

**Minutes**

**HaskoningDHV UK Ltd.  
Industry & Buildings**

**Present:** Christopher Pater (CP) (Historic England), Matthew Kinmond (MK) (Marine Management Organisation), Louise Tizzard (Wessex Archaeology), David Smart (Anthony D Bates Partnership), Steve Rawlings (SR), Sharon Higenbottom, Owen Balmont and Josie Sinden (Dover Harbour Board), Victoria Cooper (VC) (Royal HaskoningDHV)

**Apologies:** David Herrod (Dover Harbour Board)

**From:** Royal HaskoningDHV

**Date:** 18 July 2017

**Location:** Harbour House, Dover

**Copy:** Caroline Price (Royal HaskoningDHV)

**Our reference:** I&B/PB1552/304514/N034

**Classification:** Open

**Enclosures:**

**Subject:** **Goodwin Sands Marine Licence Application – Heritage Update and Results of Geophysical Survey**

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<b>Number</b>	<b>Details</b>	<b>Action</b>
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<b>1</b>	<b>Welcome and introductions</b>	
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Matthew Kinmond and Louise Tizzard present on phone, all other attendees present in person.

<b>2</b>	<b>Dover Western Docks Revival (DWDR) programme update</b>	
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SR provided an update on the DWDR programme.

DHB advised that their contractors VolkerStevin BoskalisWestminster (VSBW) mobilised in Jan 2017 and that the general progress of their works is ahead of their original schedule.

VSBW have indicated that reclamation works are due to commence in September 2017 and that they will be completed by the end of March 2018. VSBW will require approximately 1.2 million m<sup>3</sup> for these works.

VSBW have been instructed by DHB to source aggregate from an alternative licenced marine site in order not to delay the start of reclamation in September. If the Goodwin Sands licence application has been successfully approved before completion of this phase of works, the intention will be to switch to using the Goodwins Sands site as soon as possible as this represents a more economic option for the project.

DHB will require an additional 1.2 million m<sup>3</sup> for reclamation

works to infill Granville Dock, the Tidal Basin and part of the Wick Channel during a further phase of the DWDR project which will commence in 2019.

VC provided an update on the archaeological discoveries reported through the protocol and the excavation of the navigation cut.

CP queried the location and condition of the anchors reported through the protocol. VC confirmed that these were stored in a secure quay area adjacent to the Cruise Terminal and that the anchors were in good condition.

### 3 **Results of 2017 geophysical survey and assessment by Wessex Archaeology**

VC presented the results of the geophysical data assessment undertaken by Wessex Archaeology:

- 0 anomalies of anthropogenic origin of archaeological interest
- 305 anomalies of uncertain origin of possible archaeological interest
- 1 historic record of possible archaeological interest with no corresponding geophysical anomaly (7006 as recorded in the ES)
- 9 anomalies of uncertain origin of possible archaeological interest but outside vertical footprint (below 2.5m depth)
- Anomalies are concentrated along the western edge of the overall survey area where sand coverage is lower
- The comparison of bathymetric data from 2015 and 2017 surveys shows that:
  - the edge of the central and southern portion of the sandbank has moved in excess of 70 m to the east
  - the northern edge of the bank has shifted westwards into the proposed dredge area
  - sands levels within parts of the northern area have risen by as much as 10m

### 4 **Proposed mitigation measures and approach to dredging**

Archaeological Exclusion Zones (AEZs)

- no new AEZs have been recommended
- existing AEZs (50m around 7006 and 100m around the recorded location of *Britannia*) as specified in the ES and in the draft Written Scheme of Investigation (WSI) recommended for removal for following reasons:
  - the original descriptions of both do not provide

VC to update draft WSI to include details of revised mitigation measures

substantiated information to confirm that archaeological material has ever been physically recorded at these locations

- nothing has been seen at these locations in repeated surveys by the UKHO
- nothing was seen at these locations in the 2015 or 2017 data
- a single magnetic anomaly of 98nT is located within the proposed dredge area within the 100m *Britannia* AEZ and this will be avoided (see Precautionary Exclusion Zones (PEZs) below)

- CP confirmed that there is no archaeological reason to retain the AEZs although DHB may wish to retain them for operational reasons
- SR confirmed that DHB would retain them as PEZs for operational purposes

#### PEZs

- Wessex Archaeology recommended avoiding each of the 305 anomalies of uncertain origin of possible archaeological interest
- As set out in the draft WSI it has previously been established that a 25m PEZ around the extent of each anomaly would be implemented
- DHB confirmed that a 25m PEZ around each of the anomalies would be implemented and fully avoided during dredging. This will inform targeting of dredging within areas free from PEZs
- CP queried if any of the anomalies/PEZs coalesce to show areas of archaeological potential. VC confirmed that there are areas along the western edge where several anomalies are grouped in fairly close proximity but that this area will be avoided with a focus on areas to the north and east where sand levels are deeper.
- CP queried the location of the group of O2 anomalies seen in the geophysical data below 2.5m. VC confirmed that this group is located adjacent to the north eastern edge within the survey area buffer (with the exception of 7317 which is located just inside the proposed dredge area)
- CP requested that the updated WSI include a sequence of illustrations showing the detail of the different areas to inform understanding of how these anomalies are grouped

#### Protocol for Archaeological Discoveries

- CP queried if Boskalis Westminster are part of BMAPA
- MK believed that they are not part of BMAPA although

VC to provide scope of mitigation for CP highlighting areas in the draft WSI which will be updated.

VC to consult with colleagues on the updated requirements for the PMP to inform the updated WSI.

DHB to prepare a drawing showing details of proposed dredging

they are required to adhere to the Marine Aggregate Industry Protocol as part of their Marine Licence conditions for their licenced areas.

#### Monitoring

- The Preliminary Monitoring Plan (PMP) and existing draft WSI prepared by Royal HaskoningDHV anticipated MBES survey before and after each phase of dredging across an area comprising the dredge area, a 1km buffer (which incorporates the site of the protected wreck *Admiral Gardner*), the Zone of Influence (defined in the ES as the maximum extent of influence of physical processes) and the locations of the protected wrecks *Restoration* and *Northumberland*.
- MK believed that the MMO comments on the PMP included a request for backscatter also to be assessed within the dredged areas only either pre-or post- each phase of dredging. VC will consult colleagues to obtain details of an updated PMP to inform the updated WSI
- MK confirmed that EMS data will be required as a condition on the Marine Licence if granted to monitor vessel movements
- On-board monitoring will be through the means of an on-board observer to support the implementation of the protocol as set out in the draft WSI
- Discharge monitoring will comprise periodic monitoring visits by the archaeological contractor to support the implementation of the protocol

CP requested that in advance of the draft WSI being updated it would be useful for VC to provide a scope of mitigation highlighting the areas which will be amended in the draft WSI.

CP asked if further visual inspection of any of the anomalies was being carried out as previously suggested. VC confirmed that ROV survey was not being carried out:

- Conditions on the Goodwin Sands would impede the applicability of survey due to restricted visibility
- The majority of the anomalies are buried so would require intrusive excavation to investigate them
- DHB have confirmed that each anomaly will be avoided through the application of PEZs

CP requested, and DHB agreed, to produce a drawing, as part of the response to technical questions raised, which details concisely:

- Overall volume needed for the project
- Proposed dredge plot area
- Depth of dredge

- Details of pre and post dredge geophysical survey areas
- Details of PEZs

## 5 Goodwin Sands SOS independent review of data

VC explained that DHB have made the raw data available to Goodwin Sands SOS.

MK confirmed that they will consider any submission relating to any further work undertaken by Goodwin Sands SOS to review the data as they would consider any advice from the public as a consultee.

CP confirmed that HE would provide advice to the MMO under their role as the MMOs statutory advisor on the historic environment if requested to comment as part of the formal process.

When asked how Historic England would view any 3<sup>rd</sup> party interpretation of the raw data CP advised that they would only consider an interpretive report produced as part of any licence application which had considered good stewardship and was in line with good environmental practice.

VC explained that the larger number of anomalies reported by Clintons in comparison to the Wessex interpretation (771 in total) is due to the fact that anomalies have not been grouped. LT explained how Wessex pick anomalies representing seabed features (i.e. an MBES, sidescan sonar and magnetometer anomaly all associated with the same feature would be presented as a single anomaly, whereas Clintons report each anomaly individually). LT also suggested that several anomalies have not been picked as they are not archaeological e.g. where a small magnetic anomaly is considered to represent background geological variation).

Wessex Archaeology have kept a detailed list of which anomalies picked by Clintons they have not included and, in order to provide maximum detail to support the MMO decision making progress this list will be included with the updated technical report.

The focus will be on supporting the identification of the anomaly free areas as this will be the focus for DWDR dredging.

If an alternative report is provided by Goodwin Sands SOS then DHB can arrange for a further meeting (with MMO, Historic England (as the MMO's Specialist Advisor), Wessex Archaeology and Royal HaskoningDHV) to discuss the results

DHB to discuss potential for submitting draft technical report/short note outlining results to Goodwin Sands SOS.

in comparison to the existing interpretations if warranted.

## 6 **Responses to last round of public consultation and Further Information Report**

VC informed CP that the answers to questions asked previously would be provided in the upcoming FEIR submission but that, where relevant, updated information would be included to demonstrate how the 2017 geophysical survey provides more detailed evidence.

CP confirmed that complete clarity is essential and any information should be communicated as appropriate to the key points addressed through the updated WSI.

## 7 **Confirmation of areas of agreement and next steps**

### **Key Conclusion:**

Following a detailed examination of the geophysical data assessment undertaken by Wessex Archaeology, DHB can identify an area within the overall survey area where there are no identified anomalies. DHB anticipate that, in order to provide the required quantities of material for the project, dredging will involve only a shallow layer (c. 0.3m - 0.9m deep) suitable for extraction of sand by TSHD (Trailing Suction Hopper Dredger). This area will be quantified and an illustration of this area will be attached to the final version of these minutes.

DHB stated that they would want to re-visit the dredging dates specified in the original application to fit in with programmed construction dates. MK confirmed that this would need to be in line with the formal process and consider any impacts on the relevant receptors.

Minutes (this document) from the meeting will be provided as soon as possible to ensure full understanding of areas of agreement and next steps.

MK asked if DHB consent to these minutes being placed on the public register. SR and SH consented. This will also help to inform Goodwin Sands SOS and any other interested parties.

CP confirmed that if submission of revised documents to MMO would occur by 08/08 there would be no opportunity to review and offer any additional comments in the time available.

Submission of the FEIR is expected 8<sup>th</sup> August. Following the MMOs validation Historic England can expect to receive information from the MMO week commencing 14<sup>th</sup> August. The public notice will go out 17<sup>th</sup> August which commences the 42

day public consultation period.