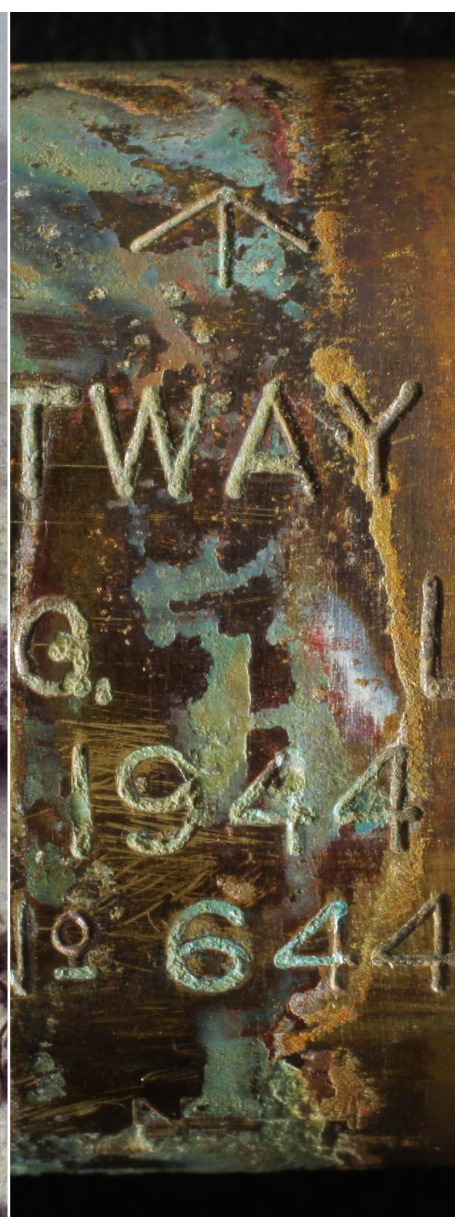


Protocol for Archaeological Discoveries: Offshore Renewables Projects

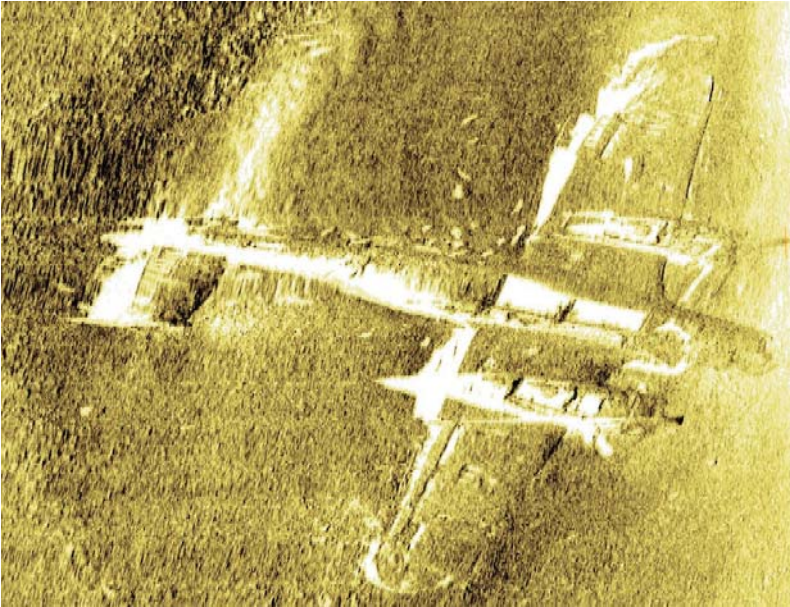


Front cover photographs

Alpha Vantus, courtesy of Areva.

Diver at the Drumbeg historic wreck site
courtesy of Wessex Archaeology.

1944 British naval telescope found in the sea
courtesy of Wessex Archaeology.



A sidescan sonar image of a rare German bomber, the Dornier Do 17, which was found on the Goodwin Sands. Shot down on 26th August 1940, the Dornier's historical importance is considerable as it is the world's only surviving example of this type of German aircraft.



Detail of a fragment of Roman samian ware which was made in Gaul (modern day France) some 1700 years ago. It was found in the North Sea and retains its makers mark.



An historic cannon found during site investigation for wind farm construction. It was left *in situ* and is one of many archaeological finds successfully reported through the Protocol.

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1st issue December 2010.
2nd issue July 2014 (revised)

Acknowledgements

Wessex Archaeology was commissioned by The Crown Estate to prepare a Protocol for archaeological discoveries for offshore renewable energy projects. Wessex Archaeology would like to thank The Crown Estate for their support and all those individuals and organisations that commented on the various drafts of the document during consultation and whose input has contributed significantly to the final document. The document was compiled by Toby Gane and design and typesetting was by Kenneth Lymer. Quality assurance and editing was provided by Euan McNeill, Vic Cooper and Gemma Ingason. The current project was managed for Wessex Archaeology by Toby Gane.

Photograph credits

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Suggested Citation

The Crown Estate, 2014, *Protocol for Archaeological Discoveries: Offshore Renewables Projects*. Published by Wessex Archaeology, Salisbury, on behalf of The Crown Estate.

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1 Introduction

1.1 Background

1.1.1 This document is a Protocol that will satisfy anticipated conditions relating to the reporting of archaeological discoveries across the offshore renewable energy industry, if followed correctly.

1.1.2 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, 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).

1.1.3 The character of the marine environment and lower baseline of archaeological knowledge at sea means that the level of unspecified risk of archaeological discoveries is generally higher at sea than on land, whilst the construction team's flexibility in the event that a significant site is discovered is generally less. Protocols may also prove useful on land to provide a safety-net when construction activities are diffuse or in areas of apparently low potential, especially given the legal requirements applicable to some archaeological discoveries. It is anticipated that the PAD will apply to all activities in the marine and inter-tidal zone and on land, if part of the offshore scheme.

1.1.4 This PAD is specific to archaeology, and it should be used at all stages of the development process where archaeological information may be obtained, including all pre-development surveys such as benthic sampling, obstruction surveys and other such operations.

1.1.5 The Crown Estate actively supports this Protocol and encourages Developers to utilise it to its full extent. Doing so may help meet the Developers' conditions of consent, will assist in protecting the historic environment, may help meet targets on sustainable development and will demonstrate the Developers' commitment to corporate social responsibility.

1.1.6 It should be noted that this PAD is a 'safety-net' only. Anticipated scheme impacts on the historic environment will have been taken into account prior to consent and wherever possible dealt with either in

advance or by conditions requiring the implementation of an archaeological Written Scheme of Investigation (WSI). This Protocol in no way detracts from the basic tenet; that impacts on the historic environment should be considered and addressed in the earliest stages of the development process.

1.1.7 PADs have been used very effectively in other industries – most notably Marine Aggregate Industry (MAI) Protocol used in the aggregate dredging sector. To date over 970 individual finds have been investigated as a result of over 370 reports, such as the important lithic tool assemblages found in Area 240. These discoveries are helping to directly inform the advice given to industry, by the Archaeological Curators. A number of previously unknown archaeological sites have been recognised due to assemblages and artefacts reported through the MAI Protocol. Details of the MAI Protocol and the important discoveries that have been made can be found at <http://www.wessexarch.co.uk/projects/marine/bmapa/index.html>.

1.1.8 The MAI Protocol has proved to be a cost effective mitigation measure with huge benefits for industry and the protection of our heritage. It has also contributed to continuing good relationships between archaeologists and those working offshore. A programme of awareness-raising visits, newsletters and online resources have helped those working in the aggregate dredging industry to learn how reporting finds contributes to identifying potentially significant archaeological sites and, where appropriate, protecting them for future generations.

1.1.9 This Protocol is intended to satisfy any conditions that relate to reporting protocols included on consents administered by marine licensing authorities, including the Major Applications and Plans Directorate of the Planning Inspectorate, the Marine Management Organisation (or equivalent planning authority), Marine Scotland, Natural Resources Wales Marine Licensing Team or the Department of the Environment (Northern Ireland). Where implementation of this Protocol is a condition of consent, failure to follow the Protocol may give rise to a breach of condition.

1.1.10 'Our Seas – a Shared Resource', which documents the UK's High Level Marine Objectives, envisages that: "The use of the marine environment is spatially planned where appropriate and based on

an ecosystems approach which takes account of climate change and recognises the protection and management needs of marine cultural heritage according to its significance” (DEFRA, 2009).

1.1.11 This theme is echoed and expanded in the UK-wide Marine Policy Statement (MPS) (2011). It intended to provide the high level policy context within which Marine Plans will be developed, and set the direction for marine licensing and other relevant authorisation systems. The MPS states:

The view shared by the UK Administrations is that heritage assets should be enjoyed for the quality of life they bring to this and future generations, and that they should be conserved through marine planning in a manner appropriate and proportionate to their significance. Opportunities should be taken to contribute to our knowledge and understanding of our past by capturing evidence from the historic environment and making this publicly available particularly if a heritage asset is to be lost.

1.1.12 Section 5.8 of the Overarching National Policy Statement for Energy (EN-1) (DECC 2011) sets out conditions and recommendations that are pertinent to the historic environment and in particular:

Where the IPC [Infrastructure Planning Commission] considers there to be a high probability that a development site may include as yet undiscovered heritage assets with archaeological interest, the IPC should consider requirements to ensure that appropriate procedures are in place for the identification and treatment of such assets discovered during construction.

This Protocol will help to satisfy that requirement when followed correctly.

1.1.13 COWRIE's *Historic Environment Guidance for the Offshore Renewable Energy Sector* (2007) document states:

The aim of protocols for unexpected discoveries is to reduce any adverse effects of the development upon the marine historic environment by enabling people working on the project to report their discoveries or recovered material rapidly in a manner that is convenient and effective. The protocol will set out the respective responsibilities of the developer, main contractors, and archaeological contractors/consultants. The protocol therefore provides a mechanism to aid compliance with the Merchant Shipping Act 1995 in respect to recovery of 'wreck', as defined by the Act and reporting of military vessel and aircraft wrecks to the Ministry of Defence.

1.1.14 This Protocol applies to things that are or may have been made, used or affected by people.

This will include, for example, fossilised remains from periods of human inhabitation, but not fossils that are exclusively pre-human in origin. It will not include finds of geological, ecological, or other non-archaeological origin, unless a link to human activity can be assumed.

1.1.15 This Protocol takes into account, and is consistent with, existing statutory and non-statutory regimes for reporting discoveries, ownership of finds and other legal regimes in each of the home countries (England; Scotland; Wales; Northern Ireland), on land, within territorial waters and outside territorial waters.

1.1.16 For some classes of find there are specific legal requirements (e.g. treasure, wreck, human remains). These legal requirements will be met by following this Protocol. In such instances, failure to follow the Protocol may also give rise to a criminal offence.

1.1.17 Where **ordnance** is concerned, specific rules are likely to have been put in place by the Developer or their contractors. These rules are required for the safe conduct of construction and installation operations, and must take precedence over this Protocol. Historic ordnance may, however, also be of archaeological interest and can be reported under this Protocol once local rules for ordnance have been satisfied.

1.1.18 This Protocol is supported by an **Implementation Service** (IS) funded by The Crown Estate which will cover the administration of the reporting of discoveries and provide advice about immediate actions (including recording, handling and storage, and introduction of measures to prevent or reduce damage if the presence of a significant archaeological site is suspected).

1.1.19 The IS can help the Developer with any subsequent actions required, but such actions are expected to be the direct responsibility of the Developer, to be agreed case-by-case with the Regulator and their archaeological advisors (curators) with the assistance of the Developer's own Retained Archaeologist, where appointed.

1.1.20 The Protocol is accompanied by an **Awareness Programme** to provide awareness-raising in the workplace, taking into account differing workplace circumstances.

1.1.21 In order for historic environment finds' protocols to be operationally effective, there must be three elements which need to be fully resourced and functioning. These are:

- The Implementation Service (IS)
- The Developer's internal reporting chain
- Awareness training to the right personnel

If just one of these elements is not in place, resourced or functioning correctly, then the Protocol will not operate and will be ineffectual for that development.

1.2 Outline

1.2.1 Archaeological finds made in the course of construction and installation activities are important because they can shed light on past human use of the landscape, sea and seabed. The information that such discoveries bring to light can help archaeologists better understand society and human endeavour in the past, and better protect significant aspects of our history on behalf of future generations.

Important: This Protocol is a supplement (rather than an alternative) to the conventional regulatory mechanisms employed in the earlier stages of the development process to consider and address impacts upon the historic environment. As a 'safety-net', the use of the Protocol should in no way be seen as a devolution of normal responsibilities toward the historic environment with respect to the planning process and the Environmental Impact Assessment (EIA) directive. It is essential that the Offshore Renewables Protocol for Archaeological Discoveries (ORPAD) is not assumed to provide a catch-all approach to dealing with marine archaeology, such that proper investigation is curtailed.

1.2.2 The Protocol is intended to apply to development, construction and installation activities where an archaeologist is not present on site and therefore not immediately available, i.e. in those instances where a traditional archaeological scheme of works is not in place (such as a watching brief, evaluation, etc.). In cases where the Developer has made provision for an archaeologist to be on site, as part of a site investigation, watching brief or specific archaeological works, then the archaeological method statement relating to this provision will take precedence. Where no specific archaeological provision has been made, then this Protocol will apply.

1.2.3 This Protocol addresses finds of archaeological interest made on the seabed, onboard vessels, in the inter-tidal zone or on land. They may be identified as a result of geophysical survey, remote operated vehicle or diver visual identification or through coming into contact with anchors, grapnels, jack-up legs or other seabed equipment. Alternatively they may be uncovered during groundworks on land or in the inter-tidal zone. These finds or anomalies may indicate that an object or structure of archaeological interest has been encountered on the seabed, the inter-tidal zone or on land.

1.2.4 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.

1.2.5 An "anomaly" is distinct from a find or site, and is a signature that could be visual or digital (e.g. 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.

1.2.6 The Protocol anticipates discoveries being made by Project Staff, who report to a Site Champion on their vessel or site (usually the senior person on site), who then reports to a person (the Nominated Contact) who has been nominated by the Developer to co-ordinate implementation of the Protocol. The Nominated Contact will in turn inform the IS and the Developer's Project Manager(s). The IS will in turn liaise with the Nominated Contact, Archaeological Curators and the Developer's Project Manager(s) as necessary.

1.2.7 It is recognised that, for the Protocol to be effective, participants (such as Site Champions or Project Staff) should receive appropriate training. This will take place through the Awareness Programme referred to above.

1.2.8 The response to reported finds will be implemented through the measures set out in the Protocol, such as further survey or the establishment of Temporary Exclusion Zones (TEZs), which may be converted into new Archaeological Exclusion Zones (AEZs), if warranted. Any action to implement new, or to amend agreed AEZs or TEZs will only be done in agreement with the appropriate national Archaeological Curators and the Regulator responsible for consenting the development.

1.2.9 It is recognised that this Protocol refers primarily to offshore schemes of development. However, with offshore renewable schemes it is usual to have associated infrastructure (such as export cables) that impact not only the offshore historic environment, but also inshore, inter-tidal, and in fully terrestrial localities. Therefore this Protocol has been designed to operate in all of these environments, where an archaeologist is not present.

1.3 Roles and Responsibilities

1.3.1 The Site Champion is the person formally appointed by the Developer to be directly

responsible for 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.

1.3.2 The Developer's Nominated Contact is the formal point of contact for all matters relating to the PAD between the Developer, its subcontractors, the Site Champions, the IS, the Retained Archaeologist (where appointed), the Archaeological Curators and ultimately the Regulator. The Nominated Contact could be the scheme's Environmental Manager, Project Manager or any other co-ordinator that the Developer feels is appropriate and effective in acting in this role. 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.

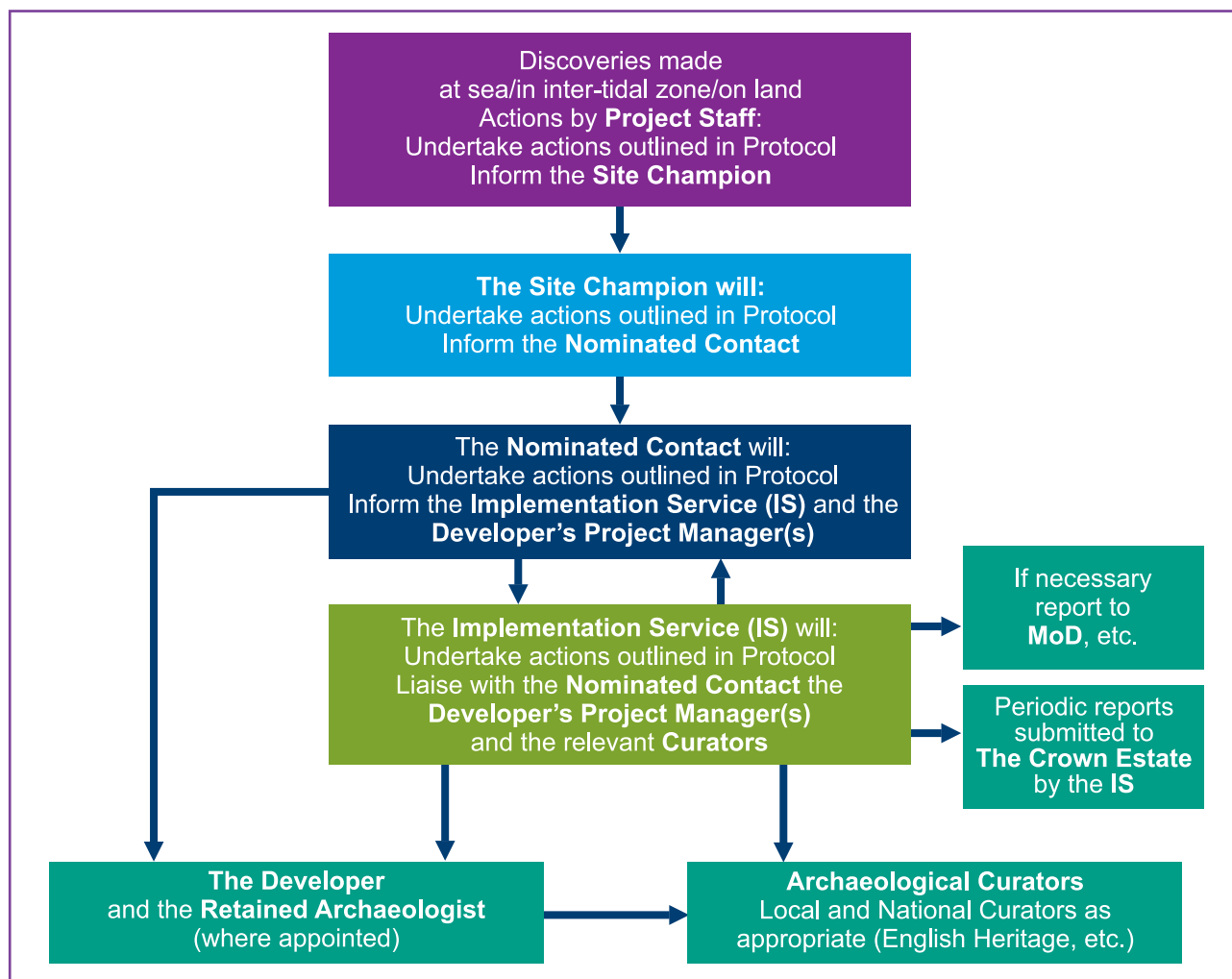
1.3.3 The IS is a service provided by an archaeological contractor appointed by The Crown Estate to manage the day to day responses to reports through the PAD. The performance of the IS will be reviewed by The Crown Estate, and the annual report of the IS will be submitted to Regulators, Archaeological Curators and Developers.

1.3.4 The Developer may have appointed a Retained Archaeologist to provide archaeological advice and/or services to the development. In this case the IS will undertake its duties in liaison with the Retained Archaeologist, as well as the Nominated Contact for the Developer. The actions of the IS will not take precedence over the Developer's Retained Archaeologist, but timely information should be provided to the IS that allows the ORPAD database to be sufficiently updated.

1.3.5 It should be noted that a 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. Therefore the IS can only provide a full response as that information becomes available.

1.3.6 Response times for Initial Responses will vary but the system is designed for information to be submitted to the IS website and a rapid response made within office hours. Alternative communication may take the form of email correspondence and/or telephone conversations (where internet access is restricted).

Basic Sequence of Reporting (when an archaeologist is not present)



2 Actions by Project Staff

2.1 In All Cases

2.1.1 If a find of archaeological interest is made, Project Staff will immediately inform the Site Champion (via their supervisor if appropriate).

2.1.2 If the discovery is ordnance, then Project Staff will abide by their operational procedures which are to take precedence; and then report via the Protocol once safe to do so.

2.1.3 Where items of archaeological interest are recovered, Project Staff (under direction of the Site Champion) will:

- Handle all material with care.
- Any rust, sediment, concretion or marine growth should not be removed and 'groups' of items or sediments should not be separated.
- If possible photograph the item in the condition in which it was recovered.
- Record the position at which the artefact/sediments were recovered.
- Label artefact appropriately and add the unique ID when provided by the Implementation Service.

If the find is from a waterlogged or underwater environment, then Project Staff (under direction of the Site Champion) will arrange for the find to be immersed in seawater in a suitable clean container, which should be covered.

2.2 Discoveries On Board

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), Project Staff will immediately inform the Officer on Watch. The Officer on Watch will inform the Site Champion.

2.2.2 Where it is possible to identify the seabed position from which the find originated, the Officer on Watch will temporarily cease construction activities in the vicinity of the seabed location, or move to an alternate location, until the advice of the IS has been obtained. The advice of the IS will be provided within the timescales previously advised (1.3.6).

2.3 Anomalies on the Seabed

2.3.1 Finds or sites of archaeological potential may be encountered via a number of methods including; geophysical survey, diver magnetometer, obstacle

avoidance sonar, visual survey by remote operated vehicles or divers, and interaction with ploughs, anchors, jack-up legs or seabed grapnels. Staff should be constantly aware of the possibility of archaeological discoveries.

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 Officer on Watch and thence to the Site Champion.

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 Officer on Watch and the Site Champion so that the anomaly can be reported, advice can be sought and any requirements for further investigation determined.

2.3.4 The Officer on Watch will arrange for the grapnel or plough to be recovered to the surface and examined as soon as possible, once recovered to surface, to see if any archaeological material is trapped within it, and will inform the Site Champion accordingly.

2.3.5 If an anomaly comes to light in the course of geophysical survey or drop-down video survey the Officer on Watch will ensure that the position of the anomaly is noted on navigational software and that the Site Champion is informed.

2.4 Discoveries on Land or in Inter-tidal Areas

2.4.1 Discoveries may be made in the course of groundworks, trenching or site investigations. They should be reported to the Site Champion and the finds handled in accordance with the general guidance above. Where archaeological investigations are already taking place, as part of a watching brief, evaluation trenching, strip map and sample or open area investigation, then the method statement for those investigations will take precedence and discoveries need not be reported under this Protocol.

2.5 Discoveries Subsequent to Work on Site

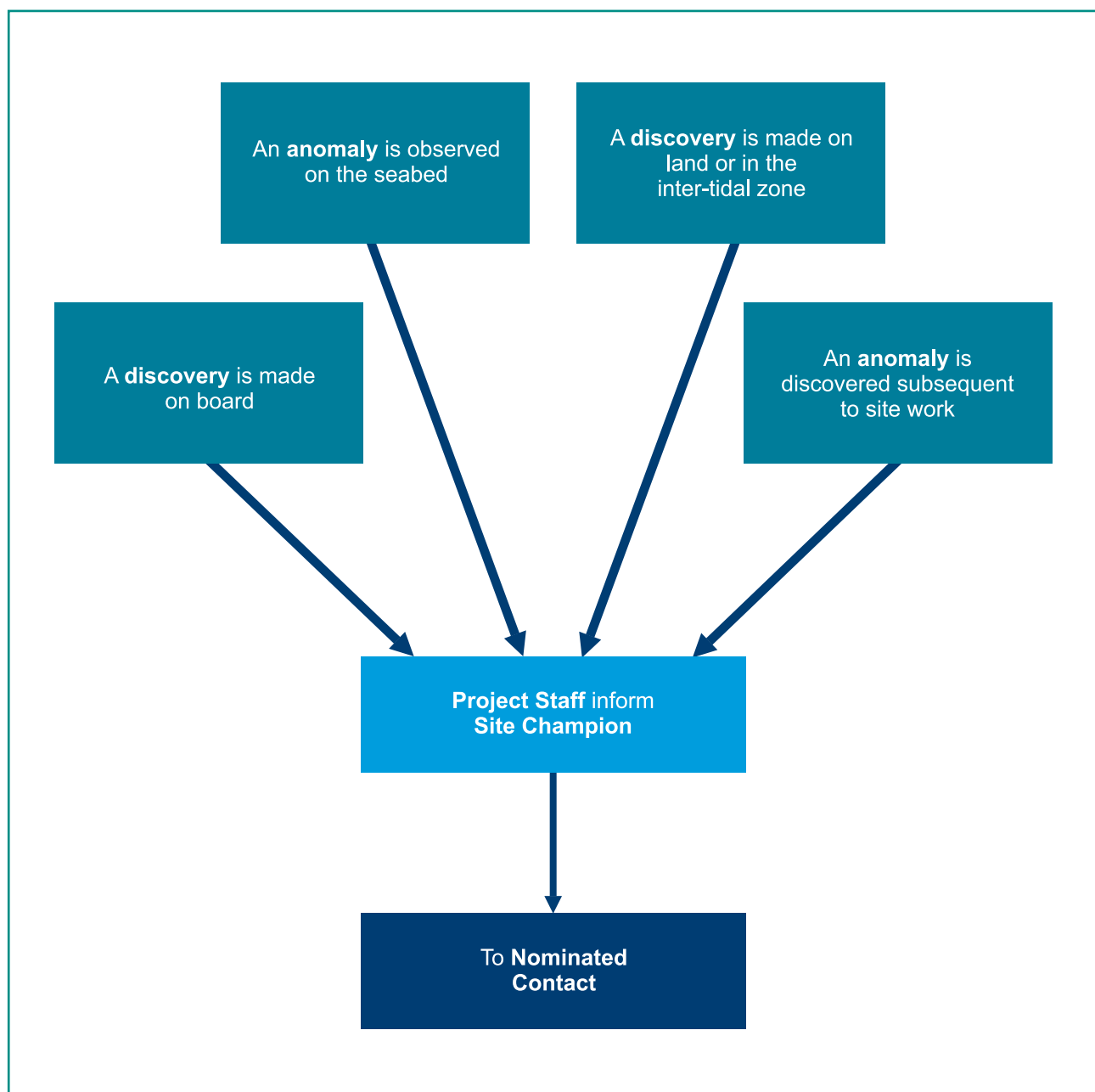
2.5.1 There are a number of circumstances in which the presence of material of archaeological interest may be identified after work on site has occurred. For example, Project Staff reviewing geophysical data or video might observe an anomaly. Similarly, Project Staff involved in processing samples in the laboratory may make archaeological discoveries in their samples.

2.5.2 Staff examining sample material (e.g. core material; benthic samples) should consider the potential for archaeological and/or

palaeoenvironmental material being recovered within their samples. Where such discoveries are made Project Staff should inform the Site Champion and pass on details of the sample number and its position.

2.5.3 If an anomaly comes to light in the course of processing or interpreting geophysical survey data, video or other photographic data, Project Staff 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.

Actions by Project Staff (when an archaeologist is not present)



3 Actions by Site Champion

3.1.1 Where it is possible to identify the position from which the discovery originated, the Site Champion will arrange for a TEZ in which construction activities will cease temporarily (in the vicinity of the location), or move to an alternate location, until the advice of the IS has been obtained. The advice of the IS will be provided within the timescales previously advised (1.3.6).

3.1.2 The Site Champion will note the occurrence as soon as possible in the site daybook or vessel log together with the time and exact position. The entry should include a close approximation of the original position of the find/anomaly. Additionally, the area should be marked on site drawings or surveys.

3.1.3 The Site Champion will compile a Preliminary Record (see Appendix II) of the occurrence. The Site Champion will inform the Developer's Nominated

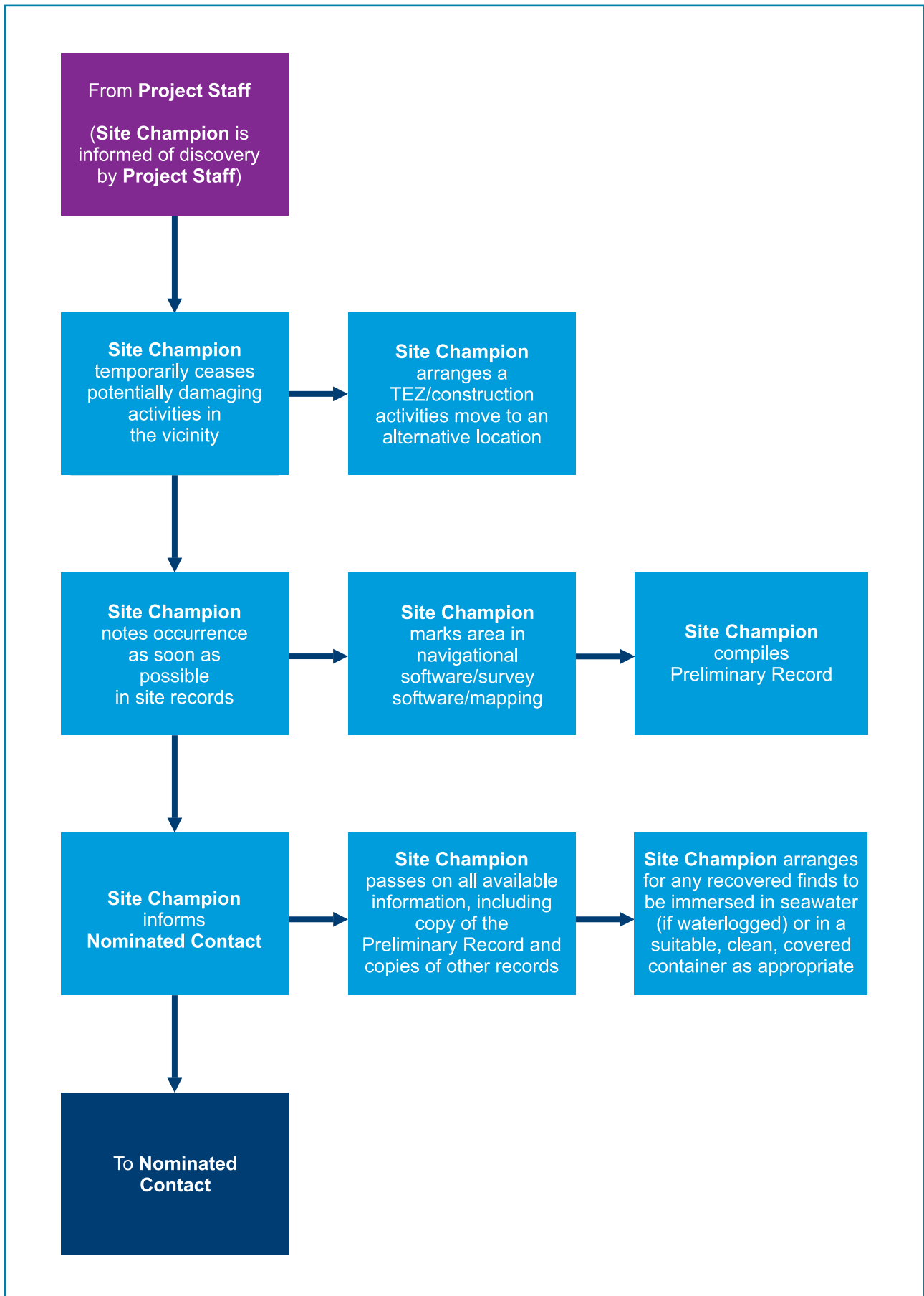
Contact of the occurrence as soon as possible and pass on all available information, including a copy of the Preliminary Record and copies of any photographs, drawings or other records that have been made.

3.1.4 The Site Champion will arrange for any finds (of archaeological material) to be carefully contained and protected;

- if waterlogged: immersed, bagged and placed in a protective container, or placed in seawater in a suitable clean container, which should be covered and stored in a cool, dark place;
- if dry: placed in a suitable container and stored in a cool, dark place;
- any dirt, rust, concretion or marine growth should not be removed.



Actions by Site Champion



4 Actions by the Nominated Contact

4.1.1 The Nominated Contact will confirm with the Site Champion that all the details set out in the Preliminary Record are comprehensive and correct.

4.1.2 Contact will be made with the Implementation Service (IS) at the earliest opportunity, preferably using the IS web service. The IS will provide advice on the appropriate immediate actions in addition to the recording, handling and storage of any items recovered. The advice of the IS will be provided within the timescales previously advised (1.3.6).

4.1.3 The Nominated Contact shall pass on to the IS all available information relating to the circumstances of the occurrence, including a copy of the Preliminary Record and copies of any other records that have been made.

4.1.4 In addition any finds should be made available to the IS if required.

4.1.5 Once informed of a find by a Site Champion, the Nominated Contact will inform the Developer's (or their Contractors') Project Managers (as appropriate), in addition to the IS.

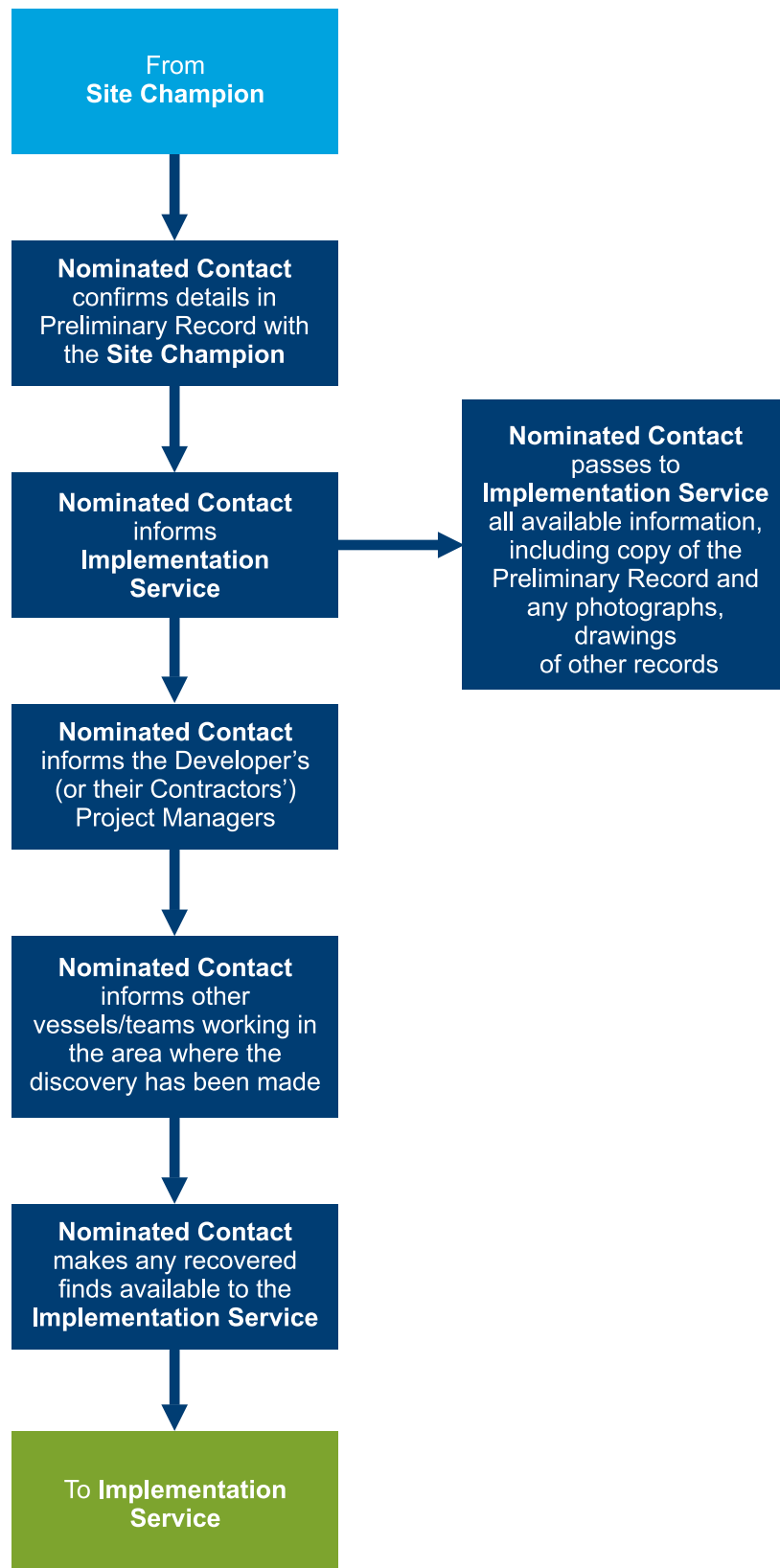
4.1.6 The Nominated Contact should inform other teams engaged in potentially damaging activities in the same area, to ensure that they are aware of the position of the discovery so that further possible damage to the historic environment can be avoided.

4.1.7 Should it be required by The Crown Estate or the Developer, IS archaeologists will travel to the site to inspect any finds or data made available.



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Actions by Nominated Contact



5 Actions by the Implementation Service

5.1 Initial Response

5.1.1 The Implementation Service (IS) will review the information about the discovery in conjunction with geophysical and/or desk-based information, where available. This review will normally be based on information uploaded to the IS website. Additional communication may take the form of email correspondence and/or telephone conversations (where internet access is restricted).

5.1.2 The IS will send an Initial Response to the Nominated Contact to acknowledge the report.

5.2 Urgent Reports

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.

5.3 Assessment of Archaeological Potential

5.3.1 The assessment of archaeological potential will be based on the following guidance:

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

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

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

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

5.3.4 In the case of a discovery of **high** potential, construction will not recommence in the TEZ without the approval of the Archaeological Curators. The IS will confirm the extent of the area of the TEZ. The IS

will notify the Archaeological Curators that a discovery of high potential has been reported, and will provide details of the further actions (see below) that have been advised.

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

5.4 Summary Record

5.4.1 The IS will send a Summary Record of the report to the Nominated Contact and to other relevant parties. The Summary Record will include:

- advice on the identification of finds and the character of their seabed locations;
- an assessment of the archaeological potential of the report, including the rationale for the conclusion reached;
- advice on actions to be taken in respect of the discovery, including any recovered finds.

5.5 Subsequent Actions

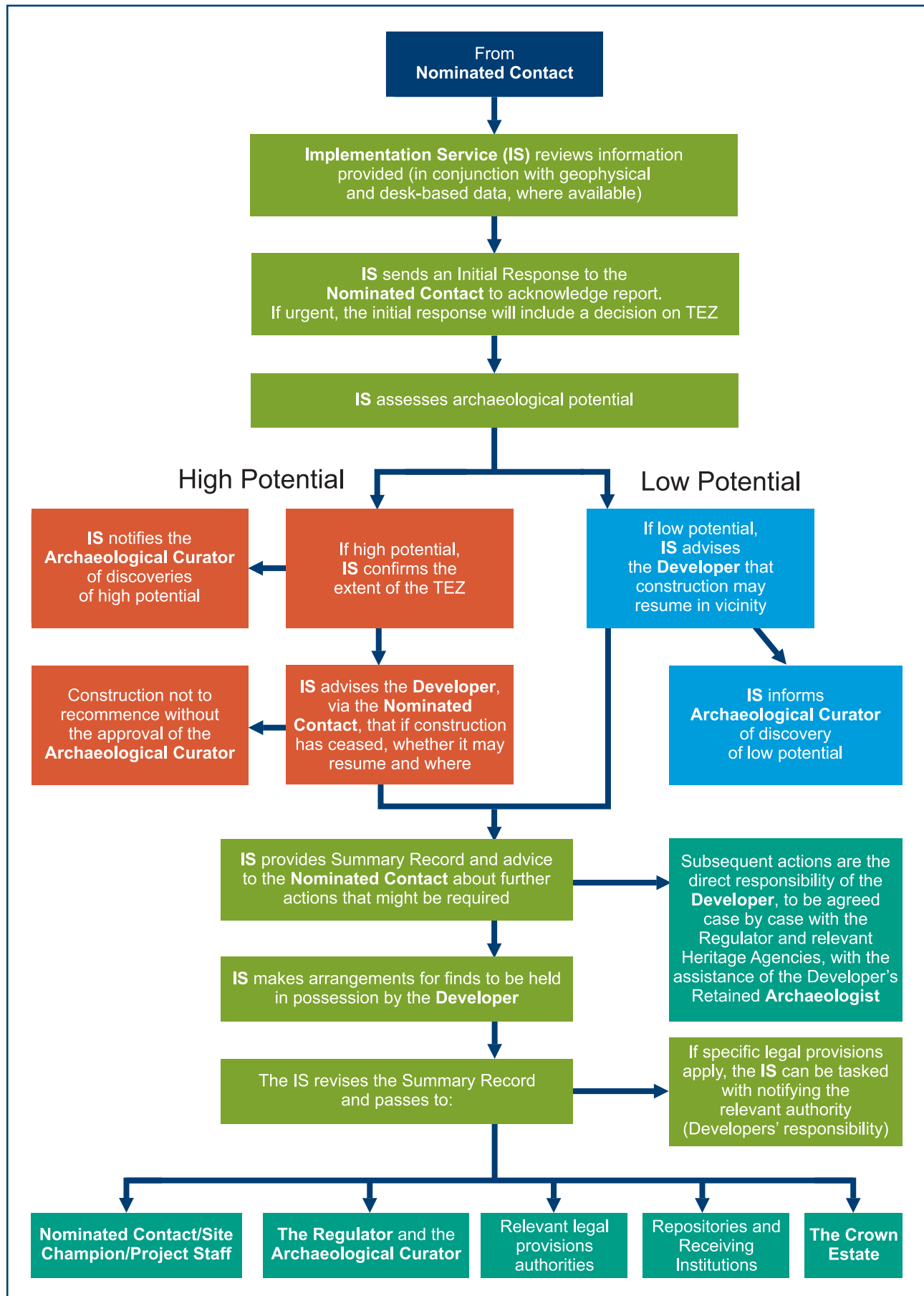
5.5.1 The IS will advise the Nominated Contact of the implications of the discovery and of further actions that might be required. Further actions may include call-out investigations, the conversion of a TEZ to an AEZ, and/or the institution of a watching brief. The rationale for conclusions reached will be provided to the Nominated Contact.

5.5.2 Any subsequent actions are expected to be the direct responsibility of the Developer, to be agreed case-by-case with the Regulator and relevant Heritage Agencies with the assistance of the Developer's own Retained Archaeologist, where appointed.

5.6 Further Requirements

5.6.1 If the discovery is something to which specific legal provisions apply (treasure, human remains, wreck etc.), it will remain the responsibility of the Developer to undertake such statutory reporting as is required. The Developer may, however, task the Implementation Service with making statutory reports alongside reporting under this Protocol if they so wish.

Actions by Implementation Service flow chart



5.7 Finds

5.7.1 The IS will make arrangements for the Developer to hold in possession any recovered finds, subject – in the case of wreck – to agreement with the Receiver of Wreck. The subsequent handling, retention or disposal of finds will be subject to applicable law and to arrangements between the Developer and the institution receiving the archaeological archive arising from the scheme.

5.8 Revised Summary Record

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 IS will pass on a copy of the revised Summary Record to the Nominated Contact for circulation to the Site Champion and relevant Project Staff.

5.9 MIDAS Report

5.9.1 A report conforming to MIDAS Heritage (the UK's historic environment data standard) will be prepared and submitted to:

- The relevant Regulator and Archaeological Curator(s).
 - In England this is English Heritage and the Local Government Archaeological Curator. The Implementation Service will send a copy of the MIDAS Report to the National Record of the Historic Environment (NRHE) for incorporation into their records.
- In the Scottish Offshore Region this is Historic Scotland and the Local Government Archaeological Curator. The Implementation Service will send a copy of the MIDAS Report to the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS) for incorporation into their records.
- In the Welsh Offshore Region this is Cadw and the Local Government Archaeological Curator. The Implementation Service will send a copy of the MIDAS Report to the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMS) for incorporation into their records.
- In Northern Ireland this is the Northern Ireland Environment Agency (Built Heritage) and the Local Government Archaeological Curator. The Implementation Service will send a copy of the MIDAS Report to the Northern Ireland Sites and Monuments Record (NISMR).
- The relevant authority, where specific legal provisions apply (e.g. Ministry of Justice, Ministry of Defence etc.).
- The relevant archaeological records repository, including the relevant NRHE, Historic Environment Record, Portable Antiquities Scheme Officer etc.
- The Crown Estate.
- The Receiver of Wreck has a standard reporting form for all items deemed to be wreck and where applicable material will be reported to them using this form.



Activities such as pre-lay grapnel runs have a high chance of encountering archaeological materials.



Worked flint, such as this example, attests to the use of the seabed environment by humans prior to its submergence.



Archaeologists examine evidence for past environments by looking at organic materials found during wind farm construction activities.

6 Appendix I: Legal Terms and Responsibilities

6.1 Legal Terms & Responsibilities*

6.1.1 Protection of Wrecks Act 1973. Under the 1973 Act, shipwrecks and wreckage of historical, archaeological or artistic importance within UK territorial waters can be protected by way of designation. Once a wreck has been designated it is an offence to carry out certain activities on or around the site without a licence.

6.1.2 Administration of the Act and associated licences is the responsibility of English Heritage in England, Historic Scotland in Scotland, Cadw in Wales and the Northern Ireland Environment Agency (Built Heritage) in Northern Ireland.

6.1.3 Currently, designated wrecks in UK waters range in date from the middle Bronze Age to the 20th century. Where a wreck is located that it is considered warrants designation, the relevant Secretary of State is required to consult appropriate advisors prior to designation. However, Developers should be aware that it is also possible for a wreck or wreck material to be designated in an emergency.

6.1.4 Merchant Shipping Act 1995. This Act is not a form of designation, but will affect offshore renewable energy schemes if, in the course of site investigations or construction, any material is recovered which falls within the definition of 'wreck'. All wreck has an owner, and the Merchant Shipping Act sets out the procedure for returning recovered wreck to the owner or their successor. The Receiver of Wreck has to be notified of all recovered wreck landed in the UK, and will seek to identify the original owner so that it can be claimed. Ownership of unclaimed wreck from within territorial waters vests in the Crown or in a person to whom rights of wreck have been granted. Unclaimed wreck from beyond territorial waters is returned to the finder.

6.1.5 The Receiver of Wreck has a duty to ensure that finders who report wreck receive an appropriate salvage payment. In the case of material considered to be of historic or archaeological importance, a suitable museum will be asked to purchase the material at the current market valuation. The finder will receive the net proceeds of the sale as a salvage payment. If the right to, or the amount of,

salvage cannot be agreed, either between the owner and finder or between competing salvors, the Receiver of Wreck will hold the wreck until the matter is settled, either through amicable agreement or by court judgement.

6.1.6 Protection of Military Remains Act 1986.

The primary purpose of The Protection of Military Remains Act is to protect the resting places of military personnel from unauthorised disturbance. It allows the Ministry of Defence (MoD) to protect vessels and aircraft that were in military service when they were lost or wrecked. The MoD can designate any such named vessel lost after 4 August 1914 as a 'protected place' even if the position of the wreck is not known. In addition the MoD can designate a 'controlled site' as any such wreck whose position is known.

6.1.7 Access is not prohibited at a 'protected place', but it is an offence to tamper with, damage, move or remove items from such a wreck without a licence. However, access, salvage and excavation are all prohibited on 'controlled sites', except where a licence for restricted activities has been obtained from the MoD.

6.1.8 The remains of all aircraft that have been lost in military service are automatically classified as 'protected places' by the Act.

6.1.9 Marine (Scotland) Act 2010. This Act enables Scottish Ministers to designate Historic Marine Protected Areas (MPAs). This is restricted to Scottish Territorial Waters.

6.1.10 Human Remains. Human remains in archaeology may be considered in relation to the Burial Act 1857, where they are not interred on sites for which specific burial ground legislation applies. The Act requires a licence to be granted prior to the removal of human remains from deliberately deposited contexts, on land and up to the 12 nautical mile limit of territorial waters. Remains encountered offshore however may not be deliberately deposited (i.e. buried) and licences cannot be granted retrospectively. It will be rare for the Burial Act 1857, or other burial legislation, to apply to human remains found in the marine

* Adapted from 'Historic Environment Guidance for the Offshore Renewable Energy Sector', COWRIE, 2007

environment. Where human remains are associated with vessels and aircraft that were in military service when they were lost or wrecked, the provisions of the Protection of Military Remains Act 1986 would apply.

6.1.11 For sites in Scotland, the guidance offered in 'Historic Scotland Operational Policy Paper 5: The Treatment of Human Remains in Archaeology' should be adhered to.

6.1.12 Treasure: The Treasure Act 1996. The Act has effect in England, Wales and Northern Ireland and is supplemented by the Treasure (Designation) Order 2002. Finders of gold and silver objects (over 300 years old) and some base metal assemblages (prehistoric) as defined in the Act are required to report such finds by contacting the Coroner and delivering the items for hand over as per the Coroners' instructions.

6.1.13 The Act and the Order apply to objects found anywhere in England, Wales and Northern Ireland, including in or on land, in buildings (whether currently occupied or ruined), in rivers and lakes and on the foreshore (that is the area between mean high water and mean low water on beaches and tidal river banks), provided that the object does not come from a wreck.

6.1.14 In Scotland, the Scots common law right relating to found archaeological and historic items in Scotland (and dealt with through the system of Treasure Trove) does not extend to the marine environment except to the foreshore.

6.1.15 *Bona Vacantia* (Scotland). The term *bona vacantia* means "ownerless goods". In Scotland,

bona vacantia refers only to the assets of dissolved companies and lost property, which is administered under the Civic Government (Scotland) Act 1982. In Scottish law, ownerless goods fall to the Crown and the realised value of such assets are paid into the Scottish Consolidated Fund for use of the Scottish Government on behalf of the people of Scotland.

6.1.16 Ancient Monuments and Archaeological Areas Act 1979. Monuments that are of national importance within UK territorial waters can be protected by being added to the schedule of monuments protected under this Act. It is an offence to damage, or carry out a range of specified activities on such a 'scheduled monument', unless a licence for these activities has been obtained from the relevant authority, in the form of 'scheduled monument consent'.

6.1.17 Monument can mean, among other things, the site of any vehicle, vessel, aircraft or other structure. It also refers to many types of archaeological site in the traditional sense.

6.1.18 In Scotland, the Act is devolved to Scottish Ministers and the Historic Environment (Amendment) (Scotland) Bill was introduced to the Scottish Parliament in 2010.

6.1.19 The Historic Monuments and Archaeological Objects (Northern Ireland) Order 1995. The Ancient Monuments Act 1979 does not apply in Northern Ireland. The relevant legislation is the Historic Monuments and Archaeological Objects (Northern Ireland) Order 1995. It provides for the designation of scheduled monuments and the statutory reporting of archaeological objects found.



This anchor was recovered during cable installation for a wind farm. It is probably a Rodgers' Small-palm anchor, named after Lieutenant (later Commander) Rodgers and was patented in 1832. The anchor was carefully recovered to the vessel, recorded and reported, and returned to the seabed away from development impacts.

7 Appendix II: Guidelines for Identifying Finds of Archaeological Interest and Handling Artefacts

7.1 Materials Guidelines

7.1.1 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.

7.1.2 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.

7.1.3 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.

7.1.4 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 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 territorial waters, be subject to the provisions of the Burial Act 1857. Alternatively, it may be

subject to the Protection of Military Remains Act 1986. 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.

7.1.5 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 paleo-environmental 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.

7.1.6 Stone. Small to medium size 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 likely to be 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.

7.1.7 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.

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

7.1.9 Peat and Clay. Peat is black or brown fibrous soil that formed when sea level was so low that the seabed formed marshy land, for example on the banks of a river or estuary. 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. This information helps us to understand the kind of landscape that our predecessors inhabited, and about how their landscape changed. It can also provide information about rising sea-level and coastline change, which are important to understanding processes that are affecting us today. Prehistoric structures (such as wooden trackways) and artefacts are often found within or near peat, because our predecessors used the many resources that these marshy areas contained. As these areas were waterlogged, and have continued to be waterlogged because the sea has risen, 'organic' artefacts made of wood, leather, textile and so on often survive together with the stone and pottery which are found on 'dry' sites.

7.1.10 Fine-grained sediments such as silts and clays are often found at the same places as peat. These fine-grained sediments also contain the microscopic remains that can provide information about past environments and sea level change. Any discoveries of such material would be of archaeological interest, and their occurrence should be reported.

7.2 Artefact Storage Advice

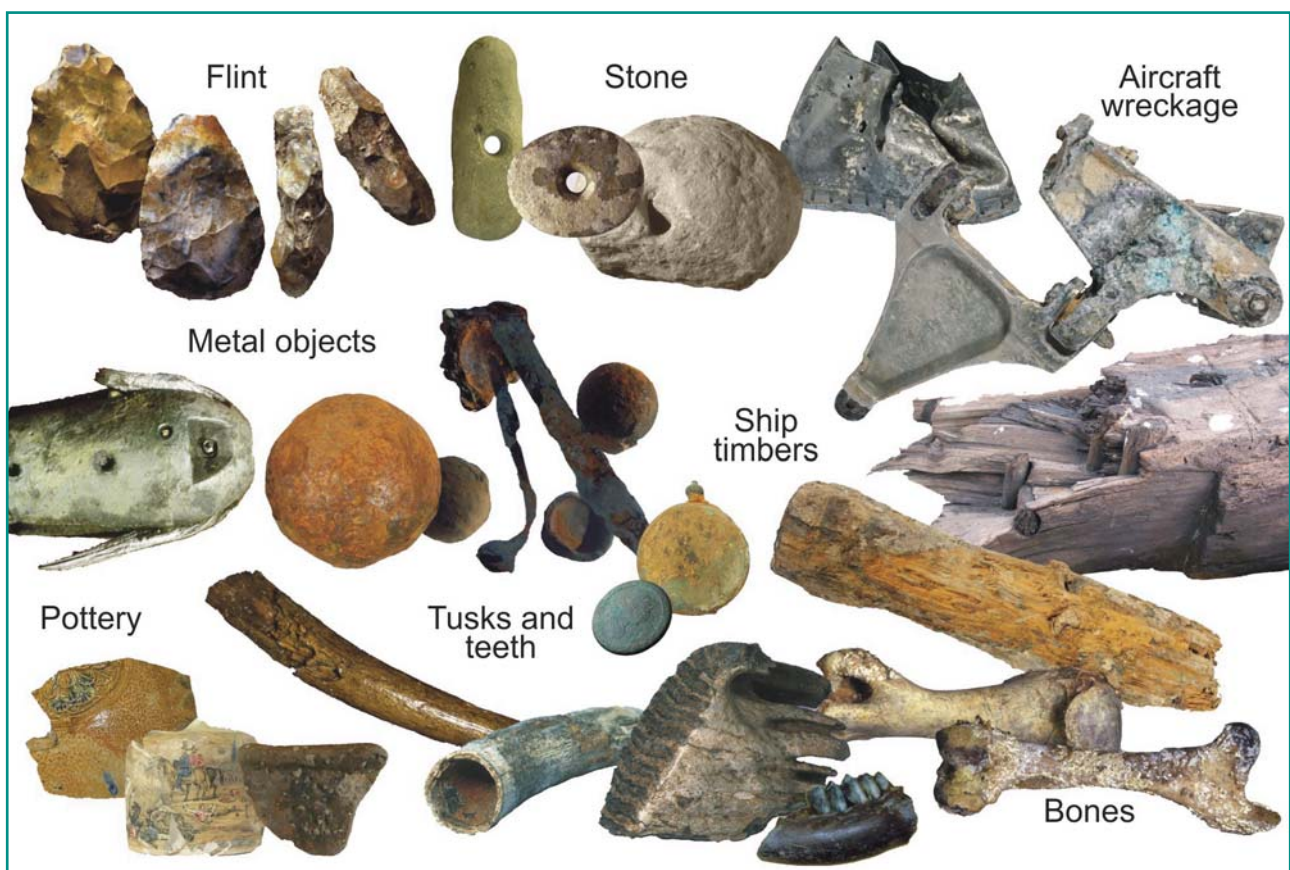
7.2.1 It should be noted that 'time is of the essence' in terms of the recovery of waterlogged archaeological material. If waterlogged organic items are allowed to dry out this can cause irreparable damage. Care in handling items is paramount.

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

- If dry, finds should be placed in sealable 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 sealable bags which are then stored in rigid plastic boxes to prevent damage. Items should be kept wet, covered, and stored in a cool, dark area if possible.
- Any sediments of interest will be collected and double bagged in sealable bags.

7.2.3 If particularly delicate or significant items are recovered the Implementation Service should be contacted for further advice.

7.2.4 The Developer will supply suitable storage materials to its construction operations. The IS can advise on suitable materials for this purpose.




Protocol for Archaeological Discoveries: Offshore Renewables Projects

Preliminary Record Form Page 1 of 2

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

Company Name:
Vessel/Team Name:
Site/sea area Name:
Date:
Time of compiling information:
Name of compiler (Site Champion):
Name of finder (if different to above):

Time at which discovery was encountered:
Vessel position at time when anomaly was encountered:
a) Latitude
b) Longitude
c) Datum (if different from WGS84)
Original position of the anomaly on the seabed, if known:
Notes on likely accuracy of original position stated above:
a) How accurate is the position?
b) Is the position the original position or has the material been moved by operations?
c) Details of circumstances and activity that lead to the discovery

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ESTATE

Protocol for Archaeological Discoveries: Offshore Renewables Projects

Preliminary Record Form Page 2 of 2

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

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 find(s) (e.g. location figure):
Details of treatment or storage of find(s):
Date and time Nominated Contact informed:
General notes:
If discovered on the seabed:
a) Derived from: e.g. Obstacle Avoidance Sonar, Cable Tensiometer?
b) Apparent size/extent of anomaly (length, width, height above seabed)
c) Extent of deviation/route development
Signed: _____ Date: _____

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8 Appendix III: Glossary

AEZ

Archaeological Exclusion Zone

COWRIE

Collaborative Offshore Wind Research into the Environment

DECC

Department of Energy and Climate Change

DEFRA

Department for Environment, Food and Rural Affairs

EH

English Heritage

EIA

Environmental Impact Assessment

HER

Historic Environment Record

HS

Historic Scotland

IPC

Infrastructure Planning Commission

IS

Implementation Service

MAI

Marine Aggregates Industry

MoD

Ministry of Defence

MoJ

Ministry of Justice

MPA

Marine Protected Areas

MPS

Marine Policy Statement

NISMR

Northern Ireland Sites and Monuments Record

NRHE

National Record of the Historic Environment

ORPAD

Offshore Renewables Protocol for Archaeological Discoveries

PAD

Protocol for Archaeological Discoveries

PAS

Portable Antiquities Scheme

RoW

Receiver of Wreck

TEZ

Temporary Exclusion Zone

WSI

Written Scheme of Investigation

9 Appendix IV: List of Consultees

List of Consultees for The Crown Estate, Offshore Renewable Energy and the Historic Environment Consultation

Advisory Committee for Historic Wreck Sites	Institute for Archaeologists
Association of Local Government Archaeological Officers: Maritime Committee	Joint Nautical Archaeology Policy Committee
Association of Local Government Archaeological Officers: Planning & Legislation Committee	Manx National Heritage
Cadw	Marine Management Organisation
Centrica	Marine Scotland
Council for British Archaeology	Ministry of Defence
Department for Culture, Media and Sport	Ministry of Justice
Department for Environment, Food and Rural Affairs	Nautical Archaeology Society
Department of Energy and Climate Change	Northern Ireland Environment Agency
Department of Enterprise Trade and Investment	Portable Antiquities Scheme
Department of the Environment, Northern Ireland	Receiver of Wreck (MCA)
DONG Wind (UK) Ltd	Renewable UK
East Anglia Offshore Wind (SP Renewables)	RES
English Heritage: Marine Team	Royal Commission on the Ancient and Historical Monuments of Scotland
E.ON	Royal Commission on the Ancient and Historical Monuments of Wales
Fluor	Scottish Government
Forewind	Sea Energy Renewables
Historic Scotland	UHI Millenium Institute
Infrastructure Planning Commission	Welsh Assembly Government: Energy Team
	Welsh Assembly Government: Marine Policy Team

10 Appendix V: References

Department of Energy and Climate Change, 2011. 'Overarching National Policy Statement for Energy (EN-1)'. London: The Stationary Office Limited.

Department for the Environment, Food and Rural Affairs, 2009. 'Our Seas – A Shared Resource. High level marine objectives'. Accessed online July 2014. www.scotland.gov.uk/resource/doc/1057/0080305.pdf

HM Government, 2011. 'UK Marine Policy Statement (MPS)'. London: The Stationery Office Limited.

Historic Scotland, 1997 reprinted and amended 2006. 'The Treatment of Human Remains in Archaeology. Historic Scotland Operational Policy Paper 5'. Edinburgh: Historic Scotland.

Wessex Archaeology Ltd. 2007. 'Historical Environment Guidance for the Offshore Renewables Energy Sector'. Commissioned by COWRIE Ltd (project reference ARCH-11-05).



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