



# **Queen Elizabeth Class Capital Dredge Project Her Majesty's Naval Base Portsmouth**

## **Method Statement for On-board Finds Reporting Protocol and Quay Side Archaeological Monitoring**

### **Prepared for:**

Boskalis Westminster Limited  
Westminster House  
Crompton Way  
Segensworth West  
Fareham  
PO15 5SS

### **On behalf of:**

Defence Infrastructure Organisation

### **Prepared by:**

Wessex Archaeology  
Portway House  
Old Sarum Park  
Salisbury  
Wiltshire  
SP4 6EB

[www.wessexarch.co.uk](http://www.wessexarch.co.uk)





**December 2015**

**111320.01**



### Quality Assurance

<b>Project Code</b>	T18613	<b>Accession Code</b>		<b>Client Ref.</b>	
<b>Planning Application Ref.</b>		<b>Ordnance Survey (OS) national grid reference (NGR)</b>			

<b>Versi on</b>	<b>Status*</b>	<b>Prepared by</b>	<b>Checked and Approved By</b>	<b>Approver's Signature</b>	<b>Date</b>
v01	I	A. Hamel	C. Budd		15/10/15
File:	W:\Projects\111320\Reports\MethodStatement\111320_QEClassCapitalDredgeProject_MethodStatement_ATH_20151015_				
v02	E	A. Hamel	C. Budd		29/10/2015
File:	W:\Projects\111320\Reports\111320_01_MethodStatement\111320_QEClassCapitalDredgeProject_MethodStatement_ATH_20151029_Rev 1				
v03	E	A. Hamel	C. Budd		03/11/2015
File:	W:\Projects\111320\Reports\111320_01_MethodStatement\111320_QEClassCapitalDredgeProject_MethodStatement_ATH_20151103_Rev2				
v04	F	A. Hamel	C. Budd		07/12/2015
File:	<a href="#">111320_QEC_ClassCapitalDredgeProject_MethodStatement_ATH_20151201_v04.docx</a>				

\* I = Internal Draft; E = External Draft; F = Final

### DATA LICENSES

This product has been derived in part from material obtained from the UK Hydrographic Office with the permission of the UK Hydrographic Office and Her Majesty's Stationery Office.

© Crown Copyright, 2015. Wessex Archaeology Ref. HA294/007/316-01.

The following notice applies:

### NOT TO BE USED FOR NAVIGATION

**WARNING:** The UK Hydrographic Office has not verified the information within this product and does not accept liability for the accuracy of reproduction or any modifications made thereafter.

This product has been derived in part from material obtained from the UK Hydrographic Office with the permission of the Controller of Her Majesty's Stationery Office and UK Hydrographic Office

([www.ukho.gov.uk](http://www.ukho.gov.uk)).

### NOT TO BE USED FOR NAVIGATION

### DISCLAIMER

THE MATERIAL CONTAINED IN THIS REPORT WAS DESIGNED AS AN INTEGRAL PART OF A REPORT TO AN INDIVIDUAL CLIENT AND WAS PREPARED SOLELY FOR THE BENEFIT OF THAT CLIENT. THE MATERIAL CONTAINED IN THIS REPORT DOES NOT NECESSARILY STAND ON ITS OWN AND IS NOT INTENDED TO NOR SHOULD IT BE RELIED UPON BY ANY THIRD PARTY. TO THE FULLEST EXTENT PERMITTED BY LAW WESSEX ARCHAEOLOGY WILL NOT BE LIABLE BY REASON OF BREACH OF CONTRACT NEGLIGENCE OR OTHERWISE FOR ANY LOSS OR DAMAGE (WHETHER DIRECT INDIRECT OR CONSEQUENTIAL) OCCASIONED TO ANY PERSON ACTING OR OMITTING TO ACT OR REFRAINING FROM ACTING IN RELIANCE UPON THE MATERIAL CONTAINED IN THIS REPORT ARISING FROM OR CONNECTED WITH ANY ERROR OR OMISSION IN THE MATERIAL CONTAINED IN THE REPORT. LOSS OR DAMAGE AS REFERRED TO ABOVE SHALL BE DEEMED TO INCLUDE, BUT IS NOT LIMITED TO, ANY LOSS OF PROFITS OR ANTICIPATED PROFITS DAMAGE TO REPUTATION OR GOODWILL LOSS OF BUSINESS OR ANTICIPATED BUSINESS DAMAGES COSTS EXPENSES INCURRED OR PAYABLE TO ANY THIRD PARTY (IN ALL CASES WHETHER DIRECT INDIRECT OR CONSEQUENTIAL) OR ANY OTHER DIRECT INDIRECT OR CONSEQUENTIAL LOSS OR DAMAGE.



# Queen Elizabeth Class Capital Dredge Project Her Majesty's Naval Base Portsmouth

## Method Statement for On-board Finds Reporting Protocol and Quay Side Archaeological Monitoring

### Contents

Acknowledgements.....	iii
<b>1 INTRODUCTION.....</b>	<b>1</b>
1.1 Project Background.....	1
1.2 Development Description.....	2
1.3 Construction Programme.....	2
1.4 Aims and Objectives.....	3
1.5 Roles, Responsibilities and Communication.....	4
<b>2 ARCHAEOLOGICAL SUMMARY.....</b>	<b>5</b>
2.1 Introduction.....	5
2.2 Designated Archaeological Sites.....	6
2.3 Submerged Prehistoric Archaeology.....	6
2.4 Known and Potential Maritime Historic Assets.....	6
2.5 Known and Potential Aviation Assets.....	7
2.6 Geophysical Anomalies.....	7
<b>3 ON-BOARD FINDS REPORTING PROTOCOL (THE PROTOCOL).....</b>	<b>7</b>
3.1 Introduction.....	7
3.2 Awareness Training.....	8
3.3 Archaeological Discoveries during Dredging Works.....	9
<i>Introduction.....</i>	<i>9</i>
<i>Major Archaeological Find.....</i>	<i>11</i>
<i>Intermediate Archaeological Find.....</i>	<i>13</i>
<i>Minor Archaeological Find.....</i>	<i>14</i>



4	QUAY SIDE ARCHAEOLOGICAL MONITORING.....	15
5	ARCHAEOLOGICAL FINDS STRATEGY .....	16
6	ACTIVITIES SUBSEQUENT TO INVESTIGATIONS .....	17
7	REPORTING.....	17
8	HEALTH AND SAFETY.....	18
9	REFERENCES.....	18
APPENDIX 1: ACTIONS ON THE DREDGING VESSEL - ANOMALIES ON THE SEABED OR FINDS RECOVERED FROM THE SEABED.....		20
APPENDIX 2: PRELIMINARY RECORDING FORM .....		20
APPENDIX 3: ACTIONS FOR THE PROJECT MANAGER.....		22
APPENDIX 4: GUIDELINES FOR IDENTIFYING FINDS OF ARCHAEOLOGICAL INTEREST ...		23
APPENDIX 4: GUIDELINES FOR ARTEFACT HANDLING AND STORAGE .....		27
APPENDIX 6: ACTIONS FOR THE PROJECT MANAGER.....		28

### Tables

Table 1:	Dredging schedule .....	3
Table 2:	Contacts .....	4
Table 3:	Key personnel on-board the crane barge <i>Strekker</i> .....	5
Table 4:	Staff to attend awareness training.....	8
Table 5:	Size of bomb grating .....	10

### Figures

Figure 1:	Study Area
Figure 2:	Areas of Archaeological Interest in Relation to Dredging Zones
Plate 1:	General location of Quay Side Archaeological Monitoring
Plate 2:	Detailed view of Quay Side Archaeological Monitoring area)



# **Queen Elizabeth Class Capital Dredge Project Her Majesty's Naval Base Portsmouth**

## **Method Statement for On-board Finds Reporting Protocol and Quay Side Archaeological Monitoring**

### **Acknowledgements**

This document was commissioned by Boskalis Westminster Limited, and Wessex Archaeology would like to acknowledge the assistance provided by Gerrit Jan van den Bosch and Bob Kidd of Boskalis Westminster Limited.

This Method Statement was written by Andrea Hamel. Illustrations were prepared by Kitty Foster. The project was managed for Wessex Archaeology by Caroline Budd.



# **Queen Elizabeth Class Capital Dredge Project Her Majesty's Naval Base Portsmouth**

## **Method Statement for On-board Finds Reporting Protocol and Quay Side Archaeological Monitoring**

### **1 INTRODUCTION**

#### **1.1 Project Background**

- 1.1.1 Wessex Archaeology has been commissioned by Boskalis Westminster Limited (BWL) on behalf of their client the Defence Infrastructure Organisation (DIO) to prepare a Method Statement outlining the specific requirements for achieving archaeological objectives described in the Written Scheme of Investigation (WSI) (Wessex Archaeology 2015a), to be undertaken as part of the Queen Elizabeth Class (QEC) Capital Dredge Project at Her Majesty's Naval Base (HMNB) Portsmouth. This Method Statement covers the On-board Finds Reporting Protocol (hereafter the 'Protocol') and the Quay Side Archaeological Monitoring, and fulfils two of the conditions from the MMO Consent Decision document (MLA/2012/00474).
- 1.1.2 The Protocol sets out a framework to facilitate the reporting of material of archaeological interest that is discovered during dredging works, either by standby dive teams and UXO operatives investigating obstructions on the seabed, or by on-board operatives examining material recovered from the seabed by the draghead. Reports are forwarded to Wessex Archaeology for initial archaeological assessment, and actions can then be taken to determine the level of investigation appropriate for each discovery. Major archaeological finds will be transferred directly to the quay side for archaeological assessment, intermediate archaeological finds and minor archaeological finds will be placed in a designated skip, which will be removed from the vessel to the quay side for archaeological recording.
- 1.1.3 Quay Side Archaeological Monitoring will take place once items of archaeological interest have been delivered to the quay. The material will be visually reviewed and recorded by suitably qualified marine archaeologists. Finds confirmed to be of archaeological interest will then be transferred to a suitable storage location.
- 1.1.4 All activities will obey legal obligations in respect of archaeological material as it relates to the obligation to report 'wreck' under the Merchant Shipping Act 1995, and be aware of the requirements of the Protection of Military Remains Act 1986.
- 1.1.5 This Method Statement is appended to the existing WSI (Wessex Archaeology 2015a). The WSI proposed mitigation measures that would be reassessed and enhanced by site and process specific Method Statements, such as this one, that would be produced and agreed for each measure and work stage implemented, as appropriate. The WSI included a summary of previous assessments (Royal HaskoningDHV (RHDHV) 2015), and updated the previous Archaeological WSI, that had been produced by RHDHV (2013).



- 1.1.6 Previous archaeological work encompassing areas covered by the QEC Project has included: an archaeological desk-based assessment (Wessex Archaeology 2003); an archaeological assessment of geophysical data (Wessex Archaeology 2004a), assessment of archaeological potential (Wessex Archaeology 2004b and Maritime Archaeology Ltd. 2006); an Environmental Impact Assessment for HMNB Portsmouth (Maritime Archaeology Ltd. 2007a) and a Scoping Report (RHDHV 2012b).
- 1.1.7 Ongoing archaeological work includes the geoarchaeological assessment. The Stage 1 geoarchaeological assessment of geotechnical logs and preliminary recording of geotechnical samples has recently been completed by Wessex Archaeology (2015b). The report includes recommendations for further archaeological assessment including Stage 2 geoarchaeological recording of a number of samples, and sets out a detailed methodology.
- 1.2 Development Description**
- 1.2.1 Details of the QEC Capital Dredge Project are taken from the Environmental Statement (ES) (RHDHV 2012a), BLW's *Project Execution Plan for Queen Elizabeth Class (QEC) Capital Dredge Project, Her Majesty's Naval Base (HMNB) Portsmouth* (BWL 2014), and further discussions with BWL regarding the works. The elements of the proposed improvement works that concern this Method Statement are: the capital dredging (deepening and localised widening) of an existing approach channel to the Naval Base and the turning circle and berthing pocket at the Naval Base (**Figure 1**).
- 1.2.2 The proposed scheme involves deepening the main Harbour approach channel and Harbour entrance to 10.8m below Chart Datum (CD). As a result, the inner harbour channel will be dredged to a depth of 11.0m below CD and the berthing pocket to 13.8m below CD. It is apparent that Hamilton Bank, a previously undredged area, will have a significant amount of material removed from its location. The total volume of dredged material arising from the proposed capital dredging activities will be approximately 3.2 million m<sup>3</sup>. There are two options proposed for beneficial use of the dredged material: Option 1 is temporary offshore storage of sands and gravels; Option 2 is landing sand and gravel ashore as aggregate for the construction market. Any material that does not have a beneficial use will be deposited at the Nab Tower licensed offshore disposal ground, located 15km to the south-east of the eastern shoreline of the Isle of Wight.
- 1.2.3 The method of dredging will be dependent on the existing sediment types. The vast majority of the dredging work will be undertaken using a Trailing Suction Hopper Dredger (TSHD), that targets gravel and sand sized sediments. Where stiff clays are present, they will be removed by a back-hoe dredger with an accompanying barge positioned alongside.
- 1.3 Construction Programme**
- 1.3.1 Dredging will take place within five defined Zones (A to E) within the approach channel (**Figure 1**). The dredging schedule is detailed in **Table 1** below:



**Table 1: Dredging schedule**

Vessel Type	Name of Vessel	Dredging Zone	Start	Finish
Crane Barge	<i>Strekker</i>	Pre dredge clearance campaign and on standby for obstruction removal during dredging works	05/11/2015	Estimated 25/02/2016
TSHD	<i>Crestway</i>	A, C, D and E	17/12/2015	14/07/2016
TSHD	<i>Shoalway</i>	Hamilton Bank and part of A	21/01/2016	17/03/2016
Backhoe Dredger	<i>Manu Pekka</i>	B, D and E	20/03/2016	10/06/2016

## 1.4 Aims and Objectives

- 1.4.1 The aim of the Method Statement is to set out the specific details of mitigation agreed through the WSI in order to address the potential impact of dredging within the QEC Project area via appropriate and recognised archaeological strategies. This is in line with the archaeological mitigation measures set out in the Archaeological Assessment compiled as part of the ES for the QEC Project (RHDHV 2012a: Chapter 22).
- 1.4.2 The aim of the Protocol is to reduce any adverse effects of the proposed dredging on the historic environment by enabling people working on the vessels to report archaeological finds in a manner that is both convenient to their everyday work and effective with regard to curatorial requirements.
- 1.4.3 The objectives of the Protocol are as follows:
- *To record material of archaeological potential as it is encountered and/or recovered;*
  - *To assess the archaeological potential of recovered material;*
  - *To provide archaeological advice regarding legal requirements;*
  - *To provide 'first aid' conservation advice for finds and to provide storage advice,*
  - *To establish TEZs for discoveries of high archaeological potential; and*
  - *To provide advice on further evaluation that may be required.*
- 1.4.4 The aim of the Quay Side Archaeological Monitoring is to ensure that material recovered during the dredging process is archaeologically assessed, in line with curatorial requirements.
- 1.4.5 The objectives of the Quay Side Archaeological Monitoring are as follows:
- *To assess material recovered for archaeological significance;*
  - *To record archaeological material to a level of detail suitable for its level of archaeological significance;*
  - *To provide advice regarding further evaluation that may be required for the archaeological material; and*
  - *To provide advice regarding storage, conservation, post-fieldwork assessment; reporting, and archiving.*





## 1.5 Roles, Responsibilities and Communication

- 1.5.1 Details regarding the roles, responsibilities and communication between DIO, BWL, RHDHV, Wessex Archaeology and Historic England can be found in the WSI (**Section 4**, Wessex Archaeology 2015a). This section provides details regarding the contacts, roles, responsibility and communication that directly arise from the Method Statement (**Table 2**).

**Table 2: Contacts**

Name	Organisation	Role	Contact Information
Paul Simmonds	DIO	Project Manager	Mobile: 07785 521506
Gerrit Jan van den Bosch	BWL	Project Manager	Mobile: 07795 821 902 Office: 01489 885 933 <a href="mailto:gerrit.jan.vd.bosch@boskalis.com">gerrit.jan.vd.bosch@boskalis.com</a>
Jackie Lavender	RHDHV	Environmental Consultant (Consent Compliance)	Mobile: 07557 089947 Office: 020 7340 9692 <a href="mailto:jackie.lavender@rhdhv.com">jackie.lavender@rhdhv.com</a>
Victoria Cooper	RHDHV	Marine Heritage Consultant (Consent Compliance)	Mobile: 07775 536 772 Office: 0207 340 9698 <a href="mailto:victoria.cooper@rhdhv.com">victoria.cooper@rhdhv.com</a>
Robin Snaith	MMO	Marine Licensing Case Officer	Office: 0191 376 2577 <a href="mailto:robin.snaith@marinemangement.org.uk">robin.snaith@marinemangement.org.uk</a>
Dr. Chris Pater	Historic England	Head of Marine Planning	Mobile: 07798 653897 <a href="mailto:Chris.pater@HistoricEngland.org.uk">Chris.pater@HistoricEngland.org.uk</a>
Jane Corcoran	Historic England	Regional Science Advisor	Office: 01483 252 052 <a href="mailto:jane.corcoran@HistoricEngland.org.uk">jane.corcoran@HistoricEngland.org.uk</a>
David Hopkins	Hampshire County Council	County Archaeologist	Office: 01962 846 735 <a href="mailto:david.hopkins@hants.gov.uk">david.hopkins@hants.gov.uk</a>
Jenny Stevens	Portsmouth City Council	Assistant Local History Officer	Office: 02392 827 261 <a href="mailto:jenny.stevens@portsmouth.gov.uk">jenny.stevens@portsmouth.gov.uk</a>
Caroline Budd	Wessex Archaeology	Project Manager	Office: 01722 326 867 <a href="mailto:c.budd@wessexarch.co.uk">c.budd@wessexarch.co.uk</a>
Andrea Hamel	Wessex Archaeology	Contact for day-to-day enquiries Contact for Awareness	Mobile: 07765 226 751 Office: 01722 326 867 <a href="mailto:a.hamel@wessexarch.co.uk">a.hamel@wessexarch.co.uk</a> (in office: Monday, Tuesday, Thursday)
Graham Scott	Wessex Archaeology	Senior Archaeologist, Quayside Monitoring	Office: 01722 326 867 <a href="mailto:g.scott@wessexarch.co.uk">g.scott@wessexarch.co.uk</a>
Paolo Croce	Wessex Archaeology	Archaeologist, Quayside Monitoring	Office: 01722 326 867 <a href="mailto:p.croce@wessexarch.co.uk">p.croce@wessexarch.co.uk</a>
Katy Ball	Portsmouth Museum	Collections Registrar	Office: 02392 834 766 <a href="mailto:Katy.Ball@portsmouthcc.gov.uk">Katy.Ball@portsmouthcc.gov.uk</a>

- 1.5.2 Contact with the Archaeological Curator (Historic England) and regulator (MMO) will be administered by RHDHV with respect to consent compliance. Wessex Archaeology will notify RHDHV of the completion of key stages in implementing the WSI including awareness training arrangements and the submission of deliverables to BWL.



- 1.5.3 Wessex Archaeology will communicate directly with the Archaeological Curator (Historic England) and regulator (MMO) with regards to discoveries reporting and arrangements for awareness training.
- 1.5.4 Wessex Archaeology will maintain direct telephone and email contact with BWL and with UXO specialists on-board the vessel during dredging in order to monitor the functionality of the Protocol, as BWL staff and the UXO specialists will be on the front line of potential archaeological discoveries, either through assessing obstructions on the seabed as possible UXO, or by encountering material recovered from the seabed and brought to the surface on the draghead of the dredger. In the event that no discoveries of archaeological significance are encountered, weekly telephone calls will be maintained by Wessex Archaeology.
- 1.5.5 Further details regarding the lines of communication for archaeological discoveries can be found in **Sections 3 and 4**.
- 1.5.6 Dredging staff will be identified for each dredging vessel prior to dredging commencing. The key personnel for the crane barge *Strekker* are identified in **Table 3** below. There will always be one superintendent, one UXO expert, one operator and one skipper on-board the vessel. The superintendent will be the person on-board responsible for the archaeological protocol (the Site Representative).

**Table 3: Key personnel on-board the crane barge *Strekker***

Name		Position
Hendrik Jan Venema	BWL	Works Manager
Mark Jacobs	BWL	Superintendent
Jordan Gillespie	BWL	Superintendent
Patrick Allen	BWL	Superintendent
Paul Thompson	Boskalis Hirdes	UXO expert
Everton Glenn	Boskalis Hirdes	UXO expert
Tonnie Moerland	BWL	Operator <i>Strekker</i>
Kees Filius	BWL	Skipper <i>Strekker</i>
Jan van Der Panne	BWL	Operator <i>Strekker</i>
Cees Overduin	BWL	Skipper <i>Strekker</i>
John Brown	BWL	Barge Master

## 2 ARCHAEOLOGICAL SUMMARY

### 2.1 Introduction

- 2.1.1 A full summary of known and potential archaeological receptors identified during previous assessments are provided in the WSI (Wessex Archaeology 2015a). This presents a brief summary.
- 2.1.2 Archaeological evidence may occur as primary context (*in situ*), discrete sites and artefact assemblages, or as secondary context (derived) archaeological material within deposits reworked by natural or human processes. For the purposes of the Method Statement, the archaeological resource is considered to comprise:



- *Submerged prehistoric archaeology, including both the study of prehistoric sites (anthropogenic features, artefacts and palaeoenvironmental evidence demonstrating aspects of past human activities) and the study of palaeolandscapes (palaeogeographic features and palaeoenvironmental evidence);*
- *Maritime archaeology, including shipwrecks and material accidentally or deliberately lost overboard, such as fishing gear, anchors, cargo, or ordnance lost in battle; and*
- *Aviation archaeology, including both the remains of crashed aircraft and material jettisoned from aircraft. The majority of aviation sites are related to World War II, and any aircraft lost while in military service is automatically protected under the Protection of Military Remains Act 1986.*

## 2.2 Designated Archaeological Sites

- 2.2.1 There are no designated marine sites located in the proposed dredging area.

## 2.3 Submerged Prehistoric Archaeology

- 2.3.1 There is potential for palaeolandscapes to be present in the QEC Project area, and this has been confirmed through geotechnical borehole sample assessment, grab sampling and geophysical survey. Buried deposits are considered to be of **high archaeological sensitivity (Figure 2)**.

## 2.4 Known and Potential Maritime Historic Assets

- 2.4.1 There are no known wrecks within the proposed dredging area.
- 2.4.2 The nationally significant site of HMS *Boyne* was identified during the DBA as of **high archaeological sensitivity (Figure 2)**. The buoy associated with the wreck is positioned less than five metres from the expected top of the dredge slope, and approximately 10m beyond the base of the dredging area. Due to its proximity to the dredging area, it is possible that material from the wreck could be discovered in the dredging area.
- 2.4.3 The ES classed the geophysical anomalies on the seabed as of **low archaeological sensitivity**, and indicated that the potential for the survival of buried wrecks within the QEC Project Area is considered to be low, however it is noted that the possibility for uncharted wreck material and associated debris cannot be discounted. Portsmouth Harbour's strategic position influenced the development of the area into a key military port and dockyard. Portsmouth is intrinsically linked with the Royal Navy, and therefore there is potential for maritime material related to the Royal Navy from the medieval period to the present. Additional potential is signified by the record of 161 documented losses within the project area (MAL 2007a). Although these records are not linked to tangible remains on the seabed, they highlight the potential for further discoveries. In addition, the area of Hamilton Bank has not previously been dredged, and therefore there is higher potential for discoveries in this area (**Figure 2**)
- 2.4.4 In the approach to the harbour are the edges of two historic anchorages. These historic anchorages are designated and the potential for isolated maritime finds to be encountered as a result of the dredging activities is high. These areas are therefore considered to be of **high archaeological sensitivity (Figure 2)**.



## 2.5 Known and Potential Aviation Assets

- 2.5.1 There are no known aircraft remains currently recorded in the QEC Project area.
- 2.5.2 The potential for aircraft remains to exist should not be discounted. There are 27 documented aircraft losses within the QEC Project area, and 26 date to World War II. All aircraft lost while in military service are automatically protected under the Protection of Military Remains Act 1986, and therefore they are considered to be of **high archaeological sensitivity**.

## 2.6 Geophysical Anomalies

- 2.6.1 A number of sidescan sonar and magnetic anomalies were identified through the assessment of geophysical survey data undertaken by Wessex Archaeology (2004) and Maritime Archaeology Ltd. (2007a). Although these anomalies were initially assessed for their archaeological potential by Maritime Archaeology Ltd. and grouped according to their value as high, medium or low anomalies, subsequent diver survey ground truthing (Maritime Archaeology Ltd. 2007b) found that none were of archaeological interest. All the anomalies within the targeted diving areas were consequently assessed as being of **low archaeological sensitivity**.

## 3 ON-BOARD FINDS REPORTING PROTOCOL (THE PROTOCOL)

### 3.1 Introduction

- 3.1.1 The Protocol will be implemented throughout the duration of the channel dredge and across the full geographical extent of the project, with particular attention paid to areas of interest defined by the ES and previous archaeological reports (**Figure 2**):
- *Palaeochannels;*
  - *Two areas designated as historic anchorages outside the Harbour;*
  - *The area surrounding HMS Boyne (buoy locator and surrounding area 100m spread to the east); and*
  - *Hamilton Bank.*
- 3.1.2 The Protocol will be implemented in order to ensure that unexpected discoveries of archaeological material – including submerged prehistoric material, shipwreck material aircraft remains, and any other archaeological material – are addressed in a timely and appropriate manner.
- 3.1.3 Archaeological finds made during the course of dredging activities are important, because they can shed light on past human use of landscape, sea and seabed. The information that such discoveries bring to light can help archaeologists better understand the past and should therefore be conserved to better protect these aspects of our history on behalf of further generations.
- 3.1.4 The Protocol that follows has specifically been designed to deal with any discoveries made in the proposed capital dredging area undertaken during the QEC Project. Flow charts of actions/communications and recording sheets associated with the Protocol can be found in **Appendices 1-3**.



### 3.2 Awareness Training

- 3.2.1 Wessex Archaeology, as the Retained Archaeologist, will provide awareness training. The detailed training on the identification of finds of archaeological potential will ensure that staff are aware of what constitutes an appropriate find and the procedure for reporting such discoveries. This will allow a selective approach to be taken in the placing of each item collected by the draghead either into skips designated to collect items of archaeological or suspected archaeological interest or into the skip of material for discard. Where the origin or nature of an item is in question the precautionary principle will be employed and the item added to the archaeological skip.
- 3.2.2 Training will focus in particular on the types of material likely to be discovered during the dredging, for example:
- *Aircraft material, what constitutes it, what types of material could be present and how to recognise it;*
  - *Shipwreck material, including identifying wood that has been worked (for example, includes the presence of treenails and/or has been shaped, for example for a logboat or a clinker-built boat), fixtures and fittings, pottery, and other material that could be present on a shipwreck; and*
  - *Prehistoric material, such as handaxes and palaeoenvironmental material that could be encountered.*
- 3.2.3 Training will include an overview of levels of importance, and what constitutes a *Major Archaeological Find*, an *Intermediate Archaeological Find* and a *Minor Archaeological Find* (as defined in **Section 3.3**). More information regarding the types of materials that could be discovered can be found in **Appendix 4**.
- 3.2.4 Training will also include information on handling and storing archaeological discoveries, as outlined in **Appendix 5**.
- 3.2.5 Training given to the UXO and diving contractors will have a substantially greater level of detail than that provided for general staff under the terms of the Protocol and will include advice on their responsibilities with regard to the implementation of the WSI and Protocol as agreed by the MMO.
- 3.2.6 In addition, training will ensure that all staff understand their role and the methods for reporting finds of archaeological potential through the Protocol.
- 3.2.7 Awareness visits will take place between October 2015 and March 2016, and they will include: the works manager, superintendents, UXO experts, UXO divers and general vessel crew and office staff. The visits will also include the following named staff (**Table 4**):

**Table 4: Staff to attend awareness training**

Name	Position
Gerrit Jan van den Bosch	Project Manager
Hendrik Jan Venema	Works Manager
Mark Jacobs	Superintendent
Jordan Gillespie	Superintendent



Patrick Allen	Superintendent
Paul Thompson	UXO expert
Everton Glenn	UXO expert
Stuart Huth	SHE-Q Officer
James Spragg	Planning & Production Engineer

- 3.2.8 The timing of these visits will be based upon the dredging scheduled and staff/vessel changeovers, including pre-dredge clearance operations. There will be two dredging crews active at a time on each of the four vessels, and they will change over through the process.
- 3.2.9 An awareness visit will be provided for each vessel before the dredging work commences, and therefore it is expected that there will be four awareness visits. The captain and other crew members will be responsible for the training handover with their colleagues, however, up to four additional awareness visits could be provided if requested to smooth the transition. Once the dredging work begins, the vessel will work seven days a week, 24 hours a day (see **Table 1** for details of schedule), and it will not be possible to undertake further awareness visits, however, any questions or concerns can be brought to the attention of Wessex Archaeology.
- 3.2.10 Vessel crew will only be available on the day of their arrival or the day after, and therefore awareness visits are likely to be undertaken immediately before the start dates outlined in **Table 1** above.
- 3.2.11 BWL will keep Wessex Archaeology informed of the exact arrival dates for each vessel. The first vessel to arrive is Crane Barge *Strekker*, with an approximate arrival date of 2<sup>nd</sup> November 2015.
- 3.2.12 The first awareness visit will be held in the meeting room of the site office and will be attended by the staff named above in **Table 3**.
- 3.2.13 Provision will be made for Historic England to attend a training session to monitor the approach and provide additional information if required. Wessex Archaeology will contact Historic England regarding the most suitable awareness training, for example with crews from either *Crestway* (around 17/12/2015) or *Shoalway* (around 21/01/2016).
- 3.2.14 Periodic visits to the dredge plant by Wessex Archaeology will be planned to ensure proper adherence to the Protocol. The frequency and timing of these visits will be determined in accordance with the dredging programme.
- 3.2.15 Although unlikely to be an issue, should the need arise, Historic England and the MMO will be informed if the methods of reporting are falling short of necessary standards. This is to ensure that the MMO, as Regulator and Historic England, as their historic environment advisor, can be confident that every effort is made to protect and record archaeological material from unwarranted impacts.

### 3.3 Archaeological Discoveries during Dredging Works

#### *Introduction*

- 3.3.1 The types of dredgers and when they will be employed are outlined in the Construction Programme (**Section 1.3**).





- 3.3.2 Prior to the commencement of dredging, dredging vessel staff, UXO and diving contractors, and other key staff will receive information regarding the areas of archaeological interest (palaeochannels, historic anchorages, Hamilton Bank, and the area surrounding HMS Boyne). Details of these areas will be supplied to vessel staff via this task specific Method Statement. In addition, the areas will be identified during the awareness training, and copies of **Figure 2** that illustrates the areas will be provided both as handouts and as part of the Protocol binder for on-board reference. In addition, ESRI ArcGIS shapefiles of the areas have been provided to BWL in British National Grid (BNG). The shapefiles will ensure that the areas are clearly visible on the dredge plant computer dredge screens, to ensure complete awareness of these areas and the potential for archaeological and/or historical finds.
- 3.3.3 BWL will notify Wessex Archaeology when key areas (palaeochannels, historic anchorages, Hamilton Bank, and the area surrounding HMS Boyne) are to be dredged, so that Wessex Archaeology can ensure the vessel staff/UXO specialists are aware of any specific considerations.
- 3.3.4 Computer systems and displays on each vessel, linked to a differential GPS system and radio tide gauge, give the dredge master continuous visual information on the exact position of the dredger and draghead.
- 3.3.5 With regards to the crane barge (*Strekker*) and backhoe dredger (*Manu Pekka*), the exact location of the discovery will be recorded from the position of the vessel at the time of the discovery.
- 3.3.6 However, it will likely be more difficult for crews to accurately position discoveries made on the TSHDs (*Crestway* and *Shoalway*), as discussed in the following paragraphs.
- 3.3.7 Grids ('bomb gratings') will be installed across the draghead to prevent larger debris and Unexploded Ordnance (UXO) from entering the vessel. The size of the grids is outlined in **Table 5** below:

**Table 5: Size of bomb grating**

Vessel Type	Name of Vessel	Size of bomb grating
TSHD	<i>Crestway</i>	100mm x 300mm
TSHD	<i>Shoalway</i>	70mm x 750mm

- 3.3.8 The size of the grating is limited due to the effects that the grating can have on productivity, particularly in clay, and the size of the grating means that only larger objects are likely to become ensnared.
- 3.3.9 Large finds that completely block the dredge will likely be recovered immediately, however if the draghead is not completely blocked, it may not be cleared until the end of a dredging run. In this case, the vessel trackplot will be supplied to Wessex Archaeology, and the centrepont of the trackplot will be used as a provisional location for the find.
- 3.3.10 The Project Manager has indicated that the superintendent will be responsible for reporting (the 'Site Representative'). The Project Manager will ensure that all staff on-board the dredging vessel are aware of the nominated Site Representative. A flowchart



detailing actions on-board the dredging vessel in the event of anomalies discovered on the seabed or finds recovered from the seabed can be found in **Appendix 1**.

- 3.3.11 All finds of archaeological interest will be reported by the on-board operatives to the Site Representative, who will inform the Project Manager, who will then inform Wessex Archaeology and the DIO.
- 3.3.12 In the event that an unexpected archaeological obstruction is encountered on the seabed, BWL will notify Wessex Archaeology prior to diving. The location will be dived by the standby dive team to ascertain whether it merits further investigation to determine historic or archaeological significance and consideration as a heritage asset. Obstructions with archaeological potential will be photographed and/or videoed by the stand by dredge dive team, and the photographs and/or video data will be forwarded to Wessex Archaeology for further assessment by a suitably qualified marine archaeologist. If the divers identify a site of potential archaeological interest (based on the criteria outlined in **Appendix 4**), they will follow the strategy outlined in the *Major Archaeological Find*, *Intermediate Archaeological Find* and *Minor Archaeological Find* sections below.
- 3.3.13 In the event that a find is discovered on-board, the find will be assessed for their level of archaeological interest by the on-board operatives, based on awareness training and the criteria outlined in **Appendix 4**). If the find is of potential archaeological interest, they will follow the strategy outlined in the *Major Archaeological Find*, *Intermediate Archaeological Find* and *Minor Archaeological Find* sections below.
- 3.3.14 If there is any uncertainty as to whether or not debris caught in the draghead or encountered on the seabed is of archaeological interest, staff will operate a precautionary approach and assume interest.

#### *Major Archaeological Find*

- 3.3.15 Major archaeological finds could include a shipwreck, logboat, aircraft, or human remains (see **Appendix 4** for more details).
- 3.3.16 Following the discovery of a major archaeological find either on-board or on the seabed, BWL will cease all dredging immediately within the area, and a TEZ will be implemented around the location of the find. BWL will immediately inform the DIO Project Manager verbally and will redeploy equipment to work in an alternative location. BWL will submit a Change Notification to the DIO Project Manager within seven days.
- 3.3.17 The Site Representative will notify the Project Manager, who will then notify Wessex Archaeology within 24 hours of discovery. In addition, the Site Representative will:
- *Ensure that the find is photographed and/or videoed if on the seabed, by the stand by dive team, if on the surface by the on-board operatives;*
  - *Provide the find with a reference number from a continuous unique numbering system;*
  - *Obtain a position for the find from the vessel's GPS location in conjunction with the 2015 sidescan sonar target position and/or the location provided by the ARIS high resolution sonar and video in use by Boskalis Hirdes for UXO investigation;*
  - *Fill in a preliminary recording form (**Appendix 2**)*





- *Forward the preliminary recording form, and any additional information, to the Project Manager;*
- *The Project Manager will confirm all details in the preliminary recording form are comprehensive and correct and will forward it, along with copies of any photographs, video and other relevant information, to Wessex Archaeology within 24 hours of discovery;*
- *On receipt of a report, the marine archaeologist will review the data provided and supply further advice as relevant.*

3.3.18 If the discovery is on the seabed:

- *An archaeological diver from Wessex Archaeology will accompany the standby dive team to investigate the site and provide further advice within 48 hours. The archaeological diver will undertake a significance assessment and provide advice; and*
- *The methodology for addressing these sites will be agreed prior to any further dredge activity at that location. Existing geophysical data from these locations will be reviewed to determine the extent of the site if possible and to correlate new discoveries with existing data assessment.*

3.3.19 If the discovery is made on-board:

- *All material will be handled with care;*
- *Any rust, sediment, concretion or marine growth, should not be removed, and 'groups' of items or sediments should not be separated;*
- *It will be assumed that the find is not isolated and further material may be present on the seabed;*
- *An archaeological diver will accompany the standby dive team to investigate the site and provide further advice within 48 hours;*
- *If the discovery is determined to be an isolated find, then the find will be provided with 'first aid' conservation, including keeping the find submerged in clean, cold water until further requirements can be determined;*
- *The find will be moved to the quay side lay down area for immediate attention by a marine archaeologist; and*
- *Advice from Wessex Archaeology will be provided regarding the most suitable place to store the object prior to the arrival of a marine archaeologist at the site.*

3.3.20 It should be noted that archaeological investigation of *in situ* discoveries on the seabed does not typically cause undue disruption to dredging programmes and timescales, instead, archaeological divers are able to quantify and qualify the extent of any remains relatively quickly, which in turn facilitates the reporting of findings by Wessex Archaeology to BWL and Historic England.

3.3.21 Following initial recording and review the marine archaeologist will provide further advice in accordance with the Protocol and WSI. Additional works will be carried out to ensure the appropriate recording and removal of archaeological material in accordance with



specific methodology to be advised by the marine archaeologist and agreed with Historic England.

- 3.3.22 Only in agreement with the MMO and Historic England will any action be taken to implement any potential lift and recovery operations following satisfactory completion of *in situ* inspection.
- 3.3.23 In the event of the discovery of human remains, where the remains have been intentionally buried, applications should be made to the Ministry of Justice for an exhumation licence. In all other cases, Wessex Archaeology will immediately inform the Coroner and the Police. If neither the Coroner nor the Police propose to investigate the remains, they may be dealt with as set out below.
- 3.3.24 Following discussions with the Coroner and Historic England, assessment of the area and subsequent need for and appropriateness of their excavation/removal, where necessary, will be determined once the area has been investigated by a member of Wessex Archaeology's dive team. All excavation and post-excavation processes will be in accordance with the standards set out in ClfA's *Technical Paper No. 7 Guidelines to the Standards for Recording Human Remains* (2004).
- 3.3.25 Dredging will not recommence within the area of the TEZ until confirmation has been received from Historic England that the TEZ can be removed.

#### *Intermediate Archaeological Find*

- 3.3.26 Intermediate archaeological finds could include: an anchor, mammoth tooth, isolated ships timbers or concretions (see **Appendix 4** for more details).
- 3.3.27 If an intermediate archaeological discovery is identified on the seabed by the standby divers in the course of operations, the discovery will be photographed and/or videoed *in situ* by the divers.
- 3.3.28 If an intermediate archaeological find recovered from the draghead, it will be identified by the on-board operative, and it will be photographed and/or videoed, using a camera with time/date stamp. Ensure that all material is handled with care, and do not remove any rust, sediment, concretion or marine growth. Groups of items or sediments should not be separated.
- 3.3.29 Then the following steps will be undertaken:
- *Provide the find with a reference number from a continuous unique numbering system;*
  - *If possible, attach a label to the find with information regarding the object and its reference number, or photograph the find with the label prominently displayed, in order for the item to be identified during the Quay Side Archaeological Monitoring;*
  - *Record the location of the find from the vessel's GPS location, or the vessel's trackplot;*
  - *Fill in a preliminary recording form (**Appendix 2**);*



- *The Site Representative will forward the preliminary recording form to the Project Manager, along with any photographs, videos or other information;*
- *The Project Manager will then forward the preliminary recording form, along with any photographs, videos or other information, to Wessex Archaeology (**Appendix 3**);*
- *On receipt of a report, the marine archaeologist will review the data provided and provide further advice as relevant; and*
- *The find will be provided with 'first aid' if appropriate and will be placed in the skip containing archaeological material. It will then be removed to the quay side lay down area to await assessment by a marine archaeologist.*

3.3.30 Dredging will not recommence at the location of the discovery until the find has been fully recorded and, removed in accordance with the advice of the marine archaeologist.

3.3.31 During the Quay Side Archaeological Monitoring, the find will be reviewed by the marine archaeologist, additional recording will be carried out and further advice sought from experts as required. Details of the find will be entered in the finds database and provision will be made for the removal of the find to Wessex Archaeology for further conservation and recording if required or to an alternative facility if appropriate.

#### *Minor Archaeological Find*

3.3.32 Minor archaeological finds could include modern debris such as fishing gear (see **Appendix 4** for more details).

3.3.33 If a minor archaeological discovery is identified on the seabed by the standby divers in the course of operations, the discovery will be photographed and/or videoed *in situ*. Small finds may be brought to the surface.

3.3.34 If a minor archaeological find is recovered from the draghead, it will be identified by the on-board operative, and it will be photographed and/or videoed on deck.

3.3.35 The following steps will be taken:

- *Photograph and/or video the find, using a camera with a time/date stamp;*
- *Provide the find with a reference number from a continuous unique numbering system;*
- *If possible, attach a label to the find with information regarding the object and its reference number, or photograph the find with the label prominently displayed, in order for the item to be identified during the Quay Side Archaeological Monitoring;*
- *Fill in a preliminary recording form (**Appendix 2**), to be sent to Wessex Archaeology along with any photographs and/or video.*
- *The Site Representative will forward any photographs and/or video to the Project Manager who will forward them to Wessex Archaeology; and*
- *The find will be provided with 'first aid' if appropriate and placed in the skip containing archaeological material. The skip will then be removed to the quay side lay down area to await assessment by a marine archaeologist.*



- 3.3.36 On receipt of photograph and/or video data and/or a preliminary recording form, the marine archaeologist will review the data provided and provide further advice as relevant. Should the material be determined to be of intermediate archaeological interest, the location of the discovery will be determined based on the vessel track plot corresponding with the time/date stamp on the photographs and/or video of the find.
- 3.3.37 During the Quay Side Archaeological Monitoring, the find will be reviewed by the marine archaeologist and additional recording will be carried out if required. Details of the find will be entered in the finds database prior to disposal.

#### 4 QUAY SIDE ARCHAEOLOGICAL MONITORING

- 4.1.1 For any major archaeological finds that have been recovered, once the dredger has returned to the quay, the finds recovered will be stored safely for review by Wessex Archaeology. Finds will be stored in a secure location on the quay side, and treated with basic 'first aid': keeping the finds wet, cool and dark. BWL will notify Wessex Archaeology of any major archaeological finds within 24 hours of discovery, and Wessex Archaeology will provide further advice regarding suitable storage on a case by case basis'
- 4.1.2 For the skips containing intermediate and minor archaeological finds, BWL will notify Wessex Archaeology when skips are removed to the secure lay-down area, and will grant access.
- 4.1.3 The skips will be loaded and unloaded at:
- *North Quay in the Portsmouth International Port, Whale Island Way, Portsmouth, PO2 8EB (Plate 1 and 2).*
- 4.1.4 Following confirmation of a drop off of material to shore, staff from Wessex Archaeology will attend the agreed laydown area at a time agreed with the client representative. It is expected that Wessex Archaeology staff will visit the quay once or twice per week, depending on the quantity of material recovered and the results of the assessments of the preliminary recording forms.
- 4.1.5 Wessex Archaeology staff will be subject to international port security, and will be provided with the same level of clearance as BWL staff.
- 4.1.6 Arrangements will be made for BWL to remove the material from the skips and lay it down on the quay side prior to the archaeological assessment. Whether this is done in the presence of Wessex Archaeology staff or prior to their arrival will depend on the material in the skip and advice provided by the marine archaeologists upon review of the preliminary recording forms. Wessex Archaeology staff must not be required to access the skips in order to record the archaeological material.
- 4.1.7 The on-site archaeologist(s) will visually review the material in conjunction with their corresponding preliminary reporting forms, if completed. Where reports have not been completed, Wessex Archaeology staff will review photographs and/or video footage against the items recovered in order to establish the time of recovery and an approximate location for the item, the material will be examined and should material of archaeological interest be confirmed, the material will be fully recorded on the lay down area.



- 4.1.8 Archaeological finds will be dealt with in accordance with the Archaeological Finds Strategy outlined in **Section 5**.
- 4.1.9 Quay side archaeological monitoring will be undertaken either by a team of two marine archaeologists, or by a single marine archaeologist if supported by a member of the dredge team staff to avoid lone working. The work will be undertaken as required and will be informed by the dredge vessel programme.
- 4.1.10 The quay side team will be supported by Caroline Budd, a Senior Project Manager at Wessex Archaeology, and by Andrea Hamel, a Senior Marine Archaeologist who will act as the main points of contact throughout the life of the project. Regular contact will be maintained with the dredge team/vessel throughout the dredging works.
- 4.1.11 Wessex Archaeology will ensure that consistency of staff will be maintained throughout the life of the project and that, where handovers of key staff members are necessitated, comprehensive briefings to new staff are provided to ensure understanding of the project in advance of staff changeover.

## 5 ARCHAEOLOGICAL FINDS STRATEGY

- 5.1.1 Following a discovery, Wessex Archaeology will provide initial advice on the appropriate measures to be implemented. These will include:
- *Advice on 'first aid' conservation for the finds;*
  - *The establishment of a TEZ for discoveries of high potential; and*
  - *Advice on further evaluation that may be required.*
- 5.1.2 Wessex Archaeology will then inform the MMO, Historic England, the Local Authority Historic Environment Officer, the Receiver of Wreck (as relevant to the terms of the Merchant Shipping Act 1995) and other stakeholders as appropriate.
- 5.1.3 All major archaeological finds and all artefacts identified from material recovered and stored in the quay side skip will be retained, processed and recorded in accordance with the ClfA's *Standard and Guidance for the collection, documentation, conservation and research of archaeological material* (2014).
- 5.1.4 Finds and other items of archaeological interest recovered offshore in the course of investigation are the property of The Crown Estate as the landowner, with the exception of all human remains, and 'wreck' for the purposes of the Merchant Shipping Act 1995.
- 5.1.5 Objects that require immediate conservation treatment to prevent deterioration will be treated according to guidelines laid down in *First Aid for Finds* (Watkinson 1987) and *First Aid for Underwater Finds* (Robinson 1998). A full record will be made of any treatment given.
- 5.1.6 Finds will be primarily conserved, bagged and boxed in accordance with guidelines set out in the United Kingdom's Institute for Conservation's (UKIC) *Conservation Guidelines No. 2* (UKIC 1984).



- 5.1.7 All finds will be registered in an overarching project database. Any special requirements of each find will be noted in the database.
- 5.1.8 In the event that the finds require assessment by further finds specialists or if external advice is required, Wessex Archaeology will obtain appropriate provision.
- 5.1.9 Where items are confirmed to be of archaeological interest, they will be transported to Wessex Archaeology's offices for further treatment. Where items are too large/heavy to allow removal the client representative will be consulted in order to establish either a suitable storage location on site or a means of lifting and transporting the material to Wessex Archaeology's offices.
- 5.1.10 Finds of archaeological interest will be deposited with Portsmouth Museum. The accession number for the archive is **2015/462**. All finds will be managed according to Portsmouth Museum Service's *Guidelines for the Acceptance of Archaeological Archives* (Portsmouth City Council, undated) (**Appendix 6**).
- 5.1.11 Where items are confirmed to be of limited or no archaeological interest, they will be moved to a disposal skip and will be permanently discarded.

## 6 ACTIVITIES SUBSEQUENT TO INVESTIGATIONS

- 6.1.1 Details regarding the activities subsequent to investigations, including finds assessment, monitoring fieldwork, and archiving can be found in **Section 7** of the WSI (Wessex Archaeology 2015a).

## 7 REPORTING

- 7.1.1 The report will be prepared in accordance with the guidance given in the relevant Standard and Guidance documents produced by the ClfA. Reports will typically include:
- *A non-technical summary;*
  - *The aims and methods of the work;*
  - *The results of the work, including finds and environmental remains;*
  - *A statement of the potential of the results;*
  - *Proposals for further analysis and publication (if appropriate); and*
  - *Illustrations and appendices to support the report.*
- 7.1.2 A draft of the document will be submitted to Historic England by RHDHV for comment and agreement. Any comments received from Historic England will be collated and addressed accordingly to produce the final report.
- 7.1.3 This report will be submitted in a format suitable for archiving requirements. If appropriate, a GIS layer will also be produced which will contain points and polygons indicative of the extents of any objects/sites identified during the archaeological assessment. This will be submitted to the National Record of the Historic Environment (NRHE).





- 7.1.4 However, these deliverables will not be issued into the public domain until such time as the overall mitigation work is published. This approach is necessary in order to comply with confidentiality issues.
- 7.1.5 Details of the assessment will be submitted online to the OASIS (Online Access to the Index of Archaeological InvestigationS) database. The task will be completed on publication of the agreed and final report with notification provided to the MMO.

## 8 HEALTH AND SAFETY

- 8.1.1 Details regarding Health and Safety can be found in **Section 9** of the WSI (Wessex Archaeology 2015a).
- 8.1.2 Wessex Archaeology operates a system of risk assessment for all tasks carried out by staff on or off company premises and if any site visits or works (either onshore or offshore) are carried out by Wessex Archaeology. As part of any works, an Incident Investigation and Reporting Procedure (IIRP) will be put in place, identifying client notification emergency contact procedures.
- 8.1.3 The project activities outlined in this Method Statement are based on site, and a project specific Risk Assessment will be developed, and would be available on request.

## 9 REFERENCES

BMAPA and English Heritage (now Historic England), 2005, *Protocol for Reporting Finds of Archaeological Interest*. Available online at <http://www.bmapa.org/documents/fullreportingprotocol2005.pdf>, accessed July 2015.

Boskalis Westminster Limited, 2014, Project Execution Plan for Queen Elizabeth Class (QEC) Capital Dredge Project, Her Majesty's Naval Base (HMNB) Portsmouth. Report Reference 826-10205.

Chartered Institute for Archaeologists 2004: *Guidelines to the Standards for Recording Human Remains*, IFA Paper No. 7.

Chartered Institute for Archaeologists, 2014, *Standard and guidance for the collection, documentation, conservation and research of archaeological materials*. Available online at [http://www.archaeologists.net/sites/default/files/node-files/CI-fAS&GFinds\\_1.pdf](http://www.archaeologists.net/sites/default/files/node-files/CI-fAS&GFinds_1.pdf), accessed July 2015.

Maritime Archaeology Ltd. 2006, Assessment of Vibrocores and Grab Samples – HMNB Portsmouth Approach Channel and Harbour. Report Reference 1764.

Maritime Archaeology Ltd. 2007a: HMNB Portsmouth Approach Channel and Harbour EIA. Report reference 1741.

Maritime Archaeology Ltd., 2007b, HMNB Portsmouth Approach Channel Dredge: Field Activity and Site Inspection Report. Report reference 1776.



Portsmouth City Council, undated, Appendix 6: Portsmouth Museum Service: Guidelines for the Acceptance of Archaeological Archives.

Robinson, W. 1998: *First Aid for Underwater Finds*. London: Archetype Books.

Royal HaskoningDHV, 2012a, HMNB Portsmouth Approach Channel Dredging and Associated Works. ES, Volume II: Environmental Statement. Report reference 9W6446.

Royal HaskoningDHV, 2012b, HMNB Portsmouth Approach Channel Dredging and Associated Works Scoping Report.

Royal HaskoningDHV 2013: HMNB Portsmouth Approach Channel Dredging and Associated Works: Archaeological Written Scheme of Investigation. Report reference 9W6446.

Royal HaskoningDHV, 2015, HMNB Portsmouth Approach Channel Dredging and Associated Work Project – Archaeological Written Scheme of Investigation – Supplementary Figures and Historic Environment Gazetteer. Report reference PB2131/R/304514/Lond. United Kingdom.

United Kingdom's Institute for Conservation, 1984, *Conservation Guidelines No. 2*.

Watkinson, D. 1987: *First Aid for Finds*, 2<sup>nd</sup> edition. Hertford/London: Rescue/UKIC Archaeology Section

Wessex Archaeology, 2003, Portsmouth Regeneration Project – Portsmouth Approach and Portsmouth Harbour: Archaeological Desk-Based Assessment. Report reference 53668.02.

Wessex Archaeology, 2004a, Portsmouth Regeneration Project – Portsmouth Approach: Geophysical Survey Report. Report reference 54424.02.

Wessex Archaeology, 2004b: Portsmouth Regeneration Project: Assessment of Archaeological Potential. Report reference 55870.01.

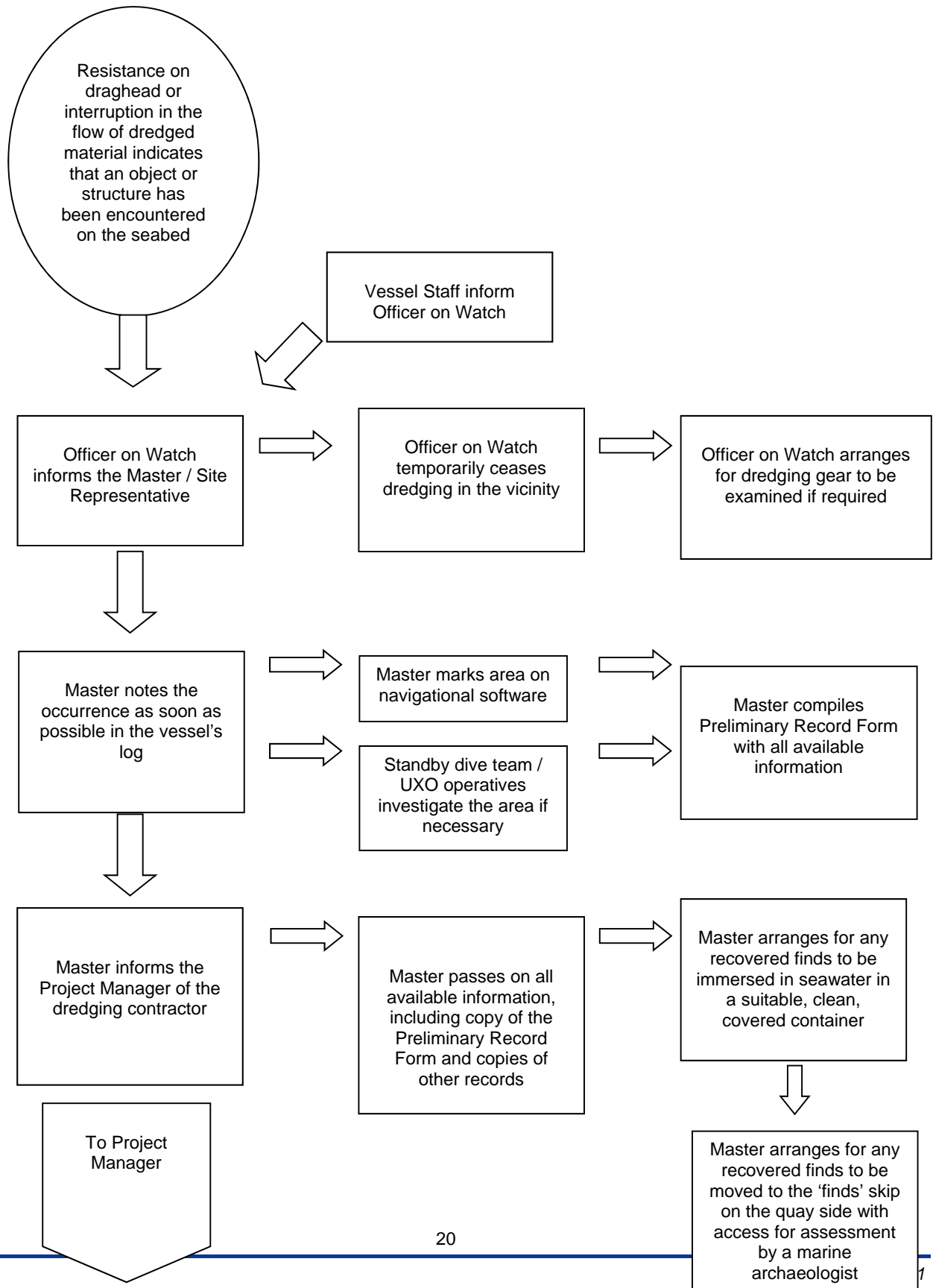
Wessex Archaeology, 2015a, Queen Elizabeth Class Capital Dredge Project, Her Majesty's Naval Base Portsmouth: Archaeological Monitoring and Mitigation: Written Scheme of Investigation. T18613.

Wessex Archaeology, 2015b, Queen Elizabeth Class Capital Dredge Project, Her Majesty's Naval Base Portsmouth, Stage 1 Geoarchaeological Review of Geotechnical Logs and Preliminary Recording of Geotechnical Samples. Report ref: T18613.02.





## APPENDIX 1: ACTIONS ON THE DREDGING VESSEL - ANOMALIES ON THE SEABED OR FINDS RECOVERED FROM THE SEABED



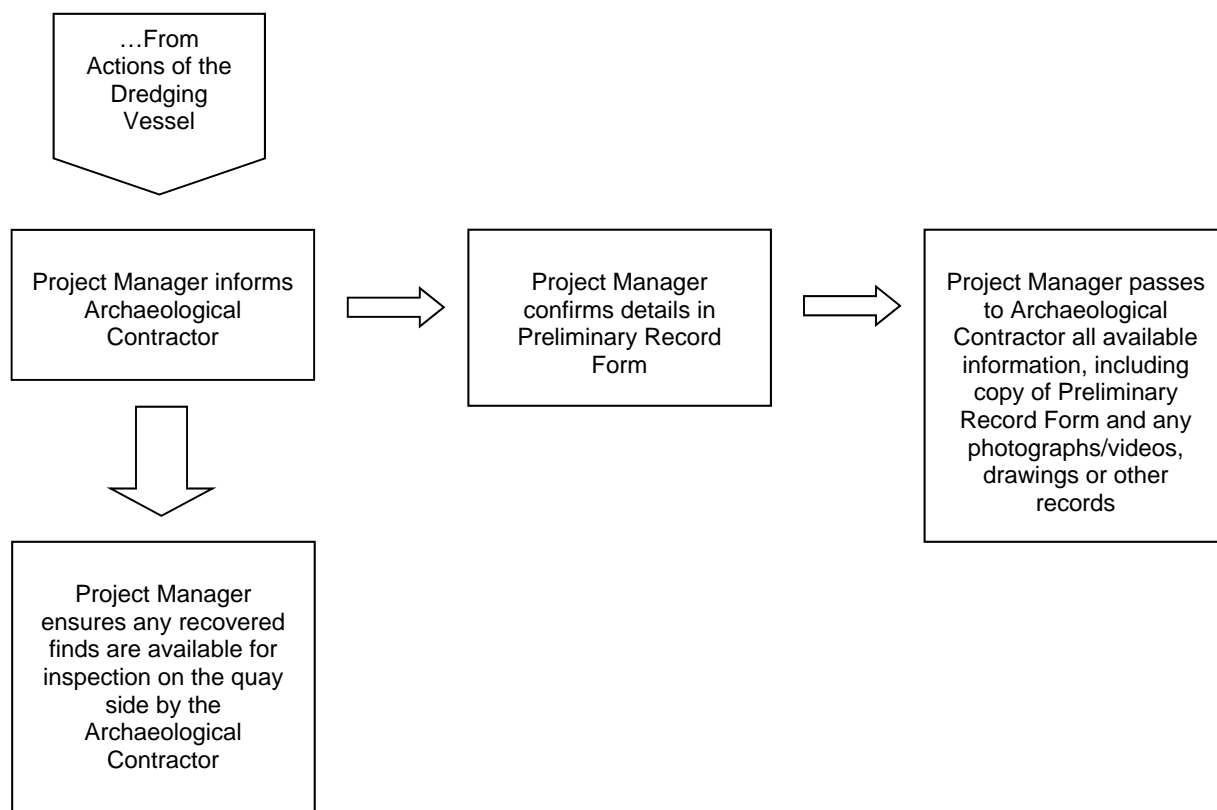


## APPENDIX 2: PRELIMINARY RECORDING FORM

		Unique ID:
Date:	Name of Report Compiler:	Contact details:
Vessel Name:	Dredging Area:	Name of Master:
Name of Officer on Watch:	Name of Finder:	Time that anomaly was encountered / find discovered
Vessel position at time when the anomaly was encountered / find discovered:		
BNG Eastings:	BNG Northings:	Datum (if different from BNG):
Notes on position given: ie: How accurate is the position given above? Is the position the original position of the anomaly on the seabed or have operations moved the material some distance from its original location?		
Description of the anomaly / find:		
For Anomalies: Apparent extent of anomaly: m long x m wide x m above general level of seabed:		
For Anomalies: Extent of deviation and of route development:		
For Finds: Details of any photographs, drawings or other records made of the find:		
For Finds: Details of any treatment given to the find:		
Date and time at which Project Manager was informed:	General notes:	



### APPENDIX 3: ACTIONS FOR THE PROJECT MANAGER





## **APPENDIX 4: GUIDELINES FOR IDENTIFYING FINDS OF ARCHAEOLOGICAL INTEREST**

This text is based on the categories outlined in the Protocol for Reporting Finds of Archaeological Interest, published by the British Marine Aggregate Producer's Association (BMAPA) and English Heritage (now Historic England), 2005.

### **Bone**

#### *Major Archaeological Finds*

Human bone is definitely of archaeological interest and is also subject to special legal requirements under the Burial Act 1857. Any suspected human bone should be reported and treated with discretion and respect.

Large quantities of animal bone may indicate a wreck (the remains of cargo or provisions) and should be reported.

#### *Intermediate Archaeological Finds*

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.

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.

### **Pottery**

#### *Intermediate Archaeological Finds*

Any fragment of pottery is potentially of interest, especially if it is a large fragment. Items with unusual shape, glaze or fabric should be reported.

#### *Minor Archaeological Finds*

Items which look like modern crockery would be considered to be a minor archaeological find, until further assessment.

### **Brick**

#### *Intermediate Archaeological Finds*

Bricks that do not have v-shaped hollows ('frogs') and/or are small, thin, or generally appear different than modern bricks could date back to the medieval or Roman period and should be reported.

#### *Minor Archaeological Finds*

Bricks with modern proportions and 'frogs' are of little to no archaeological interest.



## **Wood**

### *Major to Intermediate Archaeological Finds*

If the material discovered on the seabed, or recovered to the surface, appears to represent material from a wreck site, it must 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. Roundwood that has clearly been shaped or made into a point should be reported.

### *Minor Archaeological Find*

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.

## **Peat and Clay**

### *Major Archaeological Find*

Peat is black or brown fibrous soil that formed when sea-level was so low that the seabed formed marshy land, on the banks of a river or estuary, for example. 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. 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 such as stone tools, including hand axes, 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.

Fine-grained sediments such as silts and clays are often found in 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.

### *Intermediate Archaeological Finds*

Isolated discoveries of peat or clay.

## **Stone**

### *Major Archaeological Finds*



The recovery of numerous stones may indicate the ballast mound of a wreck or a navigational cairn, and all occurrences should be reported. Additionally, if a large concentration of stone material (as described below) is encountered, it would also be considered a major archaeological find.

#### *Intermediate Archaeological Finds*

Small to medium size stones that are shaped, polished and/or pierced may be prehistoric axes. Objects such as axe heads or knife blades made from flint are also of prehistoric date. 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.

#### **Rubber, Plastic, etc.**

##### *Major Archaeological Finds*

If rubber and plastic materials are discovered in the same area as aluminium objects and structures, they could indicate wreckage from a World War II aircraft, and therefore this material should be reported.

##### *Minor Archaeological Finds*

Except for the above, in most cases, rubber, plastic, Bakelite and similar modern materials are of little to no archaeological interest.

#### **Iron and Steel**

The potential range and date of iron and steel objects is so wide that it is difficult to provide general guidance. However, the following provides an outline of what might constitute a major or intermediate find.

##### *Major Archaeological Finds*

If the material discovered on the seabed, or recovered to the surface appears to represent material from a wreck site.

If an area contains numerous 'concretions' (iron and steel objects covered by a thick amorphous concrete-like coating), it could represent a wreck site, and should be treated as a major archaeological find.

A concentration of pieces of metal sheet and structure may also represent a wreck site, and should be treated as a major archaeological find.

##### *Intermediate Archaeological Finds*

The discovery of an isolated anchor would be considered to be an intermediate archaeological find, however, if it is discussed in association with timber or iron and steel material as discussed above, it could be part of a wreck site.



Isolated concretions, pieces of sheet metal and/or structure may also be of archaeological interest, and should be reported.

#### *Minor Archaeological Finds*

Isolated modern material, such as lost fishing gear, would be considered a minor archaeological find.

### **Other Metals**

#### *Major Archaeological Finds*

Aluminium objects may indicate aircraft wreckage from World War II, especially if two or more pieces of aluminium are fixed together by rivets. All occurrences should be reported.

Concentrations of copper and copper alloy (bronze, brass) objects, precious metal objects and coins are of interest, as they could indicate a wreck site.

#### *Minor Archaeological Finds*

Items made of thin, tinned or painted metal sheet are unlikely to be of archaeological interest.

Isolated discoveries.

### **Ordnance**

Any ordnance that is discovered should be dealt with based on the company UXO policy, as safety takes priority over archaeological objectives. However, discoveries of ordnance may be of archaeological interest (including cannonballs, bullets and shells), and they should be reported.



## APPENDIX 4: GUIDELINES FOR ARTEFACT HANDLING AND STORAGE

It should be noted that 'time is of the essence' in terms of the recovery of wet archaeological material. If organic objects such as wood are allowed to dry out, this can cause irreparable damage. Care in handling items is therefore paramount. A recovered object should be handled and stored in the following manner, particularly those identified as major archaeological finds:

- *Handle all material with care;*
- *Do not remove any rust, sediment, concretion or marine growth and do not separate 'groups' of items or sediments;*
- *All objects should be kept completely immersed in sea water if possible; if this is not possible because of their size, they should be kept damp and wrapped in plastic to prevent them drying out;*
- *Objects should be kept in clean storage containers, preferably rigid plastic boxes with lids, which should be kept in a safe, sheltered location (preferably cool and dark); large objects that will not fit in containers should be kept covered so that they do not dry out;*
- *Each object should be marked with its unique number, either by means of a tag attached to the object(s) or by writing the number on the bag that it is stored on. If this is not possible, photographs of the artefact with a label clearly displayed on it should be taken, in order for the artefact to be identified later;*
- *Each small object should be kept in its own zip-lock plastic bag;*
- *Any sediments of interest should be collected and double-bagged into zip-lock bags, if possible; and*
- *If particularly delicate or significant items are recovered, Wessex Archaeology should be contacted as soon as possible for further advice.*





**APPENDIX 6: ACTIONS FOR THE PROJECT MANAGER**

**APPENDIX 7**

**PORTSMOUTH MUSEUM SERVICE**

**GUIDELINES FOR THE  
ACCEPTANCE OF  
ARCHAEOLOGICAL  
ARCHIVES**



**Portsmouth**  
CITY COUNCIL



## **Guidelines for the Acceptance of Archaeological Archives**

If you are intending to donate archaeological material to Portsmouth Museum Service, it will help if you have read the following guidelines, which should assist you in organising and preparing the archive to the standard required by the service. If you have any queries about any part of this document, please contact the Museums and Records Service at the earliest opportunity.

### **Contents.**

- i. Introduction.**
- ii. The Museum & the Archive.**
- iii. Structure of the Archive.**
- iv. Accession Numbers & Site Codes.**
- v Consultation.**
- vi. Storage Costs & Conditions.**
- vii. Legal Title.**
- viii. Copyright.**
- ix. Archive Acceptance.**

- 1. Definition of the Archive.**
  - 1a. Documentary Archive.**
  - 1b. Object Archive.**
- 2. Packing Materials in the Archive.**
  - 2a. Bulk Finds - non sensitive.**
  - 2b. Bulk Finds - sensitive.**
  - 2c. Registered Finds.**
- 3. Marking Materials in the Archive.**
  - 3a. Locating the mark.**
  - 3b. Bulk Finds.**
  - 3c. Registered Finds.**
  - 3d. Documentary Archive.**
- 4. Photographic Record.**



## i. Introduction

Following the retrieval of archaeological data, it is essential that an ordered archive is produced and lodged with a suitable, registered museum.

Within the boundaries of Portsmouth City, Portsmouth Museum Service is the recommended repository for archaeological archives originating from work carried out within the city's boundaries.

Historically, Portsmouth Museum Service has collected archaeological material from within the city's boundaries and within a 15 mile radius from the city centre, taken from the Guildhall. Priority is given to material from within the city's boundaries.

The study of the past is a complex subject and demands the consideration of as many objects and as much information as possible in order to build up a complete picture. It is for this reason that it is essential for the museum to obtain the archive from scientifically conducted work carried out within our collection area and preserve it for the future. This document sets out the **current minimum criteria** for the acceptance of archaeological archives by the Museum Service and provides guidelines for archaeological contractors, Universities, local societies and other groups carrying out archaeological work, in the preparation of the archive.

The guidelines will be revised and refined as circumstances dictate. Regular contact with the museum regarding all stages described in this document is recommended.

## ii. The Museum and the Archive

The Museum Service will accept the total archive from any systematic archaeological work within the City of Portsmouth, provided that it meets certain requirements. These are designed to facilitate the storage, retrieval and future study of the material. The main consideration is the integrity of the archive. In order to be of the fullest use for study it is important that both the paper and the object archive are stored together. There will be occasions when this is not possible and the museum will accept paper archive (or a full copy) if it proves impossible to donate the object archive. This, however, should be regarded as an exception rather than a rule.

Retrieval for study and study itself is greatly facilitated if a standard format is adopted in the production and management of an archive and the procedures which the museum prefers to see adopted are as set out below.

## iii. Structure of the archive

The archive is defined as the total assemblage of artefacts and records from an excavation or field survey and should ideally include the documentary element, the bulk finds and the registered finds.

- i. The documentary element including paper, magnetic media and microform copies.
- ii. Photographic archive, including: slides, prints, negatives.
- iii. The object archive.
- iv. The archive should include records of all material disposed of during sampling, items selected for destructive analysis and in the case of an incomplete archive, details of material which is stored elsewhere.



#### **iv. Accession numbers and site codes**

The museum will assign accession numbers to a project at its inception and this should be of value to the originator as well as to the museum as it will eliminate duplication of site codes and provide a unique reference to that intervention.

Therefore: As early as possible within the project timetable and certainly before fieldwork commences, the originator must contact the museum to check that the proposed archive falls within the museum's collection parameters.

The museum service will then assign an accession number/numbers for the site and agree a site code.

Wherever possible, the originator should provide the Museum Service with a provisional timetable for the transfer of the archive.

#### **v. Consultation**

It is advisable for the museum to be consulted during the course of the project in order to reach agreement on the material to be retained in the object archive. Space within the store is very limited and for certain categories of bulk finds sampling is probably the answer, but this should be discussed by the project organisers and the museum as there are recognised guidelines for sampling and dispersal. It is essential that advice is taken from a Conservator as early as possible in the project and throughout, so as to minimise damage to the object element of the archive.

#### **vi. Storage costs and conditions**

The long term storage of archaeological archives is very expensive, and therefore a one off storage fee will be charged, based on English Heritage units of 0.017 cubic metres. (Standard cardboard box size). Please consult the Registrar about current charges.

Small scale interventions with limited funding will be considered separately and the fee may be waived in exceptional circumstances.

#### **vii. Legal Title**

In line with current best practice, Portsmouth Museum Service no longer accepts material on long term loan. Owners wishing to deposit material with the service will be asked to transfer title to us.

In the case of planning instigated projects the relevant archaeological contractor will be responsible for ensuring that the donor has the legal right to dispose of the archive. Transfer of Title forms are available from the museum. It will not usually be possible to persuade the land owner to donate the archive in advance of the work, though this would be ideal, but permission to deposit the paper archive or a full copy must be obtained at an early stage and accession numbers will only be assigned on this basis.

#### **viii. Copyright**

The copyright to the archive will remain with the originators, but Portsmouth City Museums and Records Service will expect to be given full licence to use the documentary archive for educational, public and research purposes.



## **ix. Archive Acceptance**

If a deposited archive adheres to the requirements of this section, then it will be formally accepted. Formal acknowledgement of the museums acceptance of the archive will be provided.

### **1. Definition of the Archive**

The archive is defined as the total assemblage or artefacts, ecofacts and records pertaining to an intervention and falls into two main areas, the documentary element and the object element.

#### **1a. Documentary Archive**

1. copies of correspondence relating to fieldwork
2. survey reports
3. site notebooks/diaries
4. original photographic records
5. original context records
6. site drawings
7. original finds records
8. records of conservation undertaken during fieldwork
9. original sample records
10. original skeletal records
11. computer discs and printouts together with list of codes used and details of software involved
12. full site matrix
13. summary of context record
14. summary of artefact record
15. summary of environmental record
16. preliminary conservation assessment
17. summary of the nature and quantity of the total archive by type

The Map 2 Post Excavation Assessment

The Map 2 Research archive

1. context information
2. photographic catalogue
3. photographic record
4. stratigraphic drawings
5. object catalogues
6. object drawings
7. X-rays and catalogue
8. conservation records
9. site narrative
10. specialist reports
11. all original material produced as part of the preparation of the final report
12. the final report site summary containing administrative details about the site
13. an index to the contents of the archive
14. a microform copy of the documentary archive

#### **1b. Object Archive**

This category includes:



1. Bulk finds, non sensitive
2. Bulk or group finds, sensitive
3. Stonework
4. Registered finds.

## **2. Packing Materials in the Archives**

### **2a. Bulk finds — non sensitive.**

1. The majority of pottery and animal bone will be considered as bulk non- sensitive finds and will not require detailed accessioning.
2. They should be stored in re-sealable pierced polythene bags within standard cardboard boxes. Both the bags and the boxes must be marked directly (do not use adhesive labels) with the accession number, site code and context number.
3. Material from more than one context may be stored in the same box but must be bagged separately and the box clearly marked with all relevant context numbers.
4. Finds should be stored by material type and in context number order
5. Material extracted for illustration should be boxed separately to allow easy access for researchers. Proxy cards should be placed in the context boxes from which they have been taken.
6. If several parts of an artefact found in several different contexts are drawn together for research they may be stored together under the lowest context number, but again proxy cards should be inserted in the appropriate boxes.
7. Stonework and larger architectural ceramic material should have the site code, accession number and object number marked discretely in paint.

### **2b. Bulk Finds — sensitive**

*These should not be packed with the non sensitive material.*

1. Human skeletal material. These should be bagged by skeletal area. Upper and lower limb bones separately on each side, axial skeleton, hands and feet individually and the skull carefully supported and placed in a skull box.
2. Iron Nails. These should be stored in re-sealable pierced polythene bags within polythene boxes containing silica gel and humidity indicator card.
3. Leather should be packed in pierced polythene bags by context and stored within black polythene boxes.
4. Slag should be stored in pierced polythene bags by context within polythene boxes.
5. Small mammalian, avian or piscine bones should be packed in small polythene boxes and then placed in the box with the rest of the bone from the context.
6. Friable pottery, sherds of tinglazed wares and porcelain need special attention. They should be stored in pierced polythene bags or polystyrene boxes and then placed in a polythene box which will be stored in the cardboard box relevant to the context.
7. Shell and charcoal samples should be stored in pierced polythene bags and boxes.

### **2c. Registered Finds**

*These include finds that are registered on site and those that are considered to be worthy of registration in hindsight. They may be both sensitive and non —sensitive, but for purposes of packing and marking should be treated as sensitive.*



1. Advice on the marking and packing of registered finds should be sought from a registered conservator if there is any difficulty or doubt.
2. Registered finds should be packed for long term storage and should be physically and chemically stable.
3. They should be boxed by material type and within this by registered find number.
4. They should be stored in sealable polythene boxes.
5. Waterlogged or unstable material must be treated and stabilised before transfer to the museum.
6. Different material types should not be stored in the same box except in the case of composite items.
7. Do not overfill the boxes.
8. All bags and boxes should be marked with accession number, site code, context and registered find number. Bags and Boxes should be marked in lightfast permanent ink.

### **3. Marking Materials in the Archive**

#### **3a. Locating the mark.**

The following considerations should be borne in mind.

1. Avoid physically unstable areas.
2. Avoid decorated, painted, pigmented, varnished or waxed areas.
3. Choose a position that it not likely to be visible when the object is on display.
4. Avoid areas where the mark is at risk from abrasion.
5. Mark all detachable parts of an object.
6. In a multi media object, mark the part of the object that can be marked most securely, bearing in mind the points above.
7. Where possible, standardise the position in which each class of objects is marked.
8. Where the object is made of a material difficult to mark, a Tyveck type label should be placed in the bag with the object. Large pieces of wood should have a label attached to them using terylene cord and aluminium clout nails or copper tacks.

#### **3b. Bulk Finds**

1. Mark all bone, pottery, ceramic building material, ceramic pipes, glass and flint directly, using colour-fast permanent ink.
2. Mark mortar or wall plaster, wherever possible, directly using oil or acrylic paints or permanent colourfast ink.
3. Mark stonework and large ceramic building materials directly, using oil or acrylic paint.

#### **3c. Registered Finds**

1. Mark all items except those whose surfaces are decorated. (See Locating the mark above).
2. Apply a layer of Paraloid varnish to the area to be marked to act as a barrier between the ink and the object.
3. Once the varnish is dry, mark using a permanent colour fast ink and allow to dry.
4. Coat mark with a layer of Paraloid varnish.
5. Mark large items with oil or acrylic paints using a fine brush.
6. ALWAYS CONSULT A QUALIFIED CONSERVATOR IF ANY DOUBT ABOUT MARKING REGISTERED FINDS.



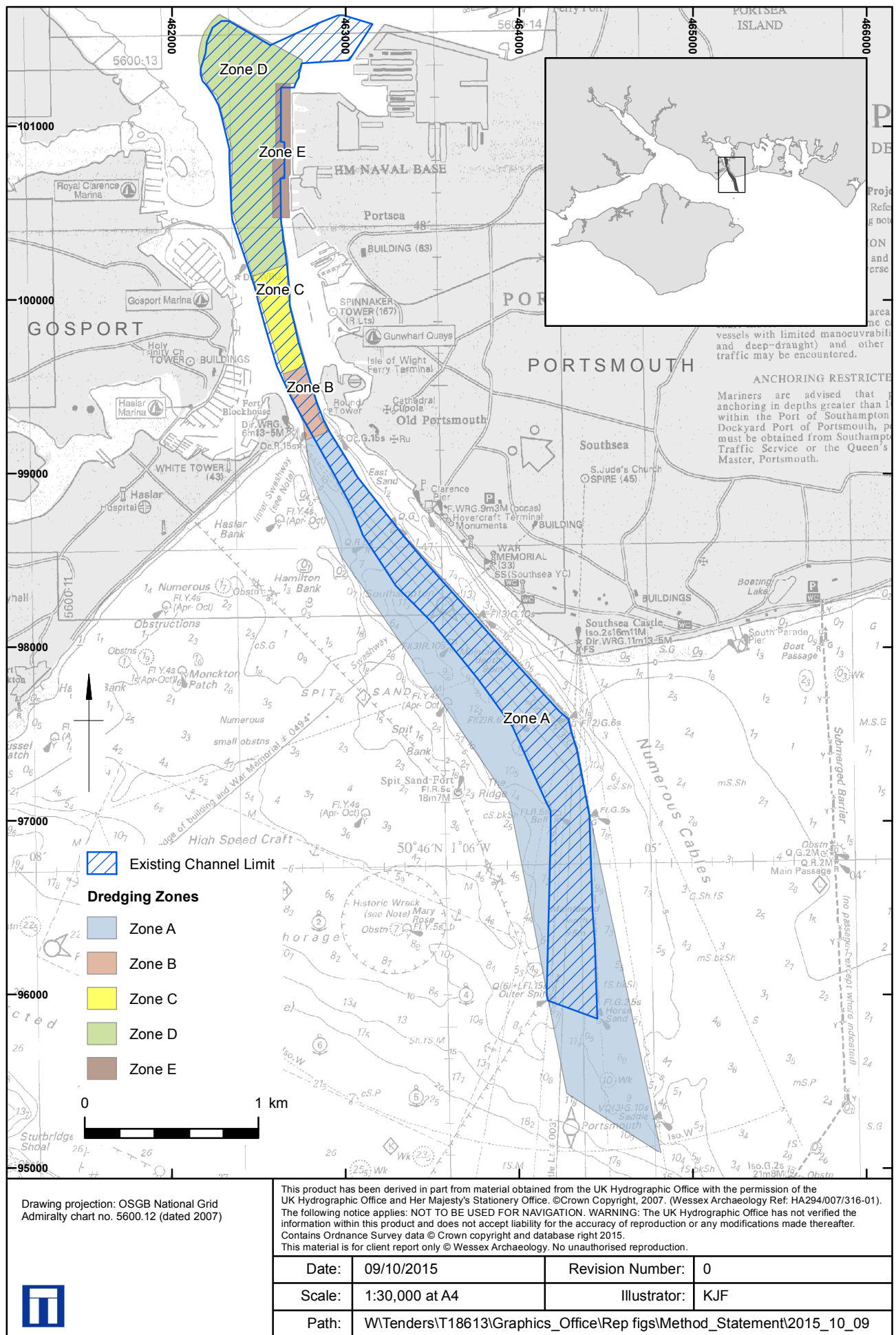
### **3d. Documentary Archive**

1. All paper materials should be marked in two places in pencil with the museum accession number.

### **4. Photographic Record.**

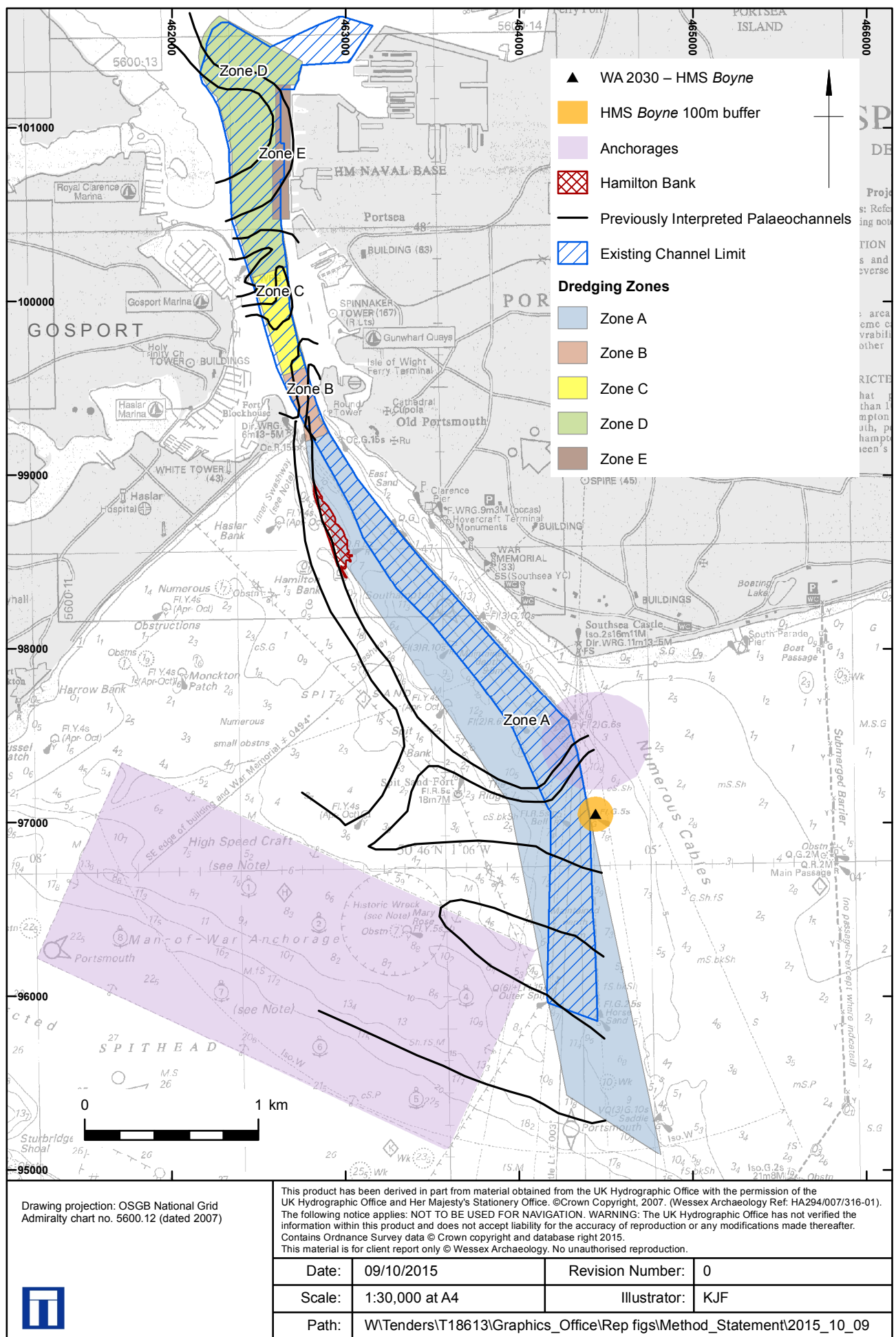
1. Slides should be mounted in archive standard slide wallets for filing cabinets.
2. Each slide should be individually numbered, (write on the slide mount, do not use stickers.) each set of slides should be accompanied by an A4 sheet with a brief description of each slide.
3. Negatives should be mounted in archive standard slide wallets for ring binders.
4. Each set should be accompanied by an A4 sheet with a brief description of each negative.
5. Prints: Please consult the Registrar regarding prints.





Study Area

Figure 1



Areas of Archaeological Interest in Relation to Dredging Zones


Figure 2



Plate 1: General location of Quay Side Archaeological Monitoring



Plate 2: Detailed view of Quay Side Archaeological Monitoring area

	Images supplied by client. This material is for client report only © Wessex Archaeology. No unauthorised reproduction.		
	Date:	09/10/2015	Revision Number: 0
	Scale:	N/A	Illustrator: KJF
	Path:	w\Tenders\T18613\Graphics_Office\Rep figs\Method_Statement\2015_10_09	