254 & 251 & 248.

Air Photographs Library of Wales, RAF CPE UK 2134, 4069-63.

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Murphy, K., 1999 'Upland Ceredigion: Historic Landscape Characterisation' (unpublished Cambria Archaeology client report; copy held with Sites and Monuments Record for Carmarthenshire, Ceredigion and Pembrokeshire).

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3.0 THE ARCHAEOLOGICAL RESOURCE

3.1 Site location and topography

The project area lies on the Ceredigion coast, immediately east of the village of Llangranog. It occupies the floor of a steep-sided stream valley, the Nant Hawen, between 600 and 1660 metres of its exit into Cardigan Bay.

The sewerage scheme route corridor is approximately 1 kilometre long. It runs between NGR SN 317 539 and SN 323 542 along the north bank of the Nant Hawen. The valley floor here slopes downhill from east to west, the level within the area falling from 80 metres OD to 60 metres OD.

The underlying solid geology comprises undivided Silurian shales of the Llandovery series. Soils are typical brown earths, of the 541j (Denbigh 1) group (Soil Survey of England and Wales, 1980). Much of the project area is subject to a low-intensity pastoral regime, with fields that are, at present, under pasture which is generally of only poor-fair quality, although some are cut for hay, and currently classed as Grade 4 land throughout (Ministry of Agriculture, Fisheries and Food, 1990). However, some of the small fields towards the west are lightly-wooded and overgrown, while the large field at the east end is currently a nursery plantation belonging to the present owners of Pigeonsford walled garden. Moreover, the swift-flowing Nant Hawen has, in the past, sustained a number of mills, from which a millrace still runs alongside the project area.

The project area lies entirely within the parish of Llangranog, but until the 16th century was part of the neighbouring parish of Llandysiliogogo.

The area is not included within the Cadw/ICOMOS register of Landscapes of Outstanding or Special Historic Interest in Wales, but Pigeonsford walled garden (PRN 43535) is included within the Cadw/ICOMOS register of Parks and Gardens of Special Historic Interest in Wales (Ref No. PGW (Dy) 71 (CER)).

3.2 Landscape history and development

The project area and its surrounding region have been subject to human settlement from prehistory onwards. Settlement, however, later declined and was not to rise again until the post-medieval period. Thus, whilst prehistoric sites are fairly widespread in the region, the relatively low population levels during the historic period are reflected by the paucity of its medieval and early post-medieval archaeology - an area of research that is only beginning to be fully studied, let alone fully understood.

Land-use has always been dominated by pastoral agriculture. Very little recorded archaeology is represented within the project area and the present study has been able to add few new sites. The agricultural landscape of the area - its fields, hedges and boundaries - are a relatively recent creation, and dominated by the Pigeonsford estate from the 18th century onwards.

3.2.1 The prehistoric and Roman periods (8500 BC - c.400 AD)

Like many primarily coastal/upland Welsh landscapes, the project area environs have preserved much evidence of prehistoric activity. Preservation has been assisted by the low-intensity agricultural regimes traditionally practised within the region. Nevertheless, the distribution of such sites is not dense in the environs of the project area, although more may be revealed by future fieldwork.

No prehistoric sites or features have been recorded within the project area itself. Evidence for earlier prehistoric activity within Ceredigion as a whole is mainly limited to knowledge obtained through examination of palaeoenvironmental evidence from peat deposits (Murphy 1999, 10). However, the foreshore at Llangranog has yielded Ceredigion's only finds assemblage from the Mesolithic Period (Middle Stone Age, 7500BC - 3500BC), in the form of eight flint or chert blades, and a flint/chert core (Houlder 1994, 108, 115). The finds relate to a period of lower sea-levels throughout southern Britain, when Cardigan Bay was partly dry and forested.

There is little evidence for bronze age (2500BC - 700BC) activity within the immediate environs of the project area. The iron age (700 BC - 1st century AD), however, is represented by the magnificent hillfort on Pendinas Lochtyn, the headland immediately north of the project area, which encloses an area of over 3 acres (Davies and Hogg 1994, 246-7). However, no obvious patterns of coincidence between hillforts and later territorial units can be discerned in the area, or within Ceredigion as a whole (Murphy 1999, 10), nor can any present pattern of fields and boundaries within the environs of the project area be assigned origins within this period.

3.2.2 The medieval period (c.400 - 1500 AD)

The medieval period in Ceredigion is characterised by a serious population decline reaching a low during the later medieval period.

early medieval (c.400 - 1110 AD)

Pre-Norman administration of southern Ceredigion was represented by the 'cantref' of Is Is-Aeron (Richards 1969, 285), which was further divided into four commotes. The Llangranog area lay within the commote of Caerwedros, and specifically within a smaller unit, the 'gwestfa' (roughly equivalent to the English 'manor', and 'maenor' in the rest of Wales) of Clychton. The notably Anglicised name of this gwestfa however betrays the fact that the development of these formal administrative units was, in the region, probably a late occurrence — continuing into the later medieval period.

The project area also lies entirely within the parish of Llandysiliogogo. Formal parish administration was similarly an Anglo-Norman introduction into Ceredigion where it was not firmly fixed until the post-medieval period. However, the present parish church of St Carannog, Llangranog (PRN 5926/16987) formerly a chapelry of Llandysiliogogo - appears to have been an earlier medieval, pre-Norman foundation (Ludlow, 1998). Its later medieval attachment to the Bishopric of St Davids may perpetuate a long-standing relationship, its possibly early medieval in origin.

Another feature of the area which may have pre-Norman origins is the 'holy well' site at Ffynnon-Fair (PRN 12389). Whilst this bears a Latin dedication (ie. to St Mary), rather than a dedication to a 'Celtic' saint, it is recognised that the cult of the Virgin was popular both before and after the Anglo-Norman conquest. No miracles are associated with this particular well, though many in Ceredigion are associated with powers of healing, etc (Jones 1992, 158).

Whilst much speculation can be undertaken on the nature and extent of pre-Norman administration, there is scant record for this period in terms of physical archaeology within the region of the project area, and none in the immediate environs. This absence is a characteristic of coastal/upland Ceredigion as a whole.

later medieval (1110 - 1500 AD)

The administrative framework in the project area persisted from the early medieval period within which, as has been noted, it was probably a late development. From 1110 onwards Ceredigion was an Anglo-Norman lordship, the Lordship of Cardigan, under the de Clare earls, with periods

of reversion to Welsh rule. However, the changes of master appear to have had little effect on the earlier systems of tenure that persisted, albeit in a modified form, into the early post-medieval period - despite the fact that the area was re-organised as the County of Cardiganshire by the Statute of Rhuddlan in 1284.

Again, however, evidence of the later medieval period is difficult to detect within the landscape of the environs of the project area. There is no real evidence for any settlement around St Carannog's Church (or Ffynnon-Fair) either in the early or later medieval periods, and like so many Welsh churches, it doubtless served a largely dispersed population within small rural farmsteads and hamlets. However, Rees locates the centre of Gwestfa Clychton just to the north of the project area on his map of 14th century South Wales (Rees 1932), although his authority is not known.

An earthwork of unknown form or date has been observed within the field east of Ffynnon-Fair at the west end of the project area (PRN 43526). Whilst it may be a natural feature, it may be an artificial platform and it is therefore possible that it may have a medieval (or post-medieval) origin.

The potential waterpower contained within the swift-flowing Nant Hawen was recognised during the post-medieval period with the establishment of at least two corn mills (see section 3.2.3). There is no evidence, however, that either of these had medieval origins, nor does Jack locate any of his medieval cloth-fulling mills within the area (Jack 1981, 71-120).

Field boundaries etc. are similarly predominantly the product of the later post-medieval period. It appears that the region suffered a serious population decline and became marginalised through the later prehistoric period, reaching a low during in the later medieval period, and upland settlement as a whole did not intensify until well into the post-medieval period (Murphy 1999, 12). However, one of Ceredigion's only two recorded formal, medieval rabbit warrens lay just north of Llangranog ((Condry 1994, 80).

3.2.3 The post-medieval period (1500 - 2000 AD)

The post-medieval period in Ceredigion is characterised by a rapid increase in population from at least the mid 18th century, reaching a high point in 1871. Since then there has been a steady decline (Murphy 1999, 12). The population increase has left its mark on the landscape in many forms, chiefly the enclosure of moorland and common land, often including its cultivation, and the establishment of new settlements on the fringes of marginal land (*ibid.*). The process of enclosure in Ceredigion probably had its origins within the prehistoric period, but the vast majority of present field systems were established within the 18th and 19th centuries, a phenomenon common to many predominantly upland areas. The driving mechanism took a number of forms -parliamentary enclosure, enclosure by estates, enclosure by private individuals and enclosure by squatters on the fringes of common land (Murphy 1999, 15-16). The landscape of the project area – which was always predominantly pastoral - is dominated by enclosure under the Pigeonsford estate, largely from the 18th century onwards.

A mansion, on or near the site of Pigeonsford, then known as Rhydcolomennod, was owned by the Parry family during the Tudor period. It passed to the Price family in the second half of the 17th century (Cadw/ICOMOS, n.d.). The estate was built up during the 18th century. George Price (d.1786) married Dorothea Bowen of Llwyngwair, who brought considerable wealth to the marriage, and so in 1755 he embarked on an ambitious rebuilding of the house, a campaign to which the construction of the Grade II listed walled garden (PRN 43535) probably also belongs (*ibid.*). The family changed their name to Jordan in the mid 19th century. The house was probably remodelled in about 1820 and new stables were built in 1831 (*ibid.*). The estate was leased out after 1881, and broken up and sold in 1908. The house and ground were bought by Charles W W Hope, and in 1926 became the property of David Owen Evans, a close friend of David Lloyd George who visited Pigeonsford many times (*ibid.*).

The Pigeonsford estate represented the major landowner in the Llangranog area. It is probable that the nucleus of the estate comprised the three easternmost fields in the project area (OS Nos. 2516, 4220 and unassigned), and the three opposite fields to the south of the Nant Hawen, which were defined, as a unit, by roads and tracks. However, by the time of the tithe survey in 1840 the westernmost field had been acquired by Lochtyn Farm, from which it was under lease by George Bowen Jordan Jordan of Pigeonsford (NLW, Llangrannog tithe map and apportionment, 1840). After the partial break-up of the Pigeonsford estate in 1881 only field No. 4220, the narrow Cwrtnewydd plantation to its west, the walled garden, and two of the fields south of the Hawen (including the house and home farm), remained in the estate (NLW, Pigeonsford 1, c.1900). With the exception of the walled garden and plantation, all fields north of Nant Hawen appear to have been under pasture during the 18th and 19th centuries.

The more informal enclosures in the narrower valley floor to the west appear to have been under individual private ownership. Their boundaries may be broadly contemporary with the Pigeonsford enclosures, but as they belong to piecemeal enclosure some may be earlier.

Although always predominantly pastoral, the project area landscape felt the impact of other economic activities during the post-medieval period. Chief among these was corn-milling, the swift-flowing Nant Hawen being harnessed to sustain a number of mills. A millrace (PRN 43522), taken from the Hawen, still runs alongside the project area, and formerly emerged in Llangranog village to power Felin Isaf ('Lower Mill'). Another mill, Felin Uchaf (ie. 'Upper Mill', PRN 43538) lay near Pigeonsford. A straight ditch across field number OS 2516 (PRN 43532) may be associated with this activity, but does not appear to communicate with Nant Hawen and is show on none of the historic maps.

A number of slate quarries were opened up in and around Llangranog during this period, and represented a major employer that contributed to the development of a settlement at Llangranog. They appear, predominantly, to belong to the period 1840-1900, not appearing on the tithe map and having become disused during the early-mid 20th century. Allt-goch quarry, straddling the B4321, is crossed by the route corridor.

The main factor in the development of Llangranog as a settlement was, however, the Cardiganshire sea-trade. This had its roots in the prehistoric period, contributing much to the 'western seaboard' cultural identity of the region, but it was not until the post-medieval period that it became a major economic factor and Llangranog eventually emerged as a small port. The Nant Hawen emerges into Cardigan Bay as a small inlet forming a natural harbour. A herring fishery was established during the late-medieval - early post-medieval period but, until the mid-18th century, settlement was confined to a handful of dwellings around the church, nearly 1km from the sea. From 1700 onwards, a commercial trade was fostered by local farmers and locally built ships, owned by the farmers and manned by local crews, traded between Llangranog and the rest of the world. A settlement consequently developed at the waterfront. At the end of the 18th century this was little more than a few houses, but during the early 19th century this 'Beach Village' became far more important than the earlier 'Church Village' inland (Jenkins 1982, 22). It was a centre of ship-building, while a number of warehouses were built, and a coal-yard, and two sets of lime-kilns within which imported lime was burnt, largely for fertiliser (Jenkins op. cit., 23). Llangranog's cultural links with Ireland became more firmly entrenched - a regular passenger and cargo service ran between Llangranog and Dublin for a charge of £6 per person until the mid-19th century (Jenkins *op. cit.*, 4). This trade intensified during the later 19th century, and in 1900 90% of the male population of the village were engaged in some aspect of maritime activity (Jenkins op. cit., 154). By the 1950s, however, the trade was all but dead.

3.3 Gazetteer of sites

This section contains detailed descriptions of archaeological sites and features within the proposed route corridor, namely a 15 metre wide corridor about the proposed route midline, and descriptions of sites and features immediately beyond the corridor that may be relevant to the study.

Refer to Fig. 2 for PRNs (Primary Record Numbers) and field numbers allocated for the purpose of the project (see Section 3.3.3 below). Refer to Appendix 1 for copies of selected map sources.

All sites and features have been allocated a condition statement. The codes are as follows:-

Building/A - intact Earthwork/A - intact

Building/B - slightly damaged or altered Earthwork/B - slightly damaged

Building/C - derelict/damaged

Earthwork/C – damaged Earthwork/D – archaeological evidence Building/D - archaeological evidence

Building/E - entirely gone Earthwork/E - entirely gone

Building/R - restored

Building/V - condition variable Earthwork/V - condition variable Building/U - condition unknown Earthwork/U - condition unknown

3.3.1 Sites within the proposed route corridor

PRN 18065 NGR SN 319 543 NAME ALLT-GOCH TYPE **QUARRY PERIOD** Post Med FORM/CONDITION Earthwork/B

SITE STATUS

DESCRIPTION Slate quarry in south-facing hillslope. It was established between 1840 (not marked on tithe map) and 1881 (marked on OS 6" map). Apparently still operational in 1906 (OS 6" map) it is now disused, but still survives as a feature, with a massive spoilheap forming a platform on the downslope between the B4321 and the Nant Hawen. This spoilheap is now overgrown with semi-mature ash etc.

PRN 43523

NGR SN 3175 5400 NAME FFYNNON-FAIR

TYPE BRIDGE **PERIOD** Post Med FORM/CONDITION Building/A

SITE STATUS

DESCRIPTION Masonry bridge carrying trackway 43524 over the Nant Hawen, constructed between 1833 (when it was not marked on an estate map) and 1840 (when it was marked on the tithe map). It is a single-arched structure in good-quality slate rubble. Not a listed building.

PRN NGR 43524

NAME **TYPE**

SN 317 539 FFYNNON-FAIR **TRACKWAY**

PERIOD FORM/CONDITION Post Med Earthwork/B

SITE STATUS

DESCRIPTION Trackway established between 1833 (when it was not marked on an estate map) and 1840 (when it was marked on the tithe map). It leads to Llangranog rectory (formerly vicarage) which, however, had been established just prior to 1833 (Samuel Lewis' Togographical Dictionary, 1833).

PRN

43526

NGR NAME **TYPE**

SN 3180 5400 FFYNNON-FAIR UNKNOWN

PERIOD FORM/CONDITION

Unknown Earthwork/U

SITE_STATUS

DESCRIPTION Amorphous, low earthwork 'knoll', approx. 1 metre high and 20 metres across, apparently subrectangular but badly eroded. Occupies the middle of field OS No. 7800. Probably natural. Does not appear on aerial photographs, or on any map sources.

PRN NGR 43535

SN 325 543

NAME

PIGEONSFORD WALLED GARDEN

TYPE

WALLED GARDEN

PERIOD FORM/CONDITION Post Med Building/A

SITE STATUS

LB₂

DESCRIPTION

Very good and well-preserved example of a large, mid-late 18th century former kitchen garden formerly belonging to Pigeonsford House (see PRN 6636). It still has impressive walls and the original internal layout of gravel paths. It was possibly built in the 1750s by George Price, contemporary with his remodelling of Pigeonsford House; it was present by 1834 when it was marked on the OS 1" Old Series map (its absence from the OS 2" of 1811 is probably due to lack of detail). The garden forms a rectangular enclosure lying on a south-facing slope on the north side of Nant Hawen, opposite the house and home farm. The walls, which are between 3.5 and 5.5 metres in height, are built of narrow courses of the local slate rubble, with traces of rendering surviving in places, and are lined internally with brick. Sockets within the wallface may represent bee-boles. At the southeast corner is an unusual seven-sided, two-storeyed, rendered former apple store, while built against the north wall is an interesting brick gazebo from the 1930s, visited by David Lloyd George. Outside the east wall is a small, partly-walled enclosure with a glasshouse at the south end. The glasshouse was built between 1840 (tithe map) and 1881 (OS first edition). Between the garden and the Nant Hawen is a small walled lawn, shown with fruit trees on an estate map of c.1900. The garden is Grade II listed; it is being sensitively restored by its current owner (September 2001). Text largely taken from Whittle 2001 (Ref. No. PGW (Dy) 71 (CER).

See photos 1-3.

3.3.2 Relevant sites immediately beyond the proposed route corridor

These have been included either because of their proximity to the route corridor, or because of their relationship with sites within the corridor.

PRN 5296

NGR SN 3165 5403 NAME ST CARANNOG'S

TYPE CHURCH
PERIOD Medieval
FORM/CONDITION Documents

SITE STATUS

DESCRIPTION PRN given to the documented medieval church, rebuilt on the same site

in the 19th century. The new church has the PRN 16987.

PRN 6636

NGR SN 3255 5404

NAME PIGEONSFORD HOUSE

TYPE DWELLING
PERIOD Post Med
FORM/CONDITION Building/A
SITE STATUS LB2

DESCRIPTION Mansion House lying on the south side of Nant Hawen. The home farm lies 50 metres to the east (see PRN 43539) and the walled garden lies on the opposite, north side of Nant Hawen (see PRN 43535). The house was owned by the Parry family during the Tudor period. Passed to the Price family in the second half of the 17th century. George Price (d.1786) married Dorothea Bowen of Llwyngwair, who brought considerable wealth to the marriage, and so in 1755 he embarked on an ambitious rebuilding of the house. The family changed their name to Jordan in the mid 19th century. The house was probably remodelled in about 1820 and new stables were built in 1831. The estate was leased out after 1881, and broken up and sold in 1908. The house and ground were bought by Charles W W Hope, and in 1926 became the property of David Owen Evans, a close friend of David Lloyd George who visited Pigeonsford many times. Exterior: Roughcast render, slate roofs, rendered stacks. Plan arranged around 3 sides of courtyard to rear. NE elevation has, to L, 3-window block of 2 storeys plus attic with gabled dormers; horned 4-pane sash glazing. To R of this, two-storey, 2 window block with hipped roof, dentil eaves; 12-pane hornless sashes to first floor; on ground floor, to L, (restored) trellis iron work porch over entrance doorway; 12-pane sash to R. Elevation to NW has two 12-pane hornless sashes to each floor, return (R) has single window to first floor. Beyond this, to R, C20 block connects to earlier block via 2-storey link (set back) with horned sash to each floor. To R of this, 2-window 2-storey block set forward, hipped roof, 12-pane horned sash glazing. To L, steps up to Doric porch over panelled entrance door (ground floor window to L return). elevation has, to R, 3 first floor sashes; on ground floor French doors with sash to each side. To L of this, at first floor level, 4-light landing window with stained glass; narrow 8-pane sash window to each floor (to L). To R of this, link to outbuilding with bellcote (known as chapel) has first-floor balustrade and glazed gallery. To rear, at right angles to this block is further gabled outbuilding. Elevations to courtyard include one first floor Gothic window in C19 block. Interior: Long corridor leads through from NE doorway. Two rooms to R have decorative cornices and ceilings; C20 block has one ground floor room with good Neo-Georgian decoration. A grand staircase and panelling, along with many doors have been removed. Little remains of any ornamental grounds around the house. Sale particulars of 1908 describe 'a drive and tennis courts. In front of the mansion is a clean green sward with azaleas, rhododendrons, laburnum, bay and other trees. To the left is the rose garden'. Text taken from Cadw listed buildings database and Whittle (2000).

PRN 8680

NGR SN 3168 5398
NAME FELIN ISAF
TYPE CORN MILL
PERIOD Post Med
FORM/CONDITION Building/B

SITE_STATUS

DESCRIPTION Corn mill, also called Llangranog Mill and known as Felin Isaf to distinguish it from Felin Uchaf 1km to the east (PRN 43537). Apparently post-medieval - not shown on Rees' map of 14th century South Wales. Not a listed building. Not observed Sept 2001.

 PRN
 12389

 NGR
 SN 318 539

 NAME
 FFYNNON-FAIR

TYPE WELL PERIOD Medieval

FORM/CONDITION Documents; O. Struct/U

SITE STATUS

DESCRIPTION Site of 'holy well', dedicated to St Mary, listed in Jones' 'Holy Wells' and shown on Rees' map of 14th century Wales. The site is now occupied by a late 18th - early 19th century dwelling, 'Ffynnon Fair', and the well or spring is no longer visible. The dwelling is shown on the Llangrannog tithe map of 1840.

PRN 16987

NGR SN 3165 5403

NAME ST. DAVID'S/ST CARANNOG'S

TYPE CHURCH
PERIOD Post Med
FORM/CONDITION Building/R

SITE_STATUS

DESCRIPTION 19th century church building which is a rebuild of medieval church PRN

5296. Not a listed building.

 PRN
 25233

 NGR
 SN 31 54

NAME LLANGRANNOG
TYPE SETTLEMENT
PERIOD Post Med
FORM/CONDITION Topog

SITE STATUS

DESCRIPTION Overall PRN for the settlement at Llangranog.

PRN 43522

NGR SN 31 53; SN 31 54; SN 32 54

NAME FELIN ISAF
TYPE LEAT
PERIOD Post Med
FORM/CONDITION Earthwork/B

SITE_STATUS

DESCRIPTION Leat, taken from the Nant Hawen at SN 321 541, which formerly supplied Felin Isaf corn mill (PRN 8680). It is shown on an estate map of 1833, and indicated on the OS map of 1811. It still survives in part as a sinuous open channel, but the millpond, marked

immediately south of the mill at SN 316 539 in both 1833 and 1964. has gone, as has the tailrace into the Hawen immediately north of the mill.

 PRN
 43532

 NGR
 SN 323 541

 NAME
 ALLT GOCH

 TYPE
 UNKNOWN

 PERIOD
 Post Med?

 FORM/CONDITION
 Earthwork/V

SITE_STATUS

DESCRIPTION Linear ditch, running east-west across the southern half of field OS No. 2516, very well-defined with steep sides, averaging 2.5 metres across. The sides are straight and regular in the eastern two-thirds, but the ditch widens and becomes irregular in the western third. It lies between two counterscarp banks (derived from upcast). The function of the feature is unknown. It has formerly been wet (but stops short of the Nant Hawen at its east end) being still very marshy, and is up to 0.5 metres deep. However, it seems to run out at its west end, but a continuation may be visible, as a dark cropmark on aerial photographs, in the neighbouring field. The feature is depicted in none of the map sources, does not appear to relate to any of the known leats and mills, and its function (and date) must therefore remain a mystery.

PRN 43537

NGR SN 3270 5444
NAME FELIN UCHAF
TYPE CORN MILL
PERIOD Post Med
FORM/CONDITION Building/U

SITE STATUS

DESCRIPTION Former corn mill, known as Felin Uchaf to distinguish it from Felin Isaf 1km to the west (PRN 8680). Apparently post-medieval - not shown on Rees' map of 14th century South Wales. Marked, and labelled 'Feline', on the OS 2" of 1811. Not a listed building. Not observed Sept 2001

PRN 43539

NGR SN 3265 5405

NAME PIGEONSFORD HOME FARM

TYPE HOME FARM
PERIOD Post Med
FORM/CONDITION Building/A

SITE_STATUS

DESCRIPTION An assemblage of buildings lying 50 metres east of Pigeonsford House (see PRN 6636). Suggested on 1811 2" map, and shown in present form on tithe map of 1840. Not visited September 2001. Not a listed building.

3.3.3 Field boundaries

PRN

43525

NGR NAME SN 3173 5396

TYPE

FFYNNON FAIR FIELD BOUNDARY

PERIOD

Post Med?

Earthwork/A

FORM/CONDITION SITE STATUS

DESCRIPTION

Low bank with overgrown thorn hedge and some mature oak standards.

Supplemented by wire fence. The boundary had been established by 1840 (tithe map). It is

probably earlier, but earlier maps are unclear.

PRN

43527

NGR

SN 3183 5403 **MAGLONA**

NAME **TYPE**

FIELD BOUNDARY

PERIOD

Unknown

FORM/CONDITION

SITE_STATUS

Earthwork/U

DESCRIPTION

Overgrown bank - not visible. Established before 1840 (marked on tithe

map).

PRN

43528

NGR NAME SN 3185 5407 **MAGLONA**

TYPE

FIELD BOUNDARY

PERIOD

Post Med?

FORM/CONDITION

SITE STATUS

Earthwork/U

DESCRIPTION

Overgrown bank - not visible. Established before 1840 (marked on tithe

map).

PRN

43529

NGR

SN 3191 5410

NAME **TYPE**

STANLEY FIELD BOUNDARY

PERIOD

Post Med

FORM/CONDITION

Earthwork/U

SITE_STATUS

DESCRIPTION

Overgrown bank - not visible. Established between 1840 (not marked on

tithe map) and 1881 (marked on OS 6" map).

PRN

43530

NGR NAME TYPE

SN 3200 5420 ALLT GOCH FIELD BOUNDARY

PERIOD FORM/CONDITION Post Med Earthwork/A

SITE STATUS

DESCRIPTION Low bank and ditch. It forms the eastern boundary of Allt Goch quarry (PRN 18065) and, like the quarry, was established between 1840 (not marked on tithe map) and 1881 (marked on OS 6" map). However, the bank supports mature oak and ash standards.

PRN

43531

NGR NAME SN 3216 5427 ALLT GOCH

TYPE

FIELD BOUNDARY

PERIOD FORM/CONDITION Post Med Earthwork/A

SITE_STATUS

DESCRIPTION Bank and ditch. The bank comprises pitched slate rubble drystone, some in 'herringbone' coursing, overgrown with immature beech, willow, ash and thorn. Ditch along east side of bank, becoming deep in southern half of boundary. The boundary is marked on the OS 2" map of 1811, when it defined a trackway running south to a ford over the Nant Hawen. This trackway was marked again on the 1" map of 1834, but had become disused (and the boundary straightened?) by 1840 when it was not marked on the tithe map. This event does not appear to have coincided with any major re-organisation of the landscape.

PRN

43533

NGR NAME TYPE

SN 3230 5420 **CWRTNEWYDD** FIELD BOUNDARY

PERIOD FORM/CONDITION Post Med Earthwork/A

SITE STATUS

DESCRIPTION Substantial earth bank, 1 metre high and 3 metres wide, supporting semi-mature oak standards. Supplemented by wire fence. The bank is probably post-medieval, defining a garden and narrow 'plantation' around Cwrtnewydd, which formed part of the Pigeonsford estate in the 19th century (Pigeonsford estate map, c.1900 - see PRN 6636). It had been established, however, by 1811 (OS 2" map).

PRN

43534

NGR NAME **TYPE**

SN 3233 5420 **CWRTNEWYDD** FIELD BOUNDARY

PERIOD Post Med FORM/CONDITION Earthwork/A

SITE_STATUS

DESCRIPTION Very straight, low earth bank supporting semi-mature sycamore, ash and thorn, and recently-planted cypress. Supplemented by wire fence. The bank is very straight and clearly post-medieval, defining a garden and narrow 'plantation' around Cwrtnewydd, which formed part of the Pigeonsford estate in the 19th century (Pigeonsford estate map, c.1900 - see PRN 6636). It had been established, however, by 1811 (OS 2" map).

PRN

43536

NGR NAME TYPE

SN 3258 5425 **PIGEONSFORD** FIELD BOUNDARY

PERIOD FORM/CONDITION

Post Med Earthwork/A

SITE STATUS

DESCRIPTION Straight field boundary, very overgrown and shrubby, supporting some standard trees. Joins walled garden PRN 43535 at its southern end. It is shown on OS 1" Old Series map of 1834, but is probably earlier, contemporary with the walled garden - its absence from the OS 2" map of 1811 is probably due to lack of detail.

PRN

43538

NGR NAME **TYPE**

SN 3274 5425 **PIGEONSFORD** FIELD BOUNDARY

PERIOD FORM/CONDITION Post Med? Earthwork/A

SITE_STATUS

DESCRIPTION Tall earthen boundary bank, 2 metres high, supporting semi-mature oak standards. Defines a trackway running south from the B4321 to Pigeonsford House (PRN 6636), shown on the OS 2" map of 1811 and probably, at least, contemporary with the house (mid 18th century).

3.4 A review of the sources

This section is a brief description of the sources used, and an assessment of their usefulness and/or limitations.

3.4.1 Documents

Contemporary source documentation in Ceredigion is scarce prior to the post-medieval period. However, later primary sources such as Samuel Meyrick's *History and Antiquities of Cardiganshire* and Samuel Lewis's *Topographical Dictionary*, and traveller's accounts, provide much information on landscape development and the significance of landscape features.

However, the county is fortunate that a comprehensive history is currently under publication. This report has drawn heavily on Volume 1 (prehistoric, Roman and early medieval) and Volume 3 (post-medieval) of the *Cardiganshire County History*. Pigeonsford house and estate have been the subject of a detailed history (Hope 1926), and a comprehensive survey of so-called 'holy wells' (ie. Ffynnon-Fair) has been undertaken by Major Francis Jones (Jones 1992).

3.4.2 Historic maps

Historic maps can establish the antiquity and significance of landscape features and standing buildings, and can also show potential ground disturbance.

There are few antique maps of the project area, The 16th century Saxton map, Speed's map of Cardiganshire (1610) and Bowen's 1729 map are of little usefulness to a detailed consideration of the project area.

However, the Ordnance Survey Original Surveyors' Drawing of 1809-10, the Ordnance Survey 1" (Old Series) of 1831 are (unusually) fairly well-detailed in this area but not every feature — or boundary — is shown. The Llangrannog tithe map of 1840 is a particularly fine example of its kind with a wealth of detail, and every boundary appears to be shown, but the tithe schedule does not provide either field-names or land-use. Ordnance Survey 1:10560 First and Second Edition map coverage, of 1891 and 1906 respectively, is complete, and shows the area in great detail.

Moreover, there is a useful estate map of the west end of the route, from 1833 (NLW, 'J. C. D.' Deposit Vol., p.19,), which shows Felin Isaf mill and leat is some detail, while NLW, Pigeonsford 1, of c.1900 – the only Pigeonsford estate map at the National Library of Wales – shows the landscape at the east end of the route in great detail.

Copies of relevant map sources are reproduced within this report, and form part of the project archive.

3.4.3 Aerial photographs

Aerial photographs are an important source of archaeological information, particularly in rural areas. Buried features can show as crop- or parchmarks, and earthworks are strongly revealed when the sun is low on the horizon. When dated, they also indicate subsequent development. The Sites and Monuments Record for Carmarthenshire, Ceredigion and Pembrokeshire has an extensive collection of both vertical and oblique aerial photographs, but coverage for Ceredigion is poor. Therefore the collection at the National Monuments Record (Royal Commission for Ancient and Historical Monuments (Wales), Crown Buildings, Plas Crug, Aberystwyth, Ceredigion) was examined, and the relevant images sent from the Air Photographs Library of Wales, at the Welsh Office, Cardiff. They demonstrated that the landscape has altered but little

during the 20th century, and a westward continuation of ditch PRN 43533 appeared to be visible as a cropmark. Possible earthwork PRN 45326, however, did not appear on the photographs.

3.4.4 Field walkover

The project area, ie. a 15 metre wide corridor, was fieldwalked on 19 September 2001. The condition of archaeological sites, features and deposits identified during the documentary research was noted and new sites, features and deposits were identified. All were recorded via photography and site notes, whilst their vulnerability was assessed. In addition, all field boundaries crossed by the proposed route were recorded via site notes.

3.4.5 Previous archaeological work

No structured archaeological work has been carried out within the project area itself (and therefore no disturbance to potential deposits through archaeological excavation).

However, Pigeonsford walled garden is fully described in the Cadw/ICOMOS register of Parks and Gardens of Special Historic Interest in Wales (Ref No. PGW (Dy) 71 (CER)), which also gives its listed building assessment. (A full description of Pigeonsford House – and other listed buildings in Llangranog parish – is featured in the Cadw listed buildings database.)

In addition, an unpublished study of overall settlement within Ceredigion, undertaken by Cambria Archaeology (Murphy 1999), outlines many factors that have influenced the settlement and archaeology of the project area and greatly assisted the correct understanding of the landscape.

3.4.6 Geotechnical work

No geotechnical work has been carried out along the route as far as Cambria Archaeology are aware.

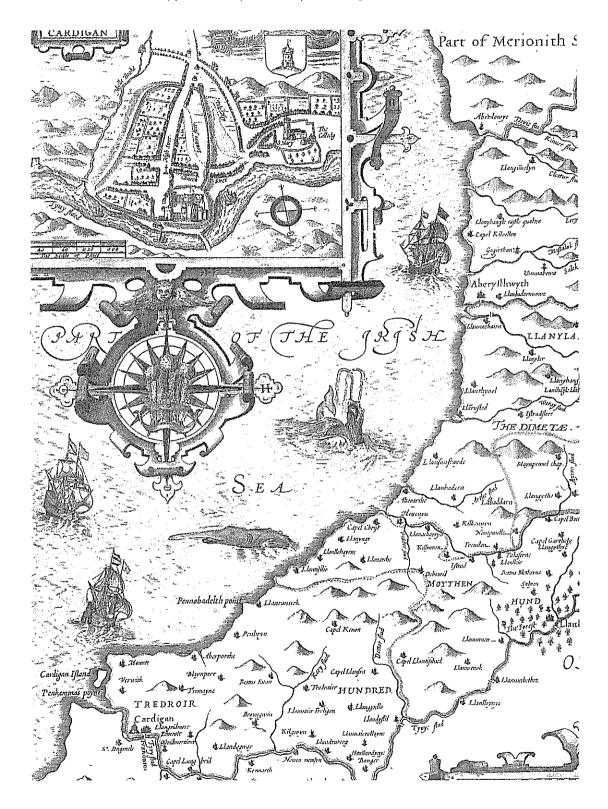
APPENDIX 1

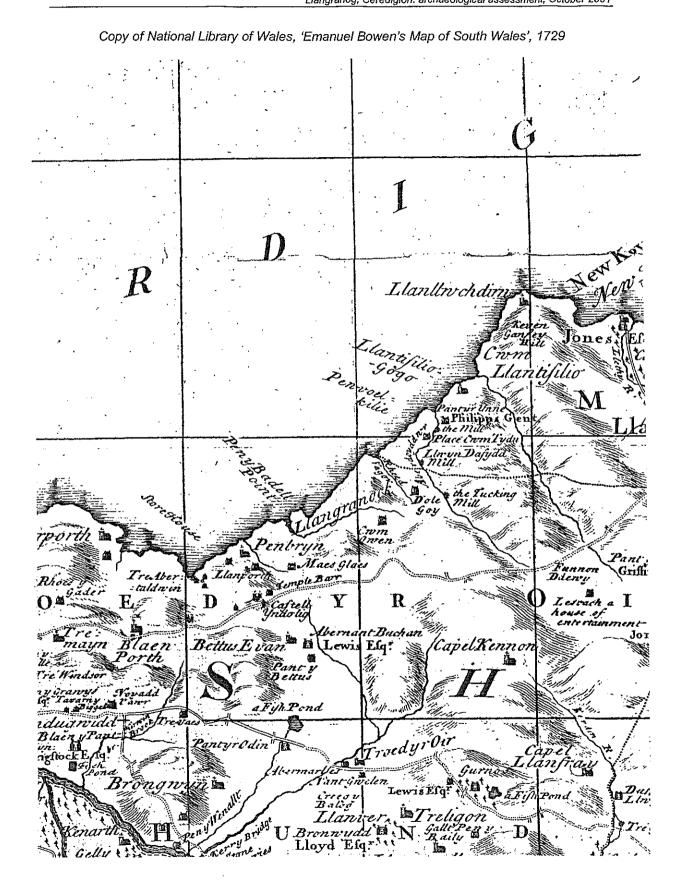
Copies of selected map sources

Copy of British Museum, Saxton's map of Radnorshire, Brecknockshire, Cardiganshire and Carmarthenshire, 1578

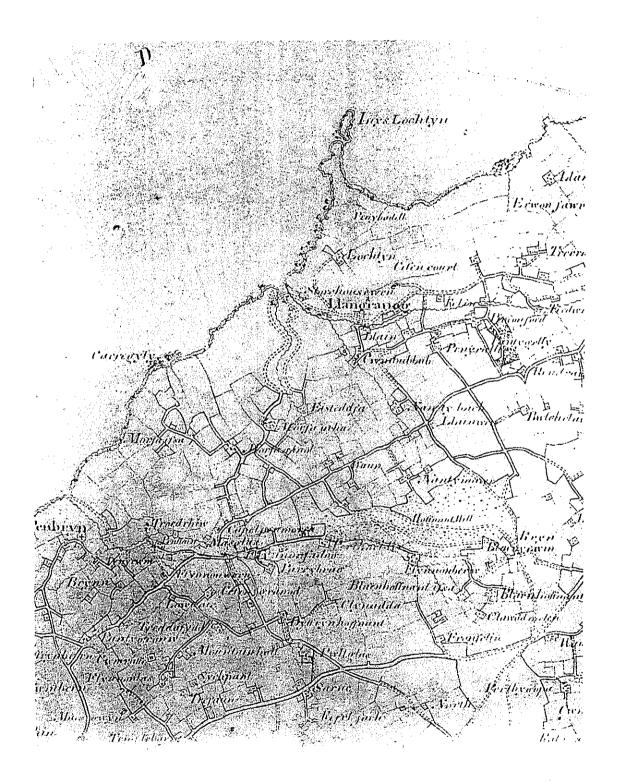


Copy of John Speed's map of Cardiganshire, 1610

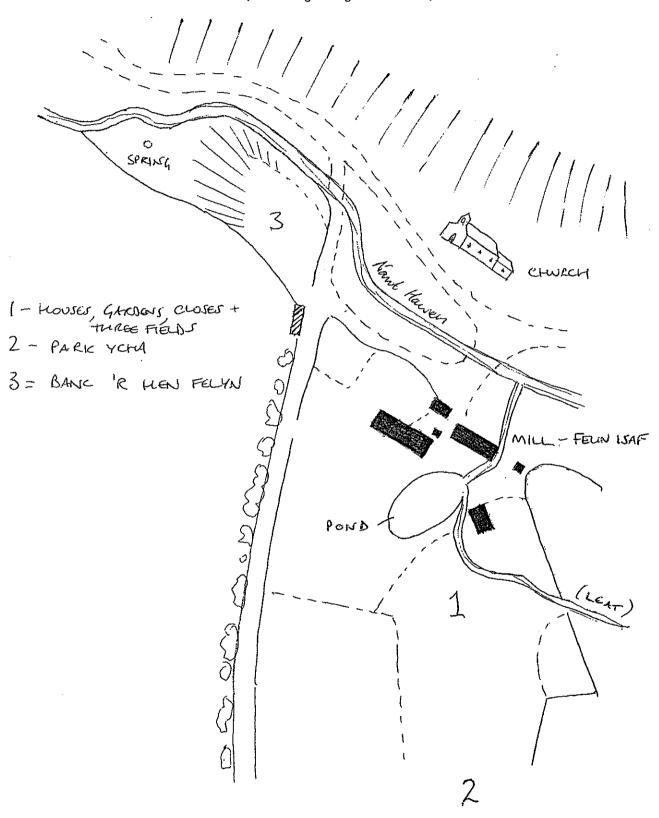




Copy of National Library of Wales, Ordnance Survey Original Surveyors' Drawings, 2" to the mile, Sheet 186, 1811



Sketch copy of National Library of Wales, 'J. C. D.' Deposit Vol., p.19, 'Cwmawen-Fawr, and Llangrannog Mill & Lands', 1793

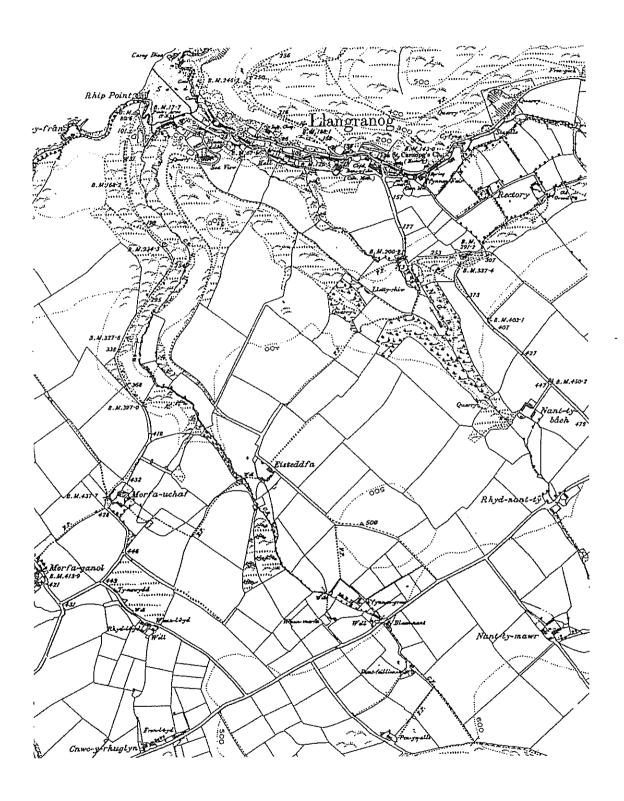


Copy of Ordnance Survey 1" to the mile, Old Series, Sheet 57, 1834

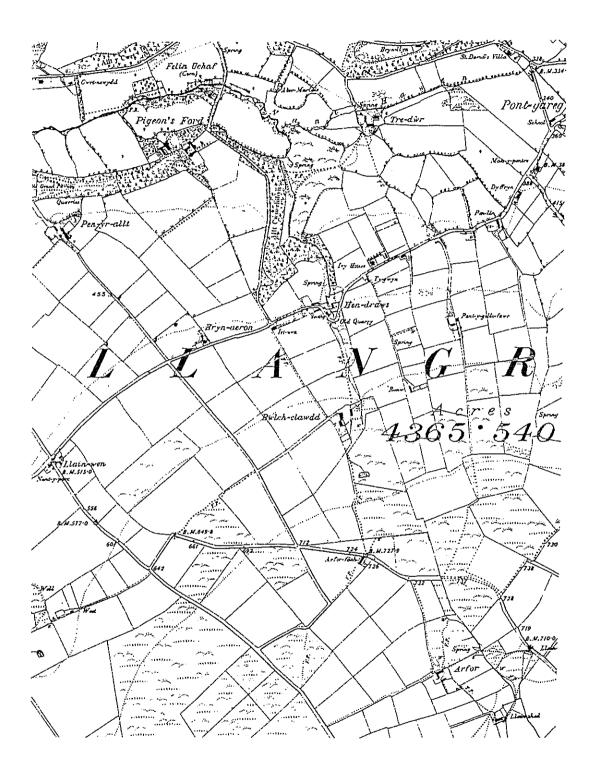


Copy of National Library of Wales, Parish of Llangrannog, Tithe Map and Apportionment, 1840

Copy of Ordnance Survey, 1:10560, Cardiganshire Sheet XXXI.NW, First Edition, 1881



Copy of Ordnance Survey, 1:10560, Cardiganshire Sheet XXXI.NE, First Edition, 1891



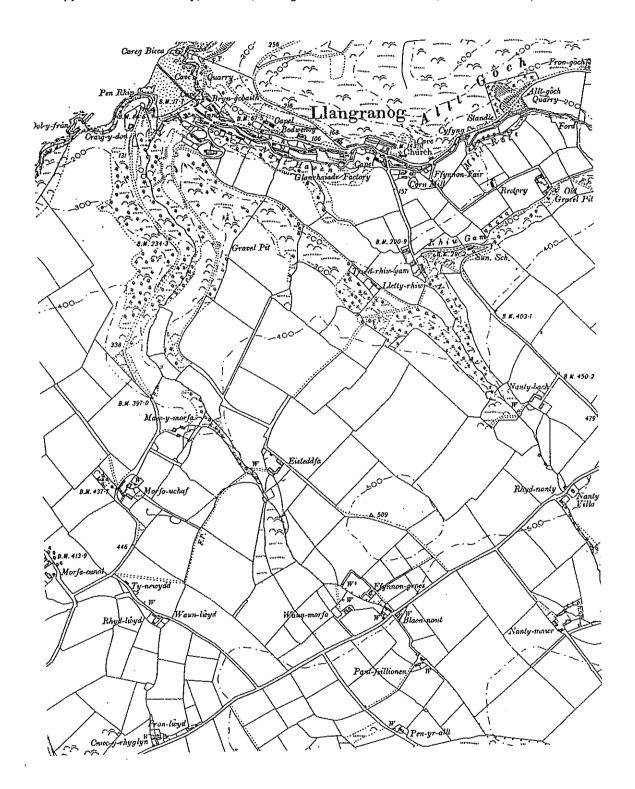
REFERENCE

1 Mansion Lawn rc, _	2 -2-0
2 Back-yard	0 -0-27
3 Ketchen Garden	0220
4, Orchard	0-3-20
5 Farm-yard —	0 3 - 19
6 Meador	4119
1 Plantation	0-3-3
8 Crrtnerydd	01 16
9 Plantation-	0-1-17
10 Meador	-4-2-34
11 Meadon	2 1 -10
12 Meadow	4-3-20
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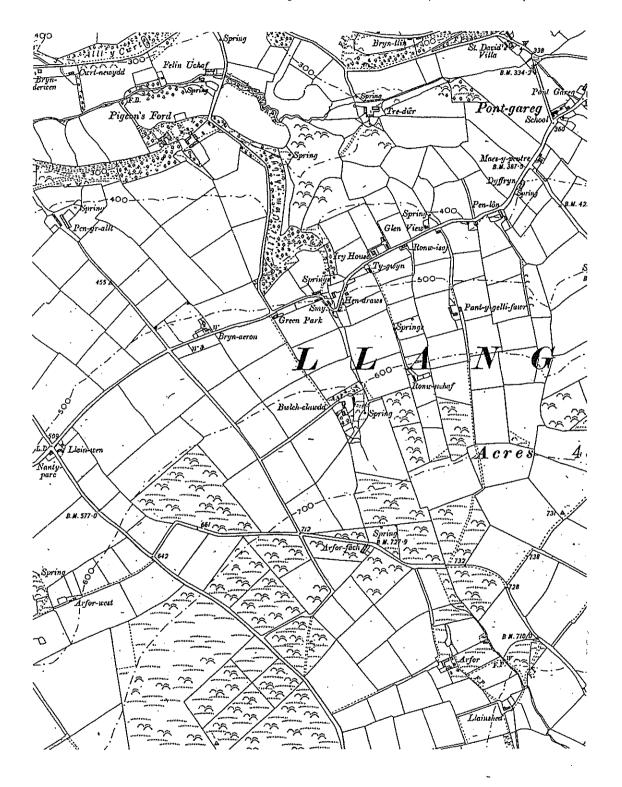
Copy of National Library of Wales, Pigeonsford 1, 'Pigeonsford Yard, Meadow and Garden', c.1900

CAMBRIA ARCHAEOLOGY Llangranog, Ceredigion: archaeological assessment, October 2001

Copy of Ordnance Survey, 1:10560, Cardiganshire Sheet XXXI.NW, Second Edition, 1906



Copy of Ordnance Survey, 1:10560, Cardiganshire Sheet XXXI.NE, Second Edition, 1906



APPENDIX 2

Photographs

Photo 1: Pigeonsford walled garden (PRN 43535), the exterior from the north-east



Photo 2: Pigeonsford walled garden (PRN 43535), the exterior from the north-west



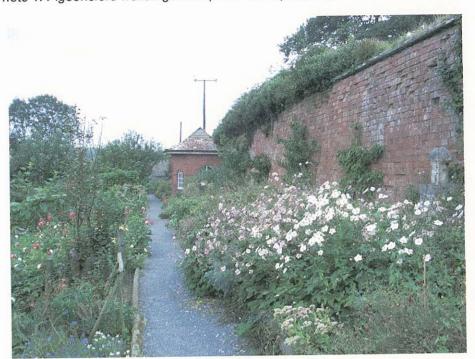


Photo 1: Pigeonsford walled garden (PRN 43535), the interior from the south-east

LLANGRANOG SEWERAGE SCHEME, CEREDIGION

AN ARCHAEOLOGICAL ASSESSMENT

REPORT NUMBER 200152

OCTOBER 2001

This report has been prepared by Neil Ludlow

Position Senior Archaeologist

Signature Date

This report has been checked and approved by Gwilym Hughes on behalf of Cambria Archaeology, Dyfed Archaeological Trust Ltd.

Position Director

Signature Date 12/10/0/

As part of our desire to provide a quality service we would welcome any comments you may have on the content or presentation of this report