# FURNACE BANK, CARMARTHEN AN ARCHAEOLOGICAL DESK-TOP ASSESSMENT

September 2005



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#### ARCHAEOLEG CAMBRIA ARCHAEOLOGY

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# SUMMARY

Cambria Archaeology – Field Services, were commissioned by Owen Banks Ltd to undertake an archaeological desk-top assessment, following submission of a detailed specification, in response to a design brief produced by Cambria Archaeology–Heritage management (CA-HM) in its role as advisors to Carmarthenshire County Council.

The proposal is for the development of a former garage premises at Furnace Bank, Carmarthen (SN42062595) for residential use. The proposed development area is located close to two Scheduled Ancient Monuments and a listed building. The site is also in the immediate vicinity of former industrial buildings, including a tinplate works.

Cartographic evidence suggests that several historic features were present within the proposed development area including a row of small buildings and associated plots, a rope walk and a watercourse.

The watercourse was in existence by 1291 but may have Roman origins. The watercourse provided water to power three mills associated with Carmarthen Priory, and was later modified to provide power for a blast furnace, tinplate works and lead smelting works in the vicinity.

Former garage buildings on the site are constructed on level area of raised ground contained behind a terrace wall. The extent to which archaeologically significant features survive within the terrace material, or elsewhere on the site is at present unknown.

#### INTRODUCTION

Cambria Archaeology – Field Services, were commissioned by Owen Banks Ltd to undertake an archaeological desk-top assessment, following submission of a detailed specification, in response to a design brief produced by Cambria Archaeology – Heritage management (CA-HM) in its role as advisors to Carmarthenshire County Council.

The proposal is for the development of a former garage premises at Furnace Bank, Carmarthen, located on the south side of Priory Street (SN42062595). The site is located in the immediate vicinity of former industrial works including a tinplate works (PRN82 - PRN = Primary Record Number on the regional Sites and Monuments Record) and a blast furnace (PRN83), parts of which survive as standing buildings and which are now listed. Two Scheduled Ancient Monuments, the Roman Amphitheatre (PRN31) and the site of the medieval Augustinian priory (PRN230), are located nearby.

The former garage buildings on the site are thought to be associated with Lowndes Garage (located at No. 55 Priory Street), both of which are constructed on a level area of raised ground contained behind a terrace wall. The extent to which archaeologically significant features survive within or below the terrace material, or elsewhere on the site is at present unknown but cartographic evidence suggests that several historic features were present within the proposed development area.

#### AIMS AND OBJECTIVES

The aims and objectives of the desk-top assessment were as follows:

- Identification of the known or potential historical/ archaeological resource of the area.
- Assessment of the character, extent, date, integrity, state of preservation and the relative value and quality of the potential archaeological resource that will be affected by the development.
- Assessment of the national/regional context within which the archaeological/ historical evidence rests.
- Identification of any constraints to archaeological survival.
- Formulation of a strategy for further investigation (whether intrusive or not), where the character and value of the resource is not sufficiently defined to permit a mitigation strategy or other response to be defined.
- Formulation of a strategy to ensure the recording, preservation or management of the resource.
- Identification of any significant artefactual or ecofactual potential.

#### **METHODOLOGY**

The compilation of the desk-top assessment primarily consisted of consultation of the regional Sites and Monuments Record (SMR). This resource includes copies of maps, documents, photographs obtained from a variety of sources, including the Carmarthenshire County Records Office (CRO), the National Library of Wales (NLW) and the Royal Commission on Ancient and Historical Monuments in Wales (RCAHMW). The SMR also contains a variety of secondary sources including published and unpublished excavation reports and historical research.

#### **RESULTS**

#### Availability of documentary evidence

The following sites with relevance to the study area are identified in the SMR:

- 31 Moridunum Roman Aphitheatre
- 41 Priory Watercourse (mill race)
- 42 Priory Mills (Fulling mills and Corn mills)
- 44 Priory of St. John the Evangelist
- 71 Bishops House/Monastery of Llandeulyddog
- 82 Tinplate Works
- 83 Blast Furnace
- 84 Lead Smelting House
- 89 Gravel Pit
- 97 Tinworks Mill Pond
- 145 Rope Walk
- 10597 Sowther Tucking (Fulling) Mill
- 10598 Northern Fulling Mill
- 10599 Carmarthen Fulling Mill
- 42599 Roman Burials

A considerable quantity of published and unpublished material on the history and development of Carmarthen is readily available. In addition there are several publications on the history of the tin and iron industries in the region. Sources consulted or quoted in this study are listed in the sources.

#### Aerial photographs

Because the site has been built over possibly since the 1920s, aerial photographs held at the SMR did not show any useful detail in the area of the proposed development. The bank below the terrace was too wooded and in shadow to enable any detail to be seen.

## Cartographic evidence

The study area is included on several historic maps of Carmarthen spanning from 1786 to 1907, as well as on more recent maps. Details from these maps indicating the area of the proposed development site are included in this report. The detail and accuracy of the map depictions is variable, so it is not certain whether features such as the mill race lie within the development area or beyond it. It is also possible that features present at the time are not depicted on the maps.

#### Site development history

The area around Furnace Bank appears to have been on the periphery of Carmarthen for much of the history of the town's development. It has, however, been the location for important industrial and other activities, which eventually resulted in the spread of urban settlement along priory Street.

In Roman times the area was outside the town defences, but was nevertheless of significance. The Roman Amphitheatre (PRN 31) is located nearby on the north side of Priory Street. Evidence of Roman burials in the area has also been discovered on an excavation at Park Hall (PRN 42599). A Roman road approaching the town is believed to have run approximately on the line of Priory Street, but a watching brief at the former Lowndes Garage site at 55 Priory Street did not identify any evidence for the Roman road or any other Roman activity.

To the west of the proposed development area the 'bishop-house' or monastery of Llandeulyddog (PRN 71) was established immediately to the east of the Roman east gate in the medieval period. Llandeulyddog was mentioned as one of the seven 'bishops houses' of Dyfed in a possible 9<sup>th</sup> century text of Welsh Laws which may have been

referring to earlier 6<sup>th</sup> century events. This site controlled an Early Medieval settlement established along Priory Street. The Normans asserted control by establishing a Benedictine cell here in the early 12<sup>th</sup> century. This was replaced by the more popular Augustinians c.1125 and Llandeulyddog was re-founded as the Priory of St. John the Evangelist (PRN 44), from which Priory Street derived its name in. After the Dissolution the priory became a secular residence, recorded as the mansion house of Joyce Leyson in 1587. The priory site is a Scheduled Ancient Monument.

The property boundaries depicted on historic maps in the study area are reminiscent of medieval burgage plots. This, coupled with their location in relation to the priory, may suggest that settlement in this area dates from the medieval period.

The priory had three mills (PRNs 42, 10597, 10598, 10599) powered by a watercourse two miles long (PRN 41), which started from a weir on the Gwili River near Cwmgwili Mansion. The corn mills and fulling mills were possibly first established in this area with the establishment of the Augustinians at the Priory in Circa 1125, but the first mention of mills in the area is in a taxation of 1291. It is possible (but has not been proven) that this watercourse may have had its origins in the Roman period. These mills appear to have continued well into the post medieval period. The exact locations of these mills is not known.

The existence of the watercourse later led to the continuing industrial development of the area. In 1747 Robert Morgan established a blast furnace (PRN 83) at Furnace Bank which utilised the existing watercourse. A lead smelting works (PRN 84) was established on the site in 1760, but it closed down in 1800. Tin mills (PRN 82) commenced production in the area in 1761. These also utilised the existing watercourse, which was modified to make a mill pond for the tinplate works (PRN 97). Over the period of their productive life the tin mills expanded around the Furnace Bank area. Some of the buildings were re-sited when the railway was constructed in the mid 19th century. The tin mills were eventually closed in 1900 and partially demolished in 1902. By the time the priory mills had ceased production a large gravel pit (PRN 89) had been opened in the area of the present recreation ground. This feature is first represented on the 1st edition Ordnance Survey map of 1887. A plan of the Carmarthen Tin Mills in 1805 produced from various sources by Terry James (James 1976) indicates two lime-kilns on the south side of the mill race.

A rope walk (PRN 145) is first represented on the Carmarthen and Cardigan Railway map of 1864. A building alongside the rope walk is shown on the 1864 map. By 1887, a row of possible workers housing presumably also associated with the rope walk had been constructed, and a timber yard is marked between the rope walk and Furnace Bank.

Remains of the blast furnace survive as part of a showroom and part of the tinplate works are incorporated into a builders' merchants. These remains are now grade II listed. The date of construction of the garage buildings that currently stand on the site is uncertain but may be contemporary with Lowndes Garage at 55 Priory Street which was constructed in the 1920s. These buildings were in use by Carmarthen School of Art in the mid 1970s.

#### Site visit

A site visit was made to ascertain whether any significant archaeological features could be seen on the site, and to assess the potential for archaeological investigation on the site prior to any future redevelopment. The southern limit of the site is defined by a stone-built wall, originally associated with the tinplate works and now forming the limit of Jewsons yard. Most of the historic maps appear to suggest that the watercourse (PRN 41) is located on the north side of this wall, within a culvert, but this is not certain.

To the north of the wall is a sloping bank. This is heavily overgrown with brambles and saplings, to the extent that it was impossible to ascertain whether there were any

archaeologically significant features present. Above this bank is a revetment wall, constructed to create a level terrace of made up ground upon which the existing garage buildings are constructed. The buildings appear to be built on a concrete raft, and are constructed of steel frame and concrete blockwork, with steel and asbestos cladding.

The revetment wall appears to have been constructed in a piecemeal fashion out of concrete and wooden railway sleepers. There are also parts constructed of red brickwork. The brickwork may be associated with the rope walk (PRN 145). If this is so, it may suggest that further remains are preserved within the made-up ground behind the revetment wall.

#### **Excavations at Lowndes Garage**

An archaeological evaluation (PRN 48082) was recently undertaken close to the Furnace Bank site, at 55 Priory Street. The site has similarities to the Furnace Bank plot in the way it has been terraced to form a level platform and demonstrates the potential for archaeological deposits to survive below later development. When Lowndes Garage was built in the 1920s, nearly all the evidence for an earlier (19th century?) building on the site was truncated. The earlier building was constructed on a layer of make-up deposits laid down to create a level platform and contained behind a revetment wall. A small 'island' of surviving stratigraphy was identified as a possible Roman period horizon, suggesting that most Roman and medieval deposits may have been removed before the 19th century development.

#### The archaeological resource

From the documentary evidence outlined above there is a range of probabilities that a variety of archaeological features may survive within proposed development site. While no certain Roman deposits are known to exist in the vicinity, the likelihood that they do is increased by the presence of the nearby amphitheatre, and chance finds such as the Roman cremation urn recovered at Park Hall (Crane 2001).

Likewise, although there is no specific expectation that medieval deposits will be encountered, the nearby presence of the priory, and the documentary evidence for medieval mills in the area, can only increase the likelihood that medieval deposits might be encountered, especially since the medieval leat that provided water to power the mills runs along the southern edge of the development plot. Evidence for burgage plots and associated features (such as rubbish pits etc.) in this location, remains unproven.

With the establishment of a blast furnace adjacent to the site in 1747 and the subsequent development of the tinplate works, the likelihood of features associated with these industries being present is increased, even if the presence of specific features (such as lime kilns) within the development area cannot be predicted.

Cartographic evidence from the mid  $19^{th}$  century indicates the presence of a rope walk and associated workers' housing within the proposed development area. The site visit suggested that there was some possibility that elements of these features may survive below the existing garages, but this remains to be proven.

While the rope walk features can be considered as being of local significance to our understanding and appreciation of the industrial and residential development of this part of Carmarthen, Any features associated with the blast furnace or tinplate works can in addition be considered to be of regional importance in relation to the development of these industries generally. Any evidence relating to medieval or Roman activity in the area can be considered to be of potentially national significance, depending on its character.

There is at present, no evidence to suggest that the site has any specific or unusual ecofactual potential.

#### **DEVELOPMENT IMPACT**

The proposal is for re-development of the site for residential use. Given the current use of the site, any development is unlikely to have a detrimental physical or visual impact upon the known standing remains in the immediate surrounding area. There may, however, be an impact upon buried archaeological remains beneath the existing buildings on the site.

At present, the details of any future development are not known but they will presumably require the cutting of foundation and service trenches. The existing garage forecourt area may be constructed on solid ground, while the buildings are built on made ground behind the revetment wall. It seems unlikely that the existing revetment wall and made ground will be a suitable base for a modern development.

If a new revetment and building platform were to be constructed it is likely to have a considerable impact upon any remains of the rope walk and associated structures (such as the row of buildings represented on the Ordnance Survey map of 1887, that may survive). It is also possible that the overgrown bank may contain the remains of industrial structures such as limekilns that are often built in such locations.

The possibility that the property boundaries in this location are derived from medieval burgage plots, suggests that evidence of a variety of activities could survive within the development area.

Lastly, it is possible that future development may offer the opportunity to investigate the waterway (PRN 41). Although part of this leat survives, much has already been lost. Attempts to schedule this feature have failed but further damage or destruction should be avoided. Any opportunity to better understand its history and construction can help inform its future conservation.

#### SUGGESTED MITIGATION

At present, the exact nature of the proposed development is undecided. Considering the potential of the site to contain significant archaeological remains relating to the later industrial and residential development of the area (and the lesser possibility of medieval or Roman features being present), any development may require archaeological mitigation. However, because of the existing concrete slab and the presence of asbestos on the site, it would be difficult to undertake an archaeological evaluation of the site prior to demolition of the existing structures and removal of the concrete slab floors.

#### CONCLUSIONS

The area around Furnace Bank can be seen to be of considerable local regional and national importance in relation to the development of a variety of industries in the region and the effect these industries had on the historic development and growth of Carmarthen. The importance of the remains of these industries is reflected in the listing of the surviving standing elements and the attempt to schedule the remains of the Priory leat. The extent to which features represented on the historic maps may survive below the Furnace Bank site is at present unknown. The presence of additional features, not represented on the historic maps, including Medieval or Roman deposits is also unknown. The site does, however, have considerable potential for at least for the survival of 19<sup>th</sup> century rope walk and its associated workers housing.

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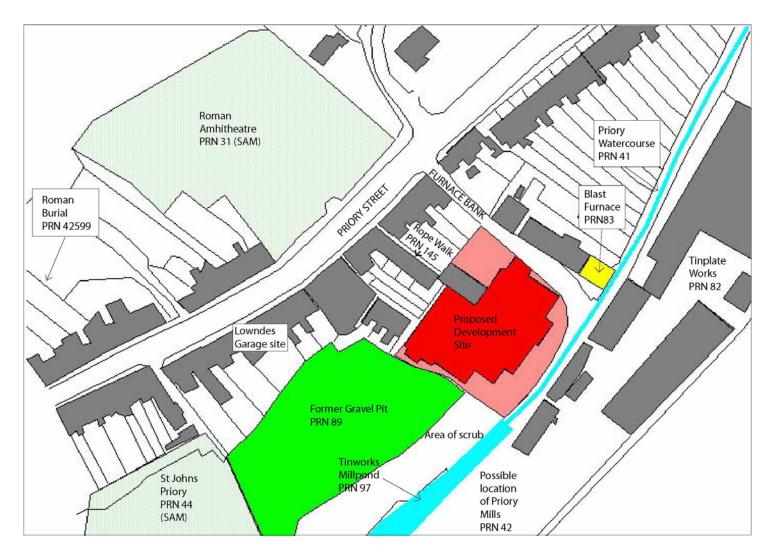
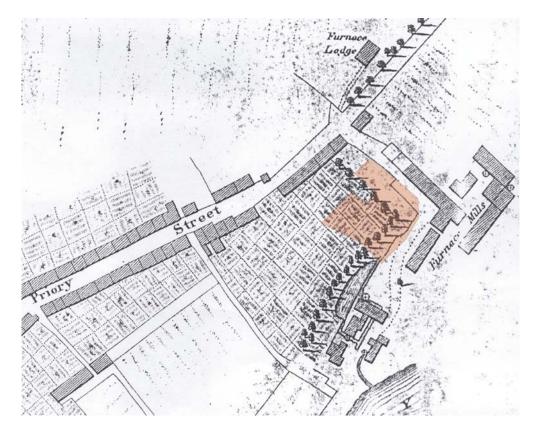


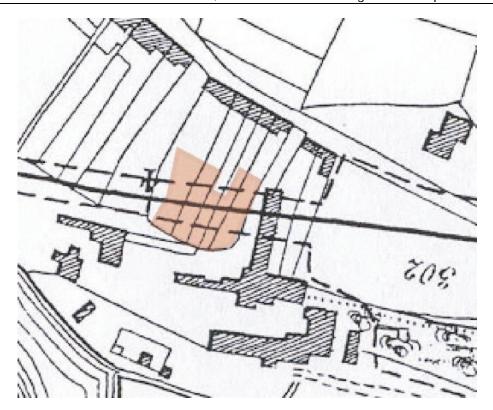
Figure 1: Site Location Plan (showing PRNs)



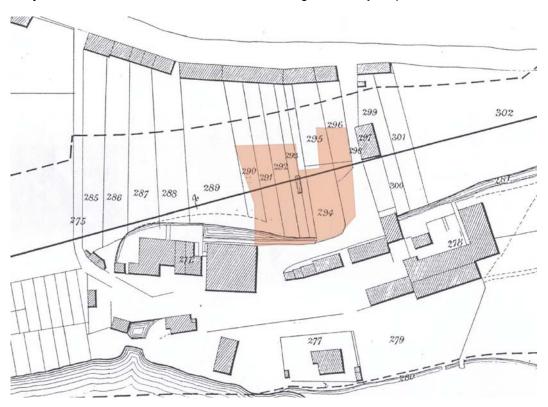
Map 1: Detail from Street Plan of Carmarthen in 1786 by Thomas Lewis



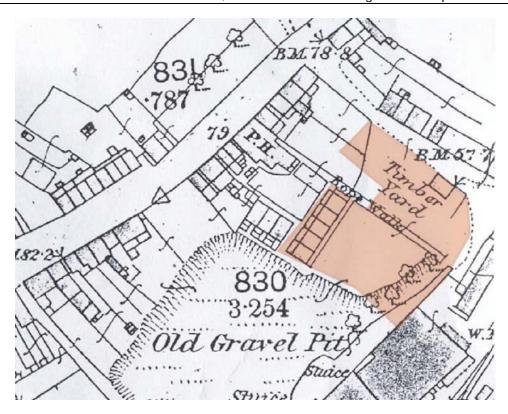
Map 2: Detail from 'Plan of Caermarthen' (1834) by John Wood



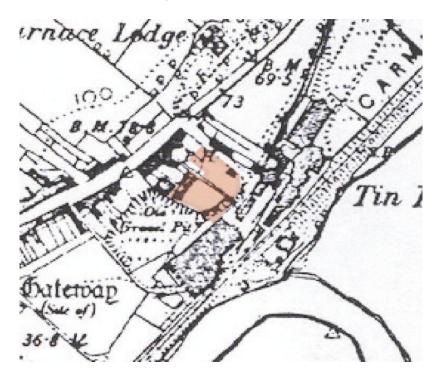
Map 3: Detail from 'Carmarthen and Cardigan Railway Map' of 1862?



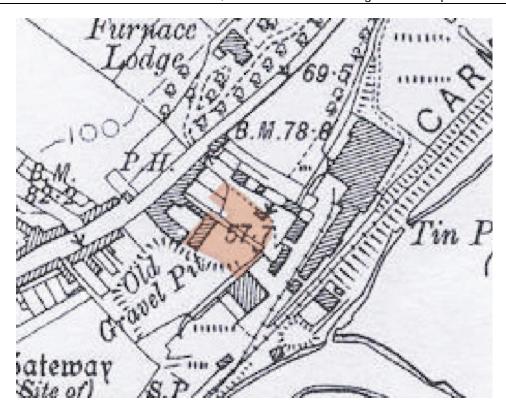
Map 4: Detail from 'Carmarthen and Cardigan Railway Map' of 1864?



**Map 5:** Ordnance Survey 1:25000, Carmarthenshire Sheet XXXIX.3, 1<sup>st</sup> ed, 1887 (detail showing site area)



Map 6: Ordnance Survey 1:10560, Carmarthenshire Sheet, XXXIXNE, 1<sup>st</sup> ed, 1891 (detail showing site area)



Map 7: Ordnance Survey 1:10560, Carmarthenshire Sheet, XXXIXNE, 2<sup>nd</sup> ed. 1907 (detail showing site area)



Photo 1: Southern boundary wall of the development area



Photo 2: Recess in boundary wall (unknown function)



**Photo 3:** Possible remnant of the rope walk (red brick and stone) extending from the revetment

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Yn unol â'n nôd i roddi gwasanaeth o ansawdd uchel, croesawn unrhyw sylwadausydd gennych ar gynnwys neu strwythur yr adroddiad hwn

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