

**LAND EAST OF PENYCOED FARM,
FFAIRFACH,
CARMARTHENSHIRE:
ARCHAEOLOGICAL WATCHING BRIEF
(NGR SN 62469 22160)**



Prepared by DAT Archaeological Services
For: Pauline Mainwaring



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LAND EAST OF PENYCOED FARM, FFAIRFACH, CARMARTHENSHIRE: ARCHAEOLOGICAL WATCHING BRIEF

Gan / By

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EXECUTIVE SUMMARY

DAT Archaeological Services were commissioned by the landowner to undertake an archaeological watching brief during ground works associated with the construction of an agricultural shed, access road and temporary mobile home on land east of Penycoed Farm, Ffairfach (centred on SN 62469 22160).

Part of the proposed access road followed the line of a known Roman road (PRN 109219) running southwest from the town of Llandeilo.

Evidence gathered from the watching brief, historical mapping and a nearby geophysical survey strongly suggests that the remains of a cobbled track recorded during the watching brief are a component of the Roman road (PRN 109219).

CRYNODEB GWEITHREDOL

Comisiynwyd Gwasanaethau Archeolegol YAD gan y tirfeddiannwr i ymgymryd â brîff gwylio archeolegol yn ystod gwaith daear sy'n gysylltiedig ag adeiladu sied amaethyddol, trac mynediad a chartref symudol dros dro ar dir i'r dwyrain o Fferm Penycoed, Ffairfach (wedi'i ganoli ar SN 62469 22160).

Roedd rhan o'r trac mynediad arfaethedig yn dilyn llinell ffordd Rufeinig hysbys (PRN 109219) sy'n rhedeg i'r de-orllewin o dref Llandeilo.

Mae tystiolaeth a gasglwyd o'r brîff gwylio, mapio hanesyddol ac arolwg geoffisegol cyfagos yn awgrymu'n gryf bod olion trac cobl a gofnodwyd yn ystod y brîff gwylio yn gysylltiedig â'r ffordd Rufeinig (PRN 109219).

**LAND EAST OF PENYCOED FARM,
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SUMMARY

DAT Archaeological Services were commissioned by Pauline Mainwaring to undertake an archaeological watching brief during ground works associated with the construction of an agricultural shed, access road and temporary mobile home on land east of Penycoed Farm, Ffairfach (Planning application No. E/32601; centred on SN 62469 22160).

Following advice from the Development Management section of Dyfed Archaeological Trust to the Planning Authority, an archaeological condition was attached to the planning condition.

The condition has been placed on planning permission for the development as the start of the proposed access road will follow the line of a known Roman road (PRN 109219) running southwest from Llandeilo. Also, to the north of the proposed development archaeological investigations undertaken on the Dyffryn Tywi school site in 2014 revealed extensive archaeological remains of Neolithic, Bronze Age and Iron Age date (PRNs 109212, 109216, 109218) as well as the line of the Roman road.

The Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW) has recorded an apparent sub-rectangular embanked enclosure (NPRN 402888) of unknown date, roughly 225m northeast of the development area. The enclosure is described as in the region of 35m across, set upon sloping ground. The only feature visible within is what appears to be an elongated rectilinear mound.

It was therefore considered that there was potential that archaeological deposits or features of Roman or prehistoric date could survive within the development area and that these may be exposed, damaged or destroyed by development groundworks.

To fulfil this condition an archaeological watching brief was undertaken during groundworks that could expose, damage or destroy archaeological remains.

The watching brief was undertaken during three visits to the site on the 21st, 22nd and 24th January 2020.

Groundworks associated with the watching brief consisted of the removal of topsoil and subsoil down to a level from which construction of the various elements of the development could begin. This meant exposing the natural ground, thus affording ample opportunity to see if evidence of archaeological features or deposits were present.

The monitored ground works comprised the removal of all the topsoil with a 360° tracked excavator fitted with a grading bucket. During this operation, the eastern edge of a cobbled track was exposed. Evidence gathered from the watching brief, historical mapping and geophysical survey strongly suggests that this cobbling is a component of the Roman road (PRN 109219).

1. INTRODUCTION

Project Proposals and Commission

- 1.1.1 DAT Archaeological Services were commissioned by Pauline Mainwaring, to provide an archaeological watching brief during groundworks associated with the construction of an agricultural shed, access road and temporary mobile home on land east of Penycoed Farm, Ffairfach (centred on SN 62469 22160, Figure 1).
- 1.1.2 An archaeological condition was attached to the planning permission (Planning Application No. E/32601) for the development following advice from the archaeological advisor to Carmarthenshire Council Planning Authority.
- 1.1.3 The condition attached to planning stated: *'No development shall take place until the applicant, or their agents or successors in title, has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted by the applicant and approved in writing by the local planning authority'*.
- 1.1.4 The condition has been placed on planning permission for the development because archaeological features issuing from various periods in the archaeological and historical timeline are known to be present in the landscape: the beginning of the proposed access road will follow the line of a known Roman road (PRN 109219) running southwest from Llandeilo; to the north of the proposed development archaeological investigations undertaken on the Dyffryn Tywi school site in 2014 revealed extensive archaeological remains of Neolithic, Bronze Age and Iron Age date (PRNs 109212, 109216, 109218) as well as the line of the Roman road; the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW) has recorded an apparent sub-rectangular embanked enclosure (NPRN 402888) of unknown date, roughly 225m northeast of the development area. The enclosure is described as in the region of 35m across, set upon sloping ground. The only feature visible within is what appears to be an elongated rectilinear mound.

1.2 Scope of the Project

- 1.2.1 A written scheme of investigation (WSI) for a watching brief was prepared by DAT Archaeological Services prior to the commencement of the works, which was approved by the archaeological advisor to the planning authority prior to the commencement of the works. The project objectives were:
 - Provision of a written scheme of investigation to outline the methodology by which DAT Archaeological Services will undertake the watching brief.
 - To identify the presence/absence of any archaeological deposits.
 - To establish the character, extent and date range for any archaeological deposits to be affected by the proposed groundworks.
 - To appropriately investigate and record any archaeological deposits to be affected by the groundworks.
 - To produce an archive and report of any results.
- 1.2.2 The overall work was summarised as: *"Archaeological attendance during groundworks associated with the construction of an agricultural shed, access road and temporary mobile home on land east of Penycoed Farm, Ffairfach, which have the potential to expose, damage or destroy archaeological remains. Appropriate investigation and recording of any such remains will be undertaken if revealed. A report and archive of the results of the works will be prepared."*

1.3 Report Outline

- 1.3.1 This report describes the location of the development works along with its archaeological background, and provides a summary and discussion of the archaeological watching brief and its results.

1.4 Abbreviations

- 1.4.1 Sites recorded on the regional Historic Environment Record (HER) are identified by their Primary Record Number (PRN) and located by their National Grid Reference (NGR). Sites recorded on the National Monument Record (NMR) held by the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW) are identified by their National Primary Record Number (NPRN). Scheduled Monument (SM). Altitude is expressed to Ordnance Datum (OD). References to cartographic and documentary evidence and published sources will be given in brackets throughout the text, with full details listed in the sources section at the rear of the report.

1.5 Illustrations

- 1.5.1 Photographic images are to be found within the report. Printed map extracts are not necessarily reproduced to their original scale.

1.6 Timeline

- 1.6.1 The following timeline is used within this report to give date ranges for the various archaeological periods that may be mentioned within the text.

Period	Approximate date	
Palaeolithic –	c.450,000 – 10,000 BC	Prehistoric
Mesolithic –	c. 10,000 – 4400 BC	
Neolithic –	c.4400 – 2300 BC	
Bronze Age –	c.2300 – 700 BC	
Iron Age –	c.700 BC – AD 43	
Roman (Romano-British) Period –	AD 43 – c. AD 410	Historic
Post-Roman / Early Medieval Period –	c. AD 410 – AD 1086	
Medieval Period –	1086 – 1536	
Post-medieval Period ¹ –	1536 – 1750	
Industrial Period –	1750 – 1899	
Modern –	20 th century onwards	

Table 1: Archaeological and historical timeline for Wales

¹ The post-medieval and industrial periods are combined as the post-medieval period on the regional Historic Environment Record as held by Dyfed Archaeological Trust

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2. The Site

2.1 Location and Topography

- 2.1.1 The proposed access road begins at an existing gateway on the south side of the A476 opposite the entrance to Bro Dinefwr School in Ffairfach, Carmarthenshire (Figure 2). From the gate the access road heads briefly westward before turning south and climbing a steep hill towards a plateau approximately 240m away from the gateway. Here the access road culminates in a yard approximately 64m long by 52m wide. The plateau is located on the 60m contour line – a climb of approximately 25m from the gateway below. The land is mainly pasture enclosed in well-maintained hedges.
- 2.1.2 The development site crosses two bands of bedrock; Abergwili Formation – Mudstone from the Ordovician period and Ffairfach Grit Formation – Sandstone from the Ordovician period (based on information from the British Geological Survey).
- (<http://mapapps.bgs.ac.uk/geologyofbritain/home.html>).

2.2 Archaeological and Historical Background

- 2.2.1 No archaeological sites are known to exist within the boundary of the proposed development area; however, a search of the regional HER database revealed that a total of eight sites of archaeological and historic interest are located within a c.250m radius centred on the development. These are listed in Table 2 and shown in Figure 3.
- 2.2.2 The nearest archaeological site to the development is a Roman Road (PRN 109219) recorded by a geophysical survey (Figure 6, Meek 2013). The geophysical survey, as well as modern aerial photography, suggests that the route of the Roman road runs very close to the proposed access road (Figure 3).
- 2.2.3 A section of this Roman road was excavated in 2014 (Hourihan et. al. 2015). Much of the original road was gone with only traces of the foundation layers remaining. Enough survived, however, to show that the road was of typical Roman construction. It heads southwest from Llandeilo, possibly in the direction of the Roman fort at Loughor (GGAT PRN 00202w). On historic maps of the area, the line of the Roman road appears as a field boundary/track, suggesting that it was in use as a right of way well into the post-medieval period in this area (Figures 4 and 5).
- 2.2.4 A sub-rectangular enclosure (NPRN 402888) of unknown date lies approximately 225m to the northeast of the development site.
- 2.2.5 The two Grade II Listed Buildings (PRNs 61085/6) associated with Penycoed Farm lie 220m to the west of the site.
- 2.2.6 An area of multi-period archaeology (PRNs 109212/6/8) excavated in 2014 (Hourihan et. al. 2015). lies approximately 80m to the north of the development site.



Figure 2: Plan of proposed development (supplied by client)

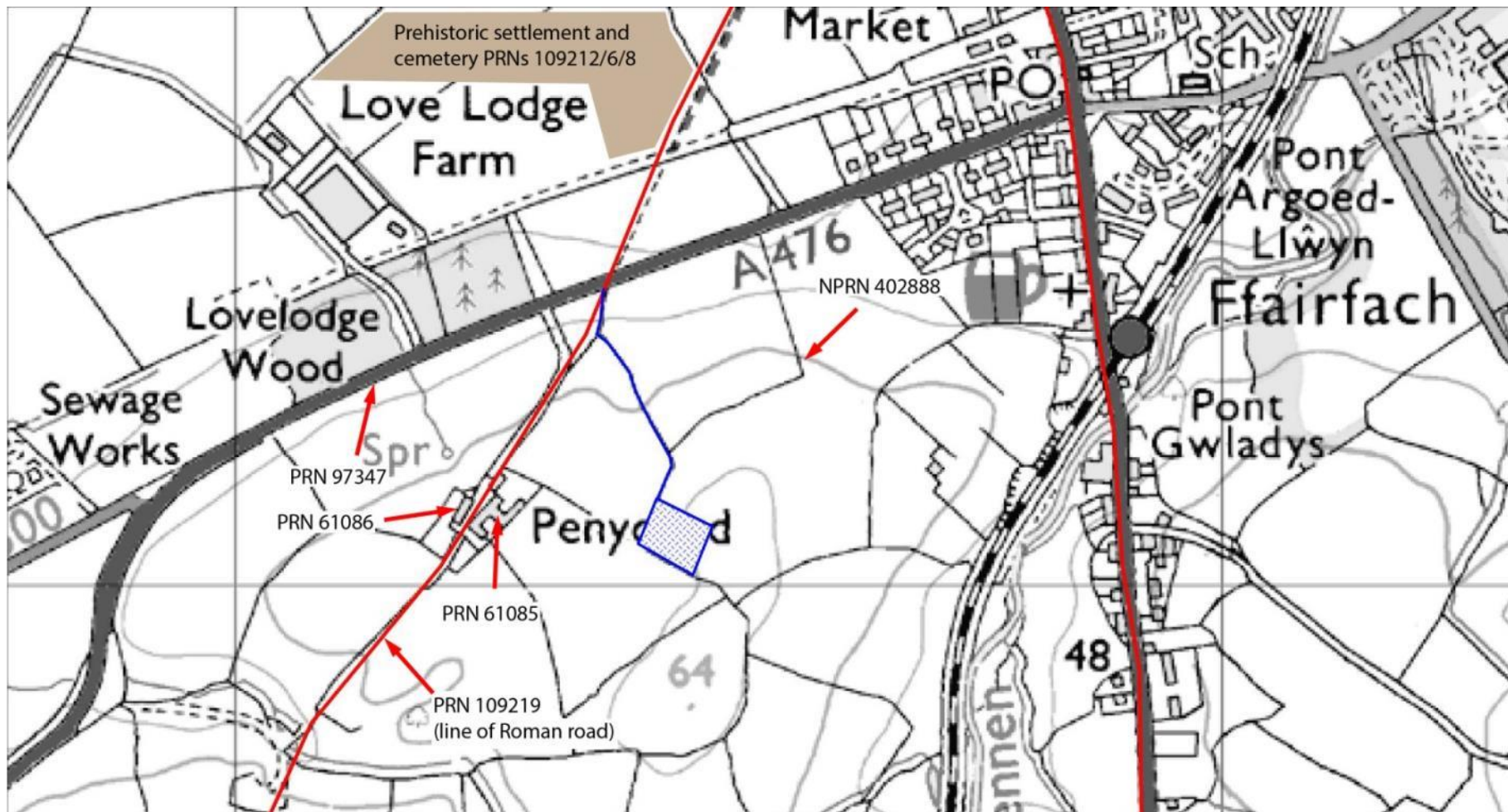


Figure 3: Location of development (blue) in relation to line of Roman road (red), and other archaeological sites in the immediate area. Details of sites listed in Table 2.

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PRN	Site name	Type	Summary	Period	NGR
61085	Penycoed	Farmhouse	Grade II Listed building	Post Medieval	SN6223021079
61086	Outbuildings to rear of Penycoed Farm	Outbuildings	Grade II Listed buildings	Post Medieval	SN6225421076
97347		Milestone	Milestone: Old Series OS (1831); 1 st Edn. OS (1887)	Post Medieval	SN6225421076
109212	Love Lodge Farm	Cemetery	A total of eight middle Bronze Age cremation pits recorded during excavation in 2014 (PRN 109211). Four of these pits were in an area associated with a number of pits, post holes and stake holes. The base of a cordoned early Bronze Age pot, with a cross motif applied to the internal face, was recovered from one of the post-holes, where it had been used as packing material.	Bronze Age	SN6235021604
109216	Love Lodge Farm	Settlement/cemetery	Four ring-ditches excavated in 2014. Radiocarbon dating has demonstrated that these were Iron Age features. Their dates span that period, the earliest being 768-432 BC and the latest being 108 BC-AD 65. It has been suggested that these monuments were constructed at fairly regular intervals, possibly by successive generations every 100 years or so. No burials were found associated with any of the ring-ditches. 2nd century Roman pottery was found in the lower/middle fills of the most easterly ring-ditch and Roman pottery was also found in a possible hearth/fire pit cut into these fills	Iron Age	SN6227721567
109218	Love Lodge Farm	Ring Ditch	A ring-ditch of possible Neolithic date excavated in 2014.	Neolithic	SN6231121598

109219	Love Lodge Farm	Road	A section of Roman road excavated in 2014 in the area of Love Lodge Farm. Much of the original road was gone with only traces of the foundation layers remaining. Enough survived however, to show that the road was of typical Roman construction. It is heading southwest from Llandeilo, possibly in the direction of the Roman fort at Loughor (GGAT PRN 00202w). On historic maps of the area the line of the Roman road appears as a field boundary/track crossing the development site, suggesting that it was in use as a right of way well into the post-medieval period in this area.	Roman	SN6241121383
NPRN	Site name	Type	Summary	Period	NGR
402888	Earthworks southwest of Ffairfach	Earthwork	An apparent sub-rectangular embanked enclosure (NPRN 402888) of unknown date, roughly 225m northeast of the development area. The enclosure is described as in the region of 35m across, set upon sloping ground. The only feature visible within is what appears to be an elongated rectilinear mound.	Unknown	SN62582123

Table 2: Archaeological and historical sites recorded on the regional HER within the immediate area of the proposed development; shown in Figure 3

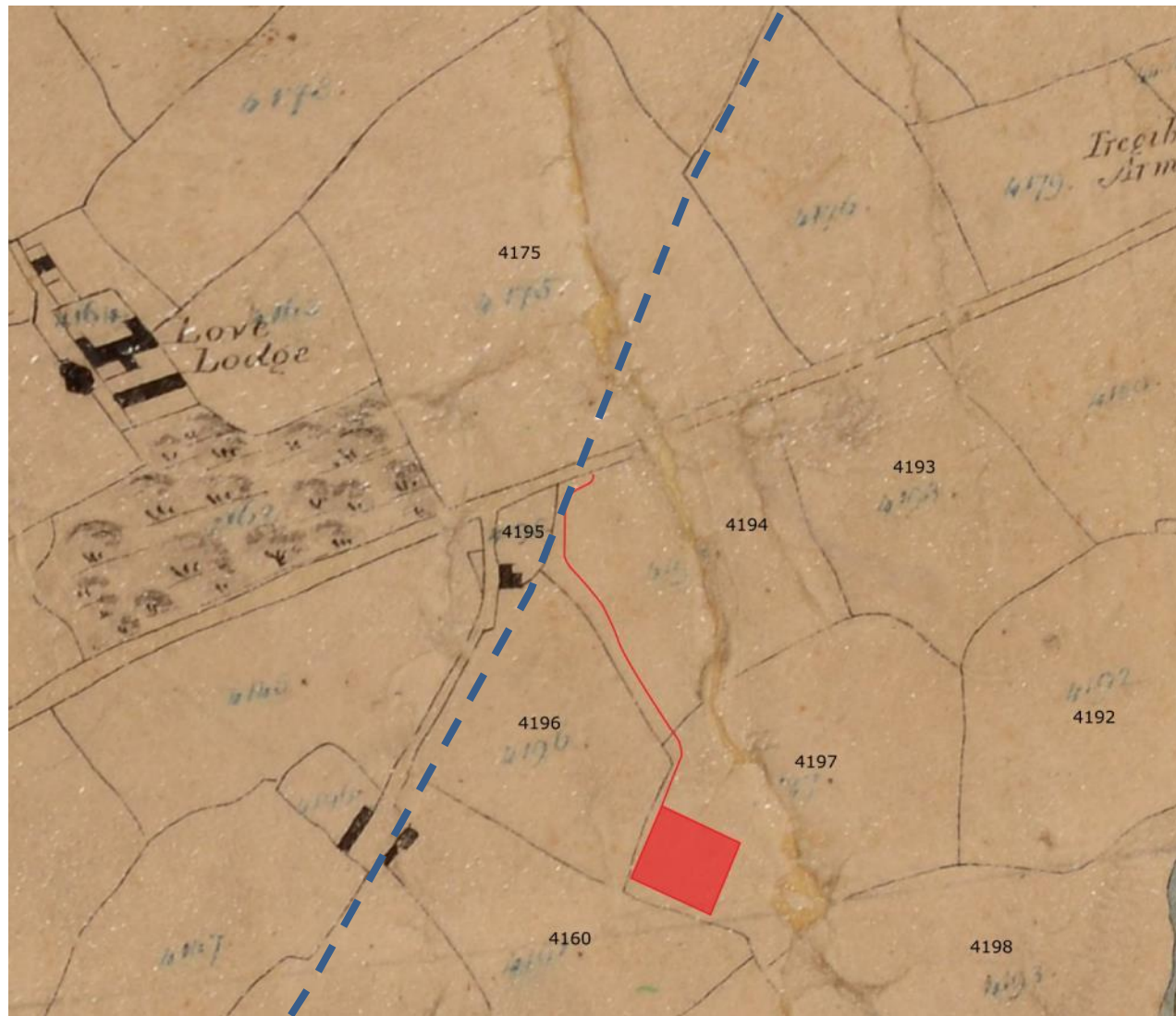


Figure 4: Extract of the 1861 parish tithe map of Llandilo Fawr – development area in red and suggested line of Roman road (PRN 109219) shown as dashed blue line

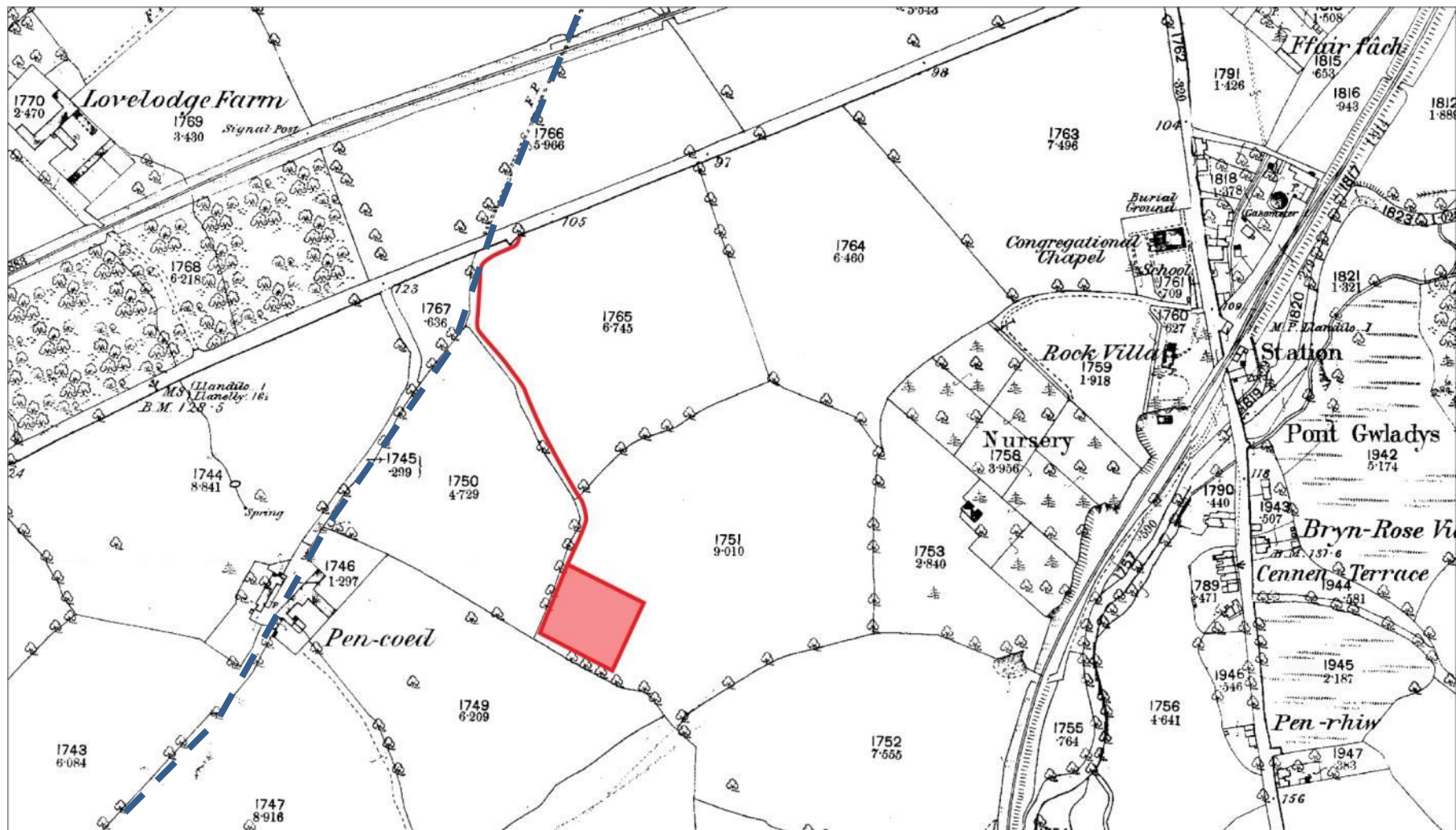


Figure 5: Extract from the Ordnance Survey 1st edition 25" map published in 1889 – development area in red and suggested line of Roman road (PRN 109219) shown as dashed blue line



Figure 6: Geophysical survey of land immediately north of the development before construction of Bro Dinefwr School (Meek 2013). Arrows indicate ditches associated with the Roman road (PRN 109219).

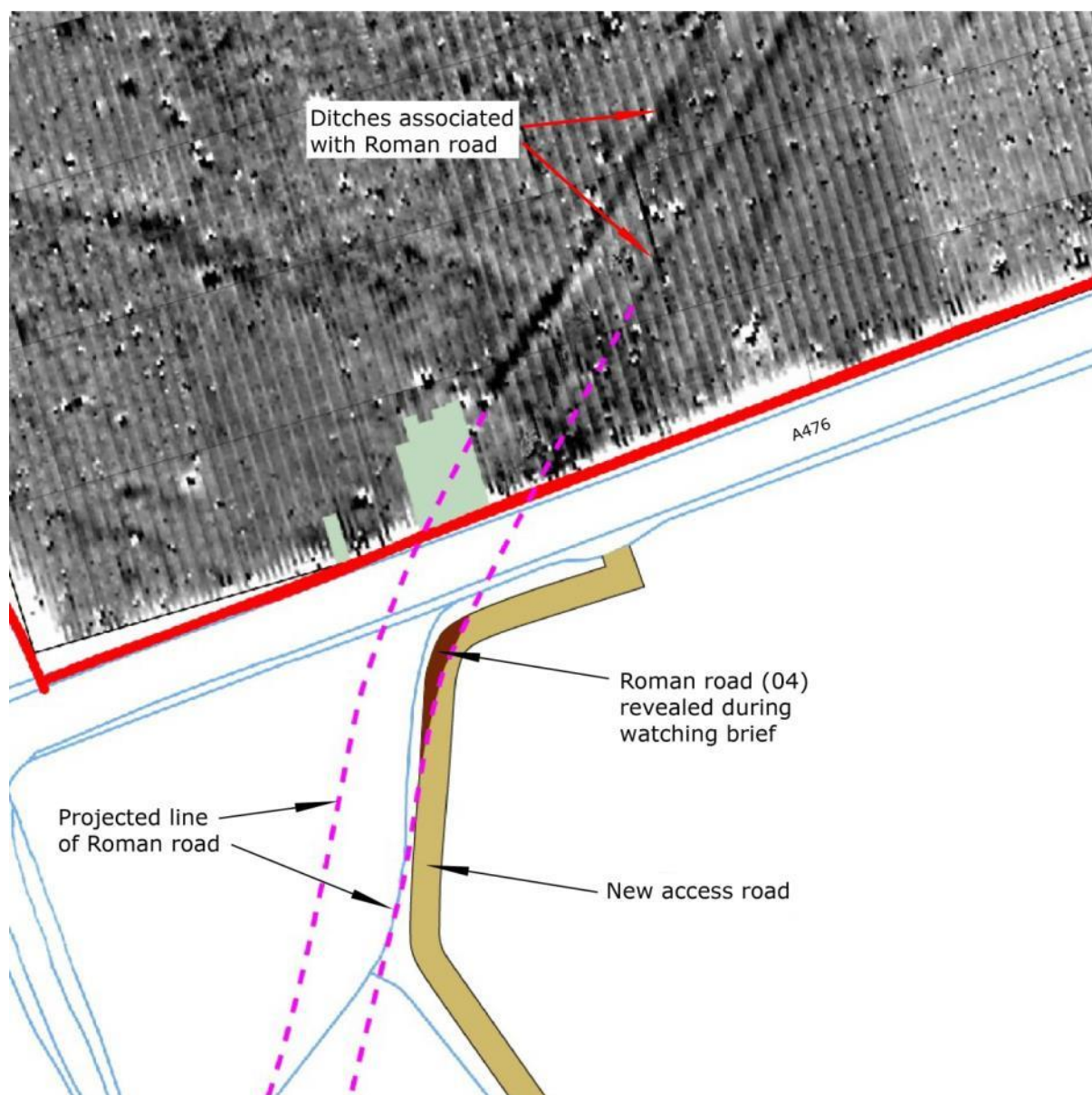


Figure 7: Detail of Figure 8 showing (04) in relation to geophysical survey

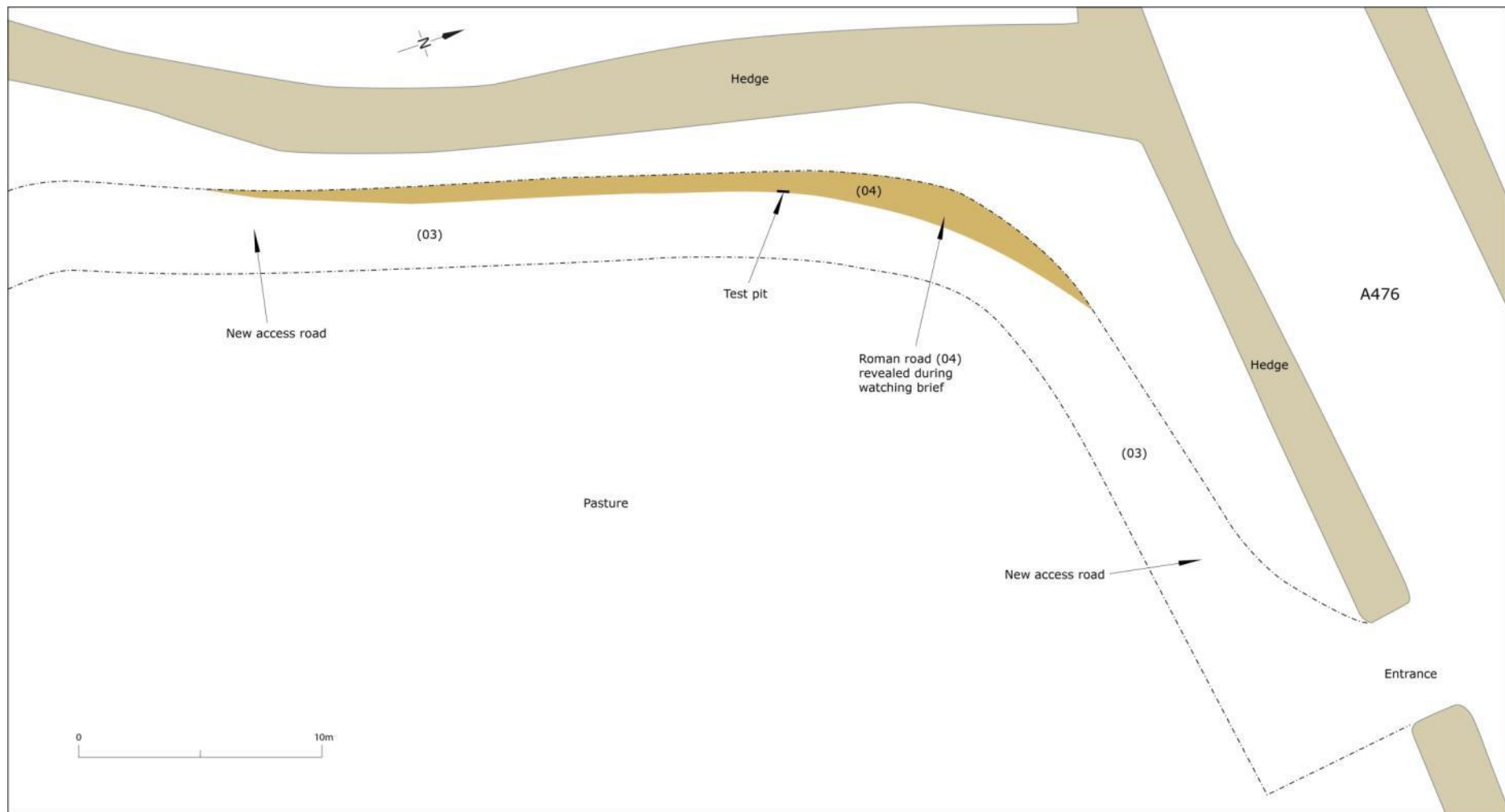


Figure 8: Plan of lower reaches of access road showing extent of stony deposit (04)

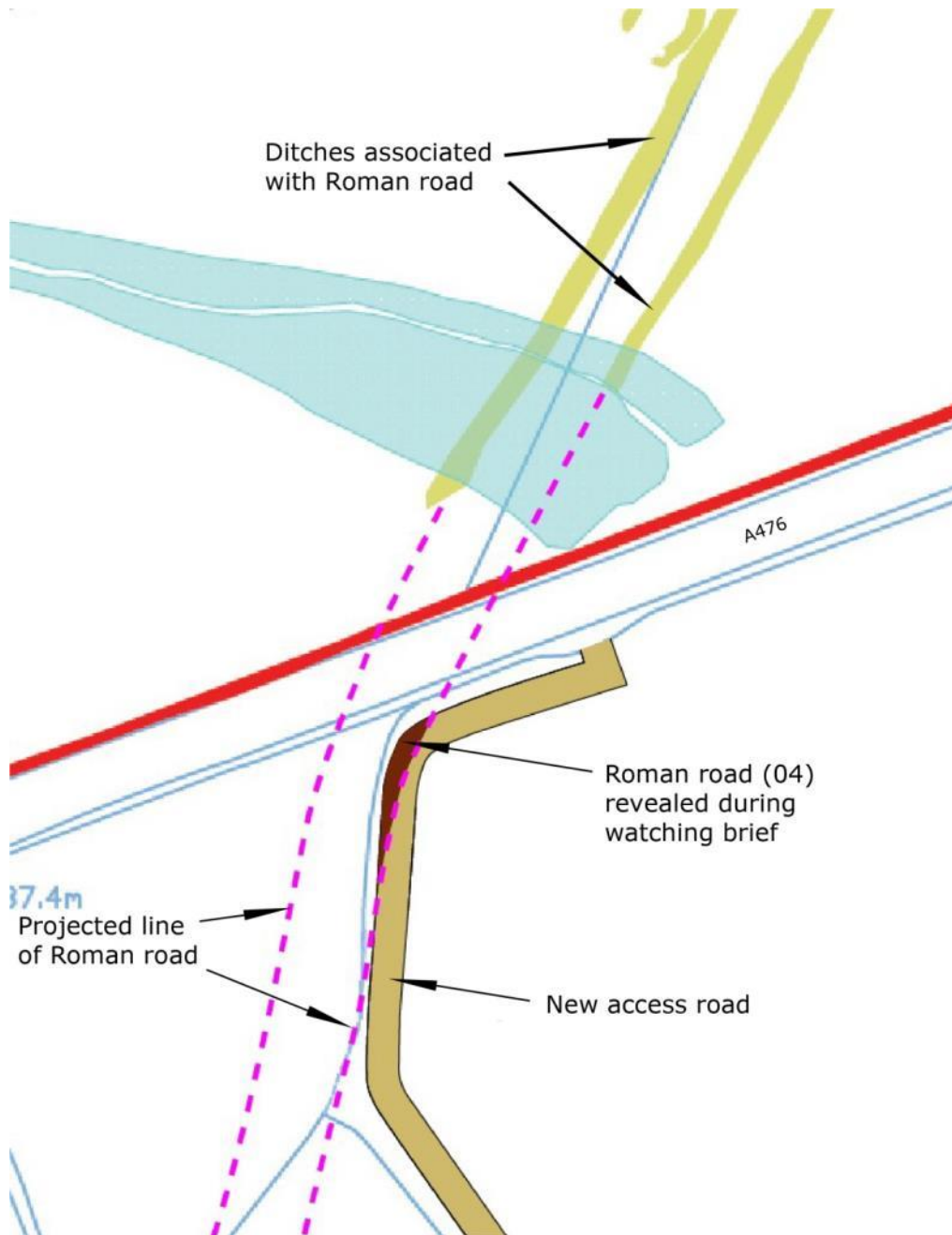


Figure 9: Detail of Figure 10 showing (04) and the projected line of Roman road

3. WATCHING BRIEF METHODOLOGY

3.1 Fieldwork

- 3.1.1 A watching brief was undertaken during initial groundworks at the site which had the potential to expose, damage or destroy underlying archaeological remains.
- 3.1.2 All archaeological deposits revealed during the groundworks were examined and recorded to an appropriate level.
- 3.1.3 Recording of all archaeological features or deposits conformed to best current professional practice and was carried out in accordance with the Recording Manual² used by DAT Archaeological Services.
- 3.1.4 The work followed the Standard and Guidance for an Archaeological Watching Brief as laid down by the Chartered Institute for Archaeologists (CIfA 2014) and adhered to their code of conduct (CIfA 2014).

3.2 Timetabling of Fieldwork

- 3.2.1 The watching brief took place on the 21st, 22nd and 24th January 2020.

3.3 Post-Fieldwork Reporting and Archiving

- 3.3.1 All data recovered during the fieldwork was collated into a site archive structured in accordance with specifications in *Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation* (Brown 2011), and the procedures recommended by the National Monuments Record, Aberystwyth.
- 3.3.2 The results of the fieldwork have been assessed in local, regional and wider contexts. The report includes a desk-based research element to ensure that the site is placed within its wider archaeological context.
- 3.3.3 A report fully representative of the results of the fieldwork has been prepared.

² DAT Archaeological Services have adopted the Recording Manual developed by English Heritage Centre for Archaeology. A copy will be available on-site for inspection if required.

4. RESULTS AND DISCUSSION (see Figure 5)

- 4.1 The groundworks involved topsoil stripping in order to create an access road from the northern hedge of the field to the site of the proposed agricultural shed, yard and mobile home - roughly 240m to the south (Figure 7).
- 4.2 The strip for the access road ran in a westerly direction for 20m from an existing gateway at the bottom of the field, then turned south (uphill) and continued for another c. 240m at a distance of between 2m to 4m from the hedge. The cut for the access road averaged 3.2m wide and varied between 0.22m and 0.35m in depth. The topsoil (01) comprised grey-brown, silty clay and averaged 0.2m depth. The subsoil (02) comprised light brown, silty-clay and averaged 0.1m depth. The topsoil and subsoil were removed down to the natural ground horizon (03); a yellow clay with stone inclusions.
- 4.3 The soil stripping in the lower reaches of the access road exposed a linear deposit of small to medium, rounded and sub-angular stone (04) (Figures 7, 8 & 9, Photo 2). The deposit, as seen in the stripped trench was 35m long and at its widest measured c. 2m. Only the eastern edge of (04) was visible, therefore the actual width of the feature is not known. To enable the feature to be better defined a substantial part of the access road was trowelled. This revealed areas of a well-preserved, robust, cobbled surface (Photos 3 & 4). The deposit (04), together with the relevant section of access road and the hedge were planned at 1:100.
- 4.4 A small test pit, measuring 0.5m long, 0.3m wide and 0.2m deep was excavated into the edge of the deposit (Photos 5 & 6). This confirmed that the natural ground (03) had been cut and the stones (04) placed within the cut. The deposit was very compact with very little soil in the interstices. The test pit did not reach the bottom of deposit (04).
- 4.5 Apart from a modern plough mark and a field drain, no other significant archaeological feature or deposit was recorded during the groundworks associated with the access road.

5. DISCUSSION

- 5.1 The purpose of this discussion is to establish whether the stony deposit (04) is possibly the eastern edge of the Roman road (PRN 109219) or a later agricultural or domestic trackway.
- 5.2 Neither the 1861 parish tithe map (Figure 4) nor the 1889 1st edition Ordnance Survey map (Figure 5) clearly show a continuation of the probable Roman road, as seen to the south on historic mapping, in the area of context (04).
- 5.3 Modern aerial photograph before the construction of Bro Dinefwr School in the field immediately to the south of the watching brief clearly shows the Roman road (PRN 109219) as a linear cropmark. The projected route of the cropmark traverses very close to the watching brief area; along the line of the current hedgebank.
- 5.4 The geophysical survey carried out in 2012 (Meek 2013, Figures 6 & 7) provided a more refined, detailed image of the cropmark, clearly showing the ditches on either side of the Roman road. The projected continuation of the eastern ditch indicates that it would be in close proximity to the strip for the access road.
- 5.5 The trowelled areas of stony deposit (04) revealed a compact, cobbled surface (Photos 2, 3 and 4) which is consistent with the surface of a track

or road dating from the Roman period (although other periods cannot be ruled out entirely).

- 5.6 The small test pit excavated into the side of (04) revealed that the natural ground (03) had been cut into and stone deposited within it. This cut could represent the edge of the linear drainage ditch parallel with the Roman road, as seen in the geophysical survey. The cobbles (04) could either have been used to backfill the ditch or be a result of the erosion of the road surface over many years.
- 5.7 Excavation of a section through the Roman road to the south of the A476 road during archaeological excavation before the construction of Ysgol Bro Dinefwr (Hourihan et al 2015) showed the road was of typical construction with a raised agger and parallel flanking ditches. The ditches were found to have been recut over time and the road reused in later periods. The original Roman foundation layers of the road included several deposits of locally sourced river gravels and water worn pebbles, and it is possible that the erosion of the road surface would have caused the silting up of the flanking ditches; exemplified by the deposits filling the possible ditch cut recorded during the watching brief.
- 5.8 Aerial survey and fieldwork has over the years identified clear stretches of the Roman road running between Llandovery and Carmarthen with the Roman fort at Llandelio sitting at roughly a day's march from either town.
- 5.9 The stretch of Roman road recorded during the watching brief could form part of the road heading away from Llandeilo in a southwest direction. It is not clear where this road is heading to but it has been suggested it may be the Roman fort at Loughor (Burnham and Davies 2010).

6. CONCLUSIONS

- 6.1 A watching brief was carried out during ground works associated with the construction of an access road, agricultural shed and temporary mobile home on land East of Penycoed Farm, Ffairfach (centred on SN 62469 22160). The development site was in an area with potential for prehistoric, Roman and medieval remains to be present.
- 6.2 The ground works comprised the machine excavation of an access road, and ground reduction associated with an agricultural shed and temporary mobile home.
- 6.3 The watching brief was undertaken during the topsoil strip for the access road only.
- 6.4 The topsoil and subsoil were removed exposing the underlying natural ground (03); thus any buried archaeological deposit or feature would be revealed. The natural ground (03) was consistent across the whole site.
- 6.5 During the excavation of the access road a stony deposit was revealed at its northern end, along the same alignment as the suggested line of the Roman road (PRN 109219) as recorded in Historic Environment Record.
- 6.7 An aerial view of the Roman road coupled with geophysical survey demonstrates that the projected route of the road could indeed cross the watching brief area at the site of (04).
- 6.8 Taking into consideration all the evidence it is very likely that deposit (04) is a component of Roman road (PRN 109219).
- 6.9 No other significant archaeological features or deposits were recorded during the ground works associated with the construction of the access road.

7. PHOTOGRAPHS



Photo 1: View north: topsoil strip for access road beside existing gateway (1m scale)



Photo 2: View southwest: after initial clean - dark band on right denotes old track (04); light band denotes partially trowelled natural ground (03) (1m scale)



Photo 3: View north: stony cobbled surface (04) and light band (03) partially trowelled natural (0.5m scale)



Photo 4: View east: detail of cobbles (04) (1m scale)



Photo 5: View south: test pit in edge of cobble surface (04) showing cut in the natural (03) (0.5m scale)



Photo 6: Close-up of test pit showing edge of cut into the natural (03)



Photo 7: View south:(04) begins to turn toward the hedge.



Photo 8: View north: (04) tapers into cut for access road (1m scale)



Photo 9: View west: (04) tapers into cut for access road (1m scale).



Photo 10: View south: access road entering upper field



Photo 11: View north along access road from upper field (1m scale)

8. SOURCES

8.1 Published

Burnham, B and Davies, J, 2010. *Roman Frontiers in Wales and the Marches*, RCAHMW

Houriham, S, Long, P & Simpson, H, 2015. *Archaeological Report for Ysgol Bro Dinefwr, Love Lodge Farm, Ffairfach, Carmarthenshire, Volume 1*, Carmarthenshire Country Council

8.2 Unpublished

Meek, J, 2013. *Lovelodge Farm Fields, Ffairfach, Carmarthenshire: Archaeological Evaluation*, DAT unpublished report 2012/78

8.3 Map

Parish tithe map of Llandilo Fawr published in 1861

Ordnance Survey 1st edition 1:2,500 map published in 1889

8.4 Database

Dyfed Archaeological Trust Historic Environment Record, The Shire Hall, Llandeilo, Carmarthenshire, SA19 6AF

British Geological Survey information accessed via
<http://mapapps.bgs.ac.uk/geologyofbritain/home.html>

APPENDIX I:

PROJECT ARCHIVE

ERN: 120804

154 x Digital photographs; Film Number 114791 (77 x JPEGs, 77 x TIFFs)

1x Photo catalogue

Context Register

Context	Description	Interpretation
01	Grey-brown , silty-cay	Topsoil
02	Light brown, silty-clay	Subsoil
03	Mixed, yellow clay	Natural ground
04	Small/medium, rounded and sub angular stone	Probable ballast and surface material for Roman road (PRN 109219)

APPENDIX II:

LAND EAST OF PENYCOED FARM, FFAIRFACH, CARMARTHENSHIRE PLANNING APPLICATION NO. E/32601 ARCHAEOLOGICAL WATCHING BRIEF WRITTEN SCHEME OF INVESTIGATION

INTRODUCTION

This written scheme of investigation (WSI) has been prepared by DAT Archaeological Services in response to a request from Pauline Mainwaring to provide an archaeological watching brief during ground works associated with the construction of an agricultural shed, access road and temporary mobile home on land east of Penycoed Farm, Ffairfach (Planning application number E/32601; centred on SN 62469 21160, Figures 1-3).

An archaeological condition (Condition No 6) has been attached to the planning permission for the development (E/32601) following advice from the Development Management section of Dyfed Archaeological Trust.

The condition attached to the planning decision states:

'No development shall take place until the applicant, or their agents or successors in title, has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted by the applicant and approved in writing by the local planning authority'.

The condition has been placed on planning permission for the development as the start of the proposed access road will follow the line of a known Roman road (PRN 109219) running southwest from Llandeilo (Figure 4). To the north of the proposed development archaeological investigations undertaken on the Dyffryn Tywi school site in 2014 revealed extensive archaeological remains of Neolithic, Bronze Age and Iron Age date (PRNs 109212, 109216, 109218) as well as the line of the Roman road.

The Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW) have recorded an apparent sub-rectangular embanked enclosure (NPRN 402888) of unknown date, roughly 225m northeast of the development area. The enclosure is described as in the region of 35m across, set upon sloping ground. The only feature visible within is what appears to be an elongated rectilinear mound.

It was therefore considered that there was potential that archaeological deposits or features of Roman or prehistoric date could survive within the development area and that these may be exposed, damaged or destroyed by development ground works.

This written scheme of investigation outlines the methodology through which DAT Archaeological Services will undertake an archaeological watching brief during ground works at the site, which have the potential to expose, damage or destroy archaeological remains. The archaeological watching brief will enable any such remains to be archaeologically recorded prior to the development commencing and provides a suitable mitigation strategy. This document has been prepared for the client and is specifically prepared for DAT Archaeological Services to undertake the required archaeological works. The WSI cannot be used by any third party.

The written scheme of investigation is in accordance with the Standard and Guidance for Archaeological Watching Briefs (Chartered Institute for Archaeologists (CIfA), 2014).

DAT Archaeological Services has considerable experience of this type of project and always operates to best professional practice. DAT Archaeological Services is the contractual arm of Dyfed Archaeological Trust that has its own Health and Safety Policy, and all works are covered by appropriate Employer's Liability and Public Liability Insurances. Copies of all are available on request.

Dyfed Archaeological Trust is a CIfA Registered Organisation and all permanent staff are CSCS registered.

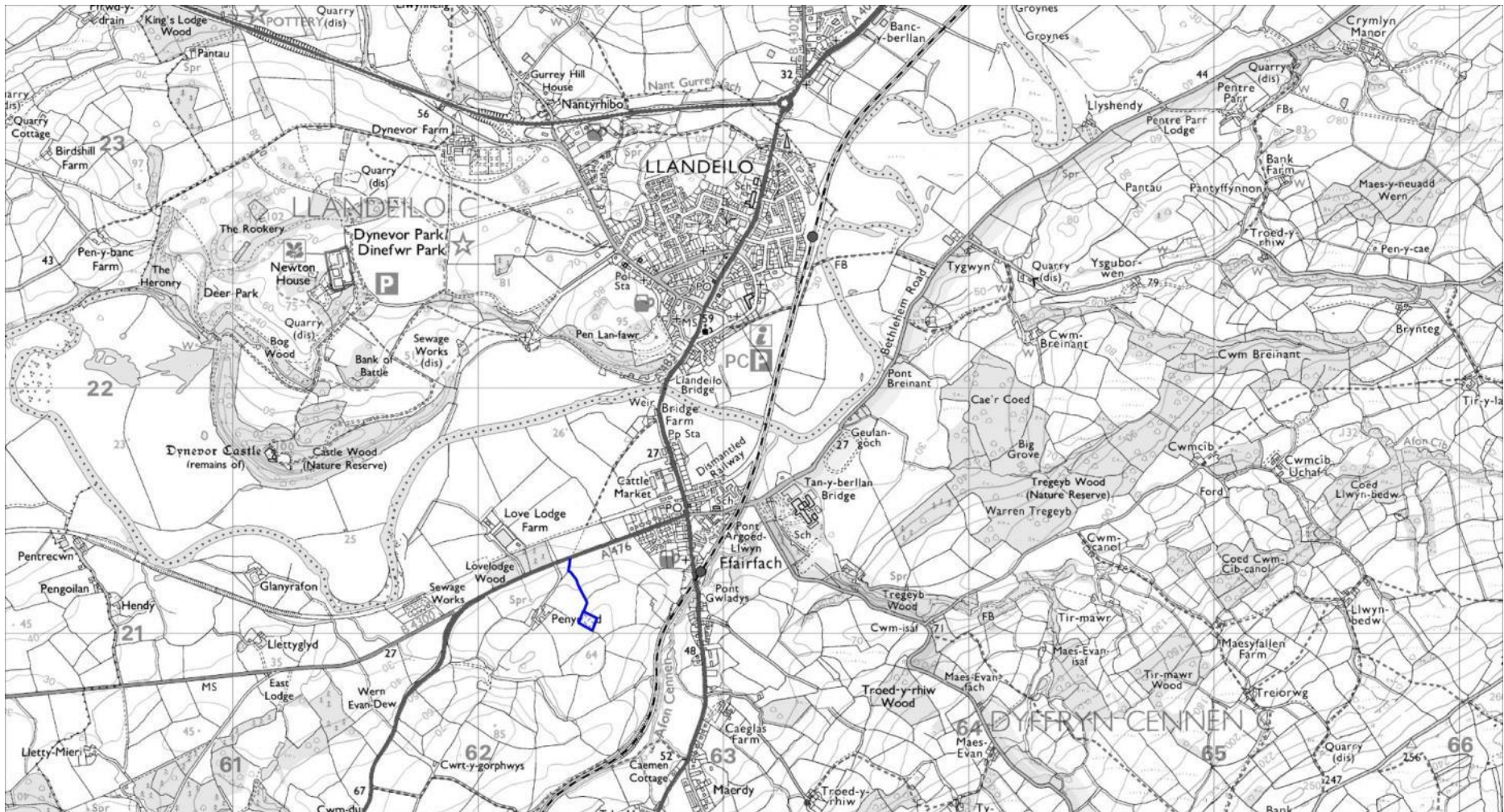


Figure 1: Map extract showing the location of development area (outlined in blue)

Reproduced from the Ordnance Survey 1:25,000 scale Map with the permission of The Controller of Her Majesty's Stationery Office,
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Figure 2: Plan of development (supplied by client)

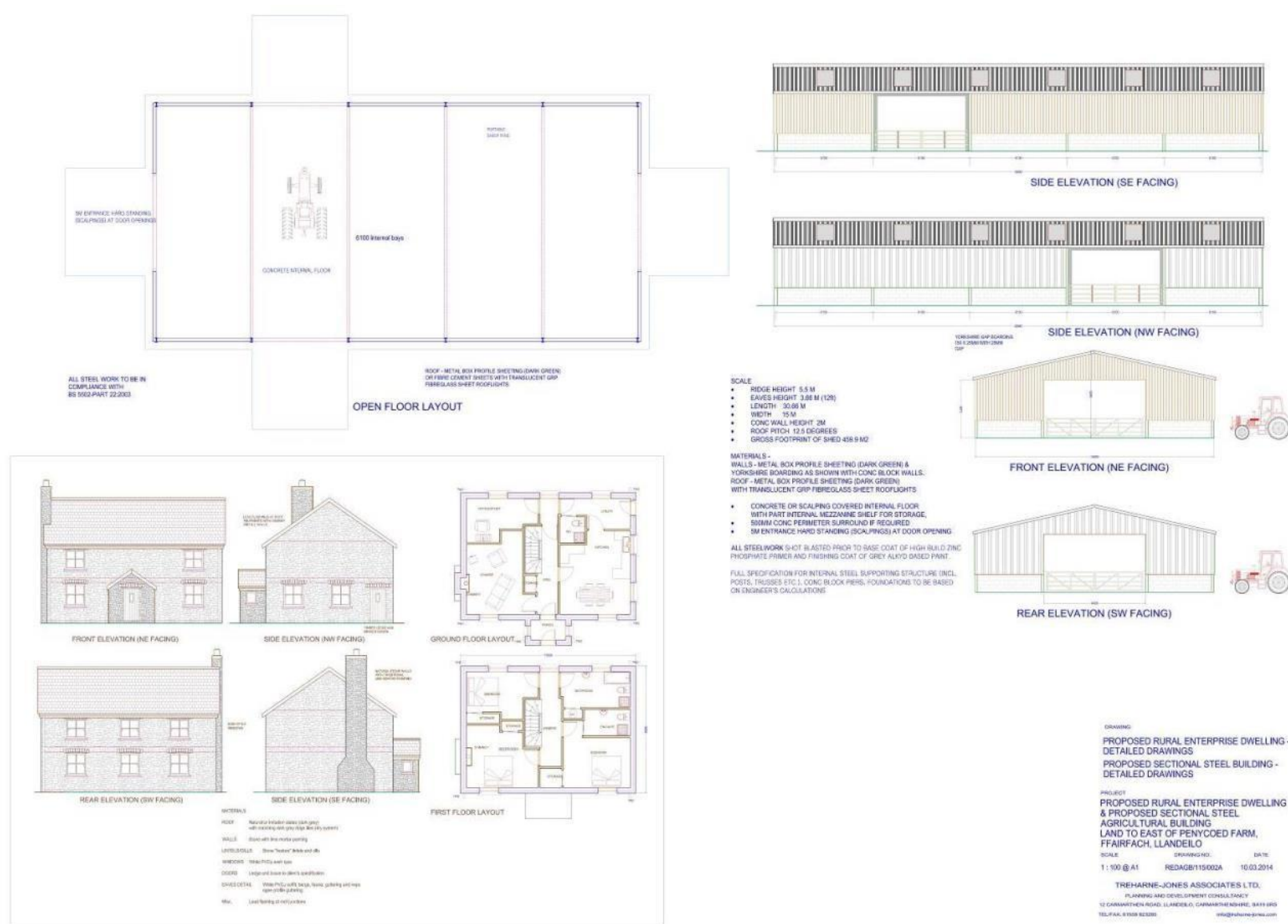


Figure 3: Detailed design of development (supplied by client)

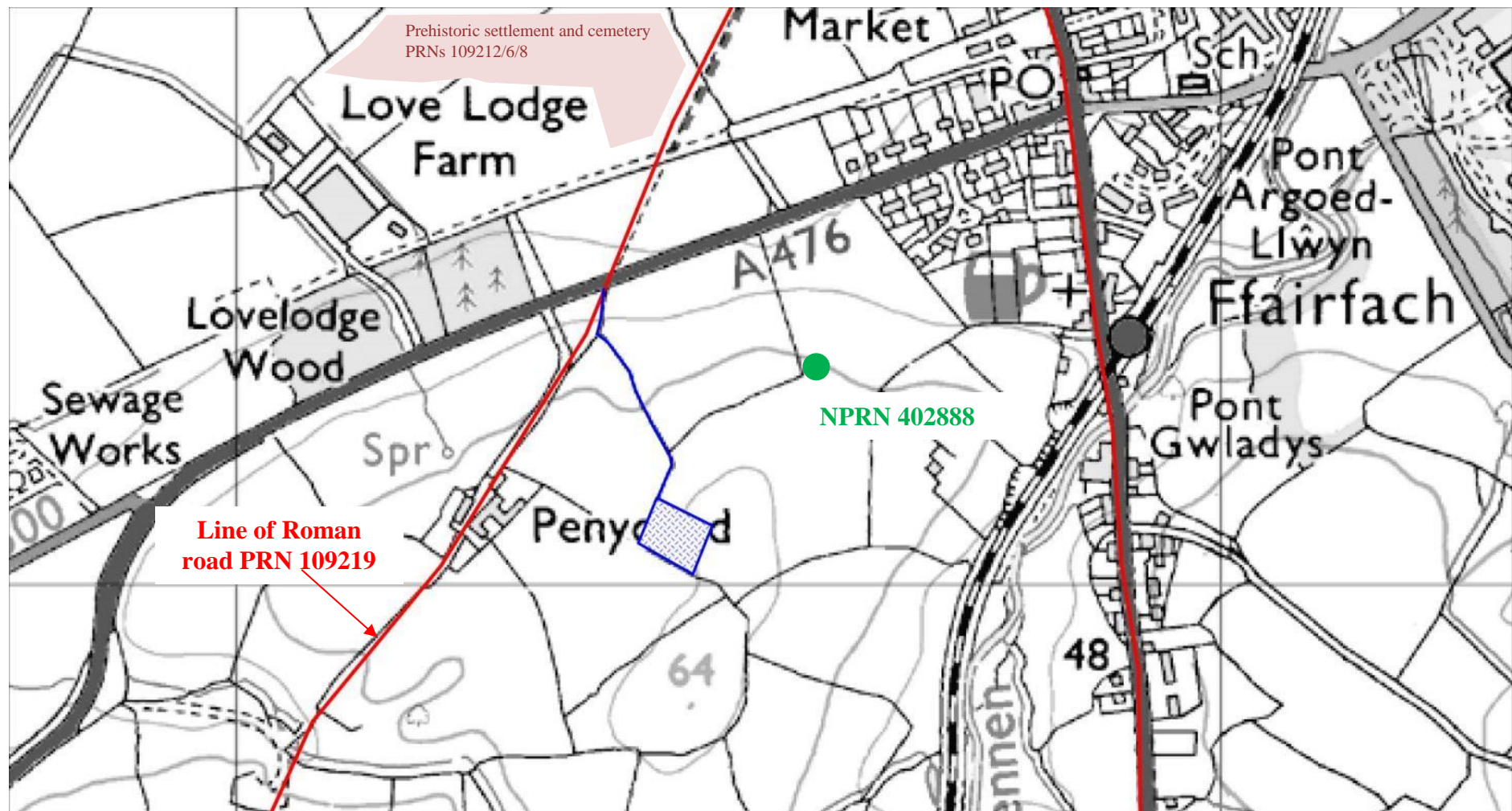


Figure 4: Location of development (blue) and line of Roman roads (red), as well as other archaeological sites in the surrounding area. Details of sites listed in Table1.

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PRN	NPRN	NAME	SITE TYPE	DATE	DESCRIPTION	GRID REFERENCE
109212		Love Lodge Farm	Cemetery	Bronze Age	A total of eight middle Bronze Age cremation pits recorded during excavation in 2014 (PRN 109211). Four of these pits were in an area associated with a number of pits, post holes and stake holes. The base of a cordoned early Bronze Age pot, with a cross motif applied to the internal face, was recovered from one of the post-holes, where it had been used as packing material	SN6235021604
109216		Love Lodge Farm	Settlement/ cemetery	Iron Age	Four ring-ditches excavated in 2014. Radiocarbon dating has demonstrated that these were Iron Age features. Their dates span that period, the earliest being 768-432 BC and the latest being 108 BC-AD 65. It has been suggested that these monuments were constructed at fairly regular intervals, possibly by successive generations every 100 years or so. No burials were found associated with any of the ring-ditches. 2nd century Roman pottery was found in the lower/middle fills of the most easterly ring-ditch and Roman pottery was also found in a possible hearth/fire pit cut into these fills.	SN6227721567
109218		Love Lodge Farm	Ring ditch	Neolithic	A ring-ditch of possible Neolithic date excavated in 2014.	SN6231121598
109219		Love Lodge Farm	Road	Roman	A section of Roman road excavated in 2014 in the area of Love Lodge Farm. Much of the original road was gone with only traces of the foundation layers remaining. Enough survived however, to show that the road was of typical Roman construction. It is heading southwest from Llandeilo, possibly in the direction of the Roman fort at Loughour (GGAT PRN 00202w). On historic maps of the area the line of the Roman road appears as a field boundary/track crossing the development site, suggesting that it was in use as a right of way well into the post-medieval period in this area.	SN6241121383
	402888	Earthworks south-west of Ffairfach	Earthwork	Unknown	an apparent sub-rectangular embanked enclosure (NPRN 402888) of unknown date, roughly 225m northeast of the development area. The enclosure is described as in the region of 35m across, set upon sloping ground. The only feature visible within is what appears to be an elongated rectilinear mound.	SN62582123

Table 1: Archaeological and historical sites recorded on the Dyfed Historic Environment Record in the near surrounding area of the proposed development site. Locations shown in Figure 4

1. WATCHING BRIEF

- 1.1 The definition of archaeological watching brief, taken from the Chartered Institute for Archaeologists Standards and Guidance: for Archaeological Watching Briefs (CIfA S&G: AWB 2014) is a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons. This will be within a specified area or site on land, inter-tidal zone or underwater, where there is a possibility that archaeological deposits may be disturbed or destroyed. The programme will result in the preparation of a report and ordered archive.
- 1.2 The purpose of a watching brief, as laid down in the CIfA S&G AWB is:
- to allow, within the resources available, the preservation by record of archaeological deposits, the presence and nature of which could not be established (or established with sufficient accuracy) in advance of development or other potentially disruptive works;*
- to provide an opportunity, if needed, for the watching archaeologist to signal to all interested parties, before the destruction of the material in question, that an archaeological find has been made for which the resources allocated to the watching brief itself are not sufficient to support treatment.*
- 1.3 This document provides a scheme of works for: **Archaeological attendance during ground works associated with the construction of an agricultural shed, access road and temporary mobile home on land east of Penycoed Farm, Ffairfach which could potentially expose, damage or destroy archaeological remains. Appropriate investigation and recording of any such remains will be undertaken if revealed. A report and archive of the results of the works will be prepared.**

2. PROJECT OBJECTIVES

- 2.1 Provision of a written scheme of investigation to outline the methodology by which DAT Archaeological Services will undertake the archaeological watching brief.
- 2.2 To monitor ground works in order to identify the presence/absence of any archaeological deposits.
- 2.3 To establish the character, extent and date range for any archaeological deposits to be affected by the proposed ground works.
- 2.4 To appropriately investigate and record any archaeological deposits to be affected by the ground works.
- 2.5 To produce an archive and report of any results.

3. FIELDWORK

- 3.1 The watching brief would entail an archaeologist being present during all ground works where there is a potential for archaeological remains to be exposed, damaged or destroyed. This will be carried out during any top soil stripping, but also includes further ground works such as excavation of foundation or service trenches.
- 3.2 It is essential coordination between the site contractor's and archaeologist is established at the outset to avoid any potential disturbance to archaeology without an archaeologist being present, or unnecessary visits

to the site when works are being carried out that do not require the presence of an archaeologist.

- 3.3 Adequate time must be made available to the visiting archaeologist to ensure that appropriate recording can be undertaken of any archaeological features or deposits exposed during ground works.
- 3.4 Recording of all archaeological features or deposits will conform to best current professional practice and be carried out in accordance with the Recording Manual³ used by DAT Archaeological Services. Significant archaeological features or deposits will be drawn at a suitable scale (no less than 1:20) and photographed in an appropriate format.
- 3.5 All archaeologically significant finds will be retained and, where possible, related to the contexts from which they derived. Finds will be temporarily stored by DAT Archaeological Services in stable conditions. All finds, except those deemed to be Treasure, will remain the property of the landowner.
- 3.6 Under the 1996 Treasure Act, "treasure" can be summarised as:
 - Any object other than a coin containing at least 10% gold or silver and at least 300 years old;
 - Any prehistoric assemblage of base metal;
 - Coins found together which contain 10% gold or silver (but no single coins) and groups of at least 10 coins of other metals, provided they are at least 300 years old;
 - Any object found associated with treasure except unworked natural objects; and
 - Any object which would have been Treasure Trove before the 1996 Act but not covered above.
- 3.7 In the event that unforeseen archaeological discoveries are made during the development, or that archaeological remains of high significance are exposed, DAT Archaeological Services shall have the power to halt any ground works and shall inform the site agent/project manager and the curatorial officer, and prepare a written statement with plan detailing the archaeological evidence. Following assessment of the archaeological remains by the curatorial officer, DAT Archaeological Services shall, if required, implement on behalf of the Client a contingency scheme for salvage excavation of affected archaeological features. In these instances it would be necessary to employ extra resources to record such features to an appropriate standard.
- 3.8 In the event that human remains are encountered, the District Coroner's Office and the Police will be notified immediately. All human remains will, where possible, be left *in situ*. If preservation *in situ* is not possible all statutory permissions will be obtained in writing before removal begins.

4. POST-FIELDWORK REPORTING AND ARCHIVING

- 4.1 An archive will be prepared if it meets the requirements of the Dyfed Archaeological Trust archive retention policy (2018). If it does, then data recovered during the evaluation will be collated into a site archive structured in accordance with the specifications in Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation

³ DAT Archaeological Services have adopted the Recording Manual developed by English Heritage Centre for Archaeology. A copy will be available on-site for inspection if required.

(Brown 2011), and the procedures recommended by the National Monuments Record, Aberystwyth. The National Standards for Wales for Collecting and Depositing Archaeological Archives produced by the Federation of Museums and Art Galleries of Wales will also be adhered to. Digital archives will be collated using the Royal Commission on the Ancient and Historical Monuments of Wales systems (2015) and deposited with the RCAHMW. The Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs) shall be followed.

- 4.2 The results of the fieldwork will be assessed in local, regional and wider contexts.
- 4.3 The results will be used to inform subsequent design considerations of the proposed development so that they can aim to avoid impacts upon any archaeological remains or that further archaeological mitigation can be implemented before such remains are disturbed.
- 4.4 The project archive, including all significant artefacts and ecofacts (excepting those which may be deemed to be Treasure) will be deposited with an appropriate body following agreement with the landowner (if retained and containing more than just digital information).
- 4.5 DAT Archaeological Services will arrange for the deposition of finds, and ascertain the costs of storage and deposition, with an approved body before the project commences and inform the curator of the arrangement which has been made.
- 4.6 A summary of the project results, excluding any confidential information, may be prepared for wider dissemination (e.g. Archaeology in Wales and special interest and period-specific journals).
- 4.7 The report will be prepared to follow the Standard and Guidance for Archaeological Watching Briefs (CifA S&G: AWB 2014).
- 4.8 Digital copies of the report will be provided to the client, as well as the Dyfed Archaeological Trust - Development Management.
- 4.9 Appropriate specialists to be used by DAT Archaeological Services include:
 - **Industrial Archaeology** –Jennifer Protheroe-Jones, Principal Curator – Industry, National Waterfront Museum, Swansea
 - **Post-medieval / medieval pottery** – Dee Brennan (local independent specialist)
 - **Prehistoric Pottery** – Dr Alex Gibson (formerly of University of Bradford / now Independent pottery specialist)
 - **Prehistoric Flint** – Dr Andrew David (formerly of English Heritage, now independent lithics specialist)
 - **Radiocarbon dating** Scottish Universities Environmental Research Centre (SUERC)
 - **Animal Bones** – Worcester Archaeology
 - **Fish bones** – Jennifer Browning (University of Leicester Archaeological Services)
 - **Environmental / Pollen analysis** – Worcester Archaeology

5. STAFF

- 5.1 The project will be managed by James Meek.
- 5.2 The on-site works will be undertaken by experienced archaeologists, from DAT Archaeological Services.

6. QUALITY ASSURANCE

- 6.1 DAT Archaeological Services has considerable experience of undertaking all categories of archaeological fieldwork and always operates to best professional practice; adhering to CIfA guidelines where appropriate. The Trust is a Registered Organisation with CIfA and all staff abide by their code of conduct and adhere to their relevant standards and guidance.
- 6.2 DAT Archaeological Services operate robust internal monitoring procedures that ensure that the standard of each project is maintained from commencement to completion.

7 MONITORING

- 7.1 The watching brief may require monitoring by the archaeological advisor to the planning authority, Dyfed Archaeological Trust – Development Management, who should be told of the commencement of the works. The fieldwork may also need to be monitored by the Head of DAT Archaeological Services.
- 7.2 All parties should be provided with free access to the site at any time during the watching brief works.

8 HEALTH AND SAFETY

- 8.1 All DAT Archaeological Services staff are CSCS⁴ registered.
- 8.2 Service information should be obtained prior to the start of the works.
- 8.3 A health and safety risk assessment must be prepared prior to the works commencing to ensure that all potential risks are minimised.
- 8.4 All relevant health and safety regulations must be followed.
- 8.5 All site inductions, H&S procedures, H&S constraints and site rules of the client or any on-site contractor will be made known to the archaeological contractor at the start of the works.
- 8.6 Safety helmets, safety boots and high visibility vests are to be used by all site personnel as necessary. The site contractors will make all archaeological staff aware of any other PPE that may be required and provide them. Archaeological staff must not enter any area where there is a considered to be a health and safety risk that has not or is not being appropriately mitigated against.
- 8.7 DAT Archaeological Services staff must ensure that their presence on site is communicated to all relevant site staff, especially machine operators.

9 ARBITRATION

- 9.1 Any dispute or disagreement arising out of a contract in relation to this work shall be referred for a decision to the Chartered Institute of Archaeologist's arbitration scheme.

⁴ *Construction Skills Certification Scheme (Health and Safety Tested)*

