

# PROJECT SHEET

**HARWICH MAINTENANCE DREDGING**  
HARWICH, ESSEX, UNITED KINGDOM

## BOSKALIS WESTMINSTER: SKILLS, RESOURCES, EXPERIENCE

Boskalis provides clients with tailored, project-specific solutions for maintenance dredging services, as illustrated by the following project summary.

## PROJECT DESCRIPTION

Boskalis Westminster (Previously Westminster Dredging Company) have undertaken the maintenance dredging at Harwich for many decades. After a tender process in 2008, the works were again awarded to a joint venture involving Westminster Dredging.

The initial contract was for a two year period from January 2009 and this was subsequently extended a further two years starting January 2011, and has since been extended to 2015.

The works are split into two parts with Boskalis Westminster (BWL) as the lead company :

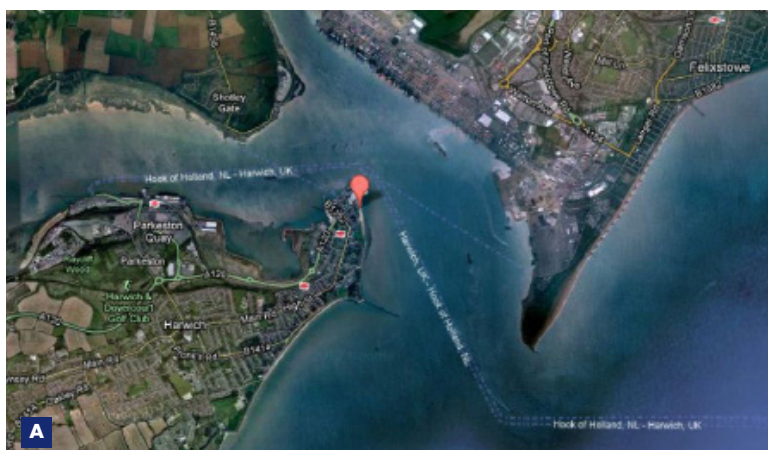
A) Major Works: Maintenance dredging in the approaches and berth pockets to Felixstowe and Harwich, with disposal of the dredged material at the Inner Gabbard disposal ground. The volume dredged each year is approximately 1,200,000 m<sup>3</sup>, completed over four or five campaigns throughout the year. Each campaign takes approximately three weeks, with a trailing suction hopper dredger (TSHD) on site for ten to twelve days of each campaign. A THSD with a carrying capacity between 8,000 m<sup>3</sup> and 12,000m<sup>3</sup> is the optimum vessel for these major works. A plough vessel, such as the 'Norma' is used to bring material from the berth faces to a location that can be accessed by the TSHD and to assist in maintaining Harwich International, Harwich Navyyard, Mistley and other port channels and jetties.

Minor Works: These form the Beneficial Sediment Replacement Scheme which controls disposal of dredged material and is intended to feed mobile sediments back into the estuary and river regimes to maintain the natural balance, or sediment budget. The material is generally dredged from the Felixstowe berths and approaches, with disposal at two locations on the River Stour and two on the River Orwell .

It is stipulated that this has to be carried out over three campaigns of 40,000m<sup>3</sup> each, with a minimum of six weeks between campaigns. The works are executed with a shallow draft THSD over the winter period (November – April) to minimise disturbance to wildlife.

## FEATURES

Project Name	Harwich Maintenance Dredging
Client	Harwich Haven Authority
Contractor	Boskalis Westminster Ltd in joint venture
Location	Harwich, Essex
Execution period	1981-2015 (Ongoing)



**A** Location map  
**B** Oranje working in Harwich  
**C** Working in busy shipping channels



The dredged cargo is discharged on the flood tide by sailing over a predetermined track at a speed of four knots whilst discharging the cargo at the water surface using the dredge pump. BWL has a fifty percent share in the major works and undertakes the minor works in its entirety.

Surveying during the dredging campaigns is normally completed by BWL and is a very intensive exercise. The main dredge area amounts to approximately 1,500,000 m<sup>2</sup>, and is surveyed every day. The survey information, including that of adjacent areas, is updated and supplied to the dredger, plough vessel and the Harbour Engineer every afternoon.