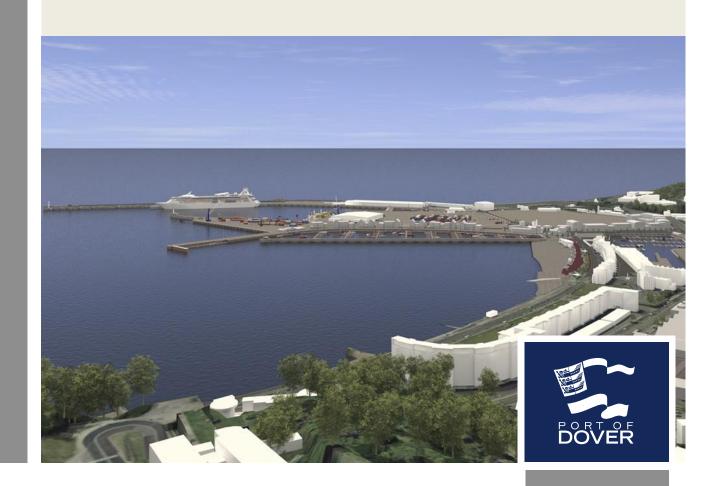
DOVER WESTERN DOCKS REVIVAL (DWDR) - GOODWIN SANDS UPDATE

April 2016



WELCOME

The Port handles 13 million passengers, 2.5 million freight vehicles and £119 billion of UK/European trade. It supports 22,000 jobs, many of which are in the local community. It has a shared vision to protect and enhance short and long term port capacity for the nation whilst delivering the catalyst for the regeneration of Dover.

DWDR is transforming the Western Docks at the Port of Dover

Dover Western Docks Revival (DWDR) is a one-off opportunity for the regeneration of Dover, bringing new investment into the area. Co-funded by the European Union and with UK Government and planning approval, DWDR will deliver:

- A transformed waterfront to ultimately attract a host of shops, bars, cafes and restaurants with Dover's unique backdrop of the harbour, cliffs and castle;
- Relocation and further development of the cargo business with a new cargo terminal and distribution centre;
- · Creation of greater space within the Eastern Docks for ferry traffic; and
- Much needed quality employment opportunities for local people.



Port of Dover's environmental credentials

The ethos of the Port is one of environmental conscientiousness; and through promotion of positive behaviour change and embedding the principle of sustainability into the management of the Port's assets and procurement processes:

- The Port continues to reduce its carbon footprint 26% reduction since 2007;
- The Port remains on track to achieve 100% landfill avoidance;
- The Port contributes to over 90% of general waste streams recycled;
- The Port promotes the Pro-Tide Project, aimed to explore tidal energy systems;
- The Port is a certified **Carbon Trust Standard bearer** and has an annual 5 per cent energy consumption reduction target:
- The Port sponsors the annual Shakespeare Beach survey and beach clean which collected 225kg of marine litter in 2015;
- Identified by the British Standards Institute for internationally recognised ISO14001 environmental management system - demonstrating continual improvement in environmental performance; and
- Dover beach is regularly listed in the Good Beach Guide for good water quality.

Dredging of Reclamation Material from the Goodwin Sands

The Port of Dover is exploring options, including a preferred proposal to dredge sand and gravel from the South Goodwin Sands off the coast of Kent, for fill material for the reclamation phase of the DWDR development. Goodwin Sands is identified as a good source of aggregate by The Crown Estate.

The Port is considering the option to dredge up to 2.5 million m³ of sand and gravel from the sub tidal (submerged by water even at low tide) parts of the South Calliper sandbank at the South Goodwin Sands, located approximately 12km north east of the Port of Dover. The location of the proposed aggregate dredging is shown in red on the chart on pg 4.

Previous Aggregate Dredging Schemes at the Goodwin Sands

The Goodwin Sands contain an important aggregate resource and have been dredged previously for fill material for infrastructure projects at the ports of Dover and Ramsgate. The Port of Dover dredged material from Goodwin Sands in the 1970's to provide fill material for the construction of the hoverport terminal. It also dredged material from Area 342 (purple in chart) on the South Goodwin Sands from 1984-1998 for land reclamation at the Eastern Docks.

In addition, material was dredged from the Goodwin Sands for use as aggregate for the construction of the Channel Tunnel Terminal in 1988-1990. The material was delivered at a rate of some 120,000 tonnes per week and was so successful that the original quantity of 2 million tonnes was increased to over 6 million. It was estimated at the time to have saved approximately 200,000 lorry movements for the original quantity alone therefore providing significant environmental benefits.

Studies show the habitat will recover naturally with no lasting effect on the eco-system and is a low carbon alternative to other sources.

How much of the Goodwin Sands will be dredged?

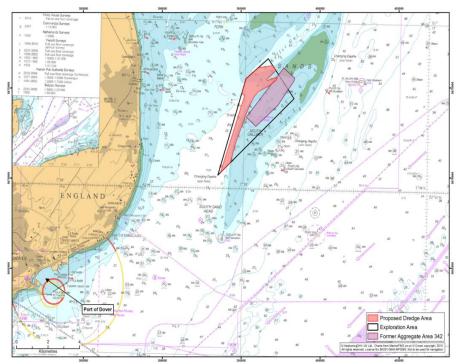
HR Wallingford have estimated the total volume of the Goodwin Sands as 1,120,000,000m³ therefore the absolute maximum of 2,500,000m³ material required dredge for the DWDR development equates to approximately **0.22%** of the total volume.

Selection of the Proposed Dredge Area

In May 2015, the Port identified an 11.6km² area (denoted by the black boundary line) on the South Goodwin Sands for exploration surveys (geophysical and ecological) for aggregate dredging potential. This area was identified based on the location of previous permitted and successful aggregate dredging activity (denoted in purple) and consideration of environmental constraints, such as avoiding wrecks and sensitive marine habitats. Following completion of the exploration surveys a systematic site selection process was undertaken to delineate the optimum proposed dredge area, as shown on the chart below. The proposed dredge area covers an area of 3.9km² (denoted in red).

The site selection process incorporated data from the exploration surveys and the following information sources:

- Mapping of constraints including physical (e.g. water depth), ecological (e.g. seal haul-out sites) and socio-economic datasets (e.g. other human uses of the area, such as subsea cables);
- Mapping of available commercial fisheries data;
- Dredger operational constraints (e.g. vessel draft and water depth restrictions);
- The location of previous Port of Dover dredging permissions at the South Goodwin Sands (including Area 342 as shown in purple below);
- · Feedback from consultation with Natural England, Historic England and Kent Wildlife Trust; and
- The Environmental Impact Assessment (EIA) Scoping Opinion issued by the Marine Management.



The proposed dredge area has been specifically designed to avoid intertidal areas (including seal haulout sites), protected and charted wrecks and sensitive seabed habitats. Detailed information on the exploration surveys and site selection process is included within the Environmental Statement for the scheme which will be publicly available.

Consenting Process

Marine aggregate dredging requires a Marine Licence from the Marine Management Organisation (MMO), which regulates activity in the marine environment. Royal HaskoningDHV, on behalf of the Port of Dover, has undertaken an Environmental Impact Assessment study to support the application for a Marine Licence for consent to dredge. The resulting Environmental Statement will describe the baseline environment, identify the potential environmental impacts of the scheme, proposed mitigation measures to avoid, reduce or offset impacts and assess the significance of impacts and explore alternatives.

Within the scope of the Environmental Impact Assessment study HR Wallingford have modelled the potential for the proposed dredging to affect coastal processes (e.g. waves and coastal erosion). The results of the modelling are now available within the Coastal Impact Study, in line with established aggregate industry practice.

During the Environmental Impact Assessment study a number of working topic groups have been conducted to review the results of the studies and capture stakeholder feedback. These groups include: coastal processes, navigation, archaeology and ecology.

If you have any further concerns the Goodwin Sands Aggregate Dredging EIA Scoping Report outlines the compliant processes which were followed to identify the potential environmental issues necessary for the input to the Environmental Impact Assessment study and is available here: http://www.doverport.co.uk/about/port-development/

Next Steps

Application for the Marine Licence (MLA) will be submitted to the MMO, along with the Environmental Statement, in Spring 2016. Extensive consultation has been conducted throughout the process with key and statutory stakeholders, commercial fisherman and leisure craft users by our consultants Royal HaskoningDHV and MacAlister Elliott. All resultant feedback has been logged, recorded and fed into the documents supporting the Environmental Statement and MLA.

Royal HaskoningDHV has engaged with stakeholders as required throughout the Environmental Impact Assessment study with the aim of ensuring that all relevant stakeholders with an interest in the Goodwin Sands are consulted.

Independent specialists on the project

Royal HaskoningDHV is an independent, international engineering and project management consultancy with over 130 years of experience. Their professionals deliver services in the fields of aviation, buildings, energy, industry, infrastructure, maritime, mining, transport, urban and rural planning and water. Backed by expertise and experience of nearly 7,000 colleagues across the world, Royal HaskoningDHV work for public and private clients in more than 130 countries.

Royal HaskoningDHV have worked extensively with the Port and were engaged on our original plans. The Port has invested heavily to ensure our investigations have been managed and delivered by this leading industry specialist.



HR Wallingford is an independent civil engineering and environmental hydraulics organisation. They deliver practical solutions to the complex water-related challenges faced by our international clients. With a 65 year track record of achievement, their unique mix of know-how, assets and facilities includes state of the art physical modelling laboratories, a full range of numerical modelling tools and, above all, enthusiastic people with world-renowned skills and expertise. Based in the UK, HR Wallingford has a reputation for excellence and innovation, which we sustain by re-investing profits from our operations into programmes of strategic research and development.



HR Wallingford were engaged to conduct Port of Dover's coastal impact study which concluded with no impact on coastal areas.

John Baugh, Principal Scientist, from HR Wallingford: "The proposed dredge for DWDR equates to **0.22%** of the total volume of the Goodwin Sands."

CEEQUAL

The Port has committed to delivering sustainability throughout the DWDR development by embracing the CEEQUAL scheme, which provides a rigorous and comprehensive sustainability rating and assessment system for civil engineering projects (as used by the Olympic Delivery Authority for the London 2012 Games and Crossrail) to achieve high environmental, economic and social performance. DWDR development is currently undergoing CEEQUAL assessment for the master planning phase of the scheme. Further CEEQUAL accreditation will be sought for the design and construction phase of the development.

We thank all of our customers and community for their understanding, co-operation and support as our work to revive the Western Docks continues.

To raise any issues or concerns related to the above, please email DWDR@doverport.co.uk and we will be happy to help.

For further details about the project, please visit http://www.doverport.co.uk/DWDR or follow percentage-port-of- Dover on Twitter with the dedicated hashtag #DoverWesternDocksRevival



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