Archaeology Wales

Land adjacent to No.9 Elliston Terrace, Carmarthen

Archaeological Watching Brief



By Andrew Shobbrook & Philip Poucher

Report No. 1656

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Archaeological Watching Brief

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Contents

Non-Technical Summary	1
1. Introduction	2
1.1 Location and Scope of Work	2
1.2 Topography and Geology	3
1.3 Archaeological and Historical Background	3
2. Methodology	4
3. Results of the Watching Brief	5
3.1 Raft Foundation Excavation	5
3.2 Finds	6
3.3 Environmental Data	6
4. Discussion and Conclusions	6
4.1 Overall Conclusions	6
4.2 Storage and Curation	7
5. Bibliography and References	7

List of Illustrations

Figure 1	General location map
Figure 2	Site layout plan
Figure 3	Development plan & watching brief area
Figure 4	Plan of recorded features

List of Plates

Photo 1	Western half of the site after excavation
Photo 2	Western half of the site after excavation
Photo 3	Eastern half of the site after excavation
Photo 4	Eastern half of the site after excavation

Appendices

Appendix I	Context Descriptions
Appendix II	Written Scheme of Investigation
Appendix III	Archive Cover Sheet

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Non-Technical Summary

This report results from work undertaken by Archaeology Wales Ltd (AW) for Mr Peter Sauro of Sauro Arch Design Ltd, on land adjacent to No. 9 Elliston Terrace, Carmarthen, centred on SN 41338 20406. The report details the results of an archaeological watching brief that took place during groundworks relating to the construction of a new two-storey office. The work was undertaken as a condition of the planning permission for the development (planning application no. W/33850. The local planning authority is Carmarthenshire County Council.

The site lies within the boundary of the Roman town of Moridunum, close to the town defences. Carmarthen has a subsequent history of settlement through the early medieval and medieval periods. By the mid-18th century this area formed part of a small parkland or pleasure gardens. By the late-19th century terraced dwellings bordered the site, with small-scale development within the site area during the 20th century.

An area measuring approximately 16m by 10m was excavated for raft foundations to a depth of approximately 0.3m below existing ground levels. In the southeast corner a light yellowbrown clay (deposit 101) was revealed. Excavation stopped at this level, and no finds were retrieved, but the colour and composition of this deposit suggested it may potentially be associated with remains of the Roman town defensive bank thought to lie in this area. The remainder of the site was covered in deposits dated to the late 19th and 20th century, likely relating to infill and levelling activity, along with the construction of a small garage building in the mid to late 20th century.

All work was undertaken to the Standards and Guidance for an Archaeological Watching Brief as set by the Chartered Institute for Archaeologists (2014).

1. Introduction

1.1 Location and Scope of Work

In December 2017 Archaeology Wales Ltd (AW) was commissioned by Mr Peter Sauro of Sauro Architectural Design Ltd, to undertake an archaeological watching brief during groundworks on land adjacent to No.9 Elliston Terrace, Carmarthen (Figures 1 & 2). The site is centred on OS grid reference SN 41338 20406. This work relates to the excavation of a rectangular shaped footing, measuring 10m by 16m, designed to accommodate a raft foundation on which a new two-storey office building will be constructed. The local planning authority is Carmarthenshire County Council. The planning application number is W/33850.

Due to the potential for archaeological remains associated with the Roman town of Moridunum to be present within the development area, Dyfed Archaeological Trust – Development Management (DAT-DM), acting as archaeological advisors to the local planning authority, recommended that a programme of archaeological work be undertaken associated with the development. This was subsequently set as one of the conditions of the planning permission for the site, it states (Condition 3):

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 in writing by the local planning authority.

In response, an approved Written Scheme of Investigation for an archaeological evaluation was produced. This evaluation was carried out by Archaeology Wales in 2017 (Shobbrook & Poucher 2017). The results of this evaluation suggested that the site was located on the line of the Roman defensive ditch, but the only deposits identified were late post-medieval infilling material and 20th century disturbance. It was further recommended that raft foundations be used to minimise the possibility of disturbing archaeological remains, and that a watching brief be undertaken during these groundworks.

Prior to the current works commencing an approved Written Scheme of Investigation (WSI) for an archaeological watching brief was produced by AW in accordance with the Standard and Guidance for Archaeological Watching Briefs (CIfA 2014), which was designed to provide an approved scheme of archaeological investigation to be implemented during the groundworks (Appendix II).

The watching brief took place on the 20th of December 2017 under the supervision of Philip Poucher.

The AW project number for the work is 2553 and the site code is ETC/17/WB. The project details are summarised on the Archive Cover Sheet (Appendix III).

1.2 Topography and Geology

The site lies in the centre of the town of Carmarthen in central Carmarthenshire. The land adjacent to No.9 Elliston Terrace lies close to the junction of Francis Terrace, Little Water Street and Barn Road, in a residential area of central Carmarthen.

The site occupies a corner plot, with a curving frontage along Elliston Terrace/Francis Terrace, from which the site is accessed. Prior to development the site was covered with levelled hardcore, on which stood a single-storey terrapin building, part encased in concrete blocks and render. This building had been demolished and the concrete foundations upon which it stood had been removed prior to the watching brief commencing.

The site is bounded to the northeast by No.46 Francis Terrace, and to the southeast by No.9 Elliston Terrace, with the boundary comprising part building and part rear garden walling.

The underlying geology of the area consists of mudstones of the Tetragraptus Beds. These are overlaid by sands and gravels representing glaciofluvial deposits of the Devensian (BGS viewer 2017).

1.3 Archaeological and Historical Background

A fort and settlement was established during the Roman period at Carmarthen by the late-1st century AD. The settlement, known as *Moridunum*, formed the *civitas*, or tribal capital, for all of southwest Wales. In the mid-2nd century the town was established on a planned gridded street layout, the extent of which is still preserved in many of the modern streets. Francis Terrace and Little Water Street, along with Old Oak Lane and The Parade/Esplanade, run along the former defences around the town, possibly along the former ditches fronting embanked defences. Elliston Terrace is located along these embanked defences and within the northwest corner of the town limits. The previous archaeological evaluation (Shobbrook & Poucher 2017) suggested that the development site is located on the line of the outer defensive ditches of the 2nd phase of defences erected around the Roman town, possibly in the 3rd century AD.

The historic core of Carmarthen is of considerable archaeological significance as there is evidence for continued occupation after the collapse of Roman administration in the early 5th century. An important religious settlement, which later became the medieval priory of St John and St Teulyddog, was established immediately to the east of the town, possibly on the site of the former Roman cemetery. St Peter's Church, to the south of the development site, is also thought to have early medieval origins, noticeable in its location just inside the former Roman town, close to its west gate. It is likely that, during the early medieval period, settlement was focused around these two religious sites. Settlement is likely to have spread along Priory Street to the east, and around Church Street and St Peter's Street to the south, with possible activity extending as far as Elliston Terrace.

After the Normans had invaded and secured territory in the area towards the end of the 11th century, they established a castle and settlement in Carmarthen. Remains of the castle are still visible to the west of the County Hall (which also sits within the grounds of the castle), and settlement was established initially to the northwest along Notts Square, and subsequently to the northeast along Spilman Street and King Street. This settlement was established separately to the pre-existing 'native' settlement that was still focused around St Peter's church and along Priory Street to the east. Carmarthen therefore remained an important settlement throughout the medieval period, with much of the new Norman settlement subsequently becoming a walled town. During this period Roman defences may still have encompassed the existing settlement to the east. The Priory also became one of the richest in Wales.

The two adjacent settlements were finally amalgamated in 1546, and the town became the judicial and administrative centre for the new county of Carmarthenshire. From the 16th century to the early 18th century Carmarthen was the largest town in Wales, only surpassed by the emerging new industrial towns of southeast Wales in the 18th century. During the 17th century the town was fortified during the Civil War, it is likely that this also included utilising the former Roman defences, which may have affected development in the Elliston Terrace area.

One of the earliest detailed maps of Carmarthen in 1786 depicts the development site as part of a partly wooded parkland or garden (PRN 100), fronted along the roadside to the west by a mill stream (possibly running along a former Roman defensive ditch), hence the name Little Water Street. The development site was still part of an enclosed wooded park in the mid 1800s, but Elliston Terrace had been established to the south and east of the development site by the 1880s.

By the 1888 Ordnance Survey map development had been established along the western edge of the development site. By the early 20th century another open-sided structure had been built against the eastern boundary, although the bulk of the development area remained apparently undeveloped. At some point during the 20th century the site was redeveloped. The Ordnance Survey map of 1969 indicates that previous late 19th and 20th century structures had been removed, and a square building constructed on the site, apparently used as a garage. This building was removed prior to the establishment of the Terrapin structure.

2. Methodology

The archaeological watching brief followed the methodology set out within the approved WSI (Appendix II).

The excavation was carried out with a 360° tracked excavator equipped with a toothless grading bucket which began firstly by removing the remains of a concrete slab foundation which had supported the previous temporary office. An area measuring 10m north-south by 16m east-west was then reduced to around 0.30m below existing ground level, this

rectangular shaped excavation was designed to accommodate a new raft foundation which would provide a stable platform for the new two-storey office building. Due to space limitations this area was excavated in two halves. Initially the western half was excavated, then this area was used to store excavated material as the eastern half was excavated.

The exposed deposits were subsequently recorded by measured sketch drawings, high resolution digital photographs (using a 10MP camera) and written records using AW recording systems. A register of all contexts and photographs was also made.

The on-site archaeological work was undertaken by Philip Poucher. The overall management of the project was also undertaken by Philip Poucher.

All works were undertaken in accordance with the CIfA's *Standards and Guidance for an Archaeological Watching Brief* (2014) and current Health and Safety legislation.

3. Results of the Watching Brief (Fig 4; Photos 1-4)

3.1 Raft Foundation Excavation

Excavation began by the removal of a concrete pad which previously had supported a temporary office building.

Stratigraphically, the earliest deposit recorded during the watching brief was formed of a light yellowish-brown clay **(101)** which contained common inclusions of medium to large sized subangular and sub-rounded stones. This deposit measured 3m north-south by 1.8m east-west when viewed in plan and was confined to the south-eastern edge of the excavation area. Excavation stopped at this level.

Overlying (101) was a mixed deposit comprising of a light brown to yellow-brown sandy clay (102) that contained abundant inclusions of medium to large sized sub-angular and subrounded stones. Within this deposit a number of late 19th and early to mid 20th century pottery fragments were recovered, along with some, presumably residual, earlier postmedieval pottery. This deposit was spread across all but the northwest corner of the excavation footprint and is considered to be the remains of late post-medieval or modern infill and landscaping. At its thinnest this deposit was 0.1m thick, but this increased across the site with excavation largely stopping at this level.

The remains of a crushed tarmac surface **(103)** was found to overlie previous deposit **(102)** and was spread across the northwest corner of the excavation area, approximately 0.1m thick. This deposit is assumed to be a levelling deposit associated to a previous 20th century garage building which had been present on the site.

Within the central area of the excavation a previous garage foundation cut was revealed **[104]**. These foundations truncated previous deposits **(103)**, **(102)** and **(101)** making this context sequentially one of the latest events recorded onsite. The foundation cut was infilled by the concrete foundations **(105)**.

The final uppermost deposit encountered comprised of a mixed building rubble deposit **(100)**, up to 0.3m thick, which contained abundant inclusions of medium to large sized sub-angular stones along with some large concrete fragments.

Two separate sewer mains in ceramic piping were uncovered, crossing the site in a north – south direction, both of which are considered to be modern in date.

3.2 Finds

Late 19th and 20th century pottery and glass fragments were recovered from deposits (102) and (100). A very small number of fragments of earlier post-medieval pottery were also recovered from deposit (102). Once noted these finds were not retained.

3.3 Environmental Data

No deposits were encountered that were suitable for environmental sampling.

4. Discussion and Conclusions

4.1 *Overall Conclusions*

An archaeological watching brief was undertaken during groundworks associated with the construction of a new office block on land adjacent to No.9 Elliston Terrace, Carmarthen (SN 41338 20406). The work was undertaken as part of the planning conditions (planning application number W/33850) for the development, on the recommendations of Dyfed Archaeological Trust – Development Management.

The site lies in the northwest corner of the former Roman town of Moridunum. The site was subject to an archaeological evaluation prior to groundworks commencing (Shobbrook & Poucher 2017). Associated research suggests the site is located on the line of the outer defensive ditches of the 2nd phase of defences erected around the Roman town, possibly in the 3rd century AD. The evaluation trenches indicated late post-medieval and modern deposits extended to the depth required by raft foundation excavations, but there remained the potential for earlier archaeological deposits, including Roman deposits, to be present at higher levels elsewhere within the foundation footprint, hence the reason an archaeological watching brief was required during foundation excavations.

During the groundworks no natural ground was encountered. Underneath a spread of mixed modern debris (100) the foundations of a 20th century garage [104] were encountered, along with associated levelling deposits (103). Below this was a spread of mixed material (102) containing late 19th and early 20th century artefacts. This deposit, which was similar to those deposits identified during the evaluation, would appear to be a general waste and levelling deposit of the late 19th or early 20th century, possibly associated with the construction of

adjacent dwellings along Francis Terrace and Elliston Terrace. A series of similar deposits were noted in the evaluation, potentially infilling sunken ground above the former Roman ditch.

In the southeast corner of the site, deposit (101) may be earlier in date, although no finds were recovered, and excavation stopped at this level. The colour and composition of this material suggests it could potentially represent remains of up-cast natural subsoil used within the defensive bank of the Roman town.

4.2 Storage and Curation

The project archive will be prepared in accordance with: *Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives* (ClfA, 2014), the requirements of the National Monuments Record (Wales) and the *Management of Research Projects in the Historic Environment, MoRPHE* (Historic England, 2006). The archive will be deposited with the RCAHMW.

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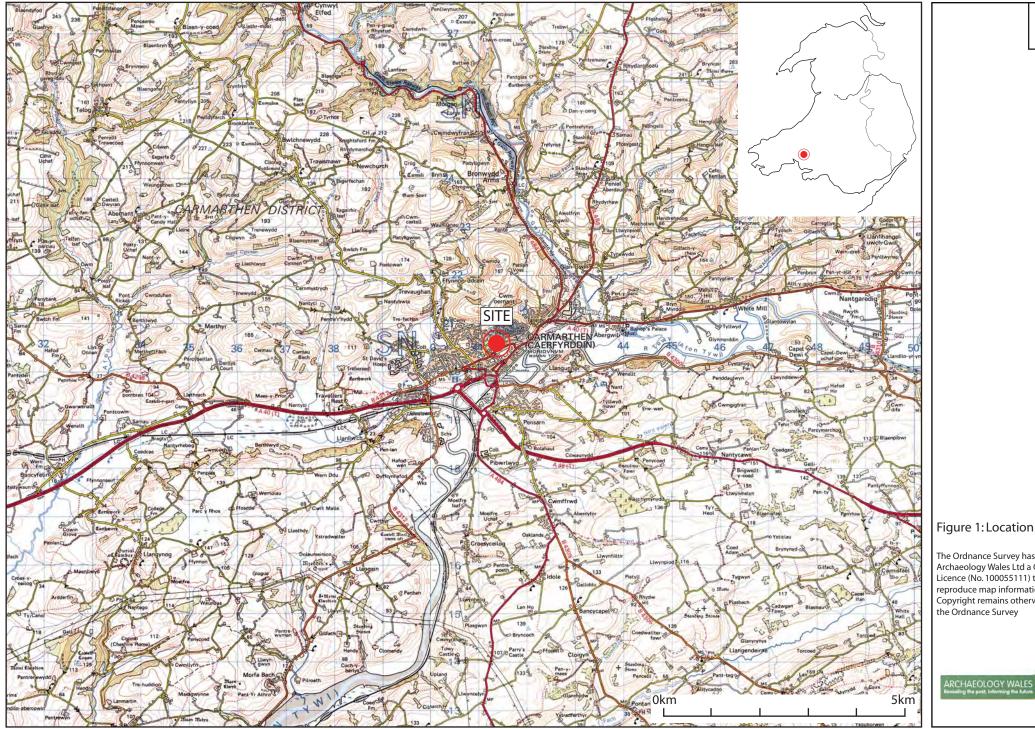
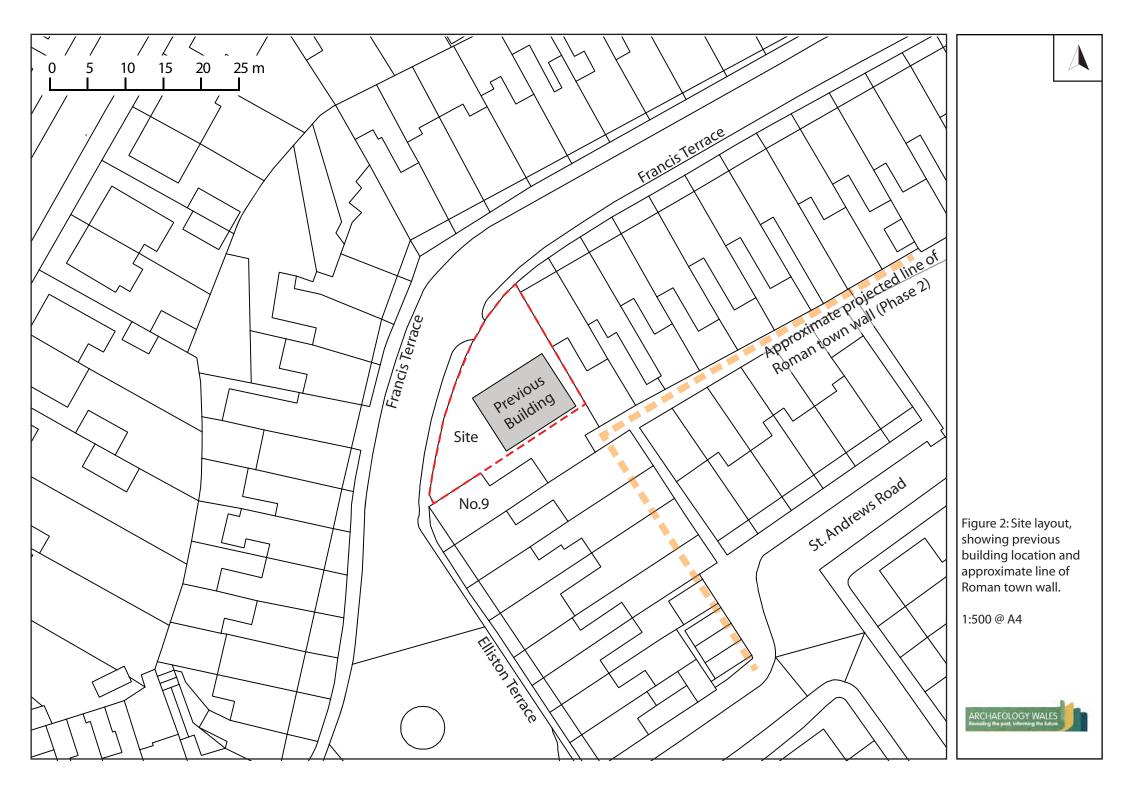
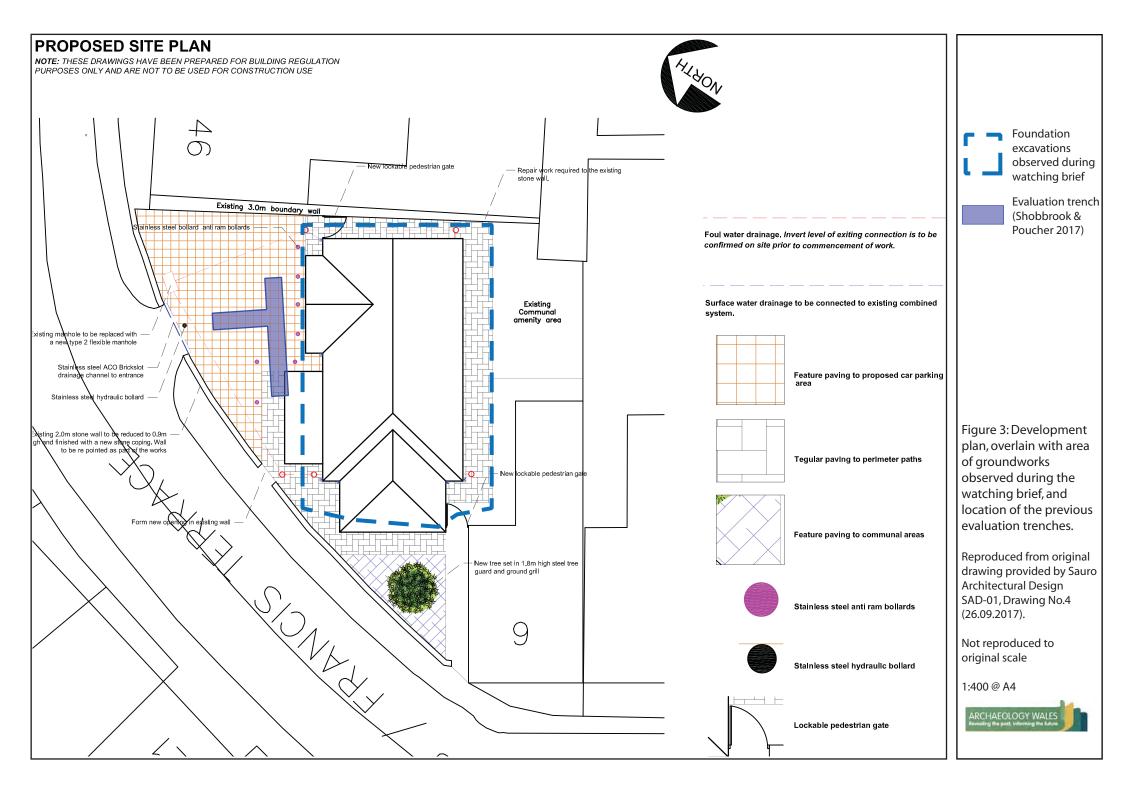


Figure 1: Location map,

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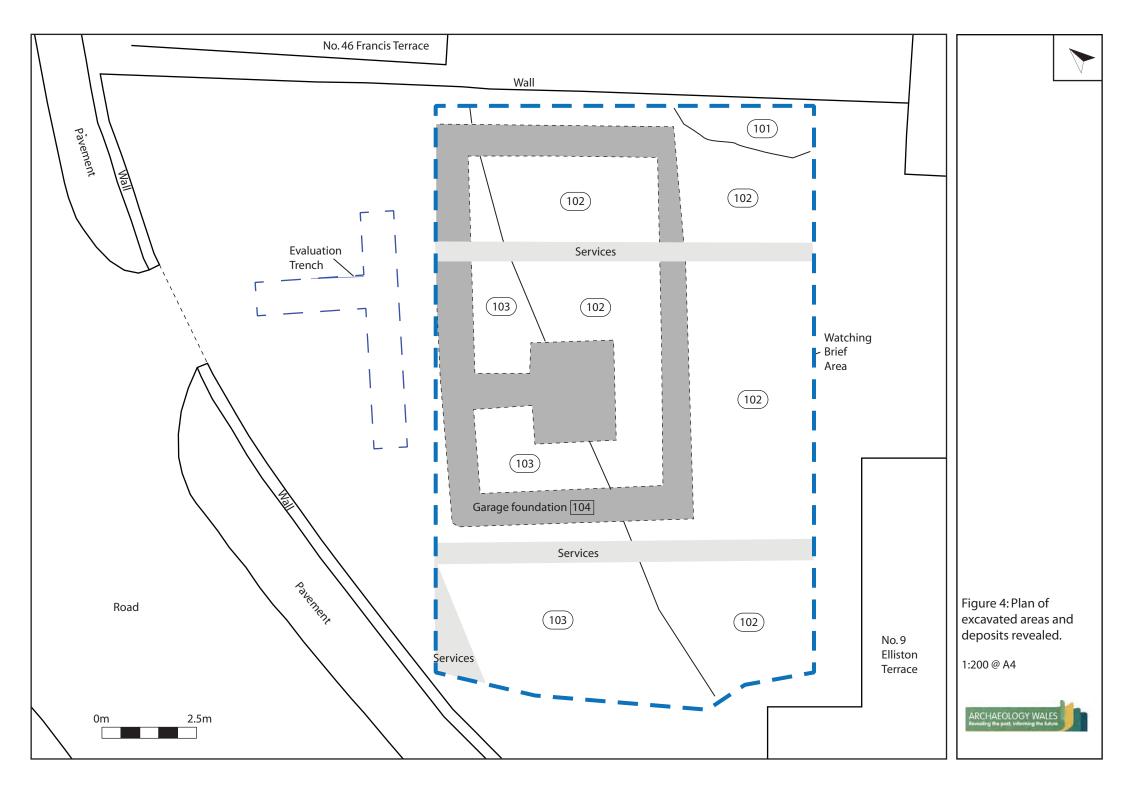




Photo 1: View of the western half of the site at finished foundation level, facing east-northeast. Showing modern services bottom left, dark deposit (103) across the centre, and deposit (102) to the right. 1m & 0.3m scale.



Photo 2: As above, facing south-southeast. Dark deposit (103) visible across the centre, with deposit (102) in the upper part of the picture. Modern services cuts through the site from top to bottom. 1m & 0.3m scale.



Photo 3: View of the eastern half of the site at finished foundation level, facing east-northeast. Deposit (102), although more mixed, spreads across much of the site, with remnants of the garage foundation [104] in the foreground, and partially exposed deposit (101) to the top right. 1m & 0.3m scale.



Photo 4: As above, facing south-southeast. Dark remnants of the garage foundation [104] visible to the right, modern services run immediately to the left of the scales, and partially exposed deposit (101) is visible top left. 1m & 0.3m scale.

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> APPENDIX I: Context List

Contexts

Context	Description		Depth
100	Deposit - Demolition/levelling layer	Friable, mid grey-brown sandy- silt Abundant, medium-large angular stone. Abundant, medium-large concrete fragments Abundant, mixed building debris 20 th cent. CBM, pottery & glass	Across site, up to 0.3m deep
101	Deposit - Bank material?/levelling deposit	Firm, light yellow-brown clay Common, medium-large rounded & sub-rounded stone No finds	1.8m x 3m, only surface revealed.
102	Deposit - Infill/levelling deposit	Friable, mottled light brown to yellow-brown-sandy-clay Abundant, medium-large sub- rounded & sub-angular stone. Common, small-medium slate & charcoal fragments Post-med to early C20 pottery.	12m x 5m, 0.1m+ thick
103	Deposit - Levelling deposit	Friable, black crushed tarmac	16m x 6m, 0.1m thick
104	Cut – C20 garage foundations	Linear, forming a rectangular area, with central square (inspection pit) Steep, straight sides, flat base. Filled by 105.	10.5m x 6m (foundation trenches 0.7m wide), 0.3m deep
105	Deposit - Fill of 104	Firm, dark grey-black fragmented concrete	10.5m x 6m (foundation trenches 0.7m wide), 0.3m thick

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APPENDIX II: Written Scheme of Investigation

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WRITTEN SCHEME OF INVESTIGATION

FOR AN ARCHAEOLOGICAL

WATCHING BRIEF

AT LAND ADJACENT TO No.9 ELLISTON TERRACE, CARMARTHEN

Prepared for:

Sauro Architectural Design

Planning Application Number: W/33850 Project No: 2553

November 2017



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Contents

Sum	mary	. 3
1.	Introduction and planning background	.3
2.	Site Description	
3.	Archaeological background	.4
4.	Objectives	
4.1.	Site Specific Research Aims	.7
5.	Timetable of works	.7
5.1.	Fieldwork	.7
5.2.	Report delivery	.7
6.	Fieldwork	.8
6.1.	Detail	. 8
6.2.	Recording	
6.3.	Finds	
6.4.	Environmental sampling strategy	
6.5.	Human remains	
6.6.	Specialist advisers	
7.	Monitoring	
8.	Post-fieldwork programme	
8.1.	Archive assessment	
8.2.	Reports and archive deposition	
9.	Staff	
	itional Considerations	
10.	Health and Safety	
10.1		-
10.2		
11.	Community Engagement and Outreach	
12.	Insurance	
13.	Quality Control	
13.1		
13.2		
14.	Arbitration	
15.	References	14

Figure 1. Site location

Figure 2. Site plan

Figure 3. Detailed site development plan

Summary

This Written Scheme of Investigation details a programme of archaeological mitigation to be undertaken by Archaeology Wales at the request of Sauro Architectural Design.

The archaeological mitigation will consist of a watching brief, and will be undertaken during ground works associated with the construction of a two storey office building on land adjacent to No.9 Elliston Terrace, Carmarthen, centred on SN 41338 20406. The associated Planning Application No. is W/33850.

The development site is located in the northwest corner of the Roman town of Moridunum, and potentially lies on the line of some of the Roman town defences. The town also saw occupation throughout the medieval and post-medieval period. A recent archaeological evaluation concluded that it is likely a Roman defensive ditch extended across the defensive area, but that this had been infilled with postmedieval and modern deposits to below the level likely to be disturbed through development works. However, the potential remained for archaeological deposits to survive within the development area.

Consequently it has been recommended that an archaeological watching brief is undertaken during ground works to mitigate the impact of the proposed development on the archaeological resource

All work will be undertaken in accordance with the standards and guidelines of the Chartered Institute for Archaeologists (2014).

1. Introduction and planning background

This Written Scheme of Investigation (WSI) details the methodology for a programme of archaeological mitigation (watching brief) to be undertaken in association with the proposed construction of a two storey office building on land adjacent to No.9 Elliston Terrace, Carmarthen, centred on SN 41338 20406 (Figures 1 - 3). The associated Planning Application No. is W/33850. The local planning authority is Carmarthenshire County Council (CCC).

The development site is located in the northwest corner of the Roman town of Moridunum, and potentially lies on the line of some of the Roman town defences. The town also saw occupation throughout the medieval and post-medieval period, and archaeological remains relating to these periods may also survive. An archaeological evaluation was recently undertaken on the site (Shobbrook & Poucher 2017), which concluded that it is likely a Roman defensive ditch extended across the defensive area, but that this had been infilled with post-medieval and modern deposits to below the level likely to be disturbed through development works. However, the potential remained for archaeological deposits to survive within the development area. As a result of this archaeological sensitivity a condition is attached to the planning consent requiring that an archaeological watching brief be undertaken to monitor the groundworks associated with the development.

This WSI has been prepared by Philip Poucher, Project Manager, Archaeology Wales Ltd (henceforth - AW) at the request of Sauro Architectural Design.

The methodology set out in this WSI will be agreed with Dyfed Archaeological Trust – Development Management (DAT-DM). DAT-DM, in its capacity as archaeological advisors to the local planning authority, has recommended that an archaeological watching brief is undertaken during ground works to mitigate the impact of the proposed development on the archaeological resource.

The purpose of the archaeological mitigation (watching brief) is to provide the local planning authority with sufficient information regarding the nature of archaeological remains on the site of the development, the requirements for which are set out in Planning Policy (revised edition 9, 2016), Section 6.5 and Technical Advice Note (TAN) 24: The Historic Environment (2017). The work is to ensure that all buried artefacts and deposits are fully investigated and recorded if they are disturbed or revealed as a result of activities associated with the development.

All work will be undertaken to the standards and guidance set by the Chartered Institute for Archaeologists (2014). AW is a Registered Organisation with the CIFA.

2. Site Description

The site lies in the centre of the town of Carmarthen in central Carmarthenshire. The land adjacent to No.9 Elliston Terrace lies close to the junction of Francis Terrace, Little Water Street and Barn Road, in a residential area of central Carmarthen.

The site occupies a corner plot, with a curving frontage along Elliston Terrace/Francis Terrace, from which the site is accessed. The site is covered with levelled hardcore, on which stands a single storey terrapin building. The terrapin building is a temporary structure, but has since been part encased in concrete blocks and render. The site is bounded to the northeast by No.46 Francis Terrace, and to the southeast by No.9 Elliston Terrace, with the boundary comprising part building and part rear garden walling.

The underlying geology of the area consists of mudstones of the Tetragraptus Beds. These are overlaid by sands and gravels representing glaciofluvial deposits of the Devensian (BGS viewer 2017).

3. Archaeological background

Carmarthen has a long and important history as Wales oldest town. A town was established here by the Romans in the 1st century AD, known as Moridunum, and operating as the civitas, or tribal capital, for all of Southwest Wales. In the mid-2nd century the town was provided with a planned gridded street layout, the extent of which is still preserved in many of the modern streets. Francis Terrace and Little Water Street, along with Old Oak Lane and The Parade/Esplanade, run along the former defences around the town. Elliston Terrace therefore sits within the northwest corner of the town limits. Excavations throughout Carmarthen have

identified two phases to the former defences. The first phase defences, possibly constructed in the late 2nd century AD, appeared in part to be built over earlier Roman occupation levels, and comprised an internal bank with two or three external ditches, covering a width of 15m to 20m in total. Possibly within a hundred years of the construction of the original defences, these were replaced by walling (between 2.5m and 3.2m wide) along the former Phase 1 central defensive ditch, backed by a new wide rampart bank, with the possible addition of a new wide external defensive ditch. Archaeological investigations along Little Water Street identified a Phase 1 outer defensive ditch along the rear of the current properties fronting the street, with rampart clay immediately to the east. It is thought Little Water Street itself runs along the Phase 2 outer defensive ditch. It is also thought that the back lane from Andrews Road, which runs to the rear of the property boundaries of Elliston Terrace and Francis/Richmond Terrace, and lies almost immediately to the southeast of the development area, represents the course of the 2nd phase defensive wall. The line of this wall has been identified in archaeological excavations lying to the rear of the properties along the south side of Richmond Terrace (James 2004, pp193-4). This would indicate that the development area lies within an area of outer defensive ditches.

Carmarthen is unusual, and perhaps unique in Wales, for seeing possible continued occupation after the collapse of Roman administration in the early 5th century. An important religious settlement, which later became the medieval priory of St John and St Teulyddog, was established immediately to the east of the town, possibly on the site of the former Roman cemetery. St Peter's Church, to the south of the development site, is also thought to have early medieval origins, noticeable in its location just inside the former Roman town, close to its west gate. It is likely that, during the early medieval period, settlement was focused around these two religious sites. Settlement is likely to have spread along Priory Street to the east, and around Church Street and St Peter's Street to the south, with possible activity extending as far as Elliston Terrace.

After the Normans had invaded and secured territory in the area towards the end of the 11th century, they established a castle and settlement in Carmarthen. Remains of the castle are still visible to the west of the County Hall (which also sits within the grounds of the castle), and settlement was established initially to the northwest along Notts Square, and subsequently to the northeast along Spilman Street and King Street. This settlement was established separately to the pre-existing 'native' settlement that was still focused around St Peter's church and along Priory Street to the east. Carmarthen therefore remained an important settlement throughout the medieval period, with much of the new Norman settlement subsequently becoming a walled town, the existing settlement to the east may also have still been defended by the Roman defences. The Priory also became one of the richest in Wales.

The two adjacent settlements were finally amalgamated in 1546, and the town became the judicial and administrative centre for the new county of Carmarthenshire. From the 16th century to the early 18th century Carmarthen was the largest town in Wales, only surpassed by the emerging new industrial towns of southeast Wales in the 18th century. During the 17th century the town was fortified

during the civil war, it is likely that this also included utilising the former Roman defences, which may have affected development in the Elliston Terrace area.

One of the earliest detailed maps of Carmarthen in 1786 depicts the site area as part of a partly wooded parkland or garden (PRN 100), fronted along the roadside to the west by a mill stream, hence the name Little Water Street. Woods map of 1834 still shows the site area as part of an enclosed wooded park, but Elliston Terrace had been established to the south and east of the development site by the 1880s.

By the early 20th another open-sided structure had been built against the eastern boundary, although the bulk of the proposed development area remained apparently undeveloped. At some point during the 20th century the site was redeveloped. The Ordnance Survey map of 1969 illustrates that the late 19th and early 20th century structures had been removed, and a square building constructed on the site, covering much of the area of proposed development. This building was presumably subsequently removed prior to the installation of the current Terrapin building, although the foundations may be the same.

The recent archaeological evaluation (Shobbroook & Poucher 2017) excavated a trench immediately adjacent to the outline of the new building. The evaluation trench reached a depth of 0.96m, no natural ground was encountered, and no Roman, early medieval or medieval finds, features or deposits were encountered. All deposits were readily dateable to the 18th century at the earliest, but are considered likely to relate to levelling and construction deposits associated with late 19th and early 20th century construction activity in the area, potentially infilling sunken ground overlying the former Roman ditch defences.

The potential for archaeological deposits within the proposed development area remains, however it was considered likely that the former Roman defensive ditch extends across the proposed development area, and therefore that infilling post-medieval and modern deposits also extend across the proposed development area. It was also considered likely that the ground has been further disturbed during the 20th century.

4. Objectives

This WSI sets out a program of works to ensure that the mitigation (watching brief) will meet the standard required by The Chartered Institute for Archaeologist's *Standard and Guidance for Archaeological Watching Briefs (2014)*.

The objective of the watching brief will be:

• to allow a rapid investigation and recording of any archaeological features that are uncovered during the proposed groundworks within the application area.

• to provide the 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 are not sufficient to support the treatment to a satisfactory or proper standard. A written report will be compiled following the fieldwork. Sufficient desk-top research will be undertaken to ensure that the results of this work are properly understood, interpreted and reported.

The report will include a comprehensive assessment of the historic context within which the archaeological evidence rests and will aim to highlight any relevant research issues within regional, national and, if relevant, international research frameworks.

4.1. Site Specific Research Aims

It is important to recognize that whilst primarily designed to mitigate impacts, developer-led archaeology is also regarded as research activity with an academic basis, the aim of which is to add to the sum of human knowledge. Curators recognize the desirability of incorporating agreed research priorities as a means of enhancing the credibility of the development control process, ensuring cost-effectiveness and legitimately maximizing intellectual return.

A research framework for the archaeology of Wales has been produced (2011-2014) and is currently in the process of review. As the archaeological work is anticipated to reveal and record evidence of the Roman town of Moridunum the framework for the Romano-British period (Davies 2016) is of particular relevance. This framework includes five main research themes, that of (1) Settlement Patterns; (2) Interaction between Roman occupiers and the indigenes; (3) the Archaeology of the Campaigning years; (4) Funerary and Ritual, and (5) Technology and Industry. Any excavations within Roman Carmarthen has the potential to add to these main research themes. Similarly it has the potential to add to the research framework for the archaeology of Medieval Wales. Particular themes of interest within this framework include urban studies (Davidson et al 2016).

5. Timetable of works

5.1. Fieldwork

The programme of mitigation will be undertaken during ground works associated with the proposed development. A start date for the ground works has not yet been finalised. Archaeology Wales will update DAT-DM with the exact date.

5.2. Report delivery

The report will be submitted to the client and to DAT-DM within three months of the completion of the fieldwork. A copy of the report will also be sent to the regional Historic Environment Record.

6. Fieldwork

6.1. Detail

The work will be undertaken to meet the standard required by The Chartered Institute for Archaeologist's Standard and Guidance for Watching Briefs (2014).

The Watching Brief will be carried out by a suitably qualified archaeologist on groundworks associated with the construction of a two storey office building (Figure 2 & 3), where sub-surface deposits are likely to be exposed or cut into. This is likely to include the excavation for the foundations of the new building, and associated service trenches. The mechanical excavation will be undertaken by a tracked 360 degree excavator using a toothless ditching bucket wherever possible, although it is anticipated that there is likely to be modern hardstanding deposits on the site requiring a toothed bucket for some of the excavation.

The site archaeologist undertaking the watching brief will be afforded the required access by the main contractor in order to observe and where necessary to record any archaeological remains revealed. Groundwork will not be undertaken without the presence of the site archaeologist. The site archaeologist will record finds and less significant archaeological deposits and features without significant delay to the work program.

Where significant or complex archaeological deposits or features are encountered there will be a requirement for those areas to be fenced off and highlighted to all contractors employed on the site. Machines or contractors shall not enter this area until archaeological recording has been completed. If significant archaeological features are revealed during the work a meeting between the client, DAT-DM and AW will be called at the earliest convenience.

To comply with professional guidelines, a contingency for a maximum of three days' uninterrupted access to each such area and for a team of up to two further archaeologists to be employed should be provided. Contingency costs will be agreed in advance before any extension to the programme commences and will follow a site meeting between Archaeology Wales, the client and DAT-DM.

6.2. Recording

Recording will be carried out using AW recording systems (pro-forma context sheets etc) using a continuous number sequence for all contexts.

Plans and sections will be drawn to a scale of 1:50, 1:20 and 1:10 as required and related to Ordnance Survey datum and published boundaries where appropriate.

All features identified will be tied in to the OS survey grid and fixed to local topographical boundaries.

Photographs will be taken in digital format with an appropriate scale, using a 12MP camera with photographs stored in Tiff format.

The archaeologist undertaking the watching brief will have access to the AW metal detector and be trained in its use.

6.3. Finds

The professional standards set in the Chartered Institute for Archaeologists' *Standard and guidance for the collection, documentation, conservation and research of archaeological (2014)* will form the basis of finds collection, processing and recording.

All manner of finds regardless of category and date will be retained.

Finds recovered that are regarded as Treasure under *The Treasure Act 1996* will be reported to HM Coroner for the local area.

Any finds which are considered to be in need of immediate conservation will be referred to a UKIC qualified conservator (normally Phil Parkes at Cardiff University).

6.4. Environmental sampling strategy

Deposits with a significant potential for the preservation of palaeoenvironmental material will be sampled, by means of the most appropriate method (bulk, column etc). Where sampling will provide a significant contribution to the understanding of the site AW will draw up a site-specific sampling strategy alongside a specialist environmental archaeologist. All environmental sampling and recording and will follow English Heritage's *Guidelines for Environmental Archaeology* (2002).

6.5. Human remains

In the event that human remains are encountered, their nature and extent will be established and the coroner informed. All human remains will be left *in situ* and protected during backfilling. Where preservation *in situ* is not possible the human remains will be fully recorded and removed under conditions that comply with all current legislation and include acquisition of licenses and provision for reburial following all analytical work. Human remains will be excavated in accordance with the Chartered Institute for Archaeologist's *Excavation and Post-Excavation Treatment of Cremated and Inhumed Human Remains: Technical Paper Number 13* (1993).

A meeting with DAT-DM, the client and AW will be called if the human remains uncovered are of such complexity or significance that the contingency arrangement (6.1 above) would not be of sufficient scope.

6.6. Specialist advisers

In the event of certain finds, features or sites being discovered, AW will seek specialist opinion and advice. A list of specialists is given in the table below although this list is not exhaustive.

Artefact type	Specialist
Flint	Kate Pitt (Archaeology Wales)
Animal bone	Richard Madgwick (Cardiff University)
CBM, heat affected clay, Daub etc.	Rachael Hall (APS)
Clay pipe	Hilary Major (Freelance)
Glass	Rowena Hart (Archaeology Wales)
Cremated and non- cremated human bone	Malin Holst (University of York)/Richard Madgwick (Cardiff University)
Metalwork	Kevin Leahy (University of Leicester)/ Quita Mold (Freelance)
Metal work and metallurgical residues	Dr Tim Young (GeoArch)
Neo/BA pottery	Dr Alex Gibson (Bradford University)
IA/Roman pottery	Jane Timby (Freelance)
Roman Pottery	Rowena Hart (Archaeology Wales)/ Peter Webster (Freelance)
Post Roman pottery	Stephen Clarke (Monmouthshire Archaeology)
Charcoal (wood ID)	John Carrot (Freelance)
Waterlogged wood	Nigel Nayling (University of Wales – Lampeter)
Molluscs and pollen	Dr James Rackham
Charred and waterlogged plant remains	Wendy Carruthers (Freelance)

6.6.1. Specialist reports

Specialist finds and palaeoenvironmental reports will be written by AW specialists, or sub-contracted to external specialists when required.

7. Monitoring

DAT-DM will be contacted approximately two weeks prior to the commencement of archaeological site works, and subsequently once the work is underway.

Any changes to the WSI that AW may wish to make after approval will be communicated to DAT-DM for approval on behalf of Planning Authority.

DAT-DM will be given access to the site so that they may monitor the progress of the field evaluation. No area will be back-filled, until DAT-DM has had the opportunity to inspect it, unless permission has been given in advance. DAT-DM will be kept regularly informed about developments, both during the site works and subsequently during post-excavation.

8. Post-fieldwork programme

8.1. Archive assessment

8.1.1. Site archive

An ordered and integrated site archive will be prepared in accordance with *The National Standard and Guidance to Best Practice for Collecting and Depositing Archaeological Archives in Wales 2017* (National Panel for Archaeological Archives in Wales) and the guidelines of the Chartered Institute for Archaeologists upon completion of the project.

The site archive (including artefacts and samples) will be will be prepared in accordance with the National Monuments Record (Wales) agreed structure and deposited with an appropriate receiving organisation, in compliance with CIFA Guidelines (*Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives'*, 2014). The legal landowners consent will be gained for deposition of finds.

8.1.2. Analysis

Following a rapid review of the potential of the site archive, a programme of analysis and reporting will be undertaken. This will result in the following inclusions in the final report:

- Non-technical summary
- Location plan showing the area/s covered by the watching brief, all artefacts, structures and features found
- Plan and section drawings (if features are encountered) with ground level, ordnance datum and vertical and horizontal scales.
- Written description and interpretation of all deposits identified, including their character, function, potential dating and relationship to adjacent features. Specialist descriptions and illustrations of all artefacts and soil samples will be included as appropriate.

- An indication of the potential of archaeological deposits which have not been disturbed by the development
- A discussion of the local, regional and national context of the remains by means of reviewing published reports, unpublished reports, historical maps, documents from local archives and the regional HER as appropriate.
- A detailed archive list at the rear listing all contexts recorded, all samples finds and find types, drawings and photographs taken. This will include a statement of the intent to deposit, and location of deposition, of the archive.

8.2. Reports and archive deposition

8.2.1. Report to client

Copies of all reports associated with the mitigation (watching brief), together with inclusion of supporting evidence in appendices as appropriate, including photographs and illustrations, will be submitted to the client and DAT-DM upon completion.

8.2.2. Additional reports

After an appropriate period has elapsed, copies of all reports will be deposited with the relevant county Historical Environment Record (DAT), the National Monuments Record and, if appropriate, Cadw.

8.2.3. Summary reports for publication

Short archaeological reports will be submitted for publication in relevant journals; as a minimum, a report will be submitted to the annual publication of the regional CBA group or equivalent journal.

8.2.4. Notification of important remains

Where it is considered that remains have been revealed that may satisfy the criteria for statutory protection, AW will submit preliminary notification of the remains to Cadw.

8.2.5. Archive deposition

The final archive (site and research) will, whenever appropriate, be deposited with a suitable receiving institution, usually the relevant Local Authority museums service. Arrangements will be made with the receiving institution before work starts.

Although there may be a period during which client confidentiality will need to be maintained, copies of all reports and the final archive will be deposited no later than six months after completion of the work.

Copies of all reports, the digital archive and an archive index will be deposited with the *National Monuments Record*, RCAHMW, Aberystwyth.

Wherever the archive is deposited, this information will be relayed to the HER. A summary of the contents of the archive will be supplied to DAT-DM.

8.2.6. Finds deposition

The finds, including artefacts and ecofacts, excepting those which may be subject to the Treasure Act, will be deposited with the same institution, subject to the agreement of the legal land owners.

9. Staff

The project will be managed by Philip Poucher (AW Project Manager) and the fieldwork undertaken by suitable qualified and experienced AW archaeologists. Any alteration to staffing before or during the work will be brought to the attention of DAT-DM and the client.

Additional Considerations

10. Health and Safety

10.1. Risk assessment

Prior to the commencement of work AW will carry out and produce a formal Health and Safety Risk Assessment in accordance with *The Management of Health and Safety Regulations* 1992. A copy of the risk assessment will be kept on site and be available for inspection on request. A copy will be sent to the client (or their agent as necessary) for their information. All members of AW staff will adhere to the content of this document.

10.2. Other guidelines

AW will adhere to best practice with regard to Health and Safety in Archaeology as set out in the FAME (Federation of Archaeological Managers and Employers) health and safety manual *Health and Safety in Field Archaeology (2002)*.

11. Community Engagement and Outreach

Wherever possible, AW will ensure suitable measures are in place to inform the local community and any interested parties of the results of the site investigation work. This may occur during the site investigation work or following completion of the work. The form of any potential outreach activities may include lectures and talks to local groups, interested parties and persons, information boards, flyers and other forms of communication (social media and websites), and press releases to local and national media.

The form of any outreach will respect client confidentiality or contractual agreements. As a rule, outreach will be proportional to the size of the project.

Where outreach activities have a cost implication these will need to be negotiated in advance and in accordance with the nature of the desired response and learning outcomes.

12. Insurance

AW is fully insured for this type of work, and holds Insurance with Aviva Insurance Ltd and Hiscox Insurance Company Limited through Towergate Insurance. Full details of these and other relevant policies can be supplied on request.

13. Quality Control

13.1. Professional standards

AW works to the standards and guidance provided by the *Chartered Institute for Archaeologists*. AW fully recognise and endorse the Chartered Institute for Archaeologists' *Code of Conduct, Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology* and the *Standard and Guidance for archaeological watching briefs* currently in force. All employees of AW, whether corporate members of the Chartered Institute for Archaeologists or not, are expected to adhere to these Codes and Standards during their employment.

13.2. Project tracking

The designated AW manager will monitor all projects in order to ensure that agreed targets are met without reduction in quality of service.

14. Arbitration

Disputes or differences arising in relation to this work shall be referred for a decision in accordance with the Rules of the Chartered Institute of Arbitrators' *Arbitration Scheme for the Institute for Archaeologists* applying at the date of the agreement.

15. References

BBNPA 2017 Delegated Decision Notice – 17/15230/FUL

Briggs, CS 2007 A Research Framework for the Archaeology of Wales Version 01, Final Paper Post Medieval Wales (1539 -1750)

British Geological Survey 2017 http://mapapps.bgs.ac.uk/geologyofbritain/home.html (Accessed 26.10.17).

Davidson, A., Davies, W., Gray, M. & Silvester, RJ. 2016 A Research Framework for the Archaeology of Wales: Medieval Draft Paper November 2016

Davies, JL 2016 *Refresh of the Research Framework for the Archaeology of Wales 2011-2016: Romano British* James, H 2003 *Excavations in Roman Carmarthen: 1973-1993* Britannia Shobbrook, A & Poucher, P 2017 *Land Adjacent to No.9 Elliston Terrace, Carmarthen: Archaeological Evaluation.* Archaeology Wales Report No.1616

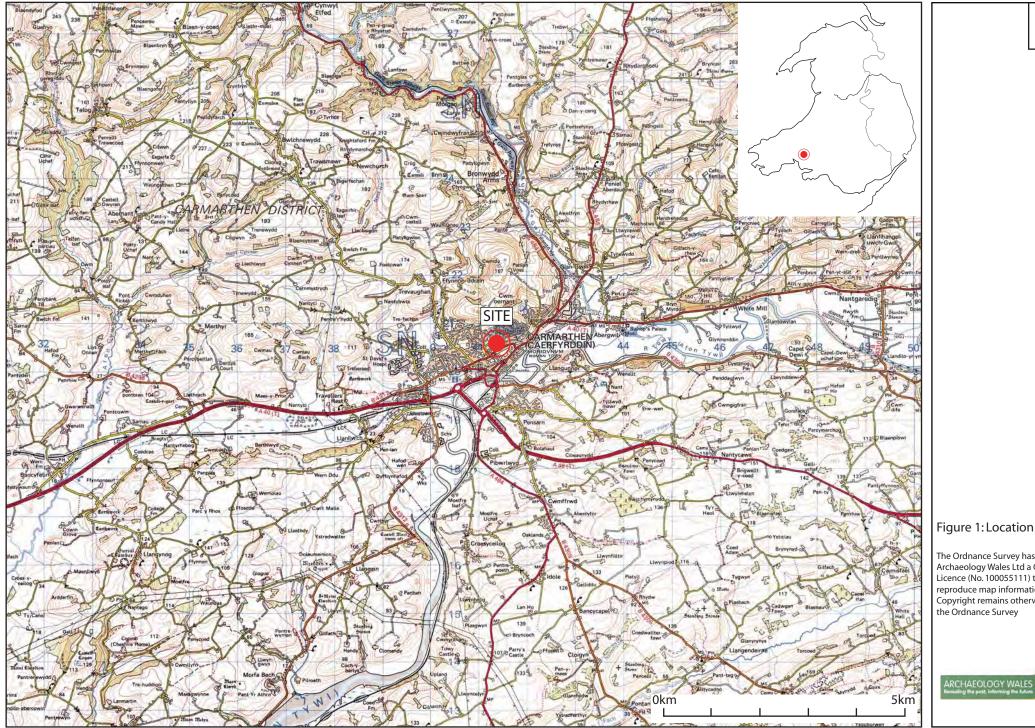
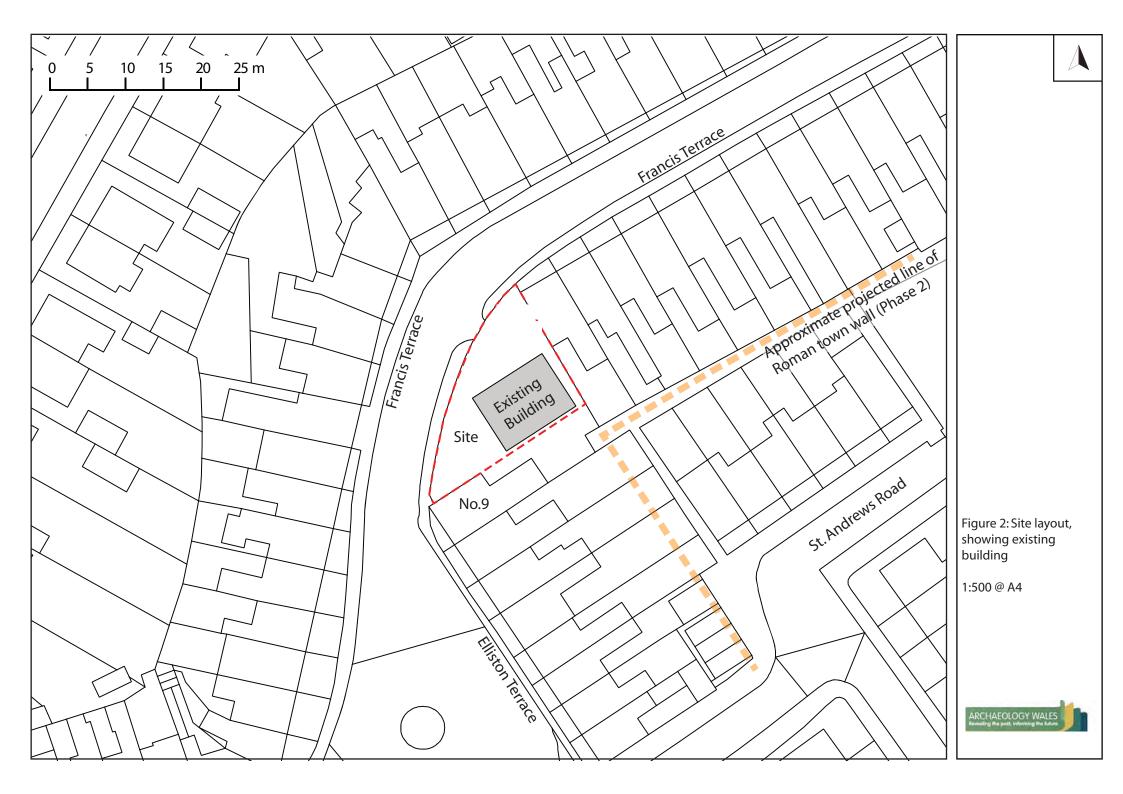
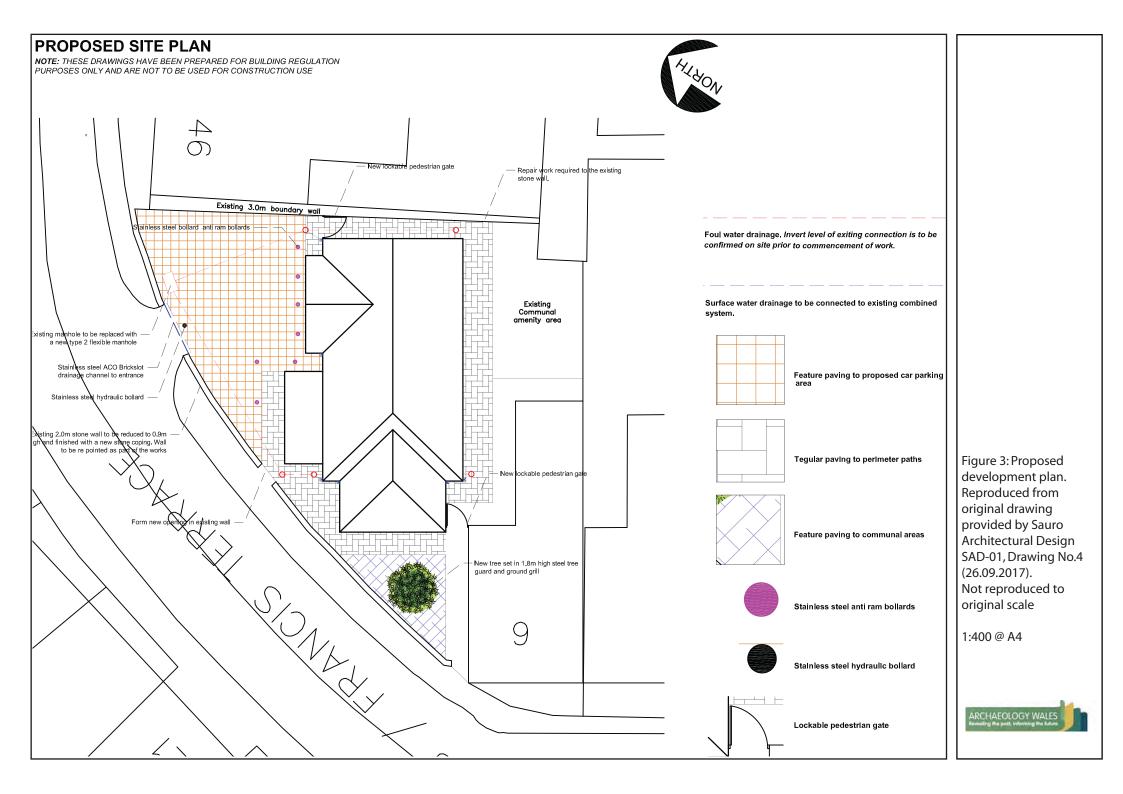


Figure 1: Location map,

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APPENDIX III: Archive Cover Sheet

ARCHIVE COVER SHEET

Land Adjacent to No.9 Elliston Terrace, Carmarthen

Site Name:	Elliston Terrace, Carmarthen
Site Code:	ETC/17/WB
PRN:	33 (Roman Town Defences)69 (Moridunum-Roman Town)100 (Furnace Gardens)
NPRN:	94432 Moridunum Roman Town
SAM:	
Other Ref No:	-
NGR:	NGR SN 41338 20406
Site Type:	Raft foundation excavation of single office building
Project Type:	Watching Brief
Project Manager:	Philip Poucher
Project Dates:	December 2017 - April 2018
Categories Present:	Paper
Location of Original Archive:	AW
Location of duplicate Archives:	Paper copies with RCAHMW, Aberystwyth.
Number of Finds Boxes:	0
Location of Finds:	-
Museum Reference:	-
Copyright:	AW
Restrictions to access:	None

Archaeology Wales

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