

DWR CYMRU WATER MAIN RENEWAL SCHEME PHASE I AND II, LLANCYNFELYN, CEREDIGION: ARCHAEOLOGICAL WATCHING BRIEF



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**DWR CYMRU WATER MAIN RENEWAL SCHEME
PHASE I AND II, LLANCYNFELYN, CEREDIGION:
ARCHAEOLOGICAL WATCHING BRIEF**

Gan / By

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DWR CYMRU WATER MAIN RENEWAL SCHEME PHASE I AND II LLANCYNFELYN, CEREDIGION: ARCHAEOLOGICAL WATCHING BRIEF

SUMMARY

An archaeological watching brief was undertaken during excavation works as part of Phase II of the Llancynfelyn Water Main Renewal Scheme following recommendation from the archaeological advisors to the local planning authority. Phase I of the works was not unfortunately not monitored due miscommunication with the onsite contractor. The work was commissioned from Dyfed Archaeological Trust by Dwr Cymru

Two monitoring visits were made to the site area during the excavation works for Phase II. The only deposits that were revealed within the excavated trenches were modern road formation layers that are of minimal archaeological interest.

Test pitting works in the vicinity of Llancynfelyn Church to locate the position of the existing water main and to determine ground suitability for drilling operations revealed further modern road formation layers of minimal archaeological interest. No open cut trenching was undertaken in this area as the ground was found to be suitable for drilling works.

The road formation layers and turf along the grass verge all lay directly over undisturbed natural; clay deposits beneath. No indication for any peat deposits associated with the large peat bogs of Cors Fochno were revealed within the excavated areas. No deposits of rinds of medieval or post-medieval date were recovered from the areas.

No further archaeological features or deposits were revealed during the course of the archaeological watching brief. Given the small scale nature of the intrusive works, and the fact that they were targeting an existing length of pipe trench, it is considered that the overall impact of the works on archaeological remains was minimal.

Whilst the intrusive works failed to reveal any significant archaeological features the potential for hitherto unknown archaeological remains to be present within the area is considered to remain high.

1. INTRODUCTION

1.1 Project Commission

1.1.1 Dwr Cymru proposed to undertake a water mains renewal scheme at Llancynfelyn, Ceredigion (roughly centred at NGR SN 6300 9276).

1.1.2 The recommendation for an archaeological watching brief was placed on the water main renewal scheme following advice from the archaeological advisors to the local planning authority, as the site lies within an area of known medieval and later medieval activity. It was considered possible that the proposed works could expose, damage or destroy below ground archaeological remains associated with activity of these dates, as well as potentially exposing earlier remains or palaeo-environmental deposits.

1.1.3 Dwr Cymru commissioned Dyfed Archaeological Trust Field Services to undertake the archaeological watching brief.

1.2 Scope of the Project

1.2.1 The scheme involves the replacement of an existing water main running through the village of Llancynfelyn, Ceredigion. The water main will mostly be replaced through the use of drilling through the old pipe and pushing through a replacement (pipe splitting). A few areas of open cut trenches were required on the route, and these were the areas where there was a potential for archaeological remains to be exposed, damaged or destroyed. Archaeological observation was undertaken in these areas only.

1.2.2 A written scheme of investigation (WSI) was prepared by Dyfed Archaeological Trust Field Services prior to the commencement of the works, which was approved by the archaeological advisor to the planning authority. The WSI stated that the project objectives were:

- Provision of a written scheme of investigation to outline the methodology by which Dyfed Archaeological Trust 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 ground works.
- To appropriately investigate and record any archaeological deposits to be affected by the ground works.
- To produce an archive and report of any results.

1.2.3 The overall aim of the work was to undertake archaeological attendance during the proposed groundworks at the site when they had the potential to expose, damage or destroy archaeological remains, and undertake appropriate investigation and recording of any such remains if revealed.

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 Record¹ (HER) are identified by their Primary Record Number (PRN) and located by their National Grid Reference (NGR). Dyfed Archaeological Trust Field Services – DAT-FS; Dyfed Archaeological Trust Heritage Management – DAT-HM; Scheduled Ancient Monument – SAM; Written Scheme of Investigation – WSI

1.5 Illustrations

1.5.1 Photographic images are to be found at the back of the report. Printed map extracts are not necessarily reproduced to their original scale.

1.6 Timeline

1.6.1 The following timeline shown in Table 1 below 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 1066	
Medieval Period –	1066 – 1536	
Post-Medieval Period ² –	1536 – 1750	
Industrial Period –	1750 – 1899	
Modern –	20th century onwards	

Table 1: Archaeological and historical timeline for Wales

¹ Held and managed by Dyfed Archaeological Trust, The Shire Hall, Carmarthen Street, Llandeilo SA19 6AF.

² 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

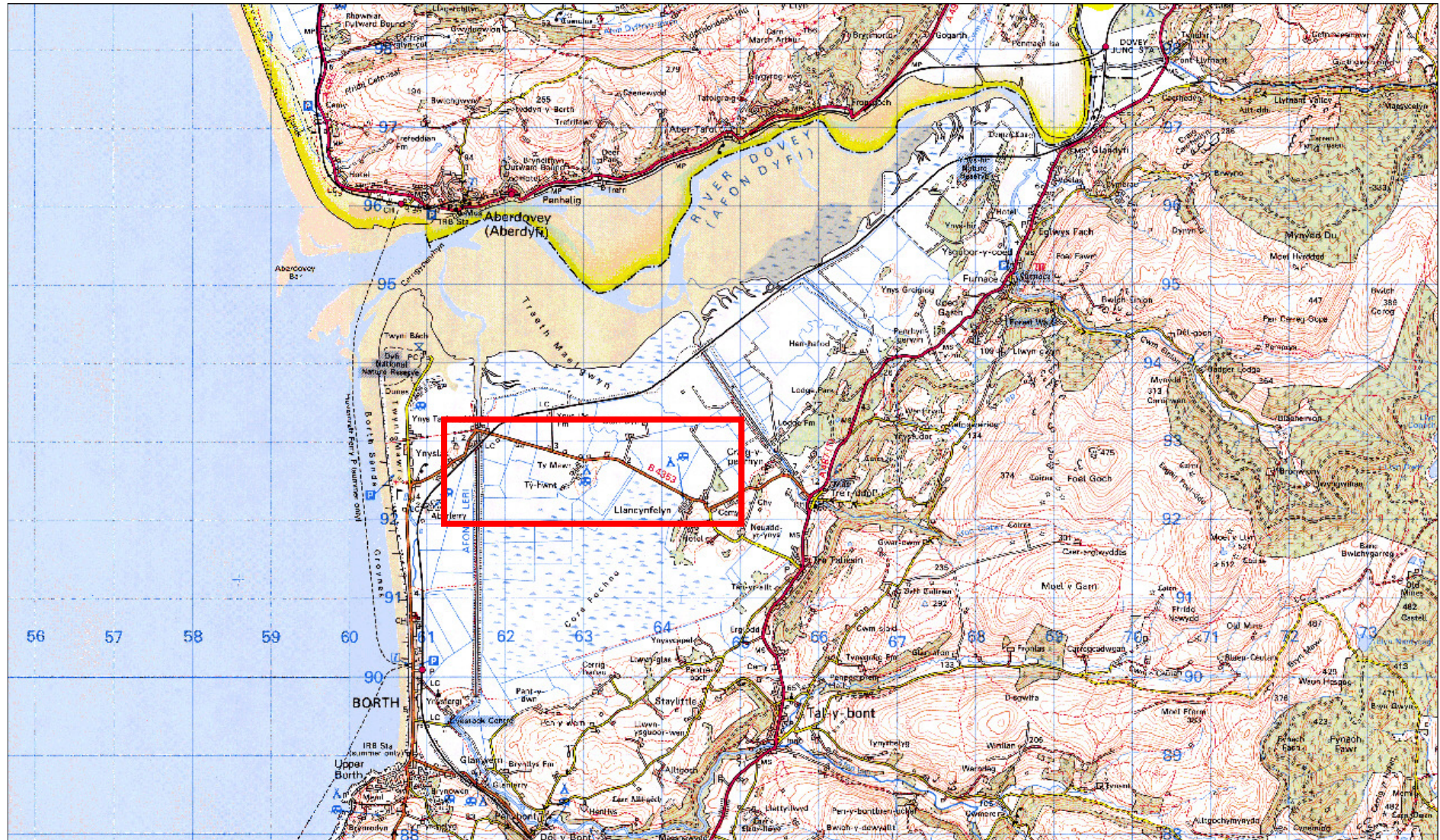


Figure 1: Site location map based upon the Ordnance Survey

Reproduced from the 2003 Ordnance Survey 1:50,000 scale Landranger Map with the permission of The Controller of Her Majesty's Stationery Office, © Crown Copyright Dyfed Archaeological Trust, The Shire Hall, Carmarthen Street, Llandeilo, Carmarthenshire SA19 6AF. Licence No AL51842A

2. THE SITE

2.1 Location

2.1.1 The Phase II project area runs from close to Llancynfelyn Parish church (SN 6461 9214), west along the B4353 towards Borth, ending at Ynyslas (SN 6128 9271), a total of c.3.8km. The B4353 itself runs through the northern edge of Borth Bog/ Cors Fochno, an extensive estuarine raised bog containing the largest expanse of primary surface lowland bog in the U.K.

2.2 Archaeological and Historical Background

2.2.1 A total of twenty seven sites are recorded on the Regional HER as lying in close proximity to the water main renewal works route (See Table 2). However, it is the general ground conditions of the area, bordering Cors Fochno that offer higher potential for the exposure of buried peat deposits relating to prehistoric land surfaces, and in which there is higher potential for organic preservation of artefacts if they are present.

2.2.2 Peat levels have been building up at Cors Fochno for around 5000 years, until agricultural drainage works of the 18th and 19th century. It is possible that Palaeolithic and Mesolithic sites now lie buried beneath this peat. The route of the water main renewal takes it across several small 'islands' within the peat, such as Llancynfelyn, Ynys Mochno and Ynys Las, all areas that are likely to have attracted activity as people attempted to exploit the local resources. As the peat bog levels continued to rise, evidence of this activity may now be preserved within the peat. Prehistoric activity has been recorded along the southern fringes of the bog, in the form of flint finds and burnt mounds, along with a well-preserved Bronze Age wooden box structure recovered to the south of Llancynfelyn.

2.2.3 An early medieval wooden trackway has also been preserved by the peat and recorded to the south of Llancynfelyn. It is possible that the churchyard of St Cynfelyn's (PRN 50147), which lies adjacent to the line of the water mains renewal, also has early medieval origins. The church itself (PRNs 5431, 17366; Photo 1) is first recorded during the medieval period, and further medieval activity along this route is shown by the discovery of a hoard of medieval coins (PRN 6096) on Ynys Mochno during the construction of the B4353.

2.2.4 By the 18th century much of the peat bog was being drained and managed for farmland, with many new farmsteads established within this area, several of which lie adjacent to the route of the water mains renewal. Lead mines and quarries are also another common feature of the post-medieval period. The railway line was also built across the bog in the 19th century. More recent archaeological sites relate to possible Second World War structures built on Ynys Las.

PRN	Site Name	Description	Grid Reference
5431	St Cynfelyn's Church	Medieval chapelry, which became a parish church during the post-medieval period	SN64589218
5432	Afon Leri Bridge	A railway bridge built in 1863.	SN61679295
6096	Ty Mawr Mochno	A hoard of medieval coins	SN63059274
10616	Plas Ynys	A 20th century military structure or reservoir.	SN6123792705
10617	Saxondale	A 20th century military structure or reservoir building.	SN6130192748
10618	Ynyslas Railway Station	Site of Ynyslas Railway Station. Station opened in 1863 and eventually closed in 1965 and subsequently demolished	SN6130192748
13678	Cors Fochno Common	An area of common land	SN637924
17366	St Cynfelyn's Church	Listed church building	SN6457892188
19851	Pont Aberler	Modern concrete and steel bridge.	SN61569313
19852	Quarry	A post-medieval quarry.	SN61549310
19854	Quarry	A post-medieval quarry	SN61259287
19855	Penpontbren-Mochno	The name of the nearby dwellings suggests a former bridge crossing.	SN63509285
19857	Quarry	A post-medieval quarry	SN64359220
19858	Lodge	A post-medieval lodge house	SN64599195
25819	Llwyn-walter lead mine	A post-medieval lead mine	SN628929
35312	Sea defences	Earth bank sea defences between and along the Afon Leri and Afon Clettwr.	SN61709318
35314	Ynys-Las Sawmill	A 19th century sawmill on the east side of the river Leri.	SN61659320
35333	Landing place	A post-medieval landing place and public watering hole.	SN61659320
35897	Ynys-Las Sawmill	A sawmill shown on the west side of the Leri replacing sawmill PRN 35314.	SN61629322
35898	Ynys-Las Sawmill	A short railway line from the Cambrian railway to the 20th century saw mill at Ynys-Las	SN61609289
50147	St Cynfelyn's Parish Church	Possible early-medieval origins to the parish church of St Cynfelyn's.	SN64589218
94902	Ynys Las Gardens	Nursery gardens first shown on the 1st edition Ordnance Survey map of 1889.	SN61399274
94919	Ty Canol/Ty Mawr farmstead	18th century building expanded to a farmstead by the early 19th century.	SN61389293
94921	Pen Mochno/Pen Pontbren farmstead	A post-medieval farmstead complex on the edge of Ynys Mochno.	SN63339291
94926	Dan y llan farmstead	18th century building expanded to a farmstead by the early 19th century.	SN64519226
94938	Tan y Bryn farmstead	A mid-19th century farmstead complex.	SN62989280
94943	Ty Mawr Mochno	A mid to late 19th century farmstead complex.	SN62949269

Table 2: Known sites of archaeological interest in close proximity to the route of the water main renewal recorded on the Regional HER

Dwr Cymru Water Main Renewal Scheme Phase I and II Llancynfelyn, Ceredigion:
Archaeological Watching Brief

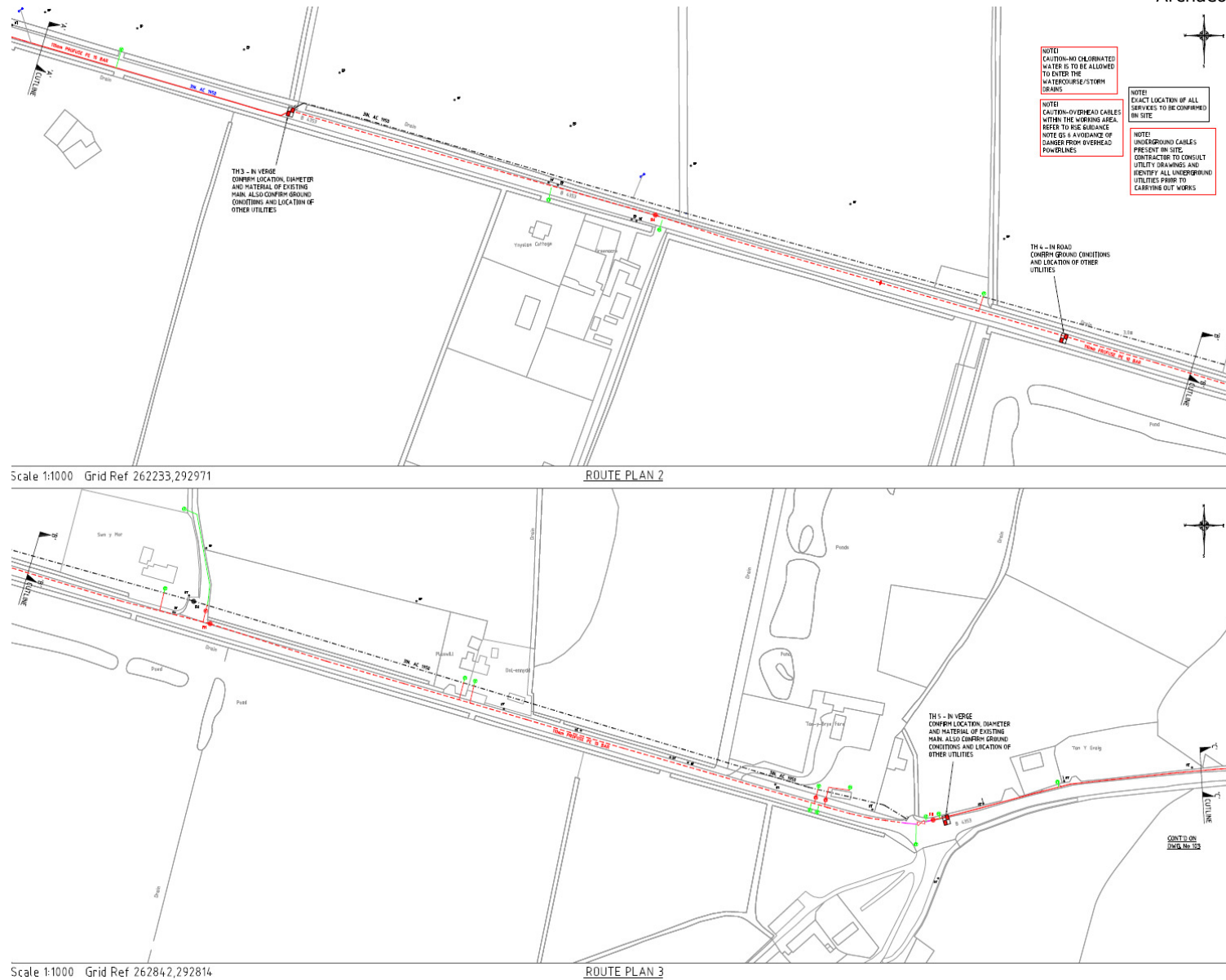


Figure 2: Route of Phase II works monitored on line of B4353 road. (plan supplied by Dwr Cymru)

Grid Ref 264511,292209

ROUTE PLAN 6

Dyfed Archaeological Trust

3. WATCHING BRIEF METHODOLOGY

The detailed methodology for the watching brief was laid out within the WSI. The relevant methodology can be summarised as follows.

3.1 Fieldwork

3.1.1 A 'watching brief' was undertaken during open cut works along the water main renewal scheme route that 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 Manual³ used by Dyfed Archaeological Trust Field Services.

3.2 Post-Fieldwork Reporting and Archiving

3.2.1 All data recovered during the fieldwork 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* (Brown 2007), and the procedures recommended by the National Monuments Record, Aberystwyth.

3.2.2 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.

3.2.3 A report fully representative of the results of the fieldwork has been prepared.

3.3 Timetabling of Fieldwork

3.3.1 The watching brief methodology involved monitoring of groundworks during two phases of excavation works for the Phase II scheme. These were undertaken on 1st February and 27th February 2012.

3.3.2 A site visit was also undertaken to the Phase I works on 15th September the day DAT-FS had been told works would commence. Unfortunately due to mis-communication, DAT-FS had not been told that the start date had been delayed. The works had been completed by the time DAT-FS contacted the site contractors to ask about start dates and progress later in the week.

³ Dyfed Archaeological Trust Field 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

4.1 Phase I Works

4.1.1 Following communication from the site contractor a single site visit was made during Phase I of the water main renewal scheme to monitor the excavation of test pits on the route of the proposed works. On arrival it was found that no contractors were present on site as the start date had been delayed. A subsequent telephone conversation made to the contractor a few days later revealed that the test pitting works had been completed and backfilled.

4.2 Phase II Works

Area 1 (NGR SN 6185 9308 – SN 6261 9286); (Figure 2)

4.2.1 A site visit was undertaken on the 1st February 2012 to monitor excavation works along the route of the water main renewal.

4.2.2 All of the excavated trenches revealed modern road formation layers overlying natural clays. The road formation layers are considered to be of minimal archaeological interest.

4.2.3 No peat deposits were revealed in any of the excavated areas, the trenches indicating that the road had been built directly upon natural clays (Photo 2).

4.2.4 With the exception of modern road formation layers no archaeological features and deposits were revealed during the site visit.

Test Pitting Area 2 (NGR SN 6450 9224 – SN 6458 9215); (Figure 3)

4.2.5 Following communication with the onsite contractor a further site visit was made on 27th February 2012 to monitor test pitting to locate the water main and test the ground conditions in the vicinity of Llancynfelyn Church (Photo 1).

4.2.6 The excavation of three test pits was monitored during the course of the site visit.

4.2.7 Two of the test pits were located within the roadline and revealed modern road formation layers overlying natural clays and bedrock, which are considered to be of minimal archaeological interest (Photos 3 & 4).

4.2.8 The third test pit was located on the grass verge adjacent to the road and revealed a 0.3m deep dark brown clay silt topsoil overlying natural clays (Photo 5).

4.2.9 With the exception of modern road formation layers no archaeological features or deposits were revealed during the course of the test pitting works.

5. CONCLUSIONS

5.1 The archaeological watching brief undertaken during the Llancynfelyn water mains renewal works revealed no archaeological remains within the excavated trenches monitored.

5.2 All of the trenches were excavated to find the location of an existing pipeline below ground and were excavated through backfill of the original pipe trench. As such it was unlikely that the works would significantly disturb archaeological remains, merely expose them (if present) within the sides of the excavated trenches. This is also the probable conclusion for the Phase I works that were not observed.

5.3 The majority of the observed trenches were excavated in the area of the existing B4353 road. Only modern road formation layers of minimal archaeological interest were exposed.

5.4 One trench was excavated within the grass verge revealing topsoil and undisturbed natural; subsoils and bedrock.

5.5 Although none of these trenches exposed significant archaeological remains, they do serve to demonstrate the absence of such deposits. If archaeological remains had been present in the past, they may have been removed during the construction of the existing road.

5.6 The lack of peat layers within the trenches within the road area would suggest that if any such remains were present, they were removed prior to its construction. The trench in the grass verge, where turf and subsoil lay directly upon clays and bedrock, would indicate that no such deposits were present in this area.

6. SOURCES

6.1 Databases

Dyfed Archaeological Trust Regional Historic Environment Record is held at The Shire Hall, Carmarthen Street, Llandeilo.

6.2 Map

Ordnance Survey 1:50000 Landranger.

PHOTOGRAPHS



Photo 1: North east facing view Llancynfelyn Church



Photo 2: North facing representative section showing road formation layers overlying clays (Area 1)



Photo 3: West facing section Test Pit 1 (Area 2)
(NGR SN 6453 9221)



Photo 4: North east facing section Test Pit 2 (Area 2)
(NGR SN 6457 9217)



Photo 5: East facing view of Test Pit 3 (Area 2)
(NGR SN 6448 9223)

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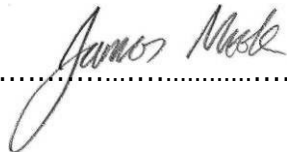
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