

MARLOES MERE, MARLOES, PEMBROKESHIRE: ARCHAEOLOGICAL MONITORING AND RECORDING

PLANNING APPLICATION NP/23/0233/FUL



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Services

For: The National Trust

DYFED ARCHAEOLOGY



ARCHAEOLEG DYFED



THE TRUST FOR WELSH ARCHAEOLOGY – DYFED REGION

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**MARLOES MERE, MARLOES,
PEMBROKESHIRE:
ARCHAEOLOGICAL MONITORING AND
RECORDING**

by

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ARCHAEOLOGICAL MONITORING AND RECORDING**

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EXECUTIVE SUMMARY

Archaeological monitoring and recording was undertaken during groundworks associated with wetland restoration work at Marloes Mere, Marloes, Pembrokeshire (NGR SM 7753 0803). Monitoring was undertaken during the groundworks undertaken for the creation of a new footpath, hedge bank and accompanying ditch. The groundworks did not include excavating to a depth that archaeological features would become visible or exposed, therefore no archaeologically significant features were recorded during the project. A reasonably high number of pieces of worked pebble flint were recovered from the topsoil removed during the groundworks. Whilst the finds are residual in nature rather than coming from a secure archaeological context, it does confirm the presence of human activity in the general area during the prehistoric period.

CRYNODEB GWEITHREDOL

Ymgwymerwyd â monitro a chofnodi archeolegol yn ystod gwaith daear yn gysylltiedig â gwaith adferiad gwlyptir ym Marloes Mere, Marloes, Sir Benfro (NGR SM 7753 0803). Ymgwymerwyd â monitro yn ystod y gwaith daear a wnaed ar gyfer creu llwybr troed newydd, clawdd a ffos gysylltiedig. Nid oedd y gwaith daear yn cynnwys cloddio i ddyfnder fel y byddai nodweddion archeolegol yn dod yn weladwy neu'n agored, felly ni chofnodwyd unrhyw nodweddion archeolegol arwyddocaol yn ystod y prosiect. Daethpwyd o hyd i nifer gweddol uchel o ddarnau o fflint cerrig mân o'r uwchbridd a dynnwyd yn ystod y gwaith daear. Er bod y darganfyddiadau yn weddilliol eu natur yn hytrach na dod o gyd-destun archeolegol diogel, mae'n cadarnhau presenoldeb gweithgaredd dynol yn yr ardal gyffredinol yn ystod y cyfnod cynhanesyddol.

1 INTRODUCTION

1.1 Project Commission

- 1.1.1 The Trust for Welsh Archaeology - Dyfed Region Archaeological Services (henceforth referred to as TWA - Dyfed Region) was commissioned by Harries Planning Design Management on behalf of their clients, The National Trust, to undertake archaeological monitoring and recording (previously known as an archaeological watching brief) during proposed works at Marloes Mere, Marloes, Pembrokeshire (centred on NGR SM 7753 0803 - Figs 1 and 2).
- 1.1.2 The proposals are for a new hedgerow and path, and the removal of reservoir bunds which will restore a wetland habitat and improve visitor interpretation at Marloes Mere, an area of semi-natural wetland habitat near Trehill Farm (Figs 1 and 2). A planning application for the proposal was submitted (NP/23/0233/FUL) to the local planning authority, Pembrokeshire Coast National Park Authority.
- 1.1.3 The site lies in an area of archaeological interest, and as a result the Development Management section of the Trust for Welsh Archaeology, in their capacity as archaeological advisors to the local planning authority, recommended a Desk Based Assessment be undertaken.
- 1.1.4 A Desk Based Assessment produced by TWA – Dyfed Region (Poucher 2023) identified archaeological potential in the area due to the presence of important sites from multiple periods in the local landscape. A possible prehistoric landscape (NPRN 409859) was referenced as potentially extending into the development area, and the existing public trackway going through the development site was highlighted as a feature of interest.
- 1.1.5 Due to the archaeological potential identified, the Development Management section of the Trust for Welsh Archaeology recommended that a programme of archaeological work be undertaken to protect the archaeological resource.

1.2 Scope of the Project

- 1.2.1 A Written Scheme of Investigation (WSI) for an archaeological watching brief was prepared by TWA – Dyfed Region prior to the commencement of the works (Appendix 1). The WSI outlined the project objectives as:
 - Provision of a WSI to outline the methodology for the watching brief which TWA – Dyfed Region would undertake;
 - To monitor ground works in order to identify the presence/absence of any archaeological deposits;
 - To establish the state of preservation, character, extent and date range for any archaeological deposits identified;
 - Production of a report and an archive of the results.

- 1.2.2 The overall work was summarised as:

The implementation of an archaeological watching brief during groundworks associated with the proposed wetland restoration work at Marloes Mere, Trehill Farm, Marloes, Haverfordwest (NGR SM 7753 0803) which have the potential to expose, damage or destroy archaeological remains.

The proposed development includes the removal of the southern reservoir's bunds, the relocation of the existing trackway onto higher ground to the south, bounded by a new hedgerow, with a new causeway path linking to

an existing bird hide and the installation of a new gateway. Initially a constructor's compound will be established, likely at the eastern end of the site adjacent to the existing track, with areas for storage, welfare facilities and parking. The reservoir bunds will be removed by machine, and this material will be used to form the new hedgebank and any raised areas. The new hedgebank will be accompanied by a drainage ditch. The existing roadway will be left in situ and a new farm track/footpath established on higher ground. Landscaping, swales, fencing and gates will be carried out. A new tractor gate will be installed and the compound area will be reinstated to its original appearance upon completion of the work.

- 1.2.3 The archaeological works were undertaken in accordance with the Chartered Institute for Archaeologists *Standard for Archaeological Monitoring and Recording* (2023), its *Universal Guidance for Archaeological Monitoring and Recording* (2023) and its codes of conduct.

1.3 Report Outline

- 1.3.1 This report provides a summary and discussion of the archaeological monitoring and recording results.

1.4 Illustrations

- 1.4.1 Printed map extracts are not necessarily reproduced to their original scale. On maps, north is towards the top of the page unless otherwise indicated.

1.5 Timeline

- 1.5.1 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.

Table 1: Archaeological and historical timeline for Wales.

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*	1536 – 1750	
Industrial Period	1750 – 1899	
Modern	20th century onwards	

* 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

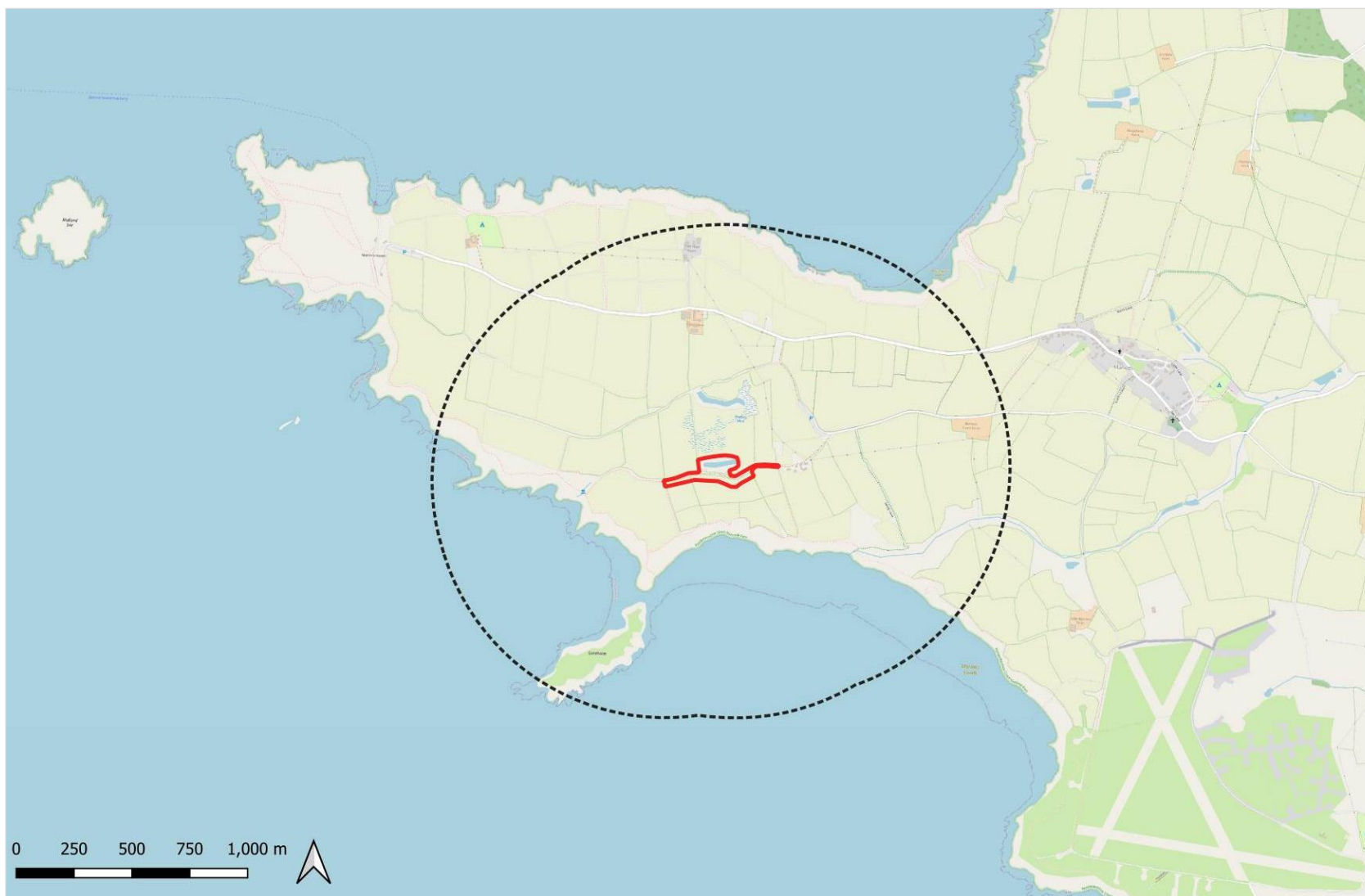


Figure 1: Location of development area showing the proposed development site in red.

Map data from OpenStreetMap (OSM) <https://www.openstreetmap.org/copyright> 07/07/2023.

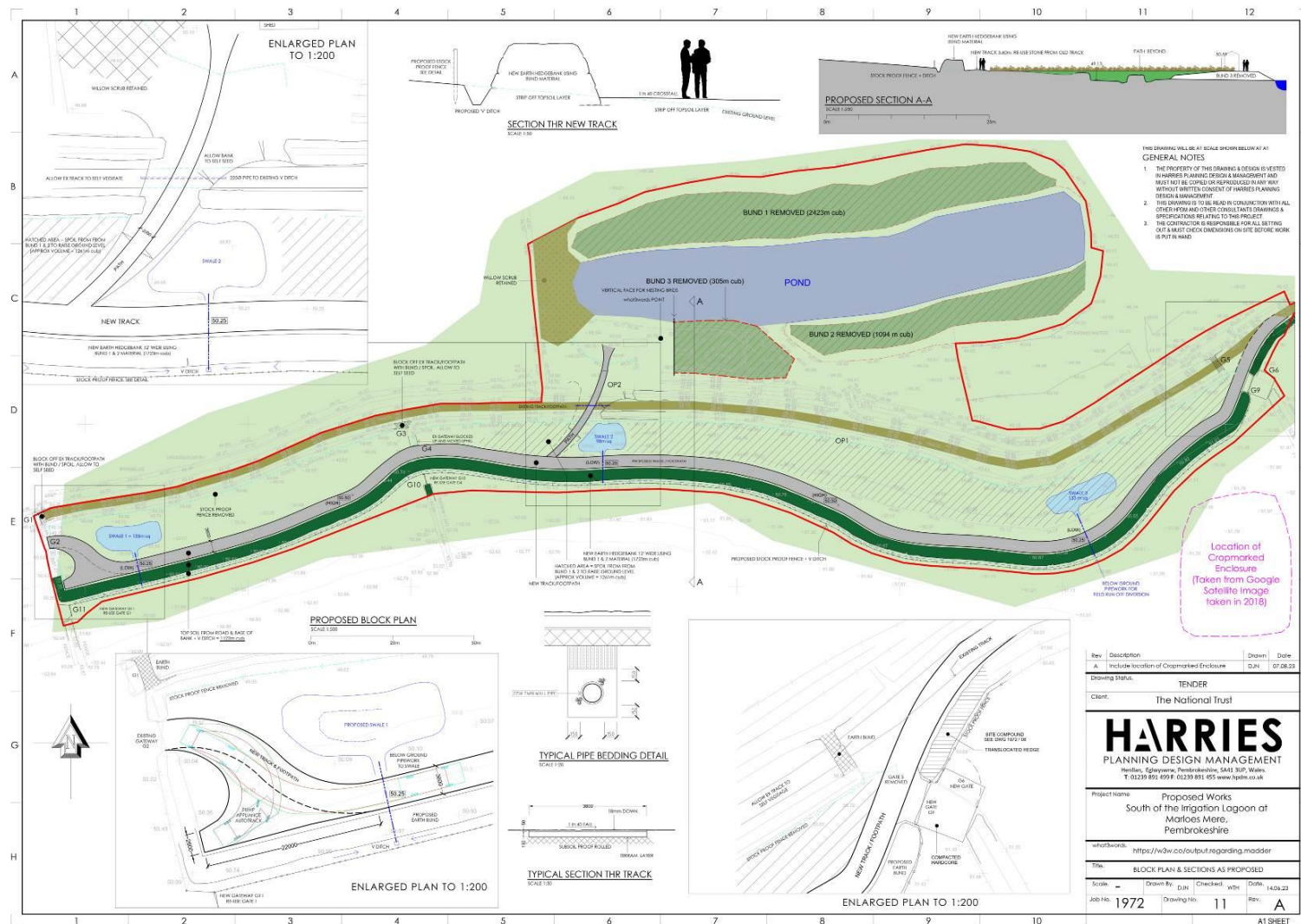


Figure 2: Proposed block plan, showing the development layout and details. Please note, the original trackway will no longer be excavated, but will be left in situ as the wetland develops. Plan also showed the plotted outline of the enclosure as visible on Photo 1. Plan provided by the client, not reproduced to scale.

2. THE SITE

2.1 Location and Topography

- 2.1.1 Marloes Mere is situated on a coastal headland 1.5km west of Marloes in south Pembrokeshire (NGR SM 7753 0803 – see Figs 1 and 2). The headland, surrounded by cliffs, rocky coves and beaches, juts into the Irish sea with the island of Skomer to the west and Gateholm and Skokholm islands to the south. There are several dispersed farmsteads spread out across the headland.
- 2.1.2 The development site is part of Trehill farm which lies 500m to the north. The site is a semi-natural wetland containing two irrigation reservoirs which are contained by earth bunds. A stone laid footpath runs along the southern edge of the wetland.
- 2.1.3 The underlying geology of the site is a sedimentary bedrock of the Grey Sandstone Group which is present across much of the southern extent of the headland. To the north and east are bands of basalt, sandstone and conglomerate from the Skomer Volcanic Group, and argillaceous rocks, sandstone and conglomerate from the Coralliferous Group, running east-west across the headland ([BGS online](#)).

2.2 Archaeological and Historical Background

- 2.2.1 A relatively high number of Mesolithic and Neolithic artefacts have been recovered from the headland (recorded on the regional HER database they are PRN's 2930, 2931, 2934, 2936, 2937, 2938, 2948, 2956, 11180, 11202, 11746 and 12220). They are mainly concentrated along the coastline but also further inland around Runwayskiln in the south. The artefacts are mostly flint objects such as scrapers, blades and microliths, left or discarded by nomadic populations travelling through this landscape. The spread and number of objects suggests repeated visits and a general area of significance during this broad period (Poucher 2023).
- 2.2.2 There is little evidence of Bronze Age activity on the headland. On Gateholm island a possible Bronze Age barrow site was identified in the mid-20th century (PRN 2944) but subsequently dismissed as the hut site of a later period. However, a small excavation on the island in 2011 recovered a sherd of pottery which was possibly early Bronze Age in date (Flaherty 2012).
- 2.2.3 To the east of the headland, at the end of the existing footpath which runs through the south of the development site (PRN 53194) is Watery Bay Rath (PRN 2939), an Iron Age multivallate coastal promontory fort. A recent excavation revealed the remains of at least one roundhouse within the enclosure, although the remains could not be securely dated (Flaherty 2012).
- 2.2.4 The Royal Commission for Ancient and Historical Monuments in Wales (RCAHMW) undertook aerial reconnaissance work in 2006 and noted cropmarks south of Marloes Mere (NPRN 409859 – see Photo 1). The marks appear to form a small curvilinear enclosure, fragments of another larger enclosure, and several other linear and pit-like features. Their form suggests a pre-historic date.



Photo 1: Google Earth satellite image taken in 2018. The enclosure, indicated by cropmarks and forming part of NPRN 409859, is marked to the east. © 2023 CNES/Airbus

- 2.2.5 In later reconnaissance work completed by RCAHMW in 2018 following a period of drought, parch marks were noted 500m north of the development site at Trehill Farm (NPRN 423108/PRN 126405). They indicated the presence of a 56m by 53m univallate defended enclosure with a single large roundhouse gully within, likely to be of Romano-British date. Several other ditch and pit-like features were noted outside of the enclosure (Photo 1).
- 2.2.6 A significant settlement site of late Roman to early medieval date sits on the level summit of Gateholm island (PRN 2929). Several small excavations have been undertaken since the early 20th century (Cantril 1910; Lethbridge and David 1930; Flaherty 2012) with survey work carried out in 1971 (Davies et al 1971) and 2011 (Davis 2011). The settlement potentially consists of up to 130 rectangular huts, the limited excavation to date suggesting they consist of turf-built structures with stone-revetted walls. The suggestion by Davies et al (1971) that it could be an early monastic community would make it one of the largest in Britain.
- 2.2.7 Several possible medieval sites are depicted in the area on Rees' reconstructed map of 14th century Wales (Rees 1932). Compiled using medieval sources, the map depicts manor houses at Marloes Court to the east of the development site, Runwayskiln to the south and East Hook to the northwest. Earthwork platforms at East Hook have been noted on aerial photography (PRN 7580). Medieval pottery from the 13th century was recovered during the Gateholm excavations as listed in 2.2.5 (PRN 2933).
- 2.2.8 The existing trackway running east-west across the site (PRN 53194) divided Marloes Mere in the south and the farmland to the north (Photo 2). The farmland has evidence of medieval strip fields (NPRN 520911), which is confirmed by the relict divisions still visible on the Tithe Map of 1842.



Photo 2: View east across the proposed development area to the south of the trackway, showing the rising ground to the south.

2.3 Previous Archaeological Investigations

- 2.3.1 Several small excavations have been undertaken on Gateholm to the south of the development site (see 2.2.6).

3. MONITORING AND RECORDING METHODOLOGY

3.1 Fieldwork

- 3.1.1 The monitoring and recording was undertaken in accordance with the Chartered Institute of Archaeologists' *Standard for Archaeological Monitoring and Recording (CifA 2023)* and its *Universal Guidance for Archaeological Monitoring and Recording (CifA 2023)*.
- 3.1.2 A Written Scheme of Investigation (WSI) detailing the proposed archaeological works was prepared by TWA – Dyfed Region (Appendix 1).
- 3.1.3 Recording of all archaeological features or deposits conformed to best current professional practice and was carried out in accordance with the Recording Manual used by TWA – Dyfed Region (adopted from the Recording Manual developed by English Heritage Centre for Archaeology, a copy is always available on-site for inspection if required). A written, drawn and photographic record was maintained throughout the monitoring and recording and all contexts encountered were recorded.
- 3.1.4 The area for development was excavated by a 5.5 tonne 360° mechanical excavator. The spoil removed during the works was used to build the proposed new hedge bank.

3.2 Timetabling of Fieldwork

- 3.2.1 The monitoring and recording took place on 11th, 12th and 15th September and 10th October 2023. The weather was generally dry and sunny.

3.3 Post-Fieldwork Reporting and Archiving

- 3.3.1 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 2011), and the procedures recommended by the National Monuments Record, Aberystwyth.
- 3.3.2 The results of the fieldwork have been assessed in local, regional and wider contexts. The report includes a desk-based research element to ensure that the site is placed within its wider archaeological context.
- 3.3.3 A report fully representative of the results of the fieldwork has been prepared.

4. MONITORING AND RECORDING RESULTS

- 4.1 A 3m wide and 400m long strip orientated east-west was removed from across the length of two fields to create the foundation for a new hedge bank. The excavation was only deep enough to clear any weeds and surface vegetation. Parallel to and below the first strip, a second 5m wide strip was excavated to form the foundation of a new footpath.
- 4.2 Excavation of the strips was undertaken using a 360 excavator with toothless grading bucket. They were not excavated deeper than the topsoil layer (approximately 0.08m deep) and did not expose any deeper subsoil or natural/geological layers which is the likely depth at which any archaeological features of significance would be observed.
- 4.3 The removal of these strips was undertaken in three stages: Field 1, the west of Field 2 and east of Field 2 (see Fig 4).

4.4 Field 1

- 4.4.1 The excavated strips in Field 1 were approximately 110m long and 0.08m deep. The excavations were not deep enough to reveal any archaeological features, only the topsoil layer was removed (Photo 3).
- 4.4.2 A total of 46 pieces of pebble flint were recovered during the stripping process, the majority multi-faceted, appearing to have been struck several times possibly during ploughing. No diagnostic tools or blades were noted, only the waste product of the knapping of poor-quality flint. The flint was heavily patinated and abraded and was found across the length of the stripped area with no areas of concentration noted.
- 4.4.3 There were no other archaeological finds recovered.



Photo 3: The stripping of Field 1, looking west.

4.5 Field 2 (west)

- 4.5.1 The excavated strips in the west of Field 2 were approximately 140m long and 0.08m deep. The excavations were not deep enough to reveal any archaeological features, only the topsoil layer was removed (Photos 4 and 5).



Photo 4: The stripping of Field 2, looking east.



Photo 5: View showing example of how shallow the topsoil stripping was in Fields 1 and 2.

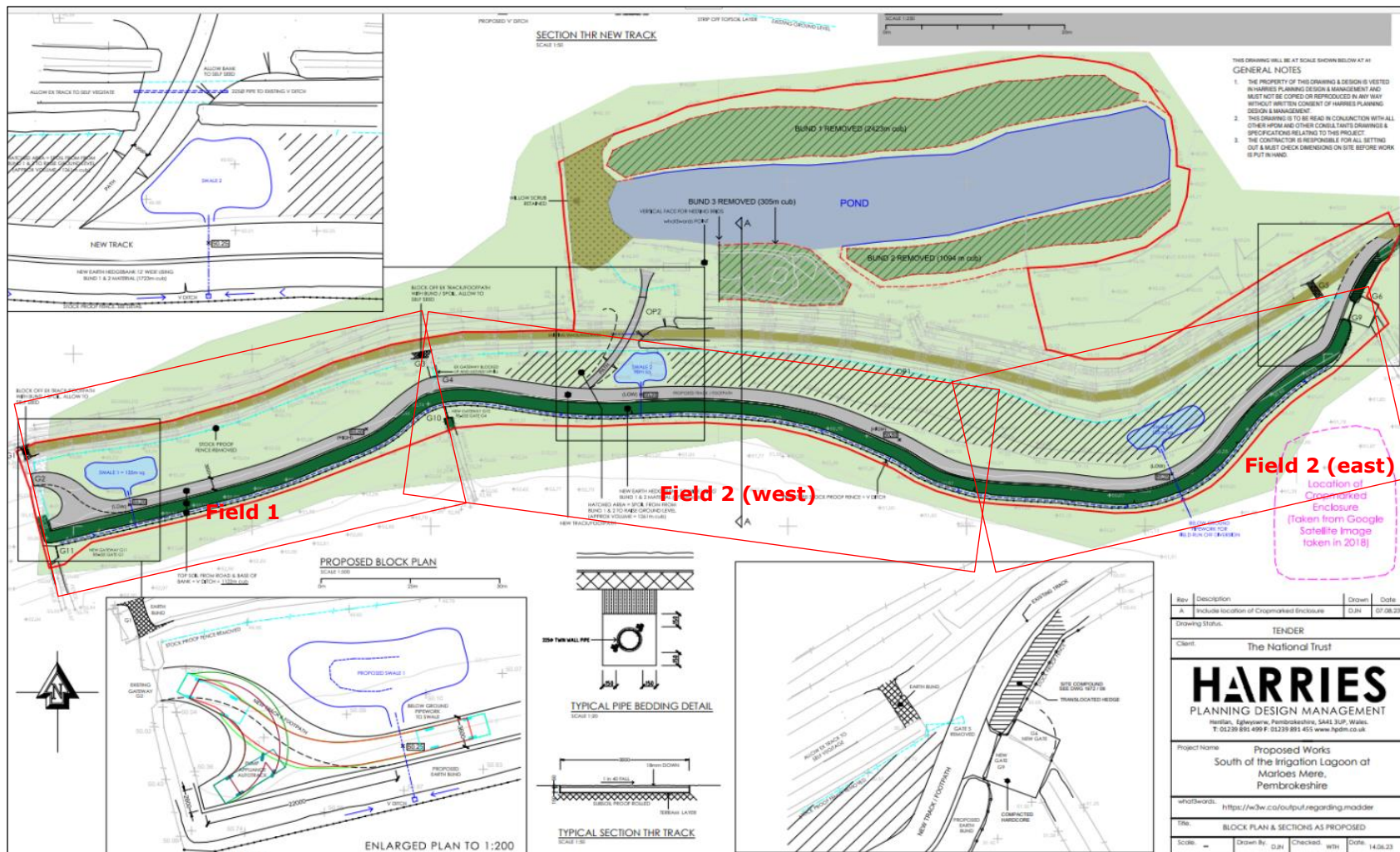


Figure 3: The areas excavated in stages highlighted in red. Base plan provided by the client, not reproduced to original scale

- 4.5.2 A total of 30 pieces of pebble flint were recovered during the stripping process. Like those found in Field 1, they were not diagnostic, heavily patinated and abraded and could possibly be a waste product from the knapping of poor-quality flint, with only one possible flake showing signs of re-touch. They were found across the length of the stripped areas with no zones of concentration noted.
- 4.5.3 Also recovered was a possible, small 0.09m long whetstone, a circular copper alloy disc (likely a modern can lid) one small piece of glass and one sherd of ceramic material, all modern in date.



Photo 6: Example of pebble flint recovered from the topsoil of Field 2.

4.6 Field 2 (east)

- 4.6.1 The excavated strips in the east of Field 2 were approximately 110m long and 0.08m deep. The excavations were not deep enough to reveal any archaeological features, only the topsoil layer was removed.
- 4.6.2 A total of 21 pieces of pebble flint were recovered during the stripping process, of the same type as those recorded before. They were only found across the first 70m of the stripped area, reducing in number as the stripping activity moved west.
- 4.6.3 No other archaeological finds were recovered.
- 4.7 To the north of the fields is a pond enclosed by bunds. The 130m long bund to the north of the pond was removed using a 360° excavator with toothed bucket. For the latter half of the excavation a bulldozer was used as the adverse weather conditions resulted in the ground becoming unsuitable for the excavator.

- 4.8 The bund was 1.2m deep and constructed of a pale grey sandy-clay matrix, likely the material which was removed when the large pond was created was re-used to create the bund (see Photo 7).
- 4.9 A total of eight pieces of pebble flint were observed in the bund material during removal. There was no conclusive physical evidence that any of the flints had been worked in any way.



Photo 7: Section of excavated bund material with 1m scale.

- 4.10 No other archaeological finds were noted.
- 4.11 A 'V' shaped drainage ditch was dug along the new hedge bank's southern edge. Upon attendance on site, works in the western part of the scheme had already been completed (Photo 8). In the eastern part of the scheme, the ground had been heavily tracked across. The possibility of observing any archaeological remains was deemed unlikely so the monitoring and recording for the remainder of the works was abandoned (Photo 9).



Photo 8: View west across completed section of ditch in Field 2.



Photo 9: View west across heavily impacted ground.

5. CONCLUSIONS

- 5.1 An archaeological monitoring and recording exercise was undertaken during groundworks associated with wetland restoration work at Marloes Mere, Marloes, Pembrokeshire.
- 5.2 A reasonably high number of Mesolithic/Neolithic artefacts have previously been recovered from the wider area, evidence of the nomadic populations likely to have moved through this landscape during the prehistoric period. Several possible Iron Age and/or Romano-British sites are recorded to the north and south of the development site (PRN's 2939, 409859, 126405, 2929). The existing footpath running through the site itself (PRN 53194) is of historic interest and leads towards the Iron Age promontory fort at Watery Bay.
- 5.3 A 3m wide and 400m long strip orientated east-west was removed from across the length of two fields to create the foundation for a new hedge bank, along with the excavation of a new drainage ditch along its length. Parallel to and below the first strip, a second 5m wide strip was excavated to form the foundation of a new footpath. A soil bund protecting the pond to the north of the new footpath was also removed.
- 5.4 The groundworks undertaken did not excavate to the depth that archaeological features are likely to become visible or exposed, instead only vegetation and the topsoil layers were removed. Therefore, no archaeologically significant features were recorded during the monitoring and recording.
- 5.5 There was a reasonably high number of worked pieces of worked pebble flint recovered during the topsoil removal, whose distribution was densest towards the east of the monitored area. Whilst the flint is residual in nature rather than coming from a secure archaeological context, and there were no diagnostic pieces, their existence does confirm the presence of human activity in the general area during the prehistoric period.

6. SOURCES

CIfA. 2023, *Universal Guidance for Archaeological Monitoring and Recording*

CIfA. 2023, *Standard for Archaeological Monitoring and Recording*

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Welsh Tithe Map, <https://places.library.wales/> [Accessed 07.02.2024]

Appendix One

MARLOES MERE, MARLOES, PEMBROKESHIRE

WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL WATCHING BRIEF

1 INTRODUCTION

- 1.1 This written scheme of investigation (WSI) has been prepared by DAT Archaeological Services in response to a request from Harries Planning Design Management on behalf of their clients, The National Trust, to provide a scheme of archaeological mitigation associated with proposed works at Marloes Mere, Trehill Farm, Marloes, Haverfordwest (NGR SM 7753 0803) (Figures 1 & 2).
- 1.2 The proposals are for the removal of reservoir bunds, relocation of a public right of way, and a new hedgerow and path, in order to restore a wetland habitat and improve visitor interpretation of Marloes Mere, an area of semi-natural wetland habitat near Trehill Farm (Figure 3). A planning application for the proposal has been submitted (planning application no. NP/23/0233/FUL) to the local planning authority, Pembrokeshire Coast National Park Authority.
- 1.3 The site lies in an area of historic and archaeological interest, as a result an Archaeological Desk-Based Assessment was recommended by Dyfed Archaeological Trust – Development Management (DAT-DM) in response to the planning application, in their role as archaeological advisors to the local planning authority. This desk-based assessment was produced by DAT Archaeological Services (Poucher 2023) in July 2023.
- 1.4 The desk-based assessment identified a wide-ranging archaeological potential in the general area due to the presence of important sites from multiple periods in the local landscape, including Mesolithic and Neolithic flint scatters, an Iron Age promontory fort, Romano-British and early medieval settlement, and medieval and post-medieval farming activity. There was also specific reference to a possible prehistoric settlement (NPRN 409859) that may extend into the development area, and the original line of the trackway (MM01) through the area, which may be a feature of archaeological interest in itself.
- 1.5 The possible prehistoric settlement (NPRN 409859) has been identified from aerial photographs (RCAHMW - <https://coflein.gov.uk/en/site/409859/> and Photo 1) with individual features including a possible sub-square enclosure at the eastern end, a small curvilinear enclosure in the centre, and a scatter of possible pit-like features. The site is spread across at least three fields on rising ground immediately to the south of the development area, but no definitive boundaries have been identified. The site of the sub-square enclosure has been plotted (Figure 3) but there is the potential for associated remains for the site as a whole to extend into the area of development which may be affected by groundworks associated with the construction of a new pathway, drainage ditches and swales.
- 1.6 The trackway (MM01) was highlighted as a site of potential interest as it lead towards the Iron Age promontory fort of Watery Bay Rath (PRN 2939), and ran alongside the boundary between medieval common land to the north and possible strip field agriculture to the south. This trackway will be relocated to the south to allow for wetland regeneration across the low-lying areas. The original intention was to excavate and reuse the track material, however the track material will now be left in situ and undisturbed as the wetland areas develop.
- 1.7 Due to the archaeological potential identified within the development area Dyfed Archaeological Trust – Development Management (DAT-DM), in their capacity as archaeological advisors to the local planning authority, have recommended that the

applicant should submit a written scheme of investigation for a programme of archaeological work to protect the archaeological resource.

- 1.8 This written scheme of investigation outlines the methodology through which DAT Archaeological Services will undertake an archaeological watching brief during ground works at the site, which have the potential to expose, damage or destroy archaeological remains. The archaeological watching brief will enable any such remains to be archaeologically recorded and provides a suitable mitigation strategy. This document has been prepared for the client and is specifically prepared for DAT Archaeological Services to undertake the required archaeological works. The WSI cannot be used by any third party.
- 1.9 The written scheme of investigation is prepared in accordance with the Standard and Guidance for an Archaeological Watching Brief (CIfA, 2014).
- 1.10 DAT Archaeological Services has considerable experience of this type of project and always operates to best professional practice. DAT Archaeological Services is the contractual arm of Dyfed Archaeological Trust that has its own Health and Safety Policy, and all works are covered by appropriate Employer's Liability and Public Liability Insurances. Copies of all are available on request.
- 1.11 Dyfed Archaeological Trust is a CIfA Registered Organisation and all permanent staff are registered.

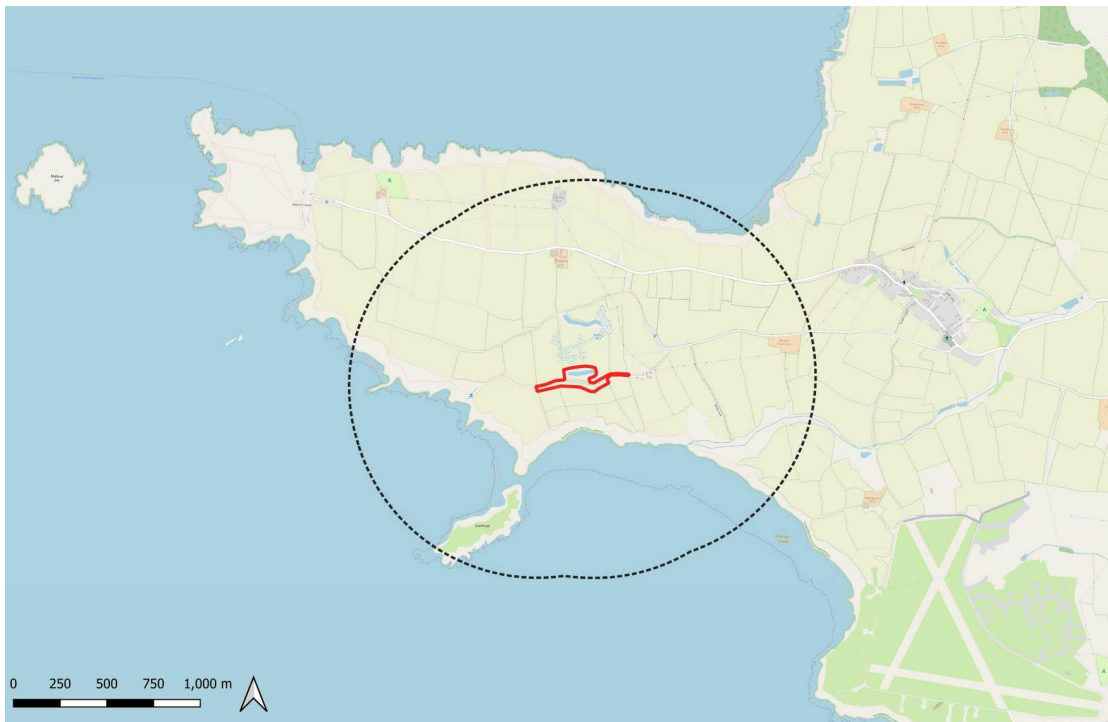


Figure 1: Location of development area showing the proposed development site in red.

Map data from OpenStreetMap (OSM) <https://www.openstreetmap.org/copyright> 07/07/2023.

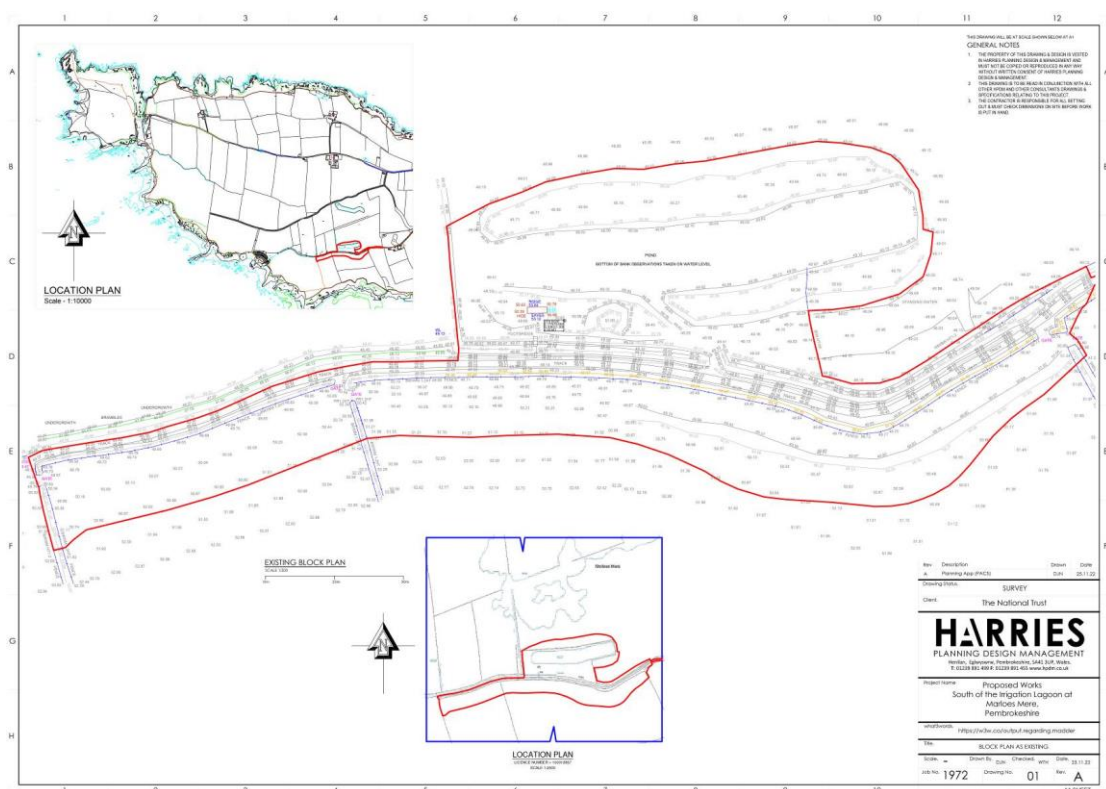


Figure 2: Detailed site and development location plan. Plan provided by the client, not reproduced to original scale.



Photo 1: Google Earth satellite image taken in 2018. The cropmarked enclosure, forming part of NPRN 409859, is marked to the east. © 2023 CNES/Airbus



Photo 2: View east across the proposed development area to the south of the trackway, showing the rising ground to the south.

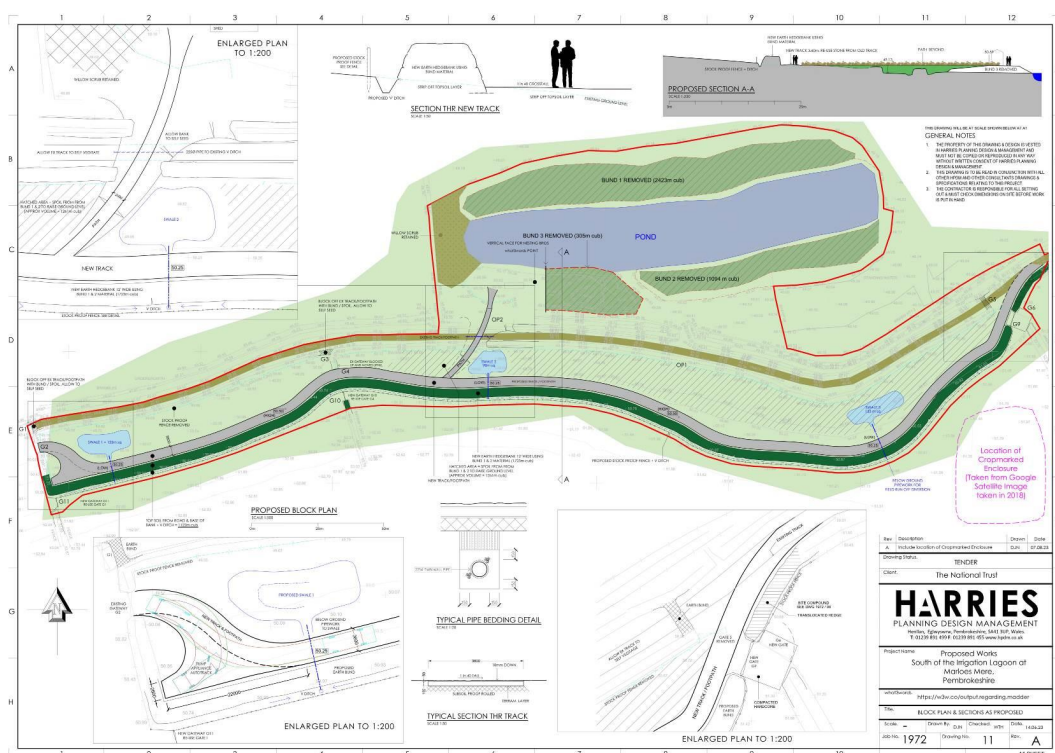


Figure 3: Proposed block plan, showing the development layout and details. Please note, the original trackway will no longer be excavated, but will be left in situ as the wetland develops. Plan also showed the plotted outline of the enclosure as visible on Photo 1. Plan provided by the client, not reproduced to scale.

2 AIM AND OBJECTIVES OF THE PROJECT

2.1 This document provides a scheme of works for:

The implementation of an archaeological watching brief during groundworks associated with the proposed wetland restoration work at Marloes Mere, Trehill Farm, Marloes, Haverfordwest (NGR SM 7753 0803) which have the potential to expose, damage or destroy archaeological remains.

Appropriate investigation and recording of any such remains will be undertaken if revealed. A report shall be prepared on the results of the watching brief, and an archive created.

2.2 The following tasks will be completed:

- Provision of a written scheme of investigation to outline the methodology for the archaeological watching brief which the appointed archaeological contractor will undertake (this document);
- Archaeological attendance during groundworks (archaeological watching brief) to appropriately investigate and record any archaeological deposits affected by the ground works, in order to identify the presence/absence of any archaeological deposits and to establish the character, extent and date range for those archaeological deposits;
- Production of a report on and an archive of the results of the archaeological watching brief.

3 WATCHING BRIEF

3.1 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.

3.2 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.

Watching Brief Fieldwork

3.3 The proposed development includes the removal of the southern reservoir's bunds, the relocation of the existing trackway onto higher ground to the south, bounded by a new hedgerow, with a new causeway path linking to an existing bird hide and the installation of a new gateway. Initially a constructor's compound will be established, likely at the eastern end of the site adjacent to the existing track, with areas for storage, welfare facilities and parking. The reservoir bunds will be removed by machine, and this material will be used to form the new hedgebank and any raised areas. The

new hedegbank will be accompanied by a drainage ditch. The existing roadway will be left in situ and a new farm track/footpath established on higher ground. Landscaping, swales, fencing and gates will be carried out. A new tractor gate will be installed, and the compound area will be reinstated to its original appearance upon completion of the work. An indication of the extent of the works is illustrated in Figure 3.

- 3.4 The watching brief will entail an archaeologist being present during all ground works where there is a potential for archaeological remains to be exposed, damaged or destroyed. The reservoir bund material was built over the wetland deposits in the 1970s, and the existing trackway will be left in situ, therefore it is anticipated that areas of potential archaeological disturbance will be focused on the compound installation, and groundworks associated with the trackway and swale installations. The archaeological watching brief will be carried out during ground-disturbing excavations which could include, but is not limited to, ground clearance, landscaping, levelling, foundation excavations and drainage run excavations.
- 3.5 Where ground conditions allow, it is recommended that machine excavations are carried out using a toothless grading bucket.
- 3.6 It is essential coordination between the site contractor's and archaeologist is established at the outset to avoid any potential disturbance to archaeology 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.
- 3.7 The archaeologist will monitor the groundworks and aim to identify any archaeological remains that may be present. They will have the authority to halt groundworks in areas where archaeological remains are identified until they have been further investigated and recorded.
- 3.8 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.
- 3.9 Features containing deposits of environmental significance will be sampled. The samples will be retained in stable conditions until analysis can be arranged.
- 3.10 All deposits will be recorded by archaeological context record sheet, scale drawing, photography and site notebooks. All individual deposits will be numbered using the open-ended numbering system in accordance with a recognised system, such as the DAT Archaeological Services' Recording Manual. Significant deposits will be recorded by scale drawing (no less than 1:20); drawn plans will be related to Ordnance Datum and, where possible, known boundaries. A digital photographic record will be maintained as a minimum using a high-resolution camera, with photographic information recorded for all photographs taken.
- 3.11 All archaeologically significant artefacts, ecofacts and samples will be retained and, where possible, related to the contexts from which they derived. Sensitive materials will be stored in appropriately stable conditions. 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, but it is assumed that permission will have been given by the landowner for these to be stored as part of the archive in a suitable repository (ownership will still be with the landowner).
- 3.12 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.
- 3.13 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 the curatorial officer at DAT-DM. DAT Archaeological Services will prepare a written statement with plan detailing the archaeological evidence. Following assessment of the archaeological remains by all parties, if required, a contingency scheme for salvage excavation of affected archaeological features may need to be implemented. This event would need to be covered by contingency financial arrangements within the project budgets.
- 3.14 In the event of the discovery of human remains, all remains will be left in situ. If removal is necessary, it will only take place following the granting of all permissions in writing by the relevant authorities (a burial licence granted from the Ministry of Justice).

4 POST-FIELDWORK REPORTING AND ARCHIVING

- 4.1 An archive will be prepared if it meets the requirements of the Dyfed Archaeological Trust archive retention policy (2018). If it does, then data recovered during the building recording and watching brief 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. The Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs) shall be followed.
- 4.2 A Data Management Plan (DMP) (Appendix I) for this project has been produced in accordance with the Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives (CifA 2014, updated 2020).
- 4.3 A report will be produced covering the results of the archaeological watching brief. The results of the fieldwork will be assessed in local, regional and wider contexts.
- 4.4 The report will include a brief research element to place the site into its wider context within the area.
- 4.5 The project archive, including all significant artefacts and ecofacts (excepting those which may be deemed to be Treasure) will be deposited

with an appropriate body following agreement with the landowner (if retained and containing more than just digital information).

- 4.6 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.
- 4.7 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).
- 4.8 The report will be prepared to follow the appropriate Standard and Guidance for Archaeological Watching Briefs (CIfA S&G: AWB 2014).
- 4.9 Digital copies of the report will be provided to the client, as well as DAT-DM and the regional Historic Environment Record (held and maintained by Dyfed Archaeological Trust).
- 4.9 Appropriate specialists to be used by DAT Archaeological Services include:
 - **Industrial Archaeology** – Jennifer Protheroe-Jones, Principal Curator – Industry, National Waterfront Museum, Swansea
 - **Post-medieval / medieval pottery** – Dee Brennan (local independent specialist)
 - **Prehistoric Pottery** – Dr Alex Gibson (formerly of University of Bradford / now Independent pottery specialist)
 - **Prehistoric Flint** – Dr Andrew David (formerly of Historic England, now independent lithics specialist)
 - **Radiocarbon dating** – Beta Analytic
 - **Animal Bones** – Worcester Archaeology
 - **Fish bones** – Jennifer Browning (University of Leicester Archaeological Services)
 - **Environmental / Pollen analysis** – Worcester Archaeology

5. STAFF

- 5.1 The project will be managed by Fran Murphy, Head of DAT Archaeological Services.
- 5.2 The on-site works will be undertaken by appropriately experienced archaeologists, from DAT Archaeological Services.

6. QUALITY ASSURANCE

- 6.1 DAT Archaeological Services has considerable experience of undertaking all categories of archaeological fieldwork and always operates to best professional practice; adhering to CIfA guidelines where appropriate. The Trust is a Registered Organisation with CIfA and all staff abide by their code of conduct and adhere to their relevant standards and guidance.
- 6.2 DAT Archaeological Services operate robust internal monitoring procedures that ensure that the standard of each project is maintained from commencement to completion.

7. MONITORING

- 7.1 The fieldwork may need to be monitored by DAT-DM in their capacity as archaeological advisors to the planning authority, who should be provided access to the site at any time during the watching brief. However, as a potential response to a Covid-19 infection a different method of monitoring may be used via regular photographic updates of the work and by telephone. The Head of DAT Archaeological Services may also monitor the on-site works intermittently.

8. HEALTH AND SAFETY

- 8.1 All permanent members of DAT Archaeological Services staff are CSCS registered.
- 8.2 DAT Archaeological Services will carry out a health and safety risk assessment to ensure that all potential risks are minimised.
- 8.3 All relevant health and safety regulations must be followed, including compliance with Welsh Government guidelines on working practices during any Covid-19 outbreak, and guidance issued by CIfA.
- 8.4 The project risk assessment details the precautions put in place to reduce the spread of Covid-19 Coronavirus during fieldwork.
- 8.5 All site inductions, H&S procedures, H&S constraints and site rules of the client or any on-site contractor will be made known to DAT Archaeological Services staff at the start of the works.
- 8.6 Safety helmets, high visibility vests and boots are to be used by all site personnel as necessary.
- 8.7 Working with machinery: DAT Archaeological Services staff must ensure that their presence on site is communicated to all relevant site staff, especially the machine operator. The archaeologist observing the machine will establish a safe working procedure with the machine operator at the start of work. This will also include discussing the methodology for safe working, ensuring that no machining is done without an archaeologist being present.
- 8.8 The site staff will go through the risk assessment prior to the works commencing and all site staff must sign the document to confirm that they have read, understood and will comply with the document.

9. QUALITY ASSURANCE

- 9.1 DAT Archaeological Services has considerable experience of undertaking all categories of archaeological fieldwork and always operates to best professional practice; adhering to CIfA guidelines where appropriate. The Trust is a Registered Organisation with CIfA and all staff abide by their code of conduct and adhere to their relevant standards and guidance.
- 9.2 DAT Archaeological Services operate robust internal monitoring procedures that ensure that the standard of each project is maintained from commencement to completion.

10 ARBITRATION

- 10.1 Any dispute or disagreement arising out of a contract in relation to this work shall be referred for a decision to the Chartered Institute of Archaeologist's arbitration scheme.

APPENDIX I:

DATA MANAGEMENT PLAN

This Data Management Plan (DMP) is produced in accordance with the *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives* (Chartered Institute for Archaeologists 2014, updated 2020). The table below is based on the Work Digital / Think Archive guidance for digital archives prepared by DigVentures, on behalf of Archaeological Archives Forum and in partnership with the Chartered Institute for Archaeologists. The project was funded by Historic England (Project No. 7796).

Section 1: Project Administration

Project Ref. No and name
FS23-025 - Marloes Mere, Trehill Farm, Marloes
ERN (if known)
130147
Project Type
Archaeological Monitoring and Recording
Client
The National Trust
Project Manager / Data Contact
Fran Murphy
Principal Archaeologist on site
Tom Jamieson
Date DMP created
17/08/23
Date DMP last updated
12/01/24
Related data management policies
Written Scheme of Investigation Chartered Institute for Archaeologists (CIfA) <i>Standards & Guidance</i> Dyfed Archaeological Trust, 2018, archive retention policy Brown 2011, Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation NPAAW, 2017, The National Standard and Guidance to Best Practice for Collecting and Depositing Archaeological Archives in Wales 2017 RCAHMW, 2015, RCAHMW guidelines for Digital Archives, Version 1 WAT, 2018, Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)

Section 2: Data Collection

Data Type (Delete as appropriate)
Documents Written Scheme of Investigation, Risk Assessment – Word doc & PDFs Context sheets, site registers, site notes - paper copies, scanned and saved as PDFs. Site plans – permatrace, scanned and saved as PDFs. Final report – Word doc & PDF Illustrations – Adobe Illustrator/Affinity Designer files, PDFs Specialist assessments (Finds, Environmental etc) – Word doc, PDF, Excel Spreadsheet
Images Site photographs – Jpeg & Tiff (for archive) Other collected data (scans, archive material, social media images etc) – Jpegs
Survey In house surveys - .dxf files, GIS files (see below) External surveys – Dependent on external contractor, eg .dxf, .dwg, .rvw etc
GIS Mapinfo files, Esri Shapefiles.

Data acquisition
All data will be collected as per the methodologies and guidance stated in the WSI (Fieldwork / Methodology).

Section 3: Documentation and metadata

Documentation and metadata accompanying the data
All data recovered will be archived in accordance with the guidance stated in the WSI (Post Fieldwork Reporting & Archiving)

Section 4: Ethics and legal compliance

Management of any ethical, copyright and Intellectual Property Rights (IPR) issues
All personal data collected during the course of the project will be handled in accordance with Dyfed Archaeological Trust's <i>Personal Data Protection Policy</i> (2018, revised 2020) and current <i>Code of Practice</i> . Licence agreements will be established, and Copyright permissions will be sought as appropriate (eg reproduced mapping extracts, archive material, specialist reports) prior to the submission of the data and/or inclusion in the publication of the project results.

Section 5: Data Security: Storage and Backup

Data storage, accessibility, and safety during research
All site-produced data will be stored digitally at the first available opportunity. All digital information is stored on the DAT server, accessible by members of the staff. This will be checked regularly by the Project Manager. All digital data on the server is backed-up at regular intervals. The server contains ample capacity for all anticipated site data, and appropriate protocols are in place to manage any potential digital malfunction or cyber attack.

Section 6: Selection and Preservation

Data retention, sharing, and preservation
Data will be retained as per Dyfed Archaeological Trust <i>Archive Retention Policy</i> (2018).

Long-term preservation plan for the dataset

<p>The digital archive relating to the project will be deposited with the NMR, held and maintained by the RCAHMS, Aberystwyth and will be created in accordance with their practices.</p> <p>The final report will be submitted to the regional Historic Environment Record in PDF format, along with any additional information they require.</p> <p>If a different digital repository to the NMR is used, their own procedures will be established at the outset of a project and followed.</p> <p>If a project includes artefacts to be deposited at a museum, arrangements will be made prior to the commencement of the project, and a copy of the digital archive will be sent with the artefacts.</p> <p>Archiving costs are included within the project budget.</p>

Section 7: Data Sharing

Sharing and accessibility

The dissemination of data is detailed in the WSI (Post-Fieldwork Report and Archiving).

Section 8: Responsibilities

Responsibilities

<p>Data collection, storage and manipulation will be carried out by the site team. The Project Manager will be responsible for the implementation of the data management plan.</p>
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