CAREW FRENCH TIDAL MILL AND CAUSEWAY, CAREW, PEMBROKESHIRE (SN 04155 03831)

ARCHAEOLOGICAL WATCHING BRIEF DURING REPAIR AND REMEDIATION WORKS 2017

DAT Archaeological Services

Prepared by Dyfed Archaeological Trust
For: Pembrokeshire Coast National Park Authority

REGISTERED ORGANISATION CIfA

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ARCHAEOLOGICAL WATCHING BRIEF DURING REPAIR AND REMEDIATION WORKS 2017

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CAREW FRENCH TIDAL MILL AND CAUSEWAY, CAREW, PEMBROKESHIRE: ARCHAEOLOGICAL WATCHING BRIEF DURING REPAIR AND REMEDIATION WORKS 2017

SUMMARY

DAT Archaeological Services were commissioned by Pembrokeshire Coast National Park Authority (PCNPA) to undertake an archaeological watching brief during repair and remediation works at the Carew French Tidal Mill (PRN 4412) and Causeway (PRN 60057) in Carew. The repair works addressed the ingress of water through leakages from and within, the vicinity of the southern wall sluice. The French Mill is a Grade II listed building (Ref No 18206) and the Causeway is a Grade II listed building (Ref No 6038) and is located within the Carew, Milton and Nash Historic Landscape Area. Due to the potential archaeological sensitivity PCNPA requested the presence of an archaeologist during the repair works.*

During the watching brief it was possible to observe the stratigraphic sequence within the excavation area. An upper layer associated with the modern road surface was observed to a depth of approximately 0.15m. This lay above a layer of made ground which in turn overlay redeposited alluvial clay deposits. The southwest face of the stone arch to the sluice was exposed as well as some apparent in-situ worked stones at the base of the trench. However it was not possible to determine if these were stone footings associated with the current east causeway wall or an earlier phase of construction. Aside from this, no significant archaeological remains or deposits were identified. Nevertheless this does not preclude the possibility that significant archaeological activity exists in the wider area surrounding both schemes.

1 INTRODUCTION

1.1 Project Commission

1.1.1 DAT Archaeological Services were commissioned by the Pembrokeshire Coast National Park Authority (PCNPA) to undertake an archaeological watching brief during repair and remediation works at the Carew French Tidal Mill and Causeway (PRN 60057) in Carew, Pembrokeshire (SN0415503831; Figure 1).

1.1.2 The repair works addressed the ingress of water through leakages from and within, the vicinity of the southern wheel sluice. Leakage is causing water ingress into the eastern cellar of the mill and around the penstock of the building.

1.1.3 The phases of repair works are outlined in the Marine Licence application submitted by PCNPA and as summarised here:

- **Phase 1:** Drainage of mill pond and removal of sluice gates for repair.
- **Phase 2:** Inspections of causeway masonry walls (internal and external)
- **Phase 3:** Temporary blockage of sluice gates with steel plates.
- **Phase 4:** Pointing repairs to masonry walls.
- **Phase 5:** Removal of steel plates and reinstatement of original grills following completion of repairs around the Mill building.
- **Phase 6:** Instalment of sluice gates and tidal refilling of mill pond.

1.1.4 The archaeological watching brief discussed in this report relates to works undertaken in Phase 2 of the repair works which included the excavation of a large test pit into the clay core of the causeway to inspect the base of the masonry walls and to determine the depth of water ingress.

1.1.5 The French Mill is a Grade II listed building (Ref No 18206) and the causeway is a Grade II* listed building (Ref No 6038) and is located within the Carew, Milton and Nash Historic Landscape Area (Ref: 338). Due to the potential archaeological sensitivity of the area the archaeological watching brief was requested by the PCNPA.

1.1.6 The purpose of a watching brief, as laid down in the IFA S&G AWB is:

- To allow, within the resources available, the preservation by record of archaeological deposits, the presence and nature of which could not be established (or established with sufficient accuracy) in advance of development or other potentially disruptive works.
- To provide an opportunity, if needed, for the watching archaeologist to signal to all interested parties, before the destruction of the material in question, that an archaeological find has been made for which the resources allocated to the watching brief itself are not sufficient to support treatment.

1.2 Scope of Project

1.2.1 A Written Specification of Investigation (WSI) for the watching brief was prepared by DAT Archaeological Services prior to the commencement of

works. The specification outlined the methodologies by which the watching brief should be undertaken including those:

- To identify the presence/absence of any archaeological deposits.
- To establish the character, extent and date range for any archaeological deposits to be affected by the proposed ground works.
- To appropriately investigate and record any archaeological deposits to be affected by the ground works.
- To produce an archive and report of any results.

1.3 Report Outline

1.3.1 This report describes the location of the development works, reviews the archaeological background, and provides a summary and discussion of the archaeological watching briefs and their results.

1.4 Abbreviations

1.4.1 Sites recorded on the Regional Historic Environment Record[1] (HER) are identified by their Primary Record Number (PRN) and located by their National Grid Reference (NGR). Dyfed Archaeological Trust Development Management – DAT-DM; Scheduled Monument – SM; Written Scheme of Investigation – WSI; -Pembrokeshire Coast National Park Authority - PCNPA.

1.5 Illustrations

1.5.1 Printed map extracts are not necessarily produced to their original scale.

1.6 Timeline

1.6.1 The following timeline (Table 1) is used within this report to give date ranges for the various archaeological periods that may be mentioned within the text.

Period	Approximate date	
Palaeolithic –	*c.*450,000 – 10,000 BC	Prehistoric
Mesolithic –	*c.* 10,000 – 4400 BC	
Neolithic –	*c.*4400 – 2300 BC	
Bronze Age –	*c.*2300 – 700 BC	
Iron Age –	*c.*700 BC – AD 43	
Roman (Romano-British) Period –	AD 43 – *c.* AD 410	Historic
Post-Roman / Early Medieval Period –	*c.* AD 410 – AD 1086	
Medieval Period –	1086 – 1536	
Post-Medieval Period[2] –	1536 – 1750	
Industrial Period –	1750 – 1899	
Modern –	20th century onwards	

Table 1: Archaeological and Historical Timeline for Wales.

[1] Held and managed by Dyfed Archaeological Trust, The Shire Hall, Carmarthen Street, Llandeilo SA19 6AF.
[2] The post-medieval and industrial periods are combined as the post-medieval period on the Regional Historic Environment Record as held by Dyfed Archaeological Trust

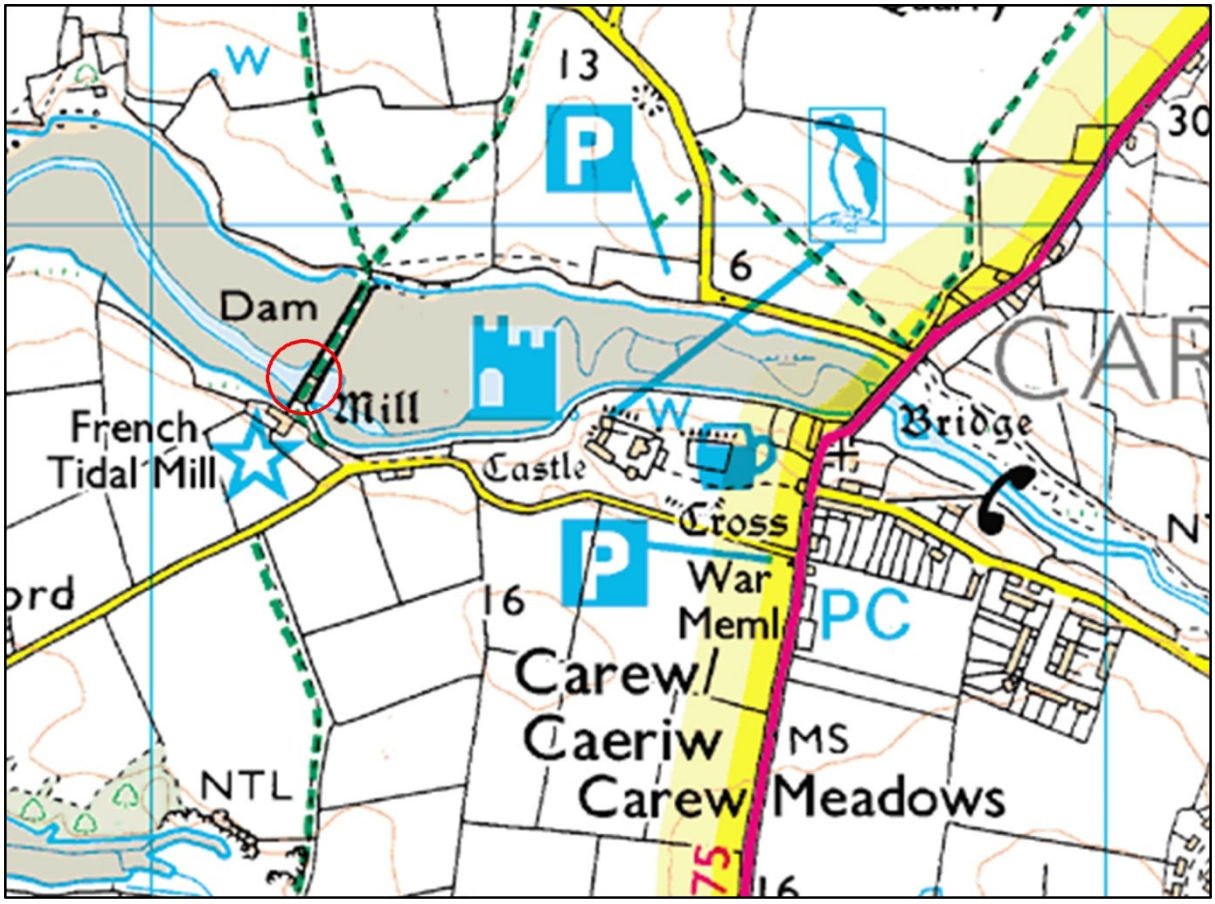


Figure 1: Map showing the location of Carew French Mill and causeway (circled in red), located east of Carew Castle

2 SITE DETAILS

2.1 Location

2.1.1 Carew French Tidal Mill is located on the southwestern end of the causeway on the southern bank of an impounded tidal creek. The creek is the tidal part of Carew River which once was far more extensive and was navigable further inland some miles to the east. However, since its impoundment by the tidal mill it has become silted up.

2.1.2 The tidal mill lies approximately 300m to the west of Carew Castle.

2.1.3 The underlying geology is sedimentary rock; specifically limestone from the Carboniferous Period formed approximately 326 to 359 million years ago in a shallow carbonate sea.

2.2 Archaeological Background

2.2.1 Documentary evidence mentions the presence of a mill (PRN 4412) and causeway (PRN 60057) in this location since the 16th and 17th centuries respectively. The stone masonry and clay core causeway creates a dam, or tidal barrier across the Carew River and is a Grade II* listed building (LB Ref No 6038). Historic prints show that it was used as a wharf at high tide. The present 19th-century three storey mill is composed of two buildings; the northern wing and main mill and is a Grade II listed building (LB Ref No 18206). The buildings are aligned along the causeway orientated north-east-south-west and host two mill wheels; the north and southern wheels. The mill is likely to have originated as two mills and indeed the northern wheel carries the date 1801. The mill was mainly used as a corn mill and later, briefly as a bone mill until its closure in 1937. The mill is the only remaining tidal mill in Wales and is now managed by PCNPA. It is open to the public following restoration in 1985 (Bell 2017, Source: Cadw Listed Buildings Full Report; 6038).

2.2.2 To the east of the mill lies the scheduled monument area of Carew Castle (SM PE001), which includes the castle structure, its grounds and its defences. The medieval settlement of Carew (PRN 27071) is believed to have focused on the castle, although the modern layout of regularly spaced buildings is more likely to be of later date. Although the extent of the main castle and its defences are well known it is anticipated that some elements of it may extend beyond the scheduled area (Enright *et al* 2015).

2.2.3 Within the grounds of the castle lies the scheduled early medieval pre-Norman stone cross (SM PE009); that possibly indicates earlier activity that predates the medieval castle (Enright *et al* 2015). It has also been suggested that the location of the castle on a promontory of land and the outer defences to the south and east of the castle could be associated with a much earlier Iron Age defended enclosure *(ibid).*

2.2.4 In 1644 a Civil War skirmish took place when the Parliamentarian forces of Colonel Laugharne sieged the castle (Enright *et al* 2015). It is believed that the skirmish took place within Carew meadows, the fields to the south of the castle. Groundworks carried out in 2013 within the car park revealed musket balls in the topsoil and it is recorded that cannon balls have been found within the fields of Carew meadows in the 19th century (*ibid).*

3 WATCHING BRIEF METHODOLOGY

3.1 Fieldwork Methodology

3.1.1 The archaeological watching brief was undertaken during Phase 2 of the repair works which covered the inspections of the causeway masonry walls. This was undertaken via excavation of a large test pit into the clay core of the causeway to inspect the base of the masonry walls and determine the depth of water ingress. The test pit was situated over the southern wheel sluice and included the excavation of the core material within the sluice (Figure 2).

3.1.2 The excavation was undertaken by a mini-excavator and a photographic record was maintained of the causeway and sluice masonry exposed during this stage. The test pit was later refilled re-using the excavated clay infill and additional imported clay soil where required.

3.1.3 Following the excavation of the test pit and inspection, the repair works included the lime mortar pointing of the external face of the causeway wall (eastern side), lime rendering of the external and internal mill cellar and the crown of the southern sluice tunnel. It was not necessary to carry out a watching brief during these phases of works.

3.1.4 The watching brief was undertaken over one day on 24th November 2017.

3.2 Post-Fieldwork Reporting and Archiving

3.2.1 All data recovered during the fieldwork will be collated into a site archive structured in accordance with specifications in *Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation* (Brown 2007), and the procedures recommended by the National Monuments Record, Aberystwyth.

3.2.2 The results of the fieldwork have been assessed in local, regional and wider contexts.

3.2.3 The report includes a desk-based research element to ensure that the site is placed within its wider archaeological context.

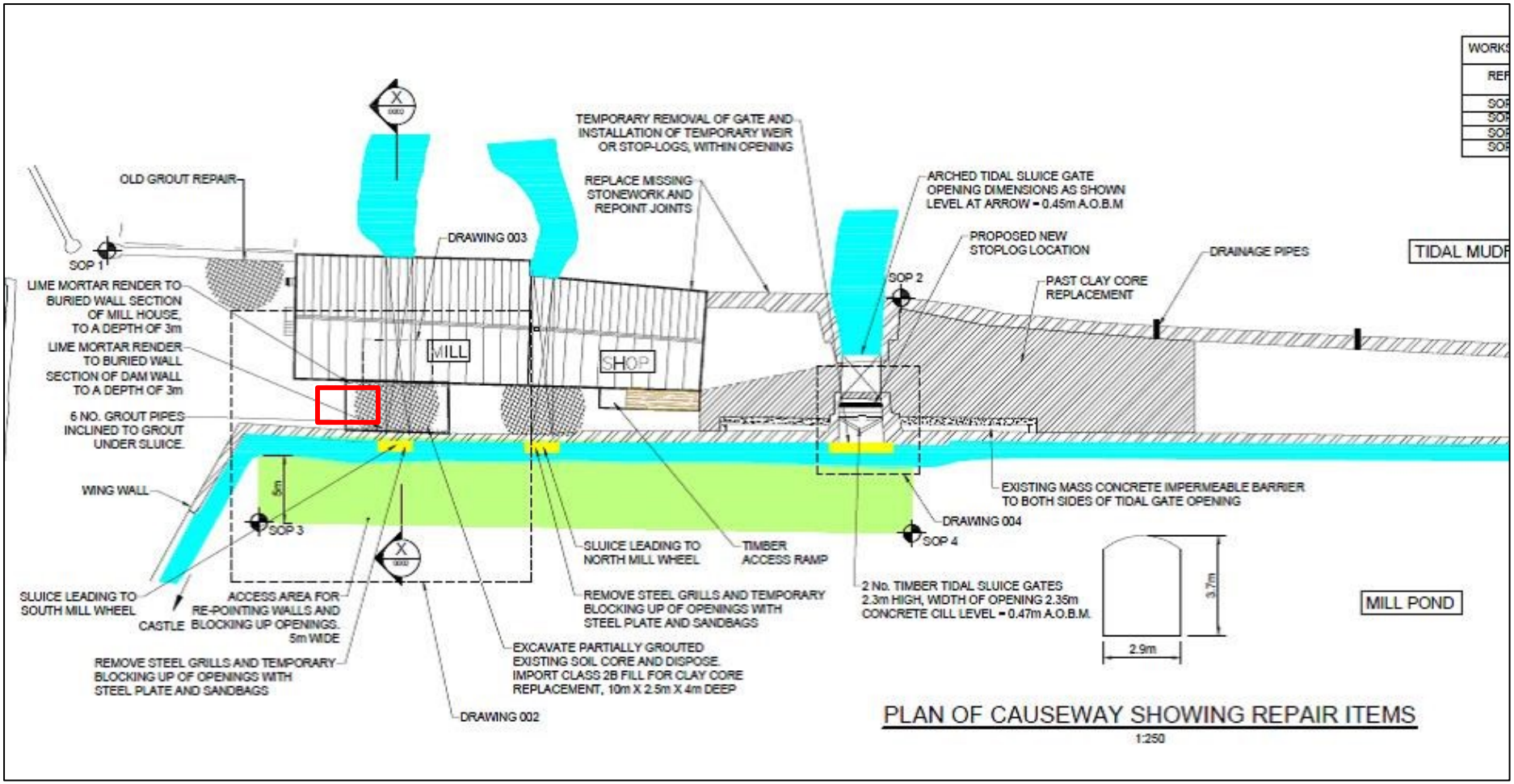


Figure 2: Plan of Carew French Mill and Causeway showing the proposed scheme of repair works and the excavated test pit outlined in red. (Reproduced courtesy of Atkins © Atkins Limited (2017))

4 RESULTS

4.1 The inspection trench was excavated over the sluice leading to the southern mill wheel (Photo 1). The trench was situated over the midsection of the sluice and extended south beyond the southern extent of the sluice structure (Figure 2).

Photo 1: Illustrating the location of the inspection trench over the sluice leading to the south mill wheel (red dashed lines mark approximate location of inspection trench).

4.2 The upper layers of the trench comprised the present road surface (approximately 0.15m thick). Underlying this was a silty layer of made ground up to 0.40m thick. This layer was rich in crushed mortar and contained fragmented frogged bricks as well as frequent small stones and a number of large flat worked stones. Lying beneath this made ground, at a depth of approximately 0.70m were alluvial clays light brown in colour; though growing significantly darker in colour with depth. Photo 2 illustrates the stratigraphic sequence observed.

Photo 2: The stratigraphic sequence observed in the southeast facing section of the inspection trench.

4.3 During the excavations the outer southwest face of the stone arch of the sluice was exposed (Photo 3). The arch appeared constructed from large worked stones. The arch extended roughly 2.0m from its apex indicating how substantial the sluice arch probably is. The alluvial deposits butted up against the stone arch, suggesting that they were natural alluvial clays excavated during construction of the causeway and then redeposited as packing when required.

4.4 The trench was excavated to a depth of approximately 2.0m. At the base of the trench in the northwest facing section an apparent *in-situ* wall was observed (Photo 4). Due to the constraints of the watching brief it was not possible to ascertain whether this was footings associated with the current east causeway wall or an earlier phase of construction. These stones were not disturbed and remained *in-situ.*

Photo 3: Outer southwest facing wall of the sluice arch exposed during excavations.

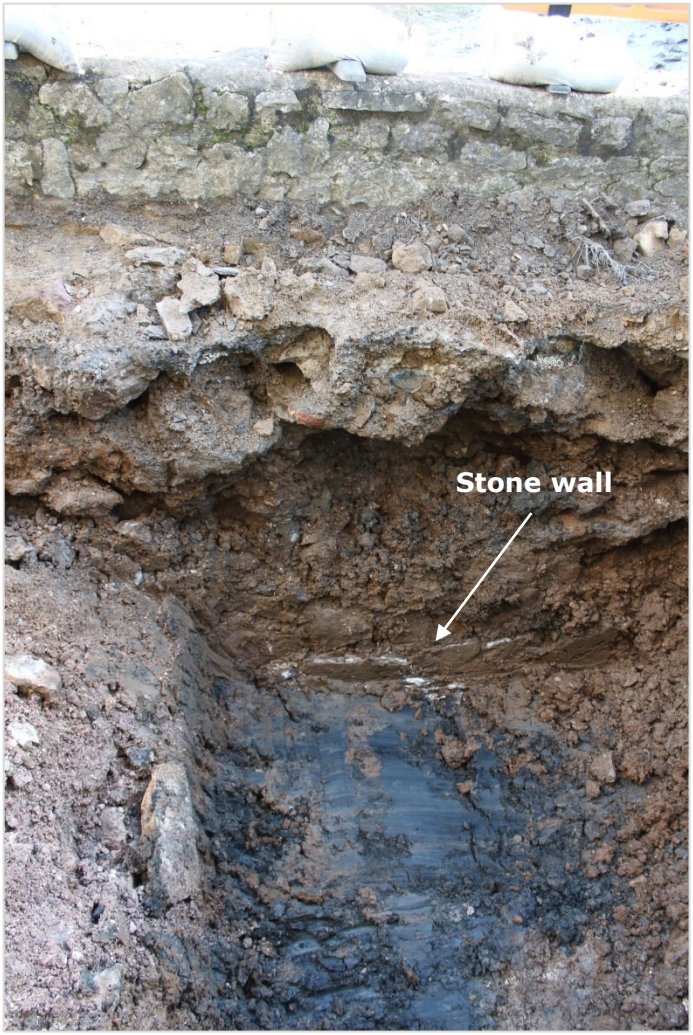


Photo 4: Evidence of a stone wall observed at the base of the trench in the northwest facing section.

5 CONCLUSIONS

5.1 This archaeological watching brief allowed the attending archaeologist to observe the stratigraphic sequence and archaeological potential of the site. The results of which have demonstrated that the groundworks associated with the repair works did not impact upon any significant archaeological remains or deposits.

5.2 The excavation of the inspection trench revealed an upper layer associated with the present road surface overlying a layer of made ground. This in turn was overlying redeposited alluvial clay deposits.

5.3 The outer southwest face of the stone arch of the sluice was exposed. Constructed from large worked stones; the arch extended roughly 2.0m from its apex indicating how substantial the sluice arch probably is

5.4 At the base of the inspection trench *in-situ* worked stones were observed in the northwest facing section of the trench. Under the constraints of the watching brief it could not be determined whether they were footings associated with the current east causeway wall or an earlier phase of construction.

5.5 Apart from the possibility of an earlier wall, no significant archaeological remains or deposits were identified. Thus the archaeological watching brief has met the aims of the project.

6 SOURCES

6.1 Published

Brown, D H, 2007, *Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation.* Institute of Field Archaeologists

Bell, M., Carew French Tidal Mill and Causeway, Carew, Pembrokeshire – Archaeological Watching Brief during Repair and Remediation Works: Written Scheme of Investigation

Enright, C., Kemp, R., Meek, J., *A4075 Road Improvements, Carew, Pembrokeshire: Archaeological Watching Brief.* Dyfed Archaeological Trust Report No. 2015/44

6.2 Database

Dyfed Archaeological Trust Historic Environment Record, housed with Dyfed Archaeological Trust in The Corner House, Llandeilo, Carmarthenshire, SA19 6AE

RCAHMW Coflein Database: -http://www.coflein.gov.uk/

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

Historic Wales: - http://historicwales.gov.uk

British Geological Survey: http://mapapps.bgs.ac.uk/geologyofbritain/home.html

6.3 Cartographic

Ordnance Survey Map, 2001, 1:25 000

Ordnance Survey Map, 2003, 1:50 000

APPENDIX I

Project Archive

Project Number: FS17_067

ERN: 111174

1 x Watching Brief Form

48 x TIFF Digital photographs; Film Number 111174

1x Photo catalogue

APPENDIX II

CAREW FRENCH TIDAL MILL AND CAUSEWAY, CAREW, PEMBROKESHIRE – ARCHAEOLOGICAL WATCHING BRIEF DURING REPAIR AND REMEDIATION WORKS
WRITTEN SCHEME OF INVESTIGATION

1 INTRODUCTION

1.1 This written scheme of investigation (WSI) or specification, has been prepared to detail the proposed archaeological watching brief that will be undertaken during the repair and remediation works at Carew French Mill and causeway at Carew, Pembrokeshire (SN0415503831; PRN 60057; Figure 1). The repair works will address the ingress of water through leakages from and within, the vicinity of the southern wheel sluice. Leakage is causing water ingress into the eastern cellar of the mill and around the penstock of the building.

1.2 This WSI outlines the method by which DAT Archaeological Services (on behalf of PCNPA) will undertake an archaeological watching brief during the invasive phases of the repair works to the stone masonry causeway. The French Mill and causeway is a Grade II* Listed Building (Ref; 6038) and is located within the Carew, Milton and Nash Historic Landscape Area (Ref; 338).

1.3 Documentary evidence mentions the presence of mills and the causeway in this location since the 16th and 17th centuries respectively. The stone masonry and clay core causeway creates a dam, or tidal barrier across the Carew River and historic prints show that it was used as a wharf at high tide. The present 19th-century three storey mill is composed of two buildings; the northern wing and main mill. The buildings are aligned along the causeway orientated north-east-south-west and host two mill wheels; the north and southern wheels. The mill is likely to have originated as two mills and indeed the northern wheel carries the date 1801. The mill was mainly used a corn mill and later, briefly as a bone mill until its closure in 1937. The mill is the only remaining tidal mill in Wales and is now managed by PCNPA. It is open to the public following restoration in 1985 (Source: Cadw Listed Buildings Full Report; 6038).

1.4 The phases of repair works are outlined in the Marine Licence application submitted by PCNPA and as summarised here:

- **Phase 1:** Drainage of Mill pond and removal of sluice gates for repair.
- **Phase 2:** Inspections of causeway masonry walls (internal and external)
- **Phase 3:** Temporary blockage of sluice gates with steel plates.
- **Phase 4:** Pointing repairs to masonry walls.
- **Phase 5:** Removal of steel plates and reinstatement of original grills following completion of repairs around the Mill building.
- **Phase 6:** Instalment of sluice gates and tidal refilling of mill pond.

1.5 An archaeological watching brief is required during Phase 2 of the repair works which includes the excavation of a large test pit into the clay core of the causeway to inspect the base of the masonry walls and to determine the depth of water ingress. The test pit will be situated over the southern wheel sluice and will include the excavation of the core material encompassing the sluice (Figures 1 & 2). This test pit will measure approximately 4m in length and depth, and will

encompass the full width of the causeway, c.3m. Further intrusive probing works may also be necessary. The excavation will be undertaken by a mini-excavator or similar small tracked machine. A photographic record will be undertaken of the exposed masonry of the causeway and sluice during this stage. This test pit will be later refilled by imported clayey soil and the re-use of existing clay infill where possible.

1.6 Following the excavation of the test pit and inspections, the repair works include the lime mortar pointing of the external face of the causeway wall (eastern side), lime rendering of the external and internal Mill cellar and the crown of the southern sluice tunnel. These phases of work will not be necessary to watch.

1.7 This WSI details the methodology of the evaluation which will be undertaken and has been prepared in accordance with the *Standard and Guidance for an Archaeological Watching Brief* (CIfA[3] 2014).

1.8 Dyfed Archaeological Services area Registered Organisation with the Chartered Institute for Archaeologists (CIfA).

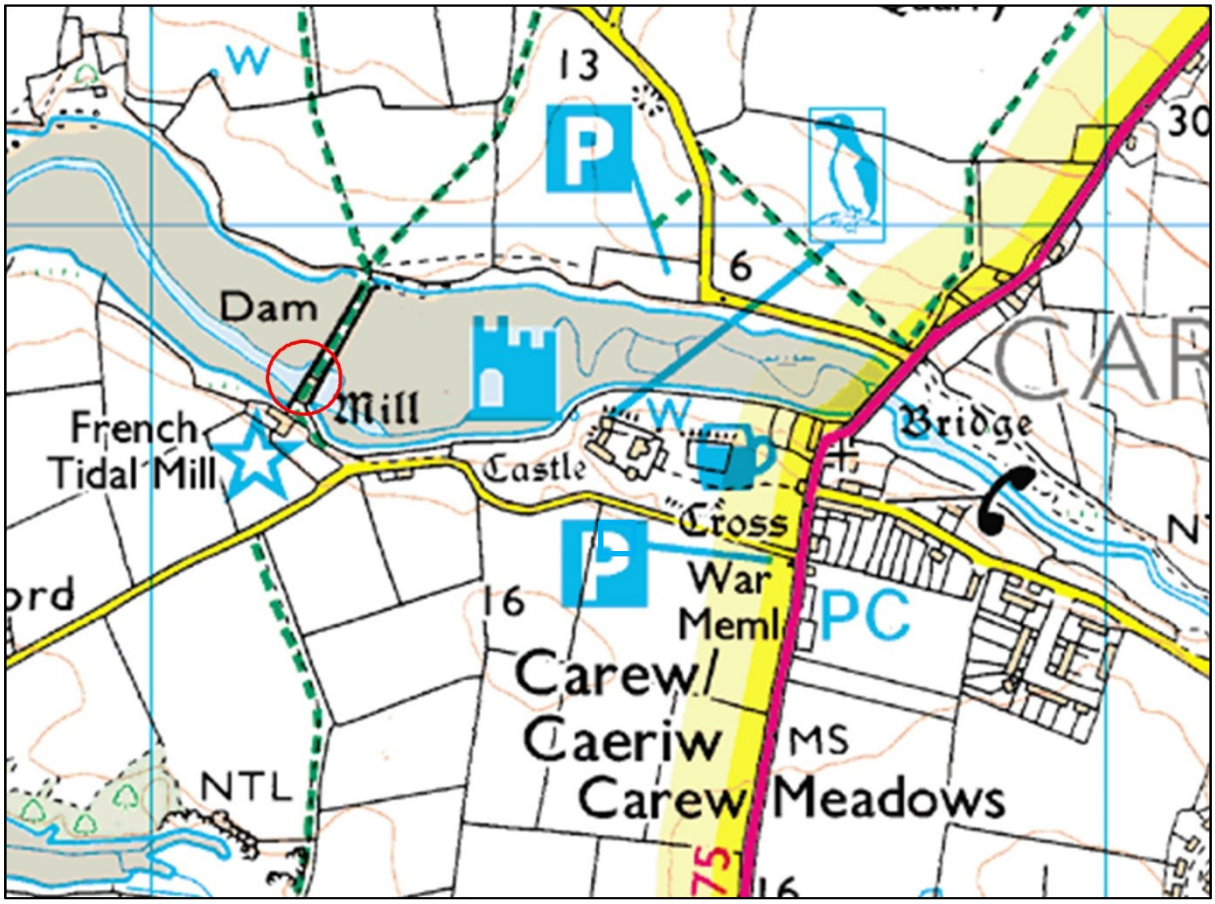


Figure 1: Map showing the location of Carew French Mill and causeway (encircled in red), located east of Carew Castle

[3] ***Chartered Institute for Archaeologists.***

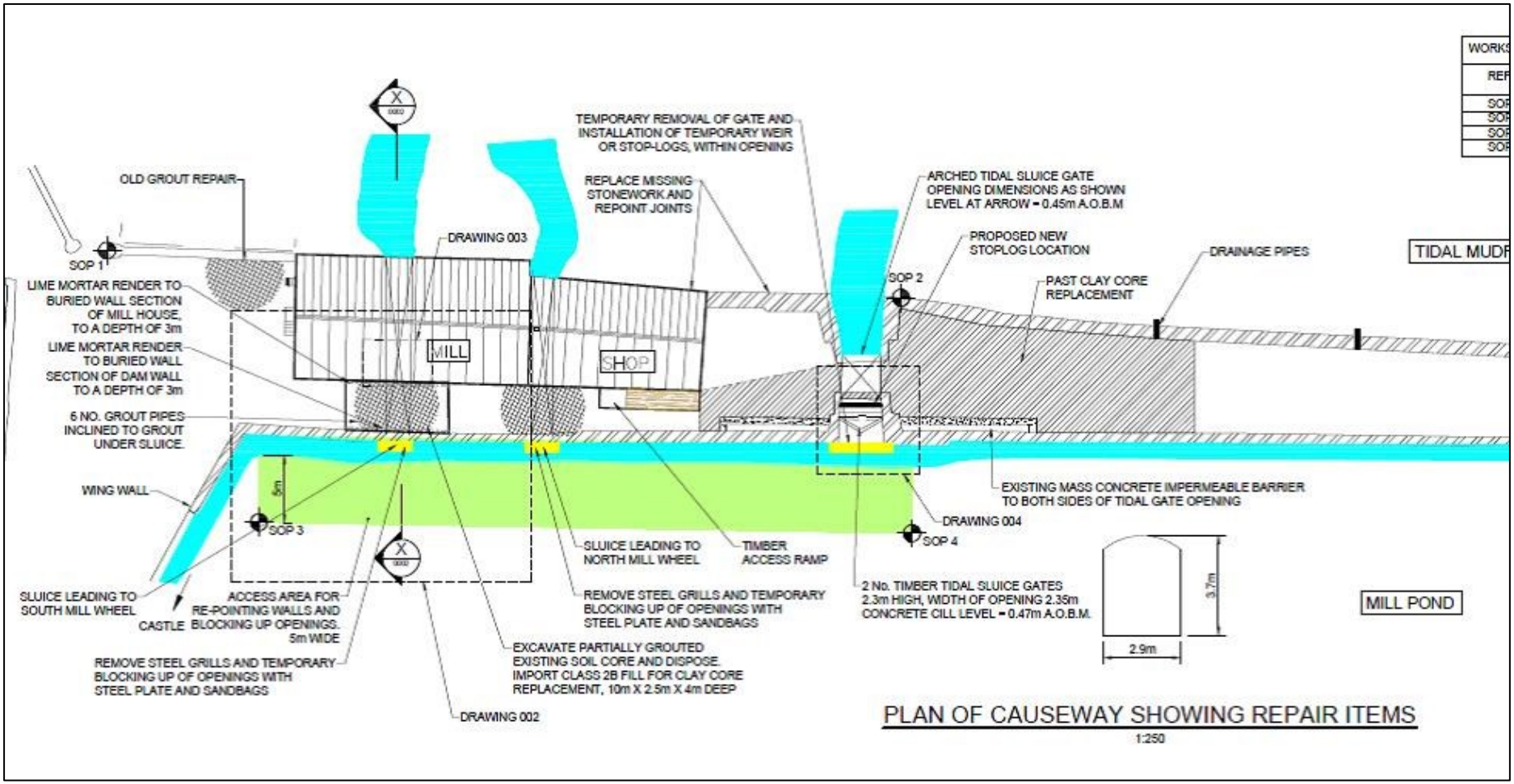


Figure 1: Plan of Carew French Mill (PRN 60057; Listed Building 6038) and its causeway showing the proposed scheme of repair works. (Reproduced courtesy of Atkins © Atkins Limited (2017))

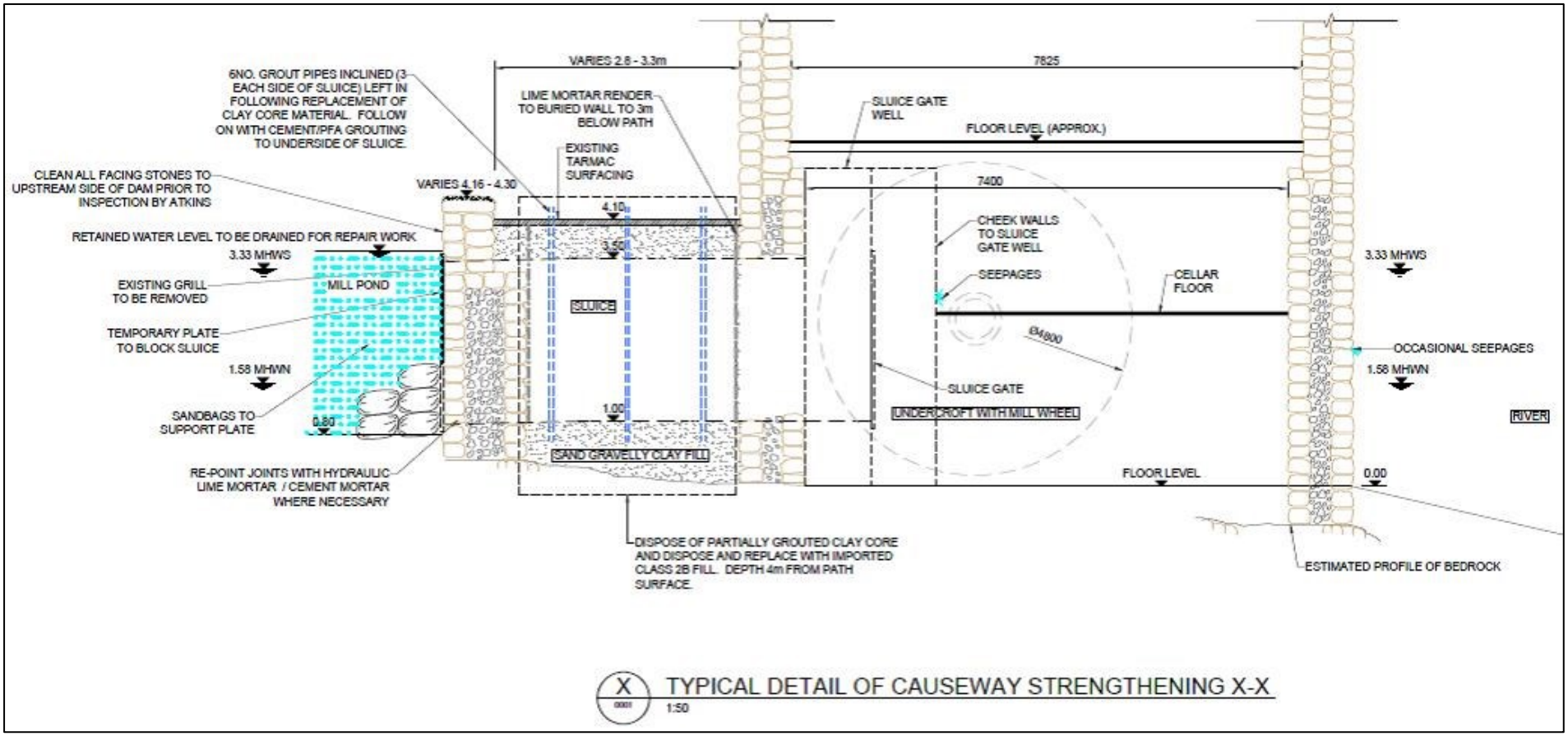


Figure 2: Section of eastern causeway wall and southern wheel sluice showing the proposed scheme of works (Reproduced courtesy of Atkins © Atkins Limited (2017)).

2. WATCHING BRIEF

2.1 The definition of archaeological watching brief, taken from the Chartered Institute for Archaeologists Standards and Guidance: for Archaeological Watching Briefs (CIfA S&G: AWB 2014) is a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons. This will be within a specified area or site on land, inter-tidal zone or underwater, where there is a possibility that archaeological deposits may be disturbed or destroyed. The programme will result in the preparation of a report and ordered archive.

2.2 The purpose of a watching brief, as laid down in the CIfA S&G AWB is:

> *to allow, within the resources available, the preservation by record of archaeological deposits, the presence and nature of which could not be established (or established with sufficient accuracy) in advance of development or other potentially disruptive works;*
>
> *to provide an opportunity, if needed, for the watching archaeologist to signal to all interested parties, before the destruction of the material in question, that an archaeological find has been made for which the resources allocated to the watching brief itself are not sufficient to support treatment.*

2.3 This document provides a scheme of works for:

The implementation of an archaeological watching brief during invasive groundworks associated with the repair and remediation works of Carew French Tidal Mill and Causeway. Appropriate investigation and recording of any significant archaeological remains will be undertaken if revealed. A photographic record of any newly exposed masonry will also be undertaken. A report and archive of the results of the works will be prepared.

2.4 The following tasks will be completed:

- Provision of a written scheme of investigation to outline the methodology for the watching brief which DAT Archaeological Services will undertake (this document);
- To establish, where possible, the state of preservation, character, extent and date range for any archaeological deposits disturbed;
- To ensure that no unnecessary damage or disturbance occurs to the area of the Listed Building Mill building 6038;
- A Level 2 photographic record of the exposed masonry and structure of the causeway southern wheel sluice;
- Production of a report and an archive of the results.

3. FIELDWORK

3.1 The watching brief would entail an archaeologist being present during all ground works where there is a potential for archaeological remains to be exposed, damaged or destroyed. This essentially entails the excavation of the causeway core material and the subsequent exposure of the masonry walls and southern wheel sluice.

3.2 It is essential that coordination between the site contractors and archaeologist is established at the outset to avoid any potential disturbance to the monument without an archaeologist being present, or unnecessary visits to the site when works are being carried out that do not require the presence of an archaeologist.

3.3 Adequate time must be made available to the visiting archaeologist to ensure that appropriate recording can be undertaken of any archaeological features or deposits exposed during ground works.

3.4 Recording of all archaeological features or deposits will conform to best current professional practice and be carried out in accordance with the Recording Manual[4] used by DAT Archaeological Services. Significant archaeological features or deposits will be drawn at a suitable scale (no less than 1:20) and photographed in an appropriate format.

3.5 All archaeologically significant finds (if found) will be retained and, where possible, related to the contexts from which they derived. Finds will be temporarily stored by DAT Archaeological Services in stable conditions. All finds, except those deemed to be Treasure, will remain the property of the landowner.

3.6 Under the 1996 Treasure Act, "treasure" can be summarised as:

- Any object other than a coin containing at least 10% gold or silver and at least 300 years old;
- Any prehistoric assemblage of base metal;
- Coins found together which contain 10% gold or silver (but no single coins) and groups of at least 10 coins of other metals, provided they are at least 300 years old;
- Any object found associated with treasure except unworked natural objects; and
- Any object which would have been Treasure Trove before the 1996 Act but not covered above.

3.7 In the event that unforeseen archaeological discoveries are made during the development, or that archaeological remains of high significance are exposed, DAT Archaeological Services shall have the power to halt any ground works and shall inform the site agent/project manager and Cadw, and prepare a written statement with plan detailing the archaeological evidence. Following assessment of the archaeological remains by Cadw, DAT Archaeological Services shall, if required, implement on behalf of the Client a contingency scheme for salvage excavation of affected

[4] *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.*

archaeological features. In these instances it would be necessary to employ extra resources to record such features to an appropriate standard.

3.8 In the very unlikely event that human remains are encountered, the District Coroner's Office and the Police will be notified immediately. All human remains will, where possible, be left *in situ*. If preservation *in situ* is not possible all statutory permissions will be obtained in writing before removal begins.

4. POST-FIELDWORK REPORTING AND ARCHIVING

4.1 All data recovered during the evaluation will be collated into a site archive structured in accordance with the specifications in *Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation* (Brown 2011), and the procedures recommended by the National Monuments Record, Aberystwyth. The *National Standards for Wales for Collecting and Depositing Archaeological Archives* produced by the Federation of Museums and Art Galleries of Wales will also be adhered to. Digital archives will be collated using the Royal Commission on the Ancient and Historical Monuments of Wales systems (2015) and deposited with the RCAHMW.

4.2 The results of the fieldwork will be assessed in local, regional and wider contexts. The report will include a desk-based research element to ensure that the site is placed within its wider archaeological context. A report that is fully representative of the results of the fieldwork will be prepared and digital and hard copies will be sent to the client for dissemination to all relevant parties.

4.3 DAT Archaeological Services will arrange for the deposition of finds, and ascertain the costs of storage and deposition, with an approved body before the project commences and inform the curator of the arrangement which has been made (it is anticipated that the paper and digital archive will be deposited with the Royal Commission on the Ancient and Historical Monuments of Wales and any finds to Ceredigion Museum).

4.4 A summary of the project results, excluding any confidential information, may be prepared for wider dissemination (e.g. Archaeology in Wales and special interest and period-specific journals).

4.5 A digital copy and two bound copies of the reports will produced for the client. Digital copies of the report will be supplied to Cadw and the Dyfed Archaeological Trust Historic Environment Record.

5. STAFF

5.1 This project will be managed by James Meek, Head of DAT Archaeological Services.

5.2 Archaeological attendance during the watching brief will be undertaken by staff drawn from the team of archaeologists employed by DAT Archaeological Services.

6. MONITORING

6.1 Cadw must be told when the commencement of works is anticipated so that they can arrange a monitoring visit if needed. The fieldwork may need to be monitored by the Head of DAT Archaeological Services. All parties should be provided with free access to the site at any time during the watching brief works.

7. HEALTH AND SAFETY

7.1 All DAT Archaeological Services staff are CSCS[5] registered.

7.2 DAT Archaeological Services will carry out a health and safety risk assessment to ensure that all potential risks are minimised.

7.3 All relevant health and safety regulations must be followed.

7.4 All site inductions, H&S procedures and site rules of the site contractor will be made known to DAT Archaeological Services staff prior to them commencing work on-site.

7.5 Safety helmets, safety boots and high visibility vests are to be used by all site personnel as necessary. The site contractors will make all archaeological staff aware of any other PPE[6] that may be required and provide them. Archaeological staff must not enter any area where there is a considered to be a health and safety risk that has not or is not being appropriately mitigated against.

7.6 DAT Archaeological Services staff must ensure that their presence on site is communicated to all relevant site staff, especially machine operators.

7.7 Carew French Mill and Causeway are adjacent to deep water and potentially, viscous mud following drainage of the Mill Pond. Appropriate site specific safety measures will be followed as per the requirements from the on-site contractors.

[5] *Construction Skills Certification Scheme (Health and Safety Tested)*

[6] *Personal Protection Equipment*

CAREW FRENCH TIDAL MILL AND CAUSEWAY, CAREW, PEMBROKESHIRE (SN 04155 03831)

ARCHAEOLOGICAL WATCHING BRIEF DURING REPAIR AND REMEDIATION WORKS 2017

RHIF YR ADRODDIAD / REPORT NUMBER 111174
RHIF Y PROSIECT / PROJECT RECORD NO. 2017-72

Chwefror 2018
February 2018

Paratowyd yr adroddiad hwn gan / This report has been prepared by

Charlie Enright

Swydd / Position: **Archaeologist DAT Archaeological Services**

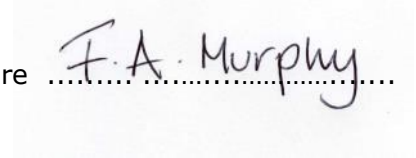
Llofnod / Signature ..... Dyddiad / Date 08/02/2018

Mae'r adroddiad hwn wedi ei gael yn gywir a derbyn sêl bendith
This report has been checked and approved by

Fran Murphy

ar ran Ymddiriedolaeth Archaeolegol Dyfed Cyf.
on behalf of Dyfed Archaeological Trust Ltd.

Swydd / Position: **Project Officer DAT Archaeological Services**



Llofnod / Signature ..... Dyddiad / Date 26/02/2018

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

ymddiriedolaeth archaeolegol

DYFED

archaeological trust