

Working together for a  
cleaner energy future



Environmental Impact Assessment Report  
Volume 3 Appendix 16.5 Protocol for Archaeological  
Discoveries

**MarramWind Offshore Wind Farm**

December 2025

<b>Document code:</b>	MAR-GEN-ENV-REP-WSP-000167
<b>Contractor document number:</b>	852346-WEIS-IA-E5-RP-M2-136031
<b>Version:</b>	Final for Submission
<b>Date:</b>	08/12/2025
<b>Prepared by:</b>	WSP UK Limited
<b>Checked by:</b>	WSP UK Limited
<b>Approved by:</b>	MarramWind Limited

# Contents

<b>1. Introduction</b>	<b>4</b>
1.1 Overview	4
1.2 Scope	4
<b>2. Types of finds</b>	<b>5</b>
<b>3. Circumstances of discovery</b>	<b>6</b>
<b>4. Terms of Roles</b>	<b>7</b>
4.1.2 Site Champion	8
4.1.3 Nominated Contact	9
4.1.4 Archaeological Curator	9
4.1.5 Archaeological Consultant	9
4.1.6 Retained Archaeologist	10
<b>5. PAD Awareness Training</b>	<b>11</b>
<b>6. Actions following discoveries on the seabed and on the deck of a works vessel</b>	<b>12</b>
6.2 Actions by the Contractor	14
6.2.1 In all cases	14
6.2.2 Discoveries on board	14
6.2.3 Anomalies on the seabed	14
6.2.4 Discoveries subsequent to work on site	15
6.3 Actions by the Site Champion	15
6.4 Actions by the nominated contact	16
6.4.2 Finds recovered within the UK 12nm limit	16
6.5 Actions by the retained archaeologist	16
6.5.1 Initial response	16
6.5.2 Urgent reports	16
6.5.3 Assessment of archaeological potential	17
6.5.4 Summary record	17
6.5.5 Subsequent actions	17
6.5.6 Further requirements	18
6.5.7 Finds	18
6.5.8 Revised summary record	18
6.5.9 Contact the relevant local and national authorities	18
<b>7. Conservation and Storage</b>	<b>19</b>
7.2 Wet finds	19
7.3 Dry finds	19

---

<b>8.</b>	<b>Advise Other Teams / Vessels Working on the Site</b>	<b>20</b>
8.2	Establishing new AEZs	20
8.3	Altering AEZs	20
8.4	Reporting and archiving	20
<b>9.</b>	<b>References</b>	<b>22</b>
<b>10.</b>	<b>Glossary of Terms and Abbreviations</b>	<b>23</b>
10.1	Abbreviations	23
10.2	Glossary of terms	23
 Table 4.1 The Project's roles and responsibilities under the PAD		 7
 Plate 6.1 Basic sequence of reporting (when an archaeologist is not present on-board / onsite)		 13
Appendix A	Guidelines for Identifying Finds of Archaeological Interest and Handling Artefacts	
Appendix B	Protocol for Archaeological Preliminary Report Form	
Appendix C	PAD Reference Guide	

---

# 1. Introduction

## 1.1 Overview

1.1.1.1 This Appendix of the Environmental Impact Assessment (EIA) Report presents the Protocol for Archaeological Discoveries (PAD) of the proposed Marram Offshore Windfarm (hereafter referred to as 'the Project') with respect to marine archaeology and cultural heritage.

1.1.1.2 This Appendix should be read in conjunction with **Volume 1, Chapter 16: Marine Archaeology and Cultural Heritage**.

## 1.2 Scope

1.2.1.1 The PAD sets out best practice in the reporting of finds of archaeological interest discovered during the proposed works. This PAD is based on the PAD for Offshore Renewables Projects published by The Crown Estate (The Crown Estate, 2014). It details the procedure for addressing finds of archaeological interest made on the seabed, onboard vessels, in the intertidal zone or on land. They may be identified as a result of geophysical survey, remotely operated vehicle (ROV) or diver visual identification or through coming into contact with anchors, grapnels, jack-up legs or other seabed equipment. These finds or anomalies may indicate that an object or structure of archaeological interest has been encountered on the seabed, in the intertidal zone or on land.

1.2.1.2 The definition of an archaeological 'find' in this context is of an object or site with archaeological potential or significance. It does not refer just to items brought to the surface. An archaeological 'site' is a group of features or objects that make up a relatively discrete collection of associated archaeological objects. This could be a shipwreck, structure, or other archaeological assemblage.

1.2.1.3 An 'anomaly' is distinct from a find or site and is a signature that could be visual or digital (for example, geophysical) that indicates a possible find or site. Further investigation may reveal that it is not of human origin or is too modern to be of archaeological interest – but until this takes place it must be considered as a source of possible archaeological interest.

1.2.1.4 The objectives of the PAD are:

- to set out the respective responsibilities of MarramWind Limited (hereafter, referred to as 'the Applicant'), their Contractors, the Archaeological Consultant, and the Retained Archaeologist prior to and during any construction works that disturb the seabed;
- to include contact details and formal lines of communication between the parties and with archaeological curators;
- to clearly set out the protocols and procedures that must be followed in the event of any unexpected archaeological discoveries; and
- to ensure that, in the event of unexpected archaeological discoveries being made, appropriate archaeological input, review and recording is undertaken.

1.2.1.5 The responsibility for implementing this PAD rests with the Applicant. This must include the engagement of the Archaeological Consultant to provide briefings to all relevant project contractors (and sub-contractors) in the use of the PAD and its implications.

## 2. Types of finds

- 2.1.1.1 'Finds' here are considered to mean all forms of artefact that can be found on the seabed. To be an artefact, the item must have been made, modified, used or transported by humans; for instance, their presence on the seabed is 'artificial' or 'cultural' rather than 'natural'.
- 2.1.1.2 For legal purposes, finds from the seabed fall into two categories. 'Wreck' has a specific legal definition broadly encompassing all sorts of materials that come to be on the seabed as a direct result of once being aboard or part of a vessel. Statutory law relating to 'wreck' is set out principally in the Merchant Shipping Act 1995, applicable to territorial waters out to twelve nautical miles. The common law relating to wreck is to be found in legal cases and commentaries.
- 2.1.1.3 All other finds are referred to as 'non-wreck'. 'Non-wreck' includes things such as prehistoric flint artefacts that were lost on land that has since been inundated by rising sea level, or artefacts that have been eroded from sites on the shore. The law applicable to 'non-wreck' is largely common law, to be found in legal cases and commentaries.
- 2.1.1.4 Any wreck recovered beyond UK territorial waters, but then brought into UK territorial waters, must be reported to the Receiver of Wrecks (RoW) under the terms of the Merchant Shipping Act 1995.
- 2.1.1.5 A list of the types of finds and materials that might be recovered that are of archaeological interest is given in **Appendix A**.

### 3. Circumstances of discovery

3.1.1.1 This PAD addresses finds of archaeological interest made in the following circumstances and when an archaeologist is not present:

- discoveries on the seabed during seabed inspections and investigations, seabed clearance or scheme installation;
- an anomaly that has been encountered on the seabed, such as possible wreck or cultural heritage features identified during geophysical, geotechnical, ROV or diver surveys; or
- a find of archaeological interest made on a works vessel, for example wreck or objects recovered to the deck during geotechnical sampling or caught in equipment such as grapnels, anchors, spud feet or ploughs.

## 4. Terms of Roles

4.1.1.1 This Section defines the terms and roles with responsibility for ensuring compliance with the PAD (see **Table 4.1**). The specific details of the individuals who will fill these roles will be confirmed and distributed in advance of the commencement of any project works that might disturb the seabed.

4.1.1.2 The Applicant will draw the attention of the Contractor to the potential for archaeological material to be found in the course of their works and will inform them of the possible importance of such finds. Key operational staff will be identified and must be briefed by the Retained Archaeologist or the Archaeological Consultant on the operation of the PAD prior to the commencement of such works.

4.1.1.3 The PAD anticipates discoveries being made by Contractor / project personnel, who report to a Site Champion on their vessel or site (usually the senior person on site, such as the vessel master or the Client Representative), who then reports to a person (the Nominated Contact) who has been nominated by the Applicant to co-ordinate implementation of the PAD. The Nominated Contact will, in turn, inform the Retained Archaeologist and the Applicant's Project Manager(s). The Retained Archaeologist will assess the nature of the appropriate action to be taken, and whether to contact the Archaeological Curators, in this case Historic Environment Scotland (HES), and will liaise with Archaeological Curators and the Applicant's Project Manager(s) as necessary. The responsibilities for each role are outlined in **Table 4.1**.

**Table 4.1 The Project's roles and responsibilities under the PAD**

Roles	Name and Contact Details (if applicable)	Key Responsibilities
Applicant	MarramWind Limited	The Applicant is the Developer of the licence area for offshore windfarm development.
Contractor / Project personnel	Not Applicable	The Project Staff are required to familiarise themselves with the requirements of the <b>Volume 4: Outline Written Scheme of Investigation (Offshore)</b> and the PAD and receive awareness training from the Retained Archaeologist. Any discoveries made by the Project Staff will immediately have to be reported to inform the Officer on Watch. The Officer on Watch will inform the Site Champion.
Site Champion	TBC	The Site Champion is directly responsible for the on-site implementation of the PAD and any reports arising from a particular activity location. The Site Champion should ensure works in the vicinity are stopped and a temporary exclusion zone (TEZ) is put in place. They should ensure that the find is recorded in the vessel log, navigational software and within the Preliminary Record Form ( <b>Appendix B</b> ). The Site Champion should inform the Nominated Contact and pass over any records. They are also responsible for making sure that

Roles	Name and Contact Details (if applicable)	Key Responsibilities
		any recovered finds are stored correctly as set out in the <b>Volume 4: Outline Written Scheme of Investigation (Offshore)</b> .
<b>The Applicant's Nominated Contact</b>	<p>TBC</p> <p>Darren Jameson            Scottish Power</p> <p>Darren.jameson@scottishpower.co            m            07540 701 363</p>	The Nominated Contact is the formal point of contact for all matters relating to the PAD between the Applicant, its subcontractors, the Site Champions, the Retained Archaeologist, the Archaeological Curators and ultimately the Regulator. The Nominated Contact will immediately report any findings to the Retained Archaeologists, who will then be responsible for implementing the Protocol.
<b>Archaeological Curators</b>	<p>HES – Marine Planning Team (Details TBC); and</p> <p>The Local Planning Authority (LPA) Archaeological Advisor</p>	The statutory advisor on the marine historic environment and the Archaeological Curators for heritage matters offshore (below Mean High Water Springs (MHWS)) is HES in conjunction with the LPA Archaeological Advisor (Aberdeen). Archaeological Curators' provide the development control and planning advice to the Regulator and has the final decision on the scope of work and signs off the fieldwork when it is complete, in consultation with the Retained Archaeologist.
<b>Archaeological Consultant</b>	WSP – Cultural Heritage and Archaeology Team	The appointed archaeological consultant is a suitably qualified and experienced marine archaeological consultant employed by the Applicant. The Archaeological Consultant will oversee and ensure the successful implementation of the <b>Volume 4: Outline Written Scheme of Investigation (Offshore)</b> and contractual commitments relating to archaeology. The Archaeological Consultant should have the autonomy to make recommendations, based on their specialist knowledge and experience throughout the scheme's timeline. They will monitor the work of the Retained Archaeologist and assure the quality of the methodological approach and reporting for the project.
<b>Retained Archaeologist</b>	<p>Michael Grant            Coastal and Offshore Archaeological Research Services (COARS)</p> <p>M.J.Grant@soton.ac.uk            07584610302</p>	The Retained Archaeologist is a contractor that provides marine archaeological contractor services to the Applicant, reporting through the Archaeological Consultant. They will review information provided on archaeological discoveries, advise on mitigation requirements and strategies, undertake immediate actions for finds, provide conservation and recording facilities and services, and provide for watching brief where appropriate.

## 4.1.2 Site Champion

4.1.2.1 The 'Site Champion' is appointed by the Applicant's Nominated Contact to be directly responsible for the on-site implementation of the PAD and any reports arising from a particular activity location. The Site Champion could be a Vessel Master, a Construction Foreman or any other person in a position to control the immediate works and act as the point of contact for the construction team or Operations / Maintenance team. The Site Champion will liaise with the Nominated Contact in respect of the implementation of the PAD. The Site Champion will be issued with a series of preliminary record sheets and flow charts (see **Appendix B**) setting out the actions to be taken in the event that an archaeological discovery is made either on the seabed or on the deck of the vessel. The Site Champion will report to the Retained Archaeologist via the Nominated Contact; the Retained Archaeologist will check the necessary documentation before taking the appropriate action.

## 4.1.3 Nominated Contact

4.1.3.1 The Applicant's 'Nominated Contact' is the formal point of contact nominated for all matters relating to the PAD between the Applicant, its subcontractors, the Site Champions, the Retained Archaeologist, the Archaeological Curators and ultimately the Regulator. It is critical that all parties hold the Nominated Contact's full contact details and that any changes to the Nominated Contact's details are circulated as soon as possible. The Nominated Contact is often the Applicant's Environment Manager, Consents Manager or similar. The Applicant's Nominated Contact will be the contractor's shore-based point of contact for all communications regarding archaeological discoveries. The Nominated Contact will be issued with a copy of this document.

## 4.1.4 Archaeological Curator

4.1.4.1 HES is the Archaeological Curator and will advise the Regulator, Marine Directorate - Licensing Operations Team (MD-LOT), regarding archaeology and heritage for Scottish territorial waters. In the event of an unexpected discovery of a find of archaeological significance, the Retained Archaeologist or Archaeological Consultant may consider it necessary to inform these authorities. Should this be necessary the Archaeological Curator will be asked to:

- liaise with other relevant archaeological authorities;
- advise on proposals to further evaluate any finds; and
- advise on proposals to mitigate the effects of work activities upon any finds.

## 4.1.5 Archaeological Consultant

4.1.5.1 The 'Archaeological Consultant' is responsible for managing the scope and for monitoring and assuring the work on behalf of the Applicant. The team will liaise directly with the Retained Archaeologist, Archaeological Curator, and the Regulator. Responsibilities include:

- compiling, reviewing and updating this **Volume 4: Outline Written Scheme of Investigation (Offshore)** following consultation with the Regulator (MD-LOT and Curators (HES) post-consent to produce a final, agreed WSI (Offshore));
- advising the Applicant on their responsibilities regarding the implementation of the final WSI (Offshore) and the PAD;

- compiling, agreeing and issuing method statements for any archaeological contractors to adhere to, following consultation with the Applicant and the Regulator and Curator;
- advising the Applicant on their responsibilities and regarding interactions with the Regulators, Archaeological Curators (HES) and other third parties;
- ensuring the scope of work specifications for the Project meets archaeological requirements; and
- advising the Applicant and the Archaeological Curators on final arrangements for the analysis, archive deposition, publication and popular dissemination of the results of the archaeological works.

#### **4.1.6 Retained Archaeologist**

4.1.6.1 The 'Retained Archaeologist' is an archaeological contractor that will provide archaeological support services, archaeological advice and liaise directly with the Archaeological Consultant, Site Champion, Nominated Contact and the Archaeological Curators as necessary. The Applicant may utilise the expertise of the appointed Retained Archaeologist to manage the Protocol. Responsibilities will include:

- develop and deliver training on relevant aspects of the PAD to the Project personnel, including input to inductions, presentations and production of awareness materials. Provide storage and conservation facilities and services for recovered finds;
- advising, preparing and issuing reports to the Archaeological Curators for approval;
- implementing and monitoring of the PAD;
- providing advice to project staff / Unexploded Ordnance specialists in the event of a discovery of high archaeological interest;
- monitoring the preparation and submission of archaeological reports as appropriate and making them available to the Archaeological Curator for approval; and
- preparing provisions for the management of Project archives in consultation with an appropriate museum.

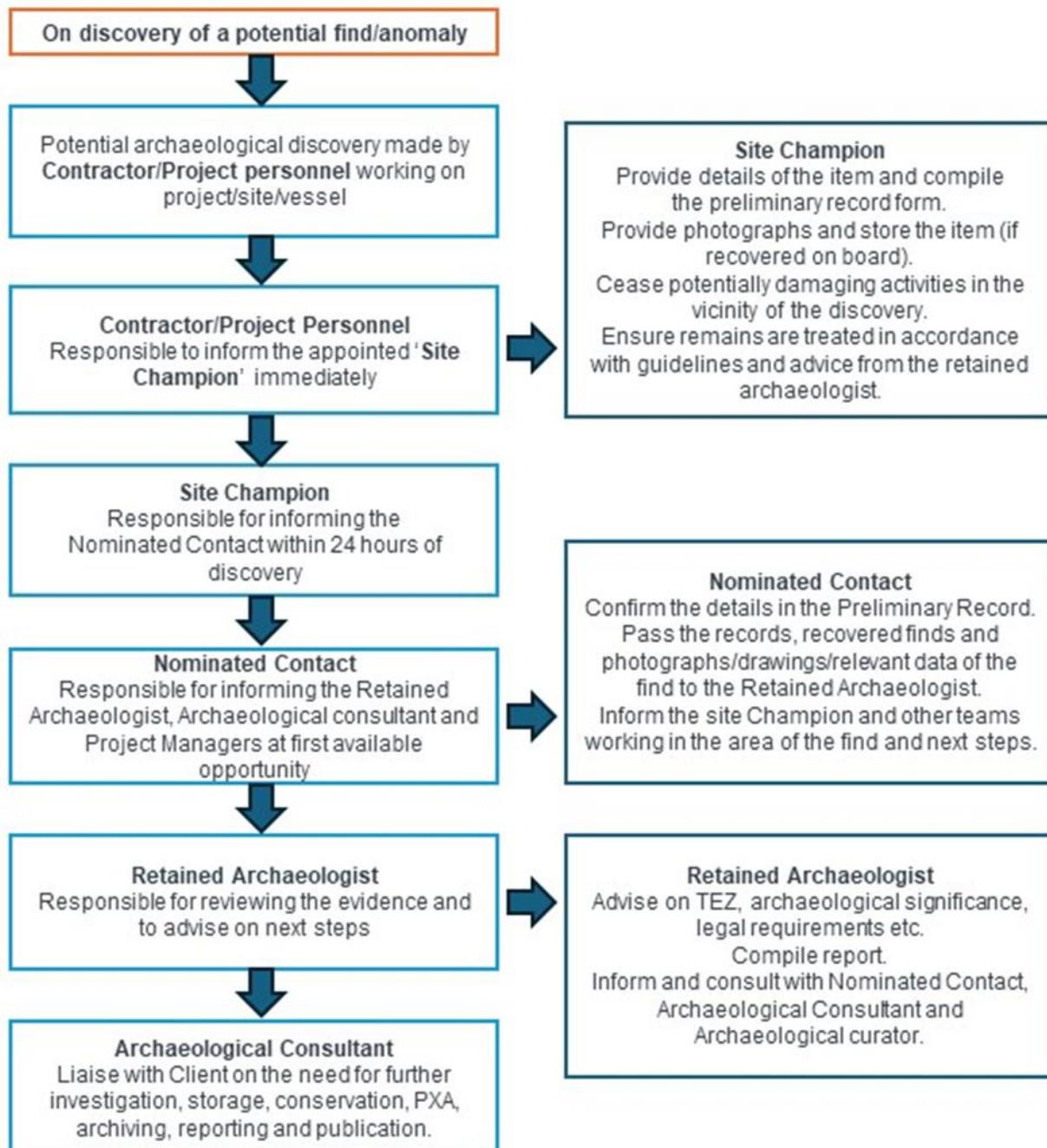
## 5. PAD Awareness Training

- 5.1.1.1 For the PAD to be effective, contractors and sub-contractors working on the Project should receive appropriate training. The Applicant's Nominated Contact(s) and the Retained Archaeologist are responsible for delivering the PAD awareness training to the personnel that will be directly involved in those works with the potential to find items of significant archaeological importance.
- 5.1.1.2 The PAD awareness training will involve the description of the protocol, the roles and responsibilities under the PAD, recording and reporting of unexpected and incidental offshore finds relating to the historic environment. It is advised that the Project personnel and the Site Champion must attend the training.

## 6. Actions following discoveries on the seabed and on the deck of a works vessel

6.1.1.1 **Plate 6.1** presents the actions to be taken in the event of an archaeological discovery during any project activities that disturb the seabed. The preliminary record sheets and flow charts illustrating the actions to be followed are presented in **Appendix B**.

## Plate 6.1 Basic sequence of reporting (when an archaeologist is not present on-board / onsite)



## 6.2 Actions by the Contractor

### 6.2.1 In all cases

- 6.2.1.1 If a find of archaeological interest is made, Contractor / Project personnel will immediately inform the Site Champion (via their supervisor if appropriate).
- 6.2.1.2 If the discovery is ordnance, then Contractor / Project personnel will abide by their operational procedures, which are to take precedence; and then report via the Protocol once safe to do so.
- 6.2.1.3 Preferably, finds should be left in situ as archaeological finds are vulnerable to deterioration when there are changes in conditions. It is important that finds are handled with care at all times and that the appropriate handling and storage techniques are applied. Fragile material, such as waterlogged wood and other organic materials, can be easily damaged; therefore, it is crucial that all finds be interfered with as little as possible.
- 6.2.1.4 Where items of archaeological interest are recovered, Contractor / Project personnel (under the direction of the Site Champion) will follow the guidelines outlined in **Plate 6.1** and **Plates B1 and B2**, and any individual recommendations from the Retained Archaeologist. Finds should be photographed with a scale and photographs of any features on the finds, including marks, glazing or imagery. Any items recovered should be immersed in seawater in a suitable clean container, which should be covered and kept in cool and dark conditions. Smaller items should be double-bagged in water and placed in a container. Do not allow the find to dry out and change the water regularly if biological growth is detected.

### 6.2.2 Discoveries on board

- 6.2.2.1 If a find of archaeological interest is made on board a construction vessel (for instance, caught in a grapnel / anchor or trapped in a plough), the Contractor / Project personnel will immediately inform the Site Champion.
- 6.2.2.2 Where it is possible to identify the seabed position from which the find originated, the Site Champion will temporarily cease construction activities in the vicinity of the seabed location until the advice has been obtained.
- 6.2.2.3 Detailed assessment of the potential of any discoveries may be dependent on the advice of, and information from, a range of external specialists, repositories and organisations which may delay full formal response about finds.

### 6.2.3 Anomalies on the seabed

- 6.2.3.1 Finds or sites of archaeological potential may be encountered via a number of methods including but not limited to:
  - geophysical survey;
  - diver magnetometer;
  - obstacle avoidance sonar;
  - visual survey by ROV or divers;
  - interaction with ploughs, anchors, jack-up legs or seabed grapnels.
- 6.2.3.2 If an anomaly is identified in advance of impact, such as on the forward-looking sonar of a cable plough, the route should – where possible – be deviated around the obstruction, in

line with normal ploughing practice. The position of the anomaly will be reported to the Site Champion.

- 6.2.3.3 If an anomaly is identified after an impact has occurred, for example, as indicated by a change in the towing cable tensiometer, avoidance by deviation will be precluded. However, the change in tension should be immediately brought to the attention of the Site Champion so that the anomaly can be reported, advice can be sought and any requirements for further investigation determined.
- 6.2.3.4 The Site Champion will arrange for the grapnel or plough to be recovered to the surface and examined as soon as possible after an anomaly is identified to see if any archaeological material is trapped within it. Results of the examination will be communicated to the Site Champion accordingly.
- 6.2.3.5 If an anomaly comes to light in the course of geophysical survey or drop-down video survey, the Contractor / Project personnel will ensure that the position of the anomaly is noted on navigational software and that the Site Champion is informed.

#### 6.2.4 Discoveries subsequent to work on site

- 6.2.4.1 Staff examining sample material (for example, core material; benthic samples) should consider the potential for archaeological and / or palaeoenvironmental material being recovered within their samples. Where such discoveries are made, Contractor / Project personnel should inform the Site Champion and pass on details of the sample number and its position.
- 6.2.4.2 If an anomaly comes to light in the course of processing or interpreting geophysical survey data, video or other photographic data, Contractor / Project personnel should inform the Site Champion and pass on details of the data files and navigational information relating to the positions where the data were obtained.

### 6.3 Actions by the Site Champion

- 6.3.1.1 Where it is possible to identify the position from which the find originated, the Site Champion will impose a TEZ in the vicinity of the discovery within which intrusive works will cease until further investigations have been concluded. Works can, however, continue in an alternative location. The feedback and advice of the Archaeological Consultant or Retained Archaeologist will be sought through the Nominated Contact and will be available throughout ground-disturbance works in order to provide the necessary response required during any activity that disturbs the seabed.
- 6.3.1.2 The Site Champion shall record the occurrence as soon as possible in the Daily Progress Report or vessel log, together with the time and exact vessel position. Where possible, the report entry should include a close approximation of the original position of the anomaly on the seabed. Additionally, the Site Champion shall ensure that the TEZ, is marked on navigational software, site drawings and survey charts. The Site Champion shall compile a Preliminary Record (see **Appendix B**) of the occurrence for discoveries both on the seabed and on the deck of the vessel.
- 6.3.1.3 The Site Champion shall inform the Nominated Contact of the occurrence as soon as possible and pass on all available information, including a copy of the preliminary record and copies of any photographs, drawings or other relevant records. If any finds have been recovered, the Site Champion shall arrange for them to be stored in seawater in a suitable clean container, which should be covered, and treated per the general advice in **Plate 6.1**. Any rust, concretion or marine growth should not be removed.

## 6.4 Actions by the nominated contact

- 6.4.1.1 Once informed of a find by the Site Champion, the Nominated Contact will confirm with the Site Champion that all the details set out in the preliminary record are comprehensive and correct. Contact will be made with the Retained Archaeologist at the earliest opportunity to request advice on the appropriate immediate actions in addition to the recording, handling and storage of any items recovered.
- 6.4.1.2 The Nominated Contact shall pass on to the Retained Archaeologist all available information relating to the circumstances of the discovery, including a copy of the Preliminary Record, related data, and copies of any other records that have been made. Any finds should be made available to the Retained Archaeologist if possible and requested. The Nominated Contact shall ensure that any find is appropriately assessed and documented for the Archaeological Consultant who will, if deemed necessary, report the find to the Archaeological Curator.
- 6.4.1.3 Once informed of a find by a Site Champion, the Nominated Contact will inform the Applicant's Offshore Project Managers, in addition to the Archaeological Consultant and Retained Archaeologist. The Nominated Contact should inform other teams engaged in potentially damaging activities in the same area, to ensure that they are aware of the position of the discovery so that further possible damage to the historic environment can be avoided. The position of the TEZ will be disseminated for this purpose as appropriate.

### 6.4.2 Finds recovered within the UK 12nm limit

- 6.4.2.1 The Nominated Contact shall make any recovered finds available for inspection by the relevant authority. If the find is, or appears to be 'wreck', or associated material, the Nominated Contact shall give notice to the RoW as soon as possible that a find has been recovered in accordance with Section 236(1) of the Merchant Shipping Act 1995. This is a legal requirement. This clause also applies to finds recovered outside territorial waters that are subsequently brought into territorial waters.

## 6.5 Actions by the retained archaeologist

### 6.5.1 Initial response

- 6.5.1.1 The Retained Archaeologist will review the information about the discovery in conjunction with geophysical and / or desk-based information, where available. Additional communication may take the form of email correspondence and / or telephone conversations (where internet access is restricted).
- 6.5.1.2 The Retained Archaeologist will send an Initial Response to the Nominated Contact and Archaeological Consultant to acknowledge the report. Should it be required, the Retained Archaeologist will travel to the site to inspect any finds or data made available. The Nominated Contact and Archaeological Consultant will be kept informed by the Retained Archaeologist.

### 6.5.2 Urgent reports

- 6.5.2.1 Where the report is urgent, the initial response will include an assessment of archaeological potential and a decision on the continuation or removal of the TEZ.

### **6.5.3 Assessment of archaeological potential**

6.5.3.1 The assessment of archaeological potential will be based on the type and extent of remains found.

6.5.3.2 The following types of discovery are likely to be of low potential:

- single finds that are not datable or are of modern (post-1800) or later date; and
- peat deposits.

6.5.3.3 The following types of discovery are likely to be of high potential:

- single finds that are of post-medieval date;
- single finds that relate to military aircraft;
- multiple finds from the same locations;
- reports indicating the presence of a wreck or other structural remains; and
- deposits of peat or fine-grained sediments that contain worked flint, charcoal or bone.

6.5.3.4 In the case of discoveries of low potential, the Retained Archaeologist will advise the Nominated Contact that the TEZ may be lifted and that construction activities in the vicinity of the discovery may recommence.

6.5.3.5 In the case of a discovery of high potential, construction will not recommence in the TEZ without the approval of the Archaeological Curators. The Retained Archaeologist will confirm the extent of the area of the TEZ and liaise with the Archaeological Curators regarding the discovery and any further actions.

### **6.5.4 Summary record**

6.5.4.1 The Retained Archaeologist will send a Summary Record of the discovery to the Nominated Contact and other relevant parties which will include:

- advice on the identification of finds and a description of the conditions in which it was found;
- an assessment of the archaeological potential of the find which should include the rationale; and
- the advice provided in respect of the discovery, including details on any recovered finds.

### **6.5.5 Subsequent actions**

6.5.5.1 The Retained Archaeologist will advise the Nominated Contact of the implications of the discovery and what actions that might be required. Further actions may include, but are not limited to site visit, the conversion of a TEZ to an Archaeological Exclusion Zone (AEZ), and watching brief, finds research, conservation, archiving and reporting. The rationale for the conclusions reached will be provided to the Nominated Contact. Any subsequent actions will be arranged for by the Applicant and will be agreed case-by-case with the Regulator and Archaeological Curators. If the historic asset is shown to be of archaeological significance the TEZ may be converted into a new AEZ. This decision will be taken by the Retained Archaeologist in consultation with the Archaeological Curator, for any marine works seaward of MHWS.

## 6.5.6 Further requirements

6.5.6.1 If the discovery is something to which specific legal provisions apply (for instance, treasure, human remains, wreck etc.), the Applicant will ensure that the required statutory reporting is undertaken. This task can be directed to the Retained Archaeologist, but the legal responsibility rests with the Applicant.

## 6.5.7 Finds

6.5.7.1 The Retained Archaeologist will liaise with the Nominated Contact, the Archaeological Consultant and the Receiver of Wreck regarding the possession of any recovered finds. The subsequent handling, retention, conservation or discard / disposal of finds will be subject to applicable law / policy and to arrangements between the Applicant and the institution receiving the archaeological archive arising from the scheme.

## 6.5.8 Revised summary record

6.5.8.1 The Summary Record will be revised to take account of further information or actions that have taken place or are planned. The Retained Archaeologist will pass on a copy of the revised Summary Record to the Nominated Contact for circulation to the Site Champion and relevant Offshore Project Staff.

## 6.5.9 Contact the relevant local and national authorities

6.5.9.1 Should the Retained Archaeologist consider it necessary, the Archaeological Curator will be consulted by the Retained Archaeologist or the Archaeological Consultant for further advice. If necessary, all available information relating to the circumstances of the occurrence, including a copy of the preliminary record and copies of any photographs, drawings or other records that have been made will be passed on to the Relevant National Authorities.

6.5.9.2 The contact details for the Archaeological Curator are in **Table 4.1**.

## 7. Conservation and Storage

- 7.1.1.1 The Retained Archaeologist, in consultation with the Archaeological Consultant, will make arrangements for the Applicant to hold in possession any recovered finds, subject – in the case of wreck – to agreement with the RoW. The subsequent handling, retention or disposal of finds will be subject to applicable law and to arrangements between the Applicant and the institution receiving the archaeological archive arising from the scheme.
- 7.1.1.2 If an artefact is discovered on-board or recovered, it should be contained, stored and protected with care to avoid any damage. In addition, it should be photographed and recorded using the preliminary record form. This may include submerging the find in seawater if the discovery is waterlogged, then placing the unchanged (dirt, corrosion, concretion or marine growth must not be removed) find in a sealed, clean container which should be stored in a cool, dark place.

### 7.2 Wet finds

- place the finds in separate water-tight plastic containers of appropriate size;
- label the container;
- place the container somewhere cool and dark;
- check the container regularly and top up with water if needed; and
- if the item breaks, do not glue it back together.

### 7.3 Dry finds

- do not put it in water;
- label it appropriately; and
- keep it safe in a dark, cold place.

## 8. Advise Other Teams / Vessels Working on the Site

- 8.1.1.1 In the event that a find is considered to be of possible archaeological significance, a TEZ may be established at the find / anomaly / site location. This will protect the identified potential heritage asset while its significance is fully assessed.
- 8.1.1.2 Where a TEZ has been imposed, the Site Champion shall inform other vessels working in the area. Those vessels shall be advised by the Nominated Contact to stay alert for further anomalies and finds.

### 8.2 Establishing new AEZs

- 8.2.1.1 Once a TEZ has been established and the significance of the historic asset it protects determined, it may be necessary to maintain this exclusion zone. If the historic asset is shown to be of archaeological significance the TEZ may be converted into a new AEZ. This decision will be taken by the Retained Archaeologist and Archaeological Consultant in consultation with the Archaeological Curator, for any marine works seaward of MHWS.

### 8.3 Altering AEZs

- 8.3.1.1 If archaeological material is discovered during the works or remains subject to AEZ become better understood due to additional survey etc., then AEZs may be altered (enlarged, reduced, moved or removed) as a result. These discoveries might include material recovered, imaged on survey equipment or through evidence from boreholes. Any alteration will be defined by the Retained Archaeologist in consultation with the Archaeological Curator and will be issued to each works vessel by the Nominated Contact through the Site Champion.

### 8.4 Reporting and archiving

- 8.4.1.1 Archaeological reports produced as a result of this PAD, will be sent for review – first to the Archaeological Consultant and then the Applicant – before being sent to the Relevant National Authorities prior to finalisation, and deposition in identified local and / or national archives. Similarly, any summary reports produced as a result of the agreed WSI (Offshore), or through implementation of the PAD, will be sent as draft reports for agreement.
- 8.4.1.2 The Retained Archaeologist will be responsible for ensuring that copies of any archaeological assessment or summary reports are deposited with the National Record of the Historic Environment (NRHE): Canmore.
- 8.4.1.3 An HES Online Access to the Index of Archaeological Investigations (OASIS) form with a digital copy of the report will be submitted within three months of completion of construction of the authorised scheme. The MD-LOT and / or, as appropriate, HES will be notified that the OASIS form has been submitted to the NRHE / Canmore within 10 working days of the submission. Guidance for archiving digital outputs in Britain can be found on the Archaeological Data Service website.
- 8.4.1.4 Any samples, finds or objects of cultural heritage interest that may be recovered during the project works will be handled and stored in the appropriate manner under the guidance of the Archaeological Consultant, in consultation with the curators and staff from the receiving institution. All subsequent decisions regarding the handling, transport and storage of

retained finds will be agreed with the Archaeological Consultant in consultation with the Relevant National Authorities and the relevant staff from the allocated receiving institution. The relevant local and national curatorial bodies will receive the draft technical reports regarding discoveries to support the determination of any subsequent actions.

## 9. References

Archaeological Data Service, (n.d.). *Depositing Data*. [online] Available at: <https://archaeologydataservice.ac.uk/advice/DepositingData.xhtml> [Accessed: 19 August 2025].

*Merchant Shipping Act 1995* (1995 c. 21). [online] Available at: <https://www.legislation.gov.uk/ukpga/1995/21/contents> [Accessed: 19 August 2025].

The Crown Estate, (2014). *Protocol for Archaeological Discoveries: Offshore Renewables Projects*. [online] Available at: <https://www.thecrownestate.co.uk/media/1782/ei-protocol-for-archaeological-discoveries-offshore-renewables-projects.pdf> [Accessed: 19 August 2025].

# 10. Glossary of Terms and Abbreviations

## 10.1 Abbreviations

Acronym	Definition
<b>AEZ</b>	Archaeological Exclusion Zone
<b>EIA</b>	Environmental Impact Assessment
<b>HES</b>	Historic Environment Scotland
<b>LPA</b>	Local Planning Authority
<b>MD-LOT</b>	Marine Directorate – Licensing Operations Team
<b>MHWS</b>	Mean High Water Springs
<b>NRHE</b>	National Record of the Historic Environment
<b>OASIS</b>	Online Access to the Index of Archaeological Investigations
<b>PAD</b>	Protocol for Archaeological Discoveries
<b>ROV</b>	Remotely Operated Vehicle
<b>RoW</b>	Receiver of Wreck
<b>TEZ</b>	Temporary Exclusion Zone
<b>WSI</b>	Written Scheme of Investigation

## 10.2 Glossary of terms

Term	Definition
<b>Archaeological Consultant</b>	The appointed archaeological consultant is a suitably qualified and experienced marine archaeological consultant employed by the Applicant.
<b>Archaeological Curators</b>	The statutory advisor on the marine historic environment and the Archaeological Curators for heritage matters offshore (below Mean High Water Springs (MHWS)) is HES in conjunction with the LPA Archaeological Advisor (Aberdeen).
<b>Crown Estate Scotland</b>	The public corporation of the Scottish government that is responsible for the management of land and property in Scotland, as owned by the monarch <i>“in right of the Crown.”</i>

<b>Term</b>	<b>Definition</b>
<b>Protocol for Archaeological Discoveries</b>	Protocols for Archaeological Discoveries (PADs) are systems of monitoring for unexpected or incidental finds relating to the historic environment and have come into use predominantly in the marine sphere, where construction tends to be a 24-hour operation, involving multiple vessels, and where conventional watching briefs (routinely used in the terrestrial sector) are not cost-effective. They are recommended in 'Historic Environment Guidance for the Offshore Renewable Energy Sector' (COWRIE 2007, 11.3, 45–6).
<b>Remotely Operated Vehicles</b>	Submersible uncrewed craft controlled from the surface via a tether, designed to operate in underwater environments for deep-sea explorations.
<b>Retained Archaeologist</b>	The Retained Archaeologist is a contractor that provides marine archaeological contractor services to the Applicant, reporting through the Archaeological Consultant.
<b>Site Champion</b>	The Site Champion is directly responsible for the on-site implementation of the PAD and any reports arising from a particular activity location. The Site Champion should ensure works in the vicinity are stopped and a temporary exclusion zone (TEZ) is put in place.
<b>The Applicant's Nominated Contact</b>	The Nominated Contact is the formal point of contact for all matters relating to the PAD between the Applicant, its subcontractors, the Site Champions, the Retained Archaeologist, the Archaeological Curators and ultimately the Regulator.

# Appendix A

## Guidelines for Identifying Finds of Archaeological Interest and Handling Artefacts

### Materials guidelines

**Rubber, Plastic etc.** In most cases, rubber, plastic, Bakelite and similar modern materials are not of archaeological interest and can be disregarded. One exception is where such materials are found in the same area as aluminium objects and structures, which may indicate aircraft wreckage from World War Two. Such material should be reported.

**Iron and Steel.** The potential range and date of iron and steel objects is so wide that it is difficult to provide general guidance. In broad terms, iron and steel objects which are covered by a thick amorphous concrete-like coating ('concretion') are likely to be of archaeological interest and should be reported. Pieces of metal sheet and structure may indicate a wreck and should be reported. Specific operational measures are likely to apply in respect of ordnance (cannonballs, bullets, shells) which should take precedence over archaeological requirements. However, discoveries of ordnance may be of archaeological interest, and they should be reported.

**Other Metals.** Items made of thin, tinned or painted metal sheet are unlikely to be of archaeological interest. Aluminium objects may indicate aircraft wreckage from World War Two, especially if two or more pieces of aluminium are fixed together by rivets. All occurrences should be reported. Copper and copper alloy (bronze, brass) objects might indicate a wreck, or they may be very old. All occurrences should be reported. Precious metal objects and coins are definitely of archaeological interest because they are relatively easy to date. All occurrences should be reported.

**Bone.** Discoveries of animal bone, teeth and tusks are of archaeological interest because they may date to periods when the seabed formed dry land and should therefore be reported. Such bones, teeth, tusks etc. may have signs of damage, breaking or cutting that can be directly attributed to human activity. Large quantities of animal bone may indicate a wreck (the remains of cargo or provisions) and should be reported. Human bone is definitely of archaeological interest, and may, if buried and found within the territorial waters, be subject to the provisions of the Burial Act 1857. Any suspected human bone should be reported and treated with discretion and respect. Objects made out of bone – such as combs, harpoon points or decorative items – can be very old and are definitely of archaeological interest. All occurrences should be reported.

**Wood.** Light coloured wood, or wood that floats easily, is probably modern and is unlikely to be of archaeological interest. 'Roundwood' with bark – such as branches – is unlikely to be of archaeological interest, although it may provide palaeoenvironmental evidence. However, roundwood that has clearly been shaped or made into a point should be reported. Pieces of wood that have been shaped or jointed may be of archaeological interest, especially if fixed with wooden pegs, bolts or nails – all occurrences should be reported. Objects made out of dark, waterlogged wood – such as bowls, handles, shafts and so on – can be very old and are definitely of archaeological interest. All occurrences should be reported.

**Stone.** Small to medium sized stones that are shaped, polished and / or pierced may be prehistoric axes. All occurrences should be reported. Objects such as axe heads or knife blades made from flint are of prehistoric date and should be reported. Large blocks of stone that have been pierced or shaped may have been used as anchors or weights for fishing nets. All occurrences should be

reported. The recovery of numerous stones may indicate the ballast mound of a wreck, or a navigational cairn. All occurrences should be reported.

**Pottery.** Any fragment of pottery is potentially of interest, especially if it is a large fragment. Items which look like modern crockery can be discarded, but if the item has an unusual shape, glaze or fabric it should be reported.

**Brick.** Bricks with modern proportions and v- shaped hollows ('frogs') are of no archaeological interest. Unfrogged, 'small', 'thin' or otherwise unusual bricks may date back to Medieval or even Roman times and should be reported.

**Peat and Clay.** Peat is black or brown fibrous organic material that was deposited when sea level was so low that the modern seabed formed marshy land, for example on the banks of a river or estuary. The peat is made up of plant remains and also contains microscopic remains that can provide information about the environment at the time it was formed. Prehistoric structures (such as wooden trackways) and artefacts are often associated with wetland areas where peat may have formed. In some rare instances archaeological material has been found within peat samples (moorlog) recovered from the North Sea seabed. Fine-grained sediments such as silts and clays are often found at the same places as peat. Any discoveries of such material could be of archaeological interest, and their occurrence should be reported.

## Artefact storage advice

It should be noted that 'time is of the essence' in terms of the recovery of waterlogged archaeological material. If waterlogged organic items are allowed to dry out this can cause irreparable damage. Care in handling items is paramount.

In the event of artefact recovery, the finds should be stored in the following manner:

- If dry, finds should be placed in zip-lock bags and / or stored in a suitable protective container in a cool, dark area if possible.
- If waterlogged, any artefacts should be kept damp, or preferably totally submerged (in sea water), in zip-lock bags which are then stored in ridged plastic boxes to prevent damage. Items should be kept wet, covered, and stored in a cool, dark area if possible, and protected from any damage to potentially delicate waterlogged material.
- Any sediments of interest will be collected and double bagged into zip-lock bags.
- If particularly delicate or significant items are recovered the Retained Archaeologist should be contacted for further advice.

The Applicant will supply suitable storage materials to its construction operations. The Retained Archaeologist can advise on suitable materials for this purpose.

# Appendix B

## Protocol for Archaeological Preliminary Report Form

### Marram Offshore Wind Farm: Protocol for archaeological discoveries

Preliminary Record Form: Discoveries on the Seabed / on board / inter-tidal zone / on land

<b>Vessel / Team Name:</b>
<b>Site / Sea Area Name</b>
<b>Date:</b>
<b>Time of compiling information:</b>
<b>Name of compiler (Site Champion):</b>
<b>Name of finder (if different to above):</b>
<b>Time at which discovery was encountered:</b>
<b>Vessel position at time when anomaly was encountered (for example, recovery position)</b>
<b>Latitude</b>
<b>Longitude</b>
<b>Datum (if different to WGS84)</b>
<b>Original position of the anomaly on the seabed, if known:</b>

**Comment on accuracy of the original position state above:**

**How accurate is the position?**

**Is the position the original position or has the material been moved by operations (for example, trawling – if so provide start and end positions of trawl)**

**Details of circumstances and activity that lead to the discovery**

**Description of the find / anomaly:**

**Apparent size / extent of the anomaly:**

**Details of any find(s) recovered:**

**Details of photographs, drawings or other records made of the finds(s):**

**Details of treatment or storage of find(s):**

**General notes:**

**If discovered on the seabed:**

**Method of identification (sonar, cable tensiometer, etc)**

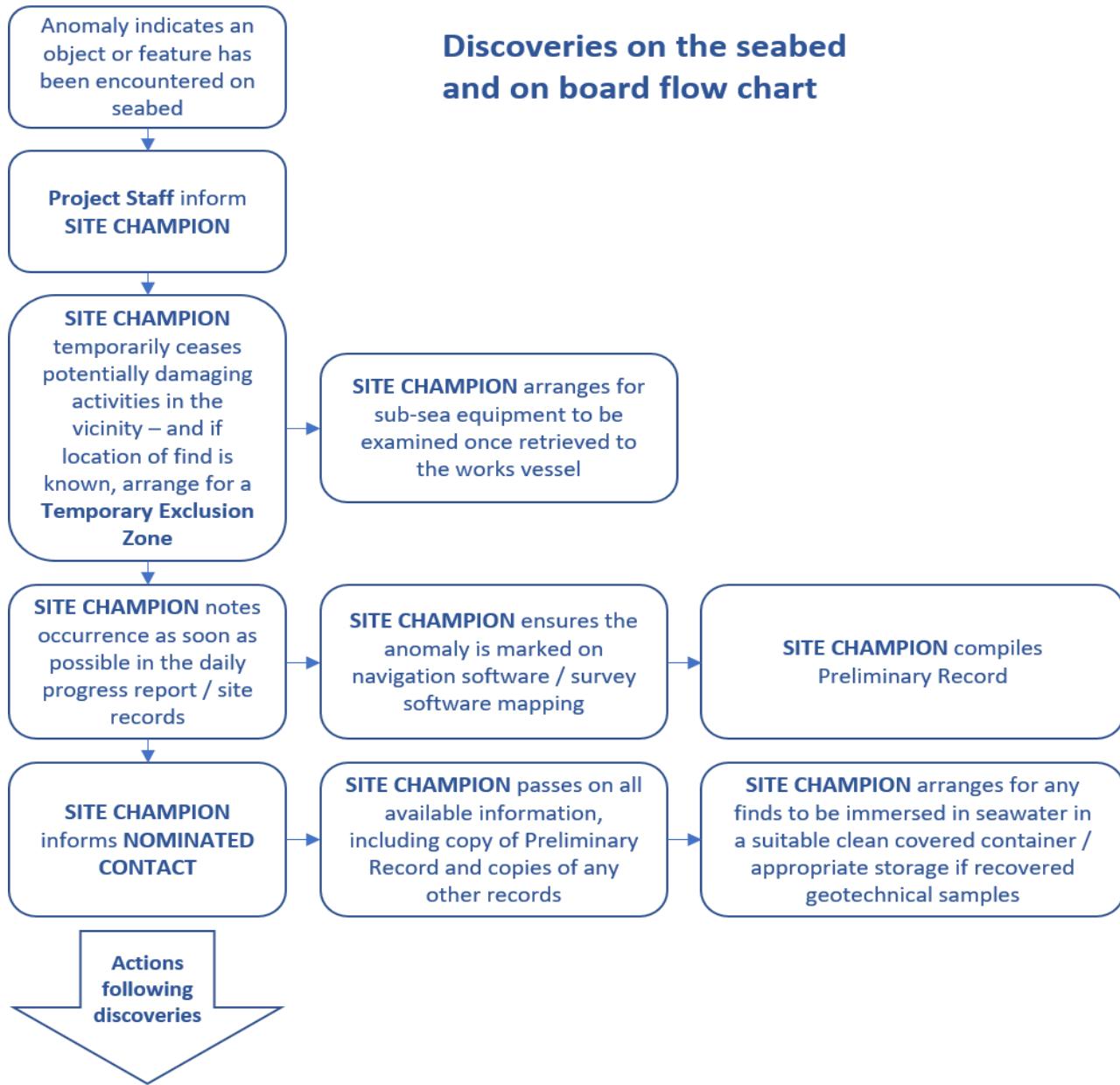
**Apparent size / extent of anomaly (length, width, height above seabed)**

**Extent of deviation / route development**

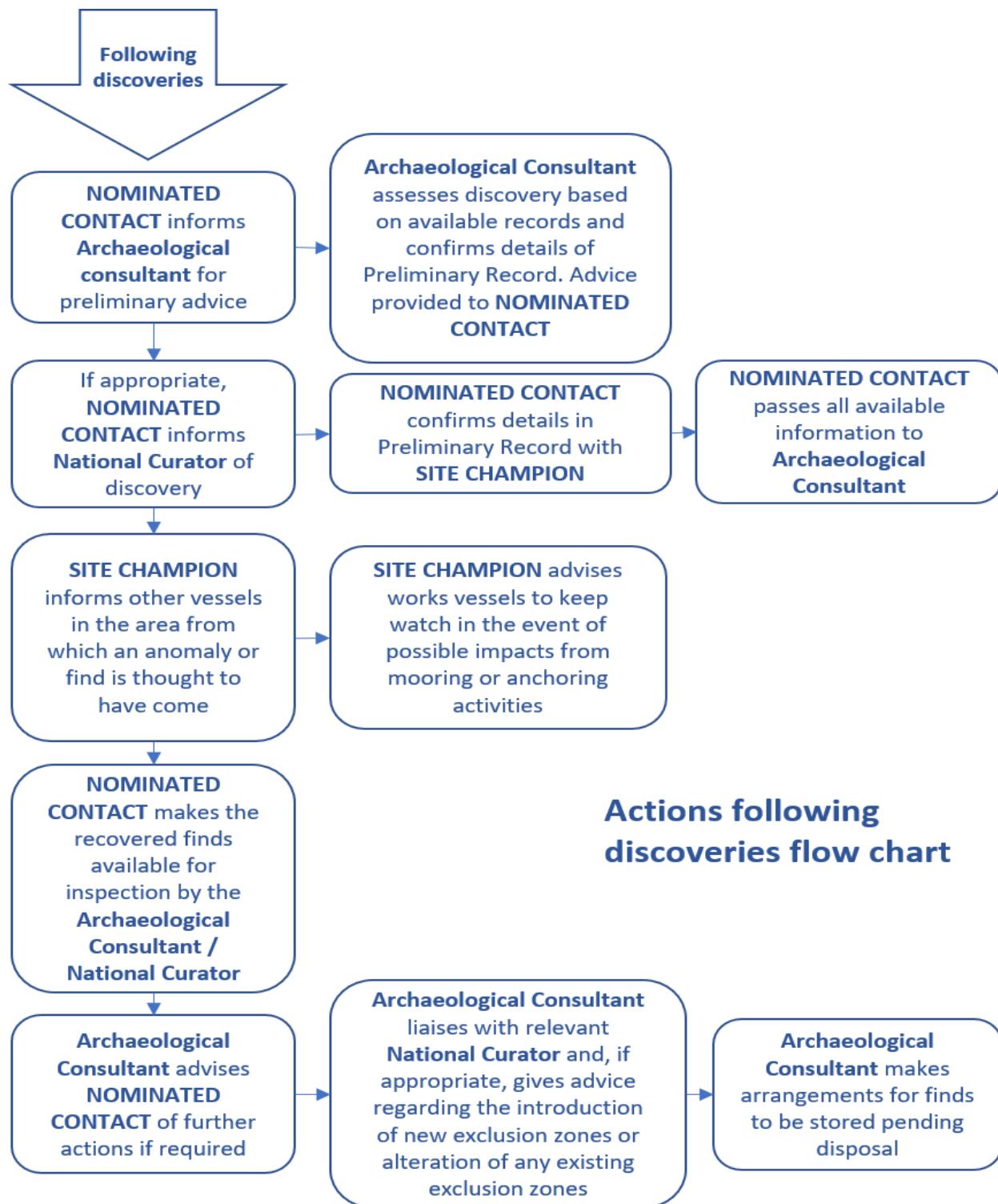
**Signed:**

**Date:**

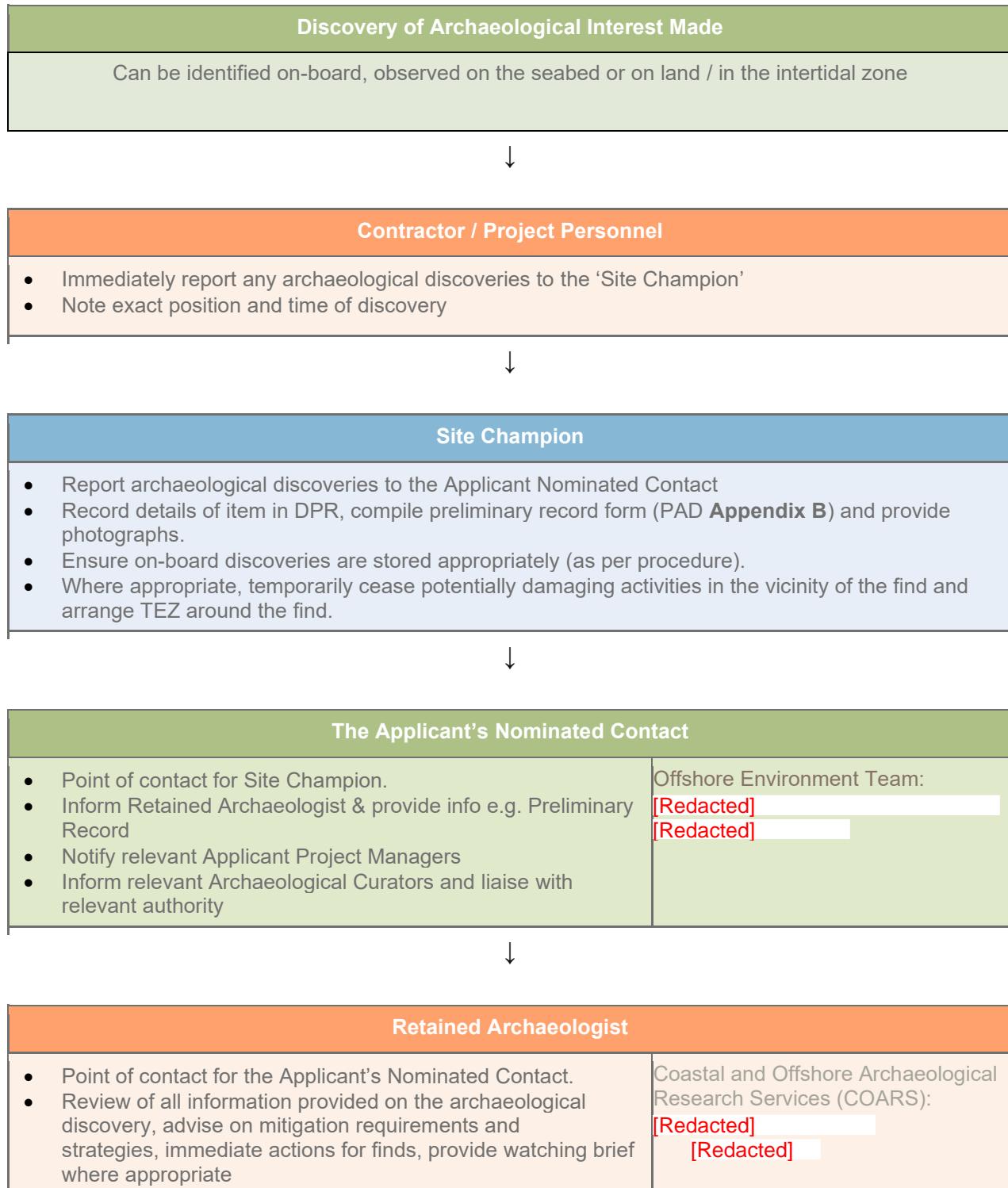
## Plate B1 Discoveries on the seabed and on board flow chart



## Plate B2 Actions following discoveries flow chart



# Appendix C PAD Reference Guide



MarramWind 