

Please Reply To:  
**DELETED**  
3<sup>rd</sup> September 2016

Marine Management Organisation  
Lancaster House 3  
Hampshire Court  
Newcastle upon Tyne, NE4 7YH

[marine.consents@marinemanagement.org.uk](mailto:marine.consents@marinemanagement.org.uk)

Dear Sirs,

**Re: Dover Harbour Board Goodwin Sands Aggregate Dredging Scheme**  
**Your Ref: Marine Licence Application MLA/2016/00227**

The Nautical Archaeology Society (NAS) wishes to object to the above application. The NAS is a UK based charity (English Registered Charity No: 262209 and Scotland No: SC040130) and a limited company (registered in England No: 1039270). Its charitable objectives include, inter alia, *“To undertake and promote exploration survey photograph recovery conservation and other operations within the field of Nautical Archaeology”*.

**The Context of the Application**

The density of aircraft and shipwreck remains in English territorial waters is amongst the highest in the world. Within these waters the Goodwin Sands has the highest density of recorded shipping losses and thus the highest density of potential underwater cultural heritage (UCH) sites in England. The position is well illustrated by the two attached slides from the Society’s training material. The first illustrates the known shipping losses for the first six months of 1863, while the second illustrates the known shipping losses for 1876-1877. Given this density of historic shipping losses, there is on the Goodwin Sands a greater risk of uncovering and permanently damaging maritime heritage sites of national or international importance than in any other place on earth. This is recognized by the Applicant’s own Impact Review and the mitigation measures that have been proposed would not prevent this. Suitable material for construction that would allow Dover Harbour Board’s proposed works to go ahead are present elsewhere in the region. The dredging of aggregate for construction in the UK is a relatively common event with 314.3 million tons dredged from 1998 to 2012, 15% of which was recovered from the south east of England. The works proposed risk damage to internationally unique marine heritage features when suitable material is available within the region.

We would like to draw your attention to extracts from the Impact Assessment carried out by Royal Haskoning DHV on behalf of the Applicant. These are shown in italics with our comments added:

## The potential for archaeological discoveries

### 6.1.2 [Seabed Prehistory] Potential

*The feature seen in data by Wessex Archaeology (2015) is interpreted as a fluvial palaeochannel similar to those described above and could date from a range of periods between the Cromerian and the Early Holocene. As such, the sediments could contain both in situ and derived anthropogenic artefacts and preserved paleoenvironmental material.”*

### 6.2.2 [Maritime] Potential

*“Goodwin Sands represents a major hazard to marine navigation and, as such, has perhaps the highest density of recorded shipping losses in the UK (Wessex Archaeology, 2014). Many of the most important trade routes of northern Europe pass close to Goodwin Sands, which are located offshore of the Downs, formerly one of the most important commercial and naval anchorages off the English Coast. It has been estimated that over 800 shipwrecks have been documented on Goodwin Sands (Cant, 2013). This coupled with the difficulties of marking the position of wrecks, and consequently identifying and monitoring archaeological sites, means that the **potential for the presence of previously unrecorded wrecks on Goodwin Sands is very high.**”*

### 6.2.3 [Aviation] Potential

*“There is **high potential for the remains of crashed aircraft on Goodwin Sands**.....Despite the low number of documented losses from the study area, **the potential for aircraft remains to be present should be considered to be high.** The locations of many of the aircraft losses may not have been recorded accurately, particularly during wartime, while many others have been lost without record. As for maritime remains (Section 6.2.2), geophysical survey, the geomorphology of the proposed dredging area and historic dredging activities suggest that, while the survival of intact aircraft within the study area is possible, discoveries of disarticulated aircraft remains are more likely to occur.”*

### 6.1.3 Value of Archaeological Receptors

*“Discoveries of in situ archaeological and paleoenvironmental material are rare within the marine environment. Consequently any such discoveries will be of **high value.**”*

1. It is well accepted that the Goodwin Sands is one of the most important marine archaeological areas around England. The Sands have the highest density of historic wrecks designated under the Protection of Wrecks Act 1973 (*HMS Stirling Castle; HMS Restoration; HMS Northumberland; The Rooswijk; The Admiral Gardner*) In order to be designated all these wrecks must be of national or international significance. The potential for further discoveries of such significance is extremely high, given that the Sands have the highest density of recorded shipwrecks in English waters. Already one historic wreck has been discovered and damaged during dredging for construction works in Dover Harbour.

2. With this wealth of known and potential heritage assets it has been suggested that the Sands should be considered in future as an area of marine archaeological conservation. The Impact Report itself admits that there is a very high chance of finding nationally important UCH in the proposed dredging area.
3. In respect of the figure quoted of over 800 shipwrecks, intelligence on shipping losses was not collated in any detail until the mid-18<sup>th</sup> century so the potential for this figure to be much greater is very real. This is not adequately acknowledged in the Assessment.
4. The Impact report acknowledges the high potential for discovery of military aircraft remains, but fails to acknowledge the high potential for discovery of intact, as opposed to disarticulated remains of aircraft. The high potential for the discovery of intact aircraft of major heritage significance is underlined by the recovery in 2013 of a complete and unique Dornier Do17 by the RAF Museum (see <http://www.rafmuseum.org.uk/cosford/things-to-see-and-do/dornier-17-conservation.aspx>) Additionally, any remains of military aircraft would be a 'Protected Place' under the Protection of Military Remains Act 1986 so any discovery by dredging would mean that the dredging would have to halt immediately and an exclusion zone around the position of the wreck established.

### **The impact of dredging**

*4.3 "Impacts which results in damage or destruction of the heritage assets themselves, or their relationship with their wider environment and context, are permanent. Once destroyed a heritage asset cannot recover."*

The Impact Report recognises that damage to UCH is irreversible and a permanent loss to mankind. The first indication of finding an unknown UCH will be after it has been damaged or destroyed by the dredge head and appears in broken pieces on board the ship. Then it is too late and the damage will have been done.

### **Mitigation**

The document recognises that the potential of finding previously unidentified archaeological material is high and in this instance the Society's view is that simply having a watching brief is insufficient mitigation. The presence of archaeological observers on board dredging vessels, whilst welcomed, will not mitigate the potential loss of fragile UCH such as wooden shipwreck or aircraft, as discussed in 2 above, because they will only see the damage or destruction once it has occurred.

### **Conservation, curation and storage**

Any discovery of nationally important artefacts would impose an immediate and potentially expensive open-ended requirement for conservation, curation and storage which could cause problems in a sector already operating at near full capacity. In this context the UK's commitment to abide by the provisions of the Annex to the UNESCO

Convention on the Protection of Underwater Cultural Heritage 2001 should be borne in mind.

### **Conclusion**

In respect of the historic maritime environment it would be difficult, if not impossible, to contemplate a more inappropriate locality in English waters in which to conduct dredging operations. The works proposed risk irreversible damage to nationally and internationally important UCH when suitable material is available within the region. It is the considered professional opinion of the Society that the MMO should not issue a marine licence to the Dover Harbour Board to dredge aggregates from the Goodwin Sands.

We would welcome the opportunity to answer any questions that may arise from our response to this consultation or to assist the MMO further in this matter.

Yours faithfully,

M. V. Williams  
Hon. Secretary