# CARMARTHEN LIBRARY PROPOSED ARCHIVES BUILDING, CARMARTHEN: ARCHAEOLOGICAL WATCHING BRIEF (SN 4145 2026)





Prepared by DAT Archaeological Services For: Carmarthenshire County Council





#### DYFED ARCHAEOLOGICAL TRUST

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# CARMARTHEN LIBRARY PROPOSED ARCHIVES BUILDING, CARMARTHEN: ARCHAEOLOGICAL WATCHING BRIEF

Gan / By

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# CARMARTHEN LIBRARY PROPOSED ARCHIVES BUILDING, CARMARTHEN: ARCHAEOLOGICAL WATCHING BRIEF

#### SUMMARY

DAT Archaeological Services were commissioned by Carmarthenshire County Council to undertake an archaeological watching brief during geotechnical works at the site of the proposed new archives building to the rear of Carmarthen Library, Carmarthen (SN 4145 2026). The development area was the subject of a Historic Environment Appraisal undertaken by DAT Archaeological Services in 2016, which demonstrated the high archaeological potential of the site. The report included information on the observation of two geotechnical test pits opened on 17<sup>th</sup> October 2016. Further test pitting and percussive boreholes were observed on 26<sup>th</sup> September 2017 which indicated a large void beneath the eastern side of the development area. An archaeological watching brief was carried out during further investigations of this void area on 17<sup>th</sup>, 18<sup>th</sup> and 19<sup>th</sup> January 2018.

The proposed archive building development site lies within the Roman Town of Moridunum. The scheduled area of the town lies directly to the west which covers St Peter's Car Park and the Carmarthen Town Associated Football Club ground. The development site is located partly on the rampart of the town defences and partly within the occupied area of the town. The eastern boundary of the site is defined by the retaining wall between the higher ground of the Carmarthen Library site and the gardens of properties on Little Water Street. The difference in ground level is around 2m. The revetment wall is likely to follow (and could conceivably contain elements of) the former Roman town wall. Defensive ditches would have been present further east, with the Roman town ramparts behind the wall to the west.

The October 2016 test pitting indicated that the development area has in parts around 2.50m of archaeological stratigraphy present dating from the Roman to Post-Medieval periods. The September 2017 test pits were located against the existing Community Centre and Library Building in order to test the depths of the foundations. These were dug through disturbed ground associated with the construction of the buildings. The percussive boreholes were located on the eastern side of the site area, close to the retaining wall. Six of the 10 holes indicated a void at a depth of around 1m below ground surface of some 1.5m depth.

In January 2018 the area of the void was exposed in order to determine what it represented and also to determine suitable mitigation measures to enable the proposed archive building to be constructed. The void was evidently a brick vaulted water tank probably of 19th century date and possibly associated with formal gardens that used to be present in the area. The tank was alianed north to south separated in to two parts by a brick wall with a central opening near its top. The full extent of the northern chamber could not be determined due to previous truncation and the proximity of the retaining wall to Little Water Street. An arch apparently in the eastern of the northern vault was also investigated in case it led to a further void. A second wall was identified parallel to the water tank 0.60mto the east. Further investigations of this area identified that the arch in the northern vault was likely to be a small alcove in the thickness of the wall. A spread of stone and mortar was identified at the base of the eastern wall. Further investigation demonstrated that this stone spread was in fact a substantially built stone wall of 0.6m width. The wall was still present at 1.7m depth. It is most likely of Roman date either associated with the town defences of a structure built into the back of the ramparts. The excavated areas were backfilled with concrete, with the wall area first protect by a geotextile membrane.

#### 1. INTRODUCTION

#### 1.1 Project Commission

- 1.1.1 DAT Archaeological Services was commissioned by Carmarthenshire County Council to undertake an archaeological watching brief during works associated with geotechnical investigations in advance of the construction of the proposed new Carmarthenshire Archives Building. The proposed archives building will lie to the northeast of Carmarthen Library on King Street and northeast of Little Water Street (centred on NGR SN 4144 2027).
- 1.1.2 In advance of the submission of a planning application for the proposed development, an initial Historic Environment Appraisal was prepared by DAT Archaeological Services that would enable the planners to make an informed decision on the proposal as regards archaeological and historic environment issues (Meek 2016). During the preparation of this appraisal, a scheme of geotechnical investigations was undertaken at the site involving the excavation of two small test pits within the footprint of the proposed archives building. Following discussion with the Development Management section of Dyfed Archaeological Trust, in their capacity as archaeological advisors to the planning authority, it was agreed that an archaeological watching brief should be maintained during these works. The results of which were summarised in the appraisal (Meek 2016).
- 1.1.3 The Historic Environment Appraisal summarised the archaeological significance and potential of the site as follows: The proposed Carmarthen Library development site lies within the Roman Town of Moridunum. It is located partly on the rampart of the town defences and partly within the occupied area of the town. Test pitting confirms that the area has in parts around 2.50m of archaeological stratigraphy present dating from the Roman to Post-Medieval periods.

The site lies directly adjacent to the Scheduled Ancient Monument of the Roman Town; within the Carmarthen Historic landscape Character area; within 500m of seven Grade I and II\* Listed Buildings; within 500m of five Conservation Areas; within 250m of eighty four Grade II Listed Buildings; and within 250m of over two hundred archaeological sites recorded on the Dyfed Historic Environment Record.

Overall the site area has confirmed archaeological remains beneath it which is of very high archaeological significance. Further archaeological mitigation will be needed though the exact nature of this work will need to be discussed with the archaeological advisors to the planning authority, Dyfed Archaeological Trust Development Management. (Meek 2016)

1.1.4 Due to the identified archaeological sensitivity of the site area, the client (Carmarthenshire CC), the architects (Acanthus Holden) and the structural engineers (Roger Casey Associates) proposed a raft foundation for the new building to prevent disturbance of the underlying archaeological remains. In order to provide more information on the feasibility of the raft foundation further geotechnical investigations were required to determine the depth of foundations of the existing adjacent buildings through hand dug test pitting and also a series of windowless samples / percussive sampling on the western side of the area to test the stability of the ground adjacent to the retaining wall between the site area and Little Water Street. These were also archaeologically observed and the results included within this report.

- 1.1.5 Due to the above works identifying a void within the western side of the site area, a third programme of geotechnical works was undertaken to investigate the void. This was again archaeologically observed and the results included within this report.
- 1.1.6 Planning application W/35783 and Listed Building Consent W/25784 were submitted to Carmarthenshire County Council which was approved in early 2018.

#### 1.2 Scope of the Project

- 1.2.1 The archaeological watching brief was undertaken during geotechnical works to fulfil the following objectives:
  - To monitor the various stages of geotechnical investigations in order 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 where possible within the limitations of the geotechnical investigations;
  - To appropriately investigate and record any archaeological deposits exposed by the geotechnical investigations; and
  - To produce an archive and report of any results.

#### 1.3 Report Outline

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

#### 1.4 Abbreviations

1.4.1 Sites recorded on the Regional Historic Environment Record<sup>1</sup> (HER) are identified by their Primary Record Number (PRN) and located by their National Grid Reference (NGR). 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.

DAT Archaeological Services

 $<sup>^{1}</sup>$  Held and managed by Dyfed Archaeological Trust, The Shire Hall, Carmarthen Street, Llandeilo SA19 6AF.

#### 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 (Table 1).

Period	Approximate date	
Palaeolithic –	c.450,000 - 10,000 BC	
Mesolithic –	c. 10,000 – 4400 BC	Pre
Neolithic –	c.4400 - 2300 BC	hist
Bronze Age –	c.2300 - 700 BC	Prehistoric
Iron Age –	c.700 BC - AD 43	O
Roman (Romano-British) Period –	AD 43 – c. AD 410	
Post-Roman / Early Medieval Period –	c. AD 410 – AD 1066	
Medieval Period –	1066 - 1536	Historic
Post-Medieval Period <sup>2</sup> –	1536 - 1750	ori
Industrial Period –	1750 - 1899	n
Modern –	20th century onwards	

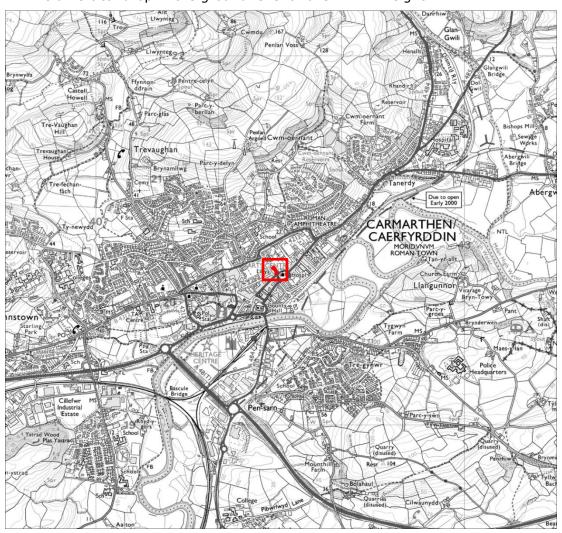
**Table 1:** Archaeological and Historical Timeline for Wales

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<sup>&</sup>lt;sup>2</sup> 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

#### 2. SITE LOCATION AND TOPOGRAPHY

- 2.1 Carmarthen Library lies directly to the northwest of St Peter's church in Carmarthen, on the northern side of King Street. The proposed archive building will be located directly to the north of the library building, and it is bounded by St Peter's Car Park to the east, the Community Centre to the north and the rear of properties fronting Little Water Street to the west.
- 2.2 The proposed development area is presently open ground used as car parking with a retaining wall to the lower properties on Little Water Street to the southwest and there is also an oil tank in a metal fenced enclosure in the southwestern part of the area.
- 2.3 The car park area is relatively level (at around 21.50m aOD), although a slight slope is visible running down to the west/southwest. Directly beyond the retaining wall to the rear of properties fronting Little Water Street, there is a vertical drop in the ground level of over 2m in height.



**Figure 1:** Location map based on the Ordnance Survey.

Reproduced from the Ordnance Survey 1:25,000 scale Map with the permission of The Controller of Her Majesty's Stationery Office, © Crown Copyright Dyfed Archaeological Trust Ltd., The Shire Hall, Carmarthen Street, Llandeilo, Carmarthenshire SA19 6AF. Licence No 100020930

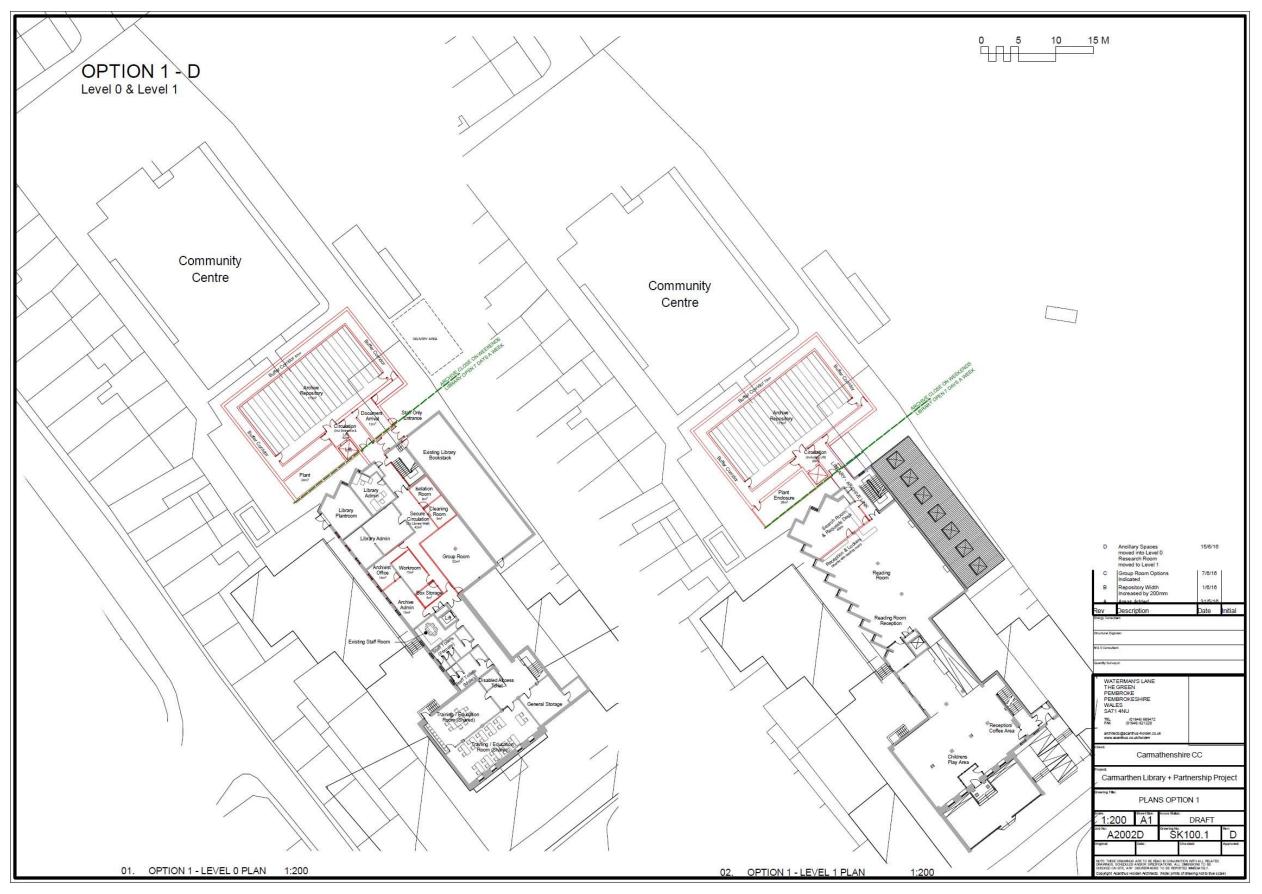
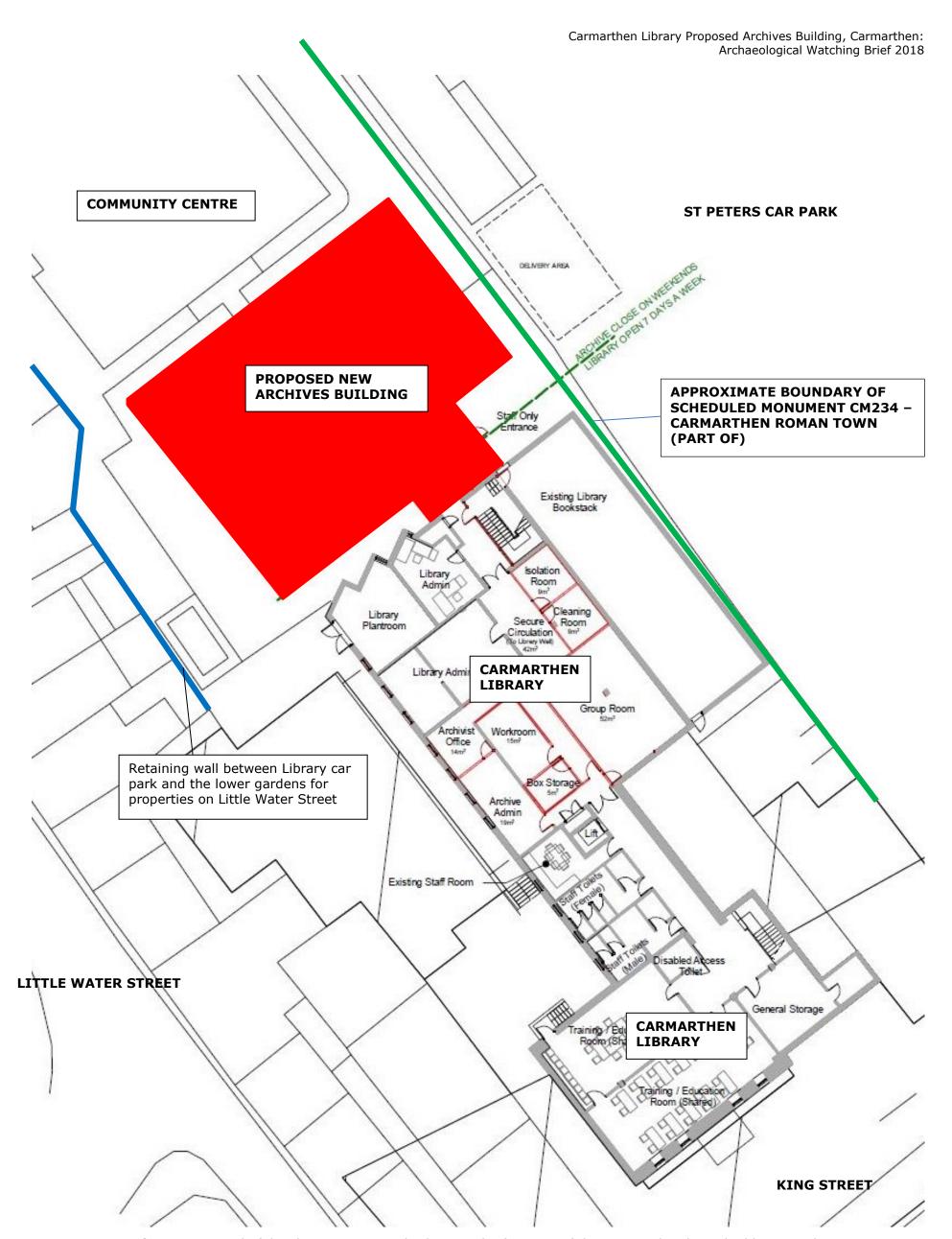


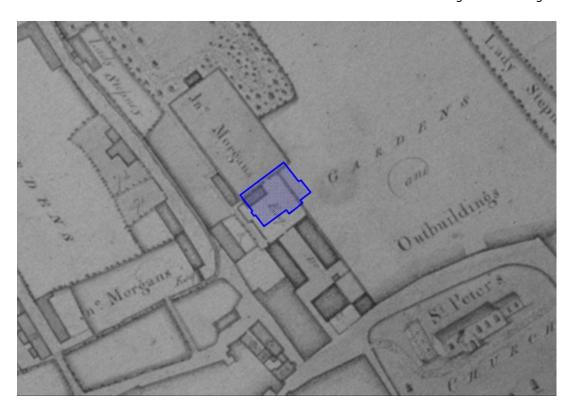
Figure 2: Development proposals Ground level and first floor (plan supplied by Acanthus Holden Architects) – not to scale



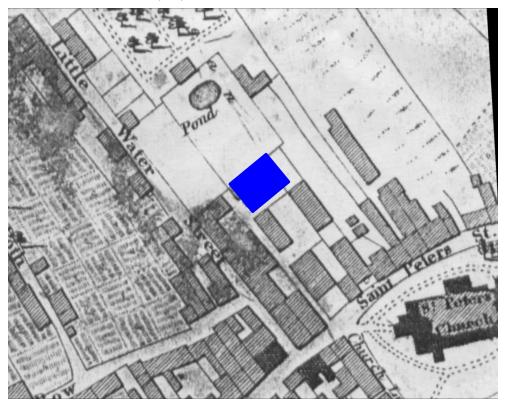
**Figure 3:** Detail of development proposals showing the footprint of the proposed archives building in red, with the approximate boundary of Scheduled Monument CM234 – Carmarthen Roman Town and other features of interest (plan supplied by Acanthus Holden Architects) (NTS)

#### 3 SUMMARY ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

- 3.1 The following is summarised from the Historic Environment Appraisal (Meek 2016) to place the site area in its archaeological and historical context. More detailed information can be found within that report, based on a 250m radius search centred on the proposed Carmarthen Archives building.
- 3.2 There are no sites of Prehistoric date known within a 250m radius of the proposed Carmarthen Archives development site.
- 3.3 There are 20 known sites of Roman date known within the 250m radius. These relate to previous findspots and excavations undertaken within the Roman town of Moridunum and the Roman fort. The development site lies within the northwestern corner of the town defences of Moridunum and thus significant Roman archaeology will be present within the site.
- 3.4 There are only two sites of Early Medieval date known within 250m of the proposed development site. It is likely that the former Roman town defences of the town were occupied into the Post-Roman period and the potential for further remains of this date to be present within the site area is relatively high.
- 3.5 Five records of Medieval date are recorded within 250m, and although the main focus of the Medieval town lay to the west, it is known that the former area of the Roman town was still occupied during the Medieval period. Three of the recorded sites relate to town gates on the medieval town defences, the two others are findspots. Medieval archaeology will be present within the proposed development site, although this may be related to agricultural / cultivation activity.
- 3.6 Numerous post-medieval sites are known within the 250m radius, most of which are listed buildings. The numerous records attest to previous historical and cartographic studies of the development of the town of Carmarthen mostly during the 19<sup>th</sup> and early 20<sup>th</sup> centuries. Many of the records relate to former public houses.
- 3.7 Records include information on Furnace House (the façade of the main Library building) and its formal gardens which were laid out to the north which covered the proposed development. Map evidence indicates that the gardens included ponds in the late 18<sup>th</sup> century and a large glasshouse was present within the development site at the end of the 19<sup>th</sup> century.
- 3.8 The earliest map consulted was the 1786 Estate map of Carmarthen (Figure 4). This shows that the proposed location of the archives store was mostly undeveloped at this time, forming part of the area of gardens to the north of Furnace House. A structure lies within the northwestern part of the development site and a garden plot boundary runs through the eastern side.
- 3.9 The 1834 map of Carmarthen by Wood's (Figure 5) shows a similar arrangement of buildings within the development plot, including Furnace House on the King Street frontage with gardens behind, including the pond which would lie beneath the Community centre. A structure is shown in the same place as that on the 1786 map with a second thinner but parallel structure to the south both within the footprint of the proposed new archives building. The accuracy of the map and scale used makes it difficult to be very clear about the exact footprint of the proposed building and the former structures that stood on the site.

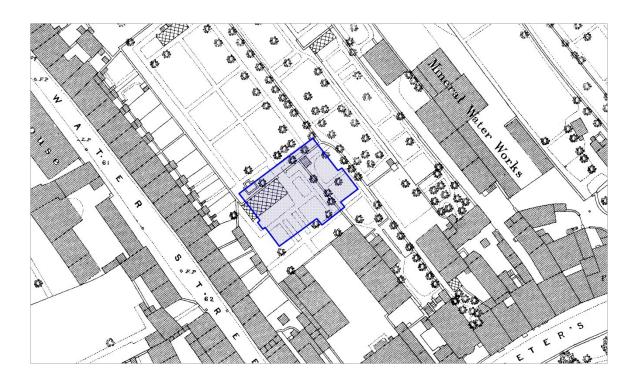


**Figure 4:** Extract of 1786 Golden Grove Estate Map showing approximate footprint of proposed Carmarthen Archives



**Figure 5:** Extract of the 1834 Wood's Map of Carmarthen showing approximate footprint of proposed Carmarthen Archives

3.10 The 1888 1:500 scale Ordnance Survey map (Figure 6) shows a more accurate representation of structures on King Street, including Furnace House, adjacent structures no longer present and a formalised garden layout to the north. This covers the area of the proposed archive store and includes a structure shown as a cross hatch, which would indicate a glass house within the northwestern part of the site area. It is possible that this is the same structure as shown on the 1786 and Woods map of 1834, although this could not be confirmed.



**Figure 6:** Extract of 1888 1:500 Ordnance Survey Map with approximate footprint of proposed Carmarthen Archives building overlaid

3.11 The later OS maps show little change to (or not enough detail of) the development site area until the 1970s when the building to the rear of the Library is constructed (the Community Centre). This apparent lack of development would indicate that the site area has high archaeological potential for well-preserved archaeological remains.

#### 4 WATCHING BRIEF METHODOLOGY

#### 4.1 Fieldwork

- 4.1.1 The watching brief was undertaken in accordance with the Chartered Institute of Archaeologists' (CIfA) Standard and Guidance for an Archaeological Watching Brief (2014).
- 4.1.2 Recording of all archaeological features or deposits conformed to best current professional practice and was carried out in accordance with the Recording Manual<sup>3</sup> used by DAT Archaeological Services. A written, drawn and photographic record was maintained throughout this watching brief. All contexts encountered during this watching brief were recorded.
- 4.1.3 The initial site visit was undertaken during the machine excavation of two test pits within the footprint of the proposed archives building.
- 4.1.4 The second visit was carried out during percussive sampling of the area. Hand excavated test pits had been previously excavated in four places around the existing buildings to determine depths of foundations, but these were not observed. Hand excavated trenches above the locations of the percussive sampling were observed.
- 4.1.5 The third phase of watching brief was undertaken over 3 days carried out during mechanical excavation of the area of a void identified by the percussive sampling. This was initially undertaken under constant archaeological supervision to determine the nature of the void and further investigation.

#### 4.2 Post-Fieldwork Reporting and Archiving

- 4.2.1 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.
- 4.2.2 The results of the fieldwork have been assessed in local, regional and wider contexts.
- 4.2.3 This report is fully representative of the results of the fieldwork.

#### 4.3 Timetabling of Fieldwork

4.3.1 The first stage of watching brief was undertaken on the  $17^{th}$  October 2016, the second stage on  $26^{th}$  September 2017 and the third stage between  $17^{th}$  and  $19^{th}$  January 2018.

<sup>&</sup>lt;sup>3</sup> 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.

#### 5. RESULTS AND DISCUSSION

#### 5.1 17<sup>th</sup> October 2016: Observation of Test Pitting

5.1.1 An archaeological watching brief was maintained during the excavation of two small geotechnical test pits within the footprint of the proposed archive building (Figure 7). On arrival the area was seen to comprise a roughly level car park area free of buildings (Photo 1). The ground level was relatively similar to that of St Peter's Car park, and mostly level across the site with perhaps a small dip in the centre of the car park area. A number of service trenches could be seen within the car park surface, including drains and other marks in the tarmac implying other buried services. An oil tank was present in the southwestern corner of the car park area. A small walled enclosure was present on the eastern side of the area adjacent to the car park. A raised kerb and footpath ran along the western edge of the site between the Community Centre and the retaining wall to the properties on Little Water Street.



**Photo 1:** Panoramic view east across the proposed footprint of the Carmarthen Archives building with the (Community Centre to left and oil tank visible to right)

- 5.1.2 The first test pit was excavated roughly in the northwestern corner of the proposed archive building, aligned northeast to southwest. An area of around 5m x 2m was cleared of tarmac to expose the underlying ground surface through which a 0.60m wide toothless bucket was used to excavate down into the underlying strata, the base of the trench measuring roughly 0.6m x 1m in size (Photo 2). The second test pit was located on the eastern side of the car park area, on a similar alignment, adjacent to the small brick walled enclosure in the southeastern corner of the plot for the proposed Archive building.
- 5.1.3 It was not possible to access the test pits as they were too narrow and deep, but measurements were made of the layers machined through (Photos 2 5; Tables 2 & 3). An assessment of their archaeological potential was made.



Photo 2: Test Pit 1 after excavation



Photo 3: General view showing location of Test Pit 1, viewing northwest



Photo 4: Test Pit 2 after excavation



**Photo 5:** General view showing location of Test Pit 2, viewing south towards rear of 1970s library building, with walled enclosure to left

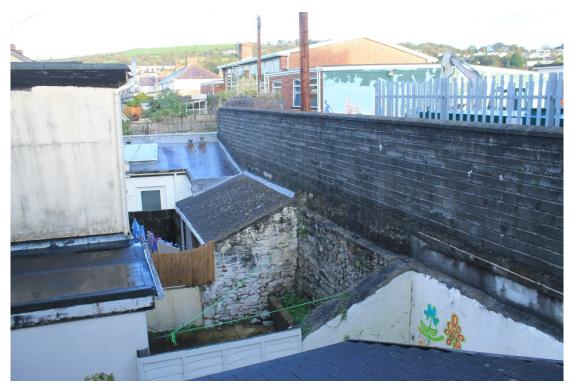
Depth	Deposit	Archaeological potential
0m - 0.12m	Tarmac surface layers	Modern.
0.12m - 0.72m	Dark brown silty soil containing modern brick and debris	Modern and of low archaeological interest.
0.73m - 1.04m	Pink mortar and crushed brick	Post-medieval – may represent the insubstantial remains of the garden structure shown on the 1834 map.
1.05m - 1.54m	Mix of materials including a fair amount of clay	No dating evidence was recovered from this layer. It is possible that it represents the remains of clay used in the ramparts of the Roman town, but this is uncertain.
1.55m - 1.70m	Layer of well-set pitched cobbles	Although no dating evidence was recovered from this layer, it is considered likely to be of Roman date. It could represent a set of cobbles for a road but evidence has also been excavated in Carmarthen, where layer of large cobbles were set down as building foundations.
1.71m - 1.80m	Mix of dark silts and clays containing oyster shells and cockles	Probably a Roman occupation layer.
1.81m - 1.90m	Very dark greyish brown to black layer	Very likely to be a Roman deposit, it was more organic in its constituents as opposed to charcoal from a burnt deposit.
1.91m - 2.50m	Grey and brown layers containing oyster shells, cockles, charcoal, fragments of brick or tile	Roman occupation layers. The depth of this layer probably means that it comprises a more complex sequence of deposits which could not be better clarified within the confines of the test pit.
2.51m – c.3.00m	Natural orange clays, crushed shale and occasional gravels	Natural undisturbed ground

Table 2: Layers machined through in Test Pit 1

Depth	Deposit	Archaeological potential
0m - 0.10m	Tarmac surface layers	Modern.
0.11m - 0.21m	Hardcore stone levelling for tarmac	Modern.
0.22m - 0.98m	Brown to light brown silty clay, with very few inclusions	Assumed to be a Post-Medieval layer although it is uncertain what it represents. It could possibly be a backfilled feature as the material seemed as if it had been imported from elsewhere.
0.99m - 1.30m	Mix of materials including brick rubble, stone and cobbles (not set like that seen in Test Pit 1)	No dating evidence was recovered from this layer. It is possible that it represents a redeposited layer of building rubble of any date from Roman through to post-medieval.
1.31m - 1.60m	Layer of relatively clean brown silts, similar to the layer seen above the rubble	No dating evidence was recovered from this layer, and it was noted as being very clean with very few inclusions. It is possible the whole sequence represents a backfilled feature which could not be confirmed within the confines of the trenches.
1.61m – <i>c.</i> 2.25m	Natural light brown silty clay with crushed shale	Natural undisturbed ground (although the possibility that it is actually redeposited natural should not be discounted – although the attending geotechnician was happy that it was natural)

Table 3: Layers machined through in Test Pit 2

5.1.4 During the test pitting it was also possible to view the difference in ground levels between the rear of the properties fronting Water Street and the boundary wall to the library (Photo 6). As noted above, the difference in ground level is around 2m. There is a stone revetment wall at the bottom, which changes to a modern brick wall roughly at the ground level height for the rear of the library.



**Photo 6:** View roughly north across the rears of the properties fronting Water Street towards Community Centre showing the difference in ground levels

#### 5.2 26<sup>th</sup> September 2017: Test Pits and Percussive Sampling

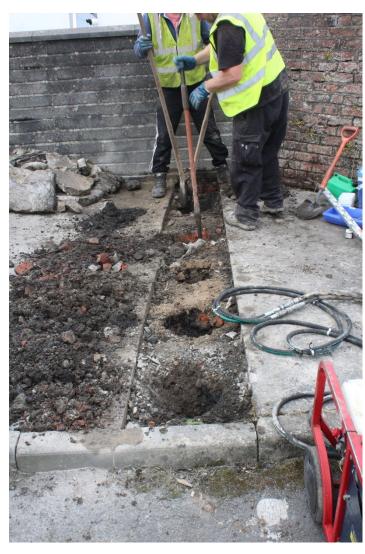
- 5.2.1 The two test pits hand excavated against the Community Centre and the two against the Library all indicated foundation depths of over 1.2m, with the pits themselves being excavated through backfill of the foundation trenches so no earlier archaeology was present (Photos 7 and 8). These had been excavated prior to the archaeologist attending the site, as had been agreed with the client.
- 5.2.2 Two hand excavated trenches were opened against the retaining wall to the properties on Little Water Street (Figure 7). These ran perpendicular to the wall covering the width of the kerbed area and were excavated initially as a roughly 3.5m long trench some 0.40m in width and around 0.30m depth. The locations of the 5 proposed percussive sampling points in each trench were then excavated to a total depth of around 0.90m using a post-hole digging tool (Photo 9).
- 5.2.3 The northern trench (Photo 9) ran roughly southwest to northeast from the point where there was a kink in the retaining wall to the edge of the kerbed area. The southern trench was located some 4.5m to the southeast on the same alignment, dug from the retaining wall to the edge of the kerbed area (Photo 10).



**Photo 7:** View southwest across test pits on southeastern wall of Community Centre



Photo 8: hand excavated test pit against north wall of Carmarthen Library



**Photo 9:** Excavation of northern trench for percussive sampling



**Photo 10:** Southern trench for percussive sampling following preparation

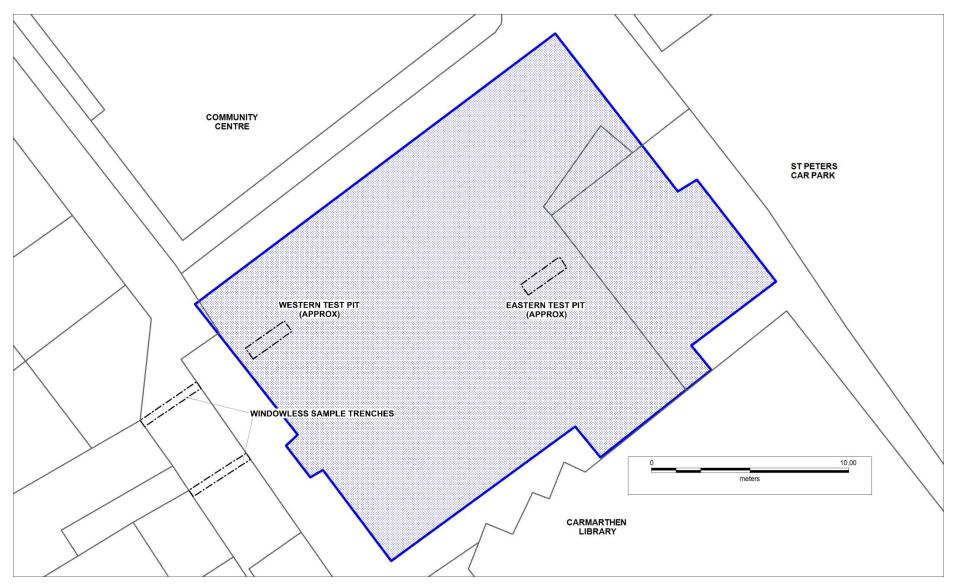


Figure 7: Location of test pits and windowless sample trenches

- 5.2.4 The hand excavation of the trenches and holes indicated modern and post-medieval build up layers to a 0.9m depth. A brick foundation was noted running northwest-southeast just southwest of centre of the two trenches.
- 5.2.5 Once the trench had been prepared, the percussive sampling was carried out using a metal tube hammered into the ground in connected sections. The two holes on the southwestern side of each trench did not demonstrate anything of particular interest, excluding the presence of a possible wall in two places.
- 5.2.6 In both trenches the three percussive samples on the northeastern parts of the trenches revealed a void around 1.5m from the present ground surface and around 1.5m depth (these were rough estimates from the observations on-site). There are no buildings that would have had cellars shown on the earlier maps.
- 5.2.7 Due to the presence of the void, further investigative work was required to confirm what the void was and its extent as it would have a significant bearing upon the foundation designs for the proposed Carmarthen Archives building.

### 5.3 17<sup>th</sup> to 19<sup>th</sup> January 2018: Investigation of the Void

5.3.1 On the 17<sup>th</sup> January a small mechanical excavator was used to machine down to the top of the void identified by the percussive sampling under constant archaeological supervision. The trench was initially located over the southwestern of the two percussive sampling trenches with a perpendicular one running on the northeastern side of the kerb (Photos 12 and 13; Figure 8).



**Photo 11:** Site area prior to start of works showing the two backfilled trenches from the percussive sampling



**Photo 12:** Initial machined trench through former percussive sampling trench, with hole visible



**Photo 13:** Trench excavated along the northeastern edge of the kerb

5.3.2 This initial T-shaped trench demonstrated the presence of a brick vaulted structure at around 1m depth and its southeastern end appeared to have been identified. The area was then extended to expose the width of the brick vault and a hole was drilled into its top to view inside the structure (Photo 14).



Photo 14: Drilling into the top of the vault within the extended trench area

5.3.3 Once it was determined that the structure was apparently quite small and evidently structurally sound, a larger hole was created in the vault to enable access into the void.



Photo 15: Machine breaking into the vault

- 5.3.4 Access was possible into the structure via a ladder which enabled a record to be made. The structure was brick built and of 1.79m internal width. It comprised two chambers. The southeastern chamber (which was accessed) measured 2.95m in length (Photos 16 and 17). The side walls were 0.90m in height to the spring of the vault and 1.45m height to the underside of its apex (1.58m to the top of the outer arch). The bricks used were of a standard post-medieval / modern size of 0.23m in length x 0.07m in height and 0.11m in width.
- 5.3.5 A small lead lined drain accessed the apex of the vault on the southeastern wall (Photo 16). This led to small brick pipes leading further to the southeast. On the northwestern side of the vault a ceramic and a metal pipe were present cutting through the vault roof (Photo 17). A drain pipe also ran between the southeastern and northwestern chambers through the dividing wall on its eastern side fairly close to the floor (Photo 18). The pipe was metal to the northwest and then led to a recessed area within the brick wall on the southeastern side with a chamfer dropping down below.
- 5.3.6 The floor of this chamber was brick built with mortar spread across it. The brick walls and almost the full height of the vaulted roof were also limewashed or mortared.
- 5.3.7 There was no further chamber identified to the southeast. The chamber was divided from that to the northwest by a brick wall 0.36m in width. An access between the two chambers was centrally placed at a height of 0.96m from the floor, with the access 0.72m in width (Photo 16).



Photo 16: View southeast of southeastern chamber, with drain entrance at apex



**Photo 17**: View northwest of southeastern chamber to dividing wall, with pipes accessing through roof of vault and through dividing wall



Photo 18: detail of pipe leading through wall between the two chambers

5.3.8 The northeastern chamber was not accessed, but it was possible to create a record of the structure. It was of at least 3.85m in length and of the same 1.79m internal width (Photo 19). The vaulted roof was at the same level as that for the other chamber although the floor was lower, covered in silts which may have hid an underlying brick floor. The northwestern end of the chamber was obscured by silts and rubble that sloped downwards towards the southeast.



**Photo 19:** View into northwestern chamber, with sloping deposits of silts and rubble and arch on eastern side

- 5.3.9 A brick arched recess was visible on the eastern side of the chamber of around 1m width, lying 1.4m north of the dividing wall. It was not tall and the apex was below the spring of the vault above. The back of the arch could not clearly be seen, but was thought to only have been the width of the wall/length of a standard brick.
- 5.3.10 A possible breach in the roof of the vault was noted in its northeastern corner although this couldn't be confirmed as the chamber could not be accessed. The southeastern chamber was backfilled with concrete.
- 5.3.11 On the 18<sup>th</sup> January it was agreed with the site contractors that they could excavate down to the top of the northwestern chamber and open it as they had done on the one to the southeast. This was not monitored but a site visit was carried out to view what had been found. The chamber had been covered in fencing before the site visit due to the potential health and safety risks of leaving it open (Photos 20 and 21).
- 5.3.12 The northwestern chamber could be seen to run almost up to the retaining wall to the gardens of Little Water Street (Photo 20). No northwestern end to the chamber was confirmed, but it would appear that the silts and rubble that were present in that chamber had been deposited in from that end.



**Photo 20:** View northwest along chambers on 18<sup>th</sup> January 2018 following exposure and opening of northwestern chamber



**Photo 21:** View northeast across brick arched opening in wall of northwestern chamber

- 5.3.13 The arch in the eastern brick wall of the northwestern chamber could be quite clearly seen below the covered area (Photo 22) confirming that it was only as deep as a single length of brick. What was not clear was whether a wall was present on its eastern side or whether the archway led to a further chamber to the east. The upper part of the back of the arch appeared to be closed off, but sands and silts were present slumping in to the chamber below this. It was thus determined on-site that further investigations were needed on the eastern side of this arch to confirm whether another void was present. The chamber itself was then backfilled with concrete to stabilise it and for safety reasons.
- 5.3.14 On the 19<sup>th</sup> January an archaeologist was present during the excavation of the eastern side of the northwestern chamber. This commenced with a narrow trench being excavated from the projected centre of the arch to the east using a 0.60m wide toothed bucket, necessitated by the rubble backfill of the area (Photo 22).
- 5.3.15 A second brick wall was identified *c*.0.65m to the east of the eastern wall of the chamber (Photo 23; Figure 8). This was of at least one brick thickness, but was not investigated further to the east. Excavation of the area between the two walls was then carried out to determine if there was indeed a void leading east from the chamber. A 1.30m depth of mixed rubble and soil containing bricks and ceramic pipes, as well as a few larger rounded stones was removed from the area between the two brick walls exposing an apparent large cobbled surface set in a very tough soil matrix (Photo 24).
- 5.3.16 It was agreed that part of this possible surface should be removed to confirm it was not sealing a vault over another void and a 0.40m depth was removed revealing that it was actually the remains of a mortared stone wall. It was possible to see that the wall was faced on both sides and had a width of 0.60m. A total length of 2.20m of the wall was exposed in the trench (Photo 25; Figure 8).



**Photo 22:** Excavation of trench to the east of the archway, showing concrete backfill of northwestern chamber



**Photo 23:** Brick wall revealed to the east of the eastern chamber wall just visible on edge of concrete



**Photo 24:** Apparent cobbled surface recorded directly east of the northwestern chamber



**Photo 25:** Clearly defined mortared stone wall in the base of the excavated area to the east of the chamber

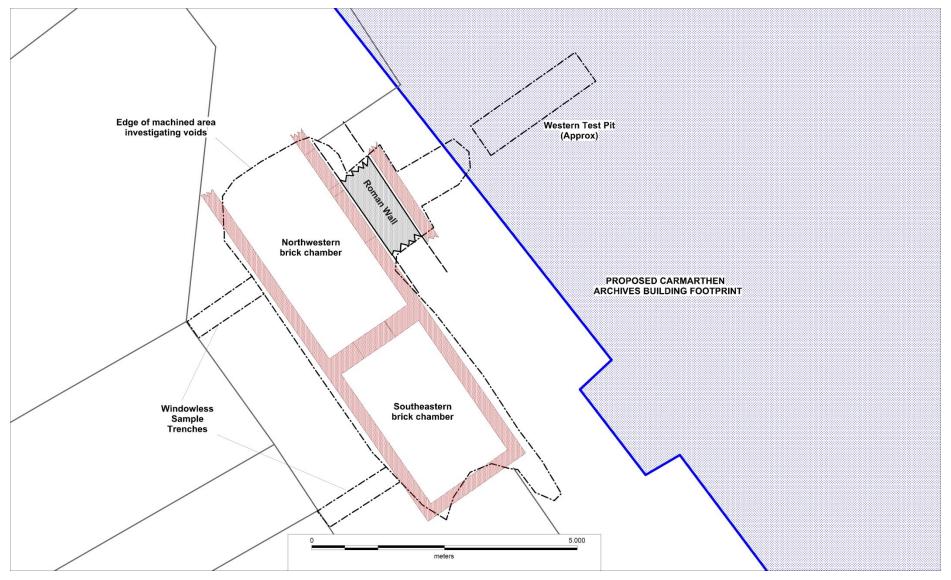


Figure 8: Detailed plan showing location of brick built chambers and Roman wall

- 5.3.17 During the above investigations the top of a substantial mortared wall was revealed at a depth of around 1.30m below the ground surface directly behind the northeastern wall of the northern chamber. The wall was partially removed to a depth of 0.40m but could be seen to be continuing down below this level. It was aligned roughly northwest to southeast, parallel to the retaining wall to Little Water Street. It had been well-faced on both sides and measured 0.60m in width. A length of 2.20m of the wall was exposed, but the wall definitely continued beyond the edges of the exposed area. It is considered that the wall would be of Roman date. Its location would have been on or within the ramparts of the town defences. The character of the wall would suggest it formed part of a building and the fact that it was apparently faced on both sides indicates that it is part of the superstructure rather than just foundations. The wall lay directly southeast of one of the test pits excavated in 2016, indicating that the test pit would have been located within and through the Roman building.
- 5.3.18 The wall comprised a mix of larger sandstone blocks, purple and grey shales, red sandstone and large cobbles, all material available locally. The mortar was dark containing charcoal and shell. It was clearly not a post-medieval mortar as it did not contain crushed coal or clinker.
- 5.3.19 Once it had been confirmed that no void lay to the east of the northwestern chamber it was agreed that no further intrusive investigations were required. The area of the wall was covered with geotextile membrane before being infilled with concrete and backfilled, thus preserving the remains of the wall and preventing any further disturbance.
- 5.3.20 No artefacts of Roman date were recovered from the investigations. Post-medieval brick, tile, drain pipe and some pottery was recovered. Of most interest was part of a large clay tile of around 0.24m in length x 0.05m in height, with a maximum surviving width of 0.16m. The tile contained a series of fairly regularly spaced small holes in its base. These tiles with holes are regularly found in the context of heated garden glass houses, and are typically square and anything up to 10" square. They were placed over heating pipe runs with the holes presumably used to dissipate the heat more evenly through the tile to prevent them cracking.

#### 6. **CONCLUSIONS**

- 6.1 Observation of the geotechnical works undertaken at the Carmarthen Library site have provided further information on the below ground archaeological remains within the development site.
- 6.2 Observation of test pitting undertaken in 2016 indicated that relatively undisturbed archaeological levels survived at a depth of around 1.00m below the existing ground surface in the test pit on the western side of the area. Above this level remains of brick built post-medieval structures were present but they had suffered disturbance from ground levelling and service installation associated with the modern library building and community centre.
- 6.3 Below the roughly 1m level within the western test pit was a sequence of stratigraphic archaeological layers that appeared relatively undisturbed, but whose character could not be determined within the confines of the test pit. Undisturbed natural ground was revealed at a depth of *c.*2.50m below ground level within this test pit indicating a depth of around 1.5m of archaeological stratigraphy.
- 6.4 The second test pit was located on the eastern side of the proposed Carmarthen Archives building footprint and had a very different sequence of deposits, but again characterising these in any detail was not possible within the confines of the test pit. Below the upper tarmac surface and levelling layers apparent light brown fine silt layers were present to a depth of 0.98m. This material would appear to have been imported onto the site, or dug up from elsewhere. It is conceivable that they relate to material used within the Roman town ramparts. Below this layer was a 0.30m depth of mixed rubble and cobbles with brick present (although the brick remained undated as it was very fragmentary), possibly indicating a demolition layer. Brown silts were again present below the rubble to a depth of c.1.60m, which lay on top of a light brown silty clay to the maximum depth of the test pit at 2.25m, interpreted as natural soils by the on-site geotechnician. It is possible that these were in fact layers associated with the town ramparts, but this could not be confirmed within the confines of the test pit. It is assumed that the relatively undisturbed archaeological stratigraphy lay at a depth of around 0.98m (the rubble layer) and that anything above this had been redeposited from elsewhere.
- 6.5 In 2017 percussive windowless sampling on the western side of the site along two trenches adjacent to the retaining wall with Little Water Street revealed the remains of brick foundations in places lying close to the existing ground surface. At a distance of around 2m from the retaining wall a void was encountered in both trenches at a depth of just over 1m and indicating it was 1.5m deep. The character and extent of this void could not be determined at this stage. Further hand excavated test holes adjacent to the existing library and Community Centre buildings did not reveal archaeological deposits, being excavated through foundation trenches for the footings of the buildings.
- 6.6 Further intrusive works were carried out in January 2018 to investigate the void using a mechanical excavator under archaeological supervision. This revealed two adjoining brick built chambers running parallel with the retaining wall to Little Water Street. The two chambers were separated by a brick wall, the southeastern chamber was 2.95m in length and 1.79m in width, the northwestern one being 3.85m in length and of the same internal width. The southeastern chamber was 1.45m in height internally to the apex of the brick vaulted roof. The other chamber may have been slightly deeper, but this could not be ascertained during the groundworks

- due to silts and rubble in the base of this chamber. It is presumed that the chambers were associated with water collection, possibly for the former gardens and glasshouse that stood on the site area.
- 6.7 A brick arch was present leading east from the northwestern chamber which was thought might indicate a further vault so additional excavations were undertaken to investigate this. A further brick wall was revealed parallel to the chamber wall c.0.60m to the east. This could possibly relate to the former glasshouse that is recorded on earlier Ordnance Survey maps.
- 6.8 Excavations between the two walls at a depth of 1.30m revealed the top of a stone and mortar wall. This was partially removed to a depth of 0.40m at which point the wall could be clearly seen, being of 0.60m width and faced on both sides. It would appear to be superstructure as opposed to footings and its depth and construction would indicate that it is likely to be of Roman date. It was aligned parallel to the retaining wall to Little Water Street which follows the exact alignment of the Roman town defences in this part of the Roman town.
- 6.9 Tied in with the information recorded in the western test pit, it would appear likely that the test pit was actually excavated within a Roman structure of which the wall formed its western side. This may suggest a building built on or within the town ramparts. The information confirms that significant archaeological stratigraphy is present within the footprint of the proposed Carmarthen Archives, including structural remains. The first 1m depth below the existing ground surface is likely to have suffered from modern disturbance from the construction of the adjacent buildings and associated service installation. Below this 1m depth, potentially well preserved archaeological stratigraphy exists most likely of Roman date.
- 6.10 The site area lies adjacent to the scheduled part of the Roman town of Moridunum (covering St Peters Car Park and Richmond Terrace football ground CM234). It also lies within the known northwestern corner of the Roman town and as such any Roman remains in this area would also be considered to be of national significance. It is proposed that the Carmarthen Archives building will be erected on a raft foundation, the formation level for which will lie some 0.20m above the top of undisturbed archaeological levels identified by the geotechnical works. Slightly deeper works may be required for the proposed drainage for the building, but otherwise it is assumed that all groundworks will be kept above the archaeological level.

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#### Map

Ordnance Survey 1888 1:500 Carmarthen Town

Ordnance Survey 1890 1:2500 Carmarthenshire Sheet XXXIX.6 and 7

Ordnance Survey 1906 1:2500 Carmarthenshire Sheet XXXIX.6 and 7

Golden Grove Estate map of 1796

Wood's Map of Carmarthen 1834

#### **Database**

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

Cof Cymru - National Historic Assets of Wales <a href="http://cadw.gov.wales/historicenvironment/recordsv1/cof-cymru/?lang=en">http://cadw.gov.wales/historicenvironment/recordsv1/cof-cymru/?lang=en</a>

## CARMARTHEN LIBRARY PROPOSED **ARCHIVES BUILDING, CARMARTHEN:** ARCHAEOLOGICAL WATCHING BRIEF

RHIF YR ADRODDIAD / REPORT NO. 2018/05 RHIF Y PROSIECT / PROJECT RECORD NO. 111238

Mawrth 2018

March 2018 Paratowyd yr adroddiad hwn gan / This report has been prepared by **JAMES MEEK** Swydd / Position: Head of DAT Archaeological Services Mae'r adroddiad hwn wedi ei gael yn gywir a derbyn sêl bendith This report has been checked and approved by **FRANCES MURPHY** ar ran Ymddiriedolaeth Archaeolegol Dyfed Cyf. on behalf of Dyfed Archaeological Trust Ltd. Swydd / Position: Project Manager DAT Archaeological Services Llofnod / Signature ...... Date sydd gennych ar gynnwys neu strwythur yr adroddiad hwn

Yn unol â'n nôd i roddi gwasanaeth o ansawdd uchel, croesawn unrhyw sylwadau

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

