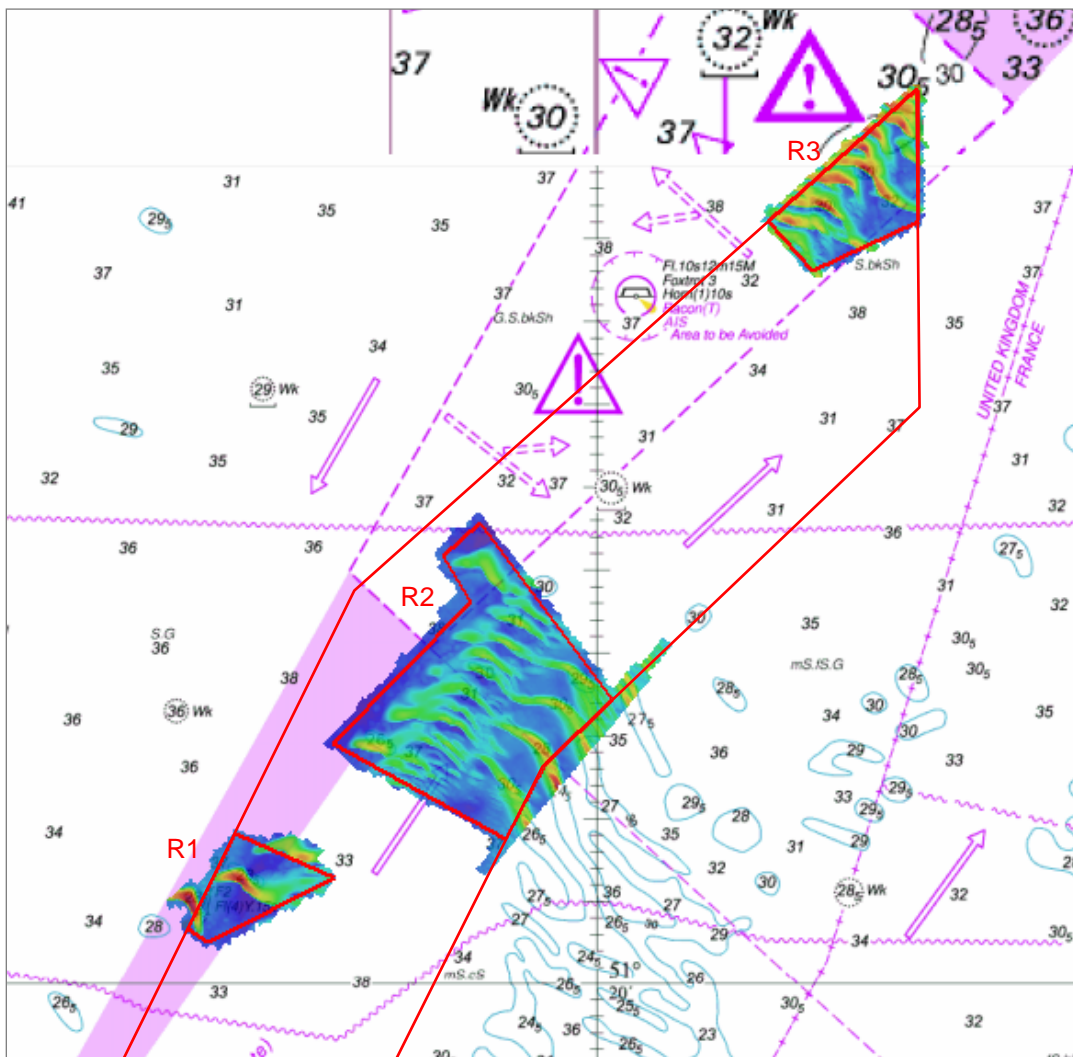




DOVER STRAIT
DEEP WATER ROUTE
NORTH WEST SANDETTIE

SUMMARY ASSESSMENT ON THE ANALYSIS OF
ROUTINE RESURVEY AREA DWR R
FROM THE 2013 SURVEY



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Summary Assessment DWR R/2013

A summary assessment of the 2013 hydrographic survey of the area: to monitor recent seabed movement; to identify any implications for shipping; and to make recommendations for future surveys.

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DEEP WATER ROUTE (NORTH WEST SANDETTIE), 2013

1 Introduction

- 1.1 The full area of DWR R is re-surveyed every 12 years; within that area there are three focused areas which are surveyed every 6 years (as shown on the front of this report). These focused areas concentrate on the areas of greatest concern, taking into account seabed features, depth of water and draught of shipping using the areas.
- 1.2 This summary report looks at the latest focused survey of DWR R and compares it against the previous survey, carried out as part of a wider Dover Strait survey in 2006-07. For more details on the area, including long-term changes, the more detailed report on the 2004 survey of DWR R should be consulted.

2 Description of the Areas

- 2.1 DWR R covers part of a Deep Draught Route which falls with the north-east bound lane of the Traffic Separation Scheme Deep Water Route. This route comprises of a recommended track and a safety corridor extending 0.5 nautical miles either side of the track. The three focused survey areas cover areas of large sandwaves where depths of less than 30 metres have been observed.
- 2.2 Large asymmetrical, south-west facing, sandwaves exist in all three areas along with symmetrical sandwaves within the central focused area.

3 Survey Data

- 3.1 The 2006-07 Dover Strait survey was conducted between 29 June 2006 and 24 May 2007. The 2013 survey was conducted on 16 November and 3 December. The Vertical Offshore Reference Frame (VORF) and GPS heighting were used to reduce depths to Chart Datum in both surveys.

4 Changes since the 2006-07 Survey

- 4.1 The surface difference plot at [Annex A](#) shows the changes in depth that have occurred since last surveyed. [Annex B](#) shows selected depths from the 2013 survey.

DWR R1

- 4.2 The large sandwave covered by the area has migrated 100 metres to the south-west (average 14m/yr) and the minimum depth increased from 28.6 to 29.3 metres.

DWR R2

- 4.3 The minimum depth found in the 2013 survey is 28.5 metres on the eastern edge of the area, where a minimum depth of 28.4 metres was found in the 2006-07 survey. Two other sandwaves with depths less than 30 metres in the 2006-07 survey have depths of 30 metres or more in the 2013 survey.
- 4.4 The current minimum charted depth in the area is 26₅ in the west of the area, close to the Deep Draught track. This depth is from a 26.9 metre sounding (truncated to half metres) from a 2001 survey of the area. Figure 4.1 below shows the minimum depths found in surveys from 1988 onwards.

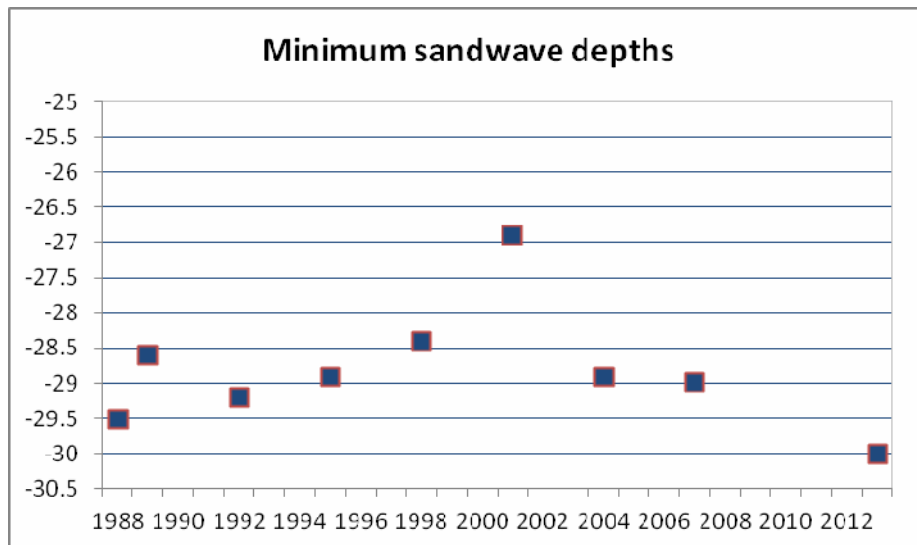


Figure 4.1: minimum depths over charted 26₅ sandwave (see Annex B for location)

DWR R3

- 4.5 The minimum depth found in the 2013 survey is 30.2 metres in the north of the area, where a minimum depth of 29.5 metres was found in the 2006-07 survey. Depths over other sandwaves with minimum depths greater than 30 metres are the same or slightly deeper than in the 2006-07 survey.

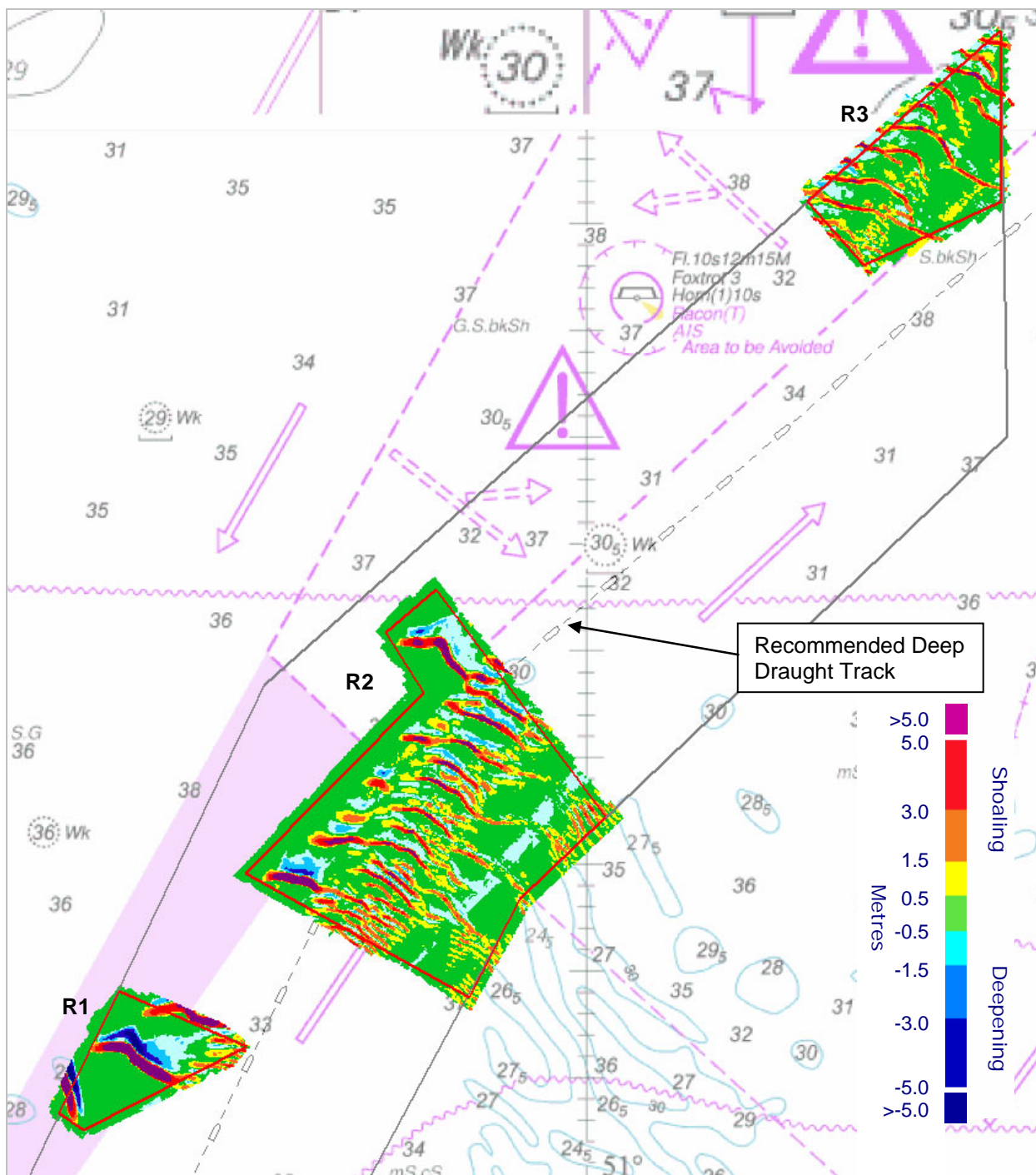
5 Implications for Shipping

- 5.1 Changes to the large sandwaves in the area are only of concern to the very large draught vessels using the area. Sample AIS data indicates the around 50 vessels drawing 20 metres or more pass along the north-east bound Deep Water Route annually, with vessels drawing up to 22.8 metres. Examination of these tracks show that vessels follow close to the recommended track for deep draught vessels or pass to the south-east, reducing the course alteration required if following the recommended waypoints.
- 5.2 The general route of deep draught vessels and a sample track adopted by one vessel, transiting at low water, is shown in [Annex C](#).

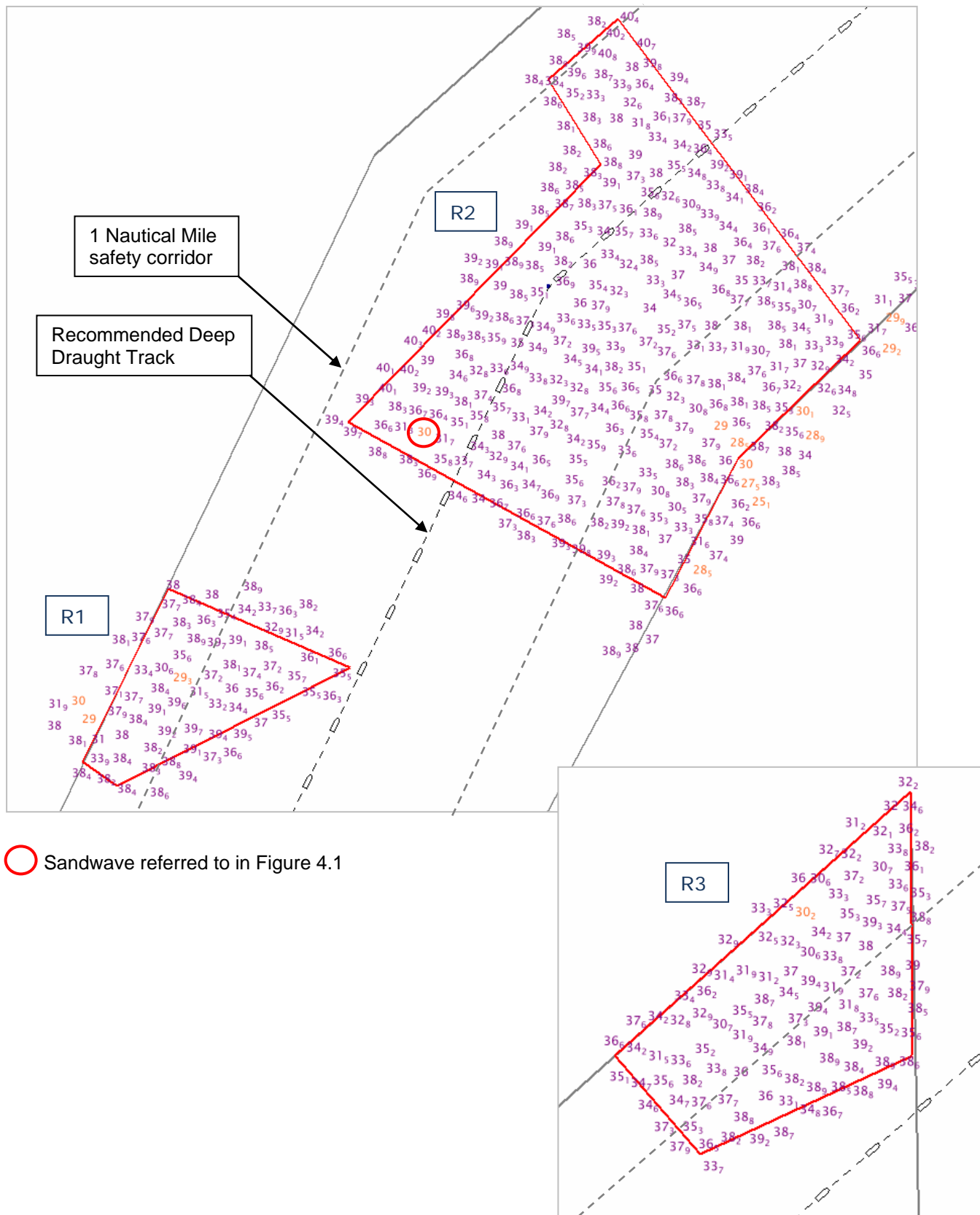
6 Recommendations

- 6.1 As the large sandwaves in areas DWR R1 and R3 lie just outside the Deep Draught Route corridor and outside the northeast bound Deep Water Route, it is recommended that the survey frequency is extended to 12 years and removed from the intervening 6 year focused survey. However, the areas will be surveyed in 6 years time under the full survey of DWR R.
- 6.2 Area DWR R2 should be retained as a 6-year focused survey area, considering the use of the area by very deep draught vessels and potential for shoal depths of concern to them.

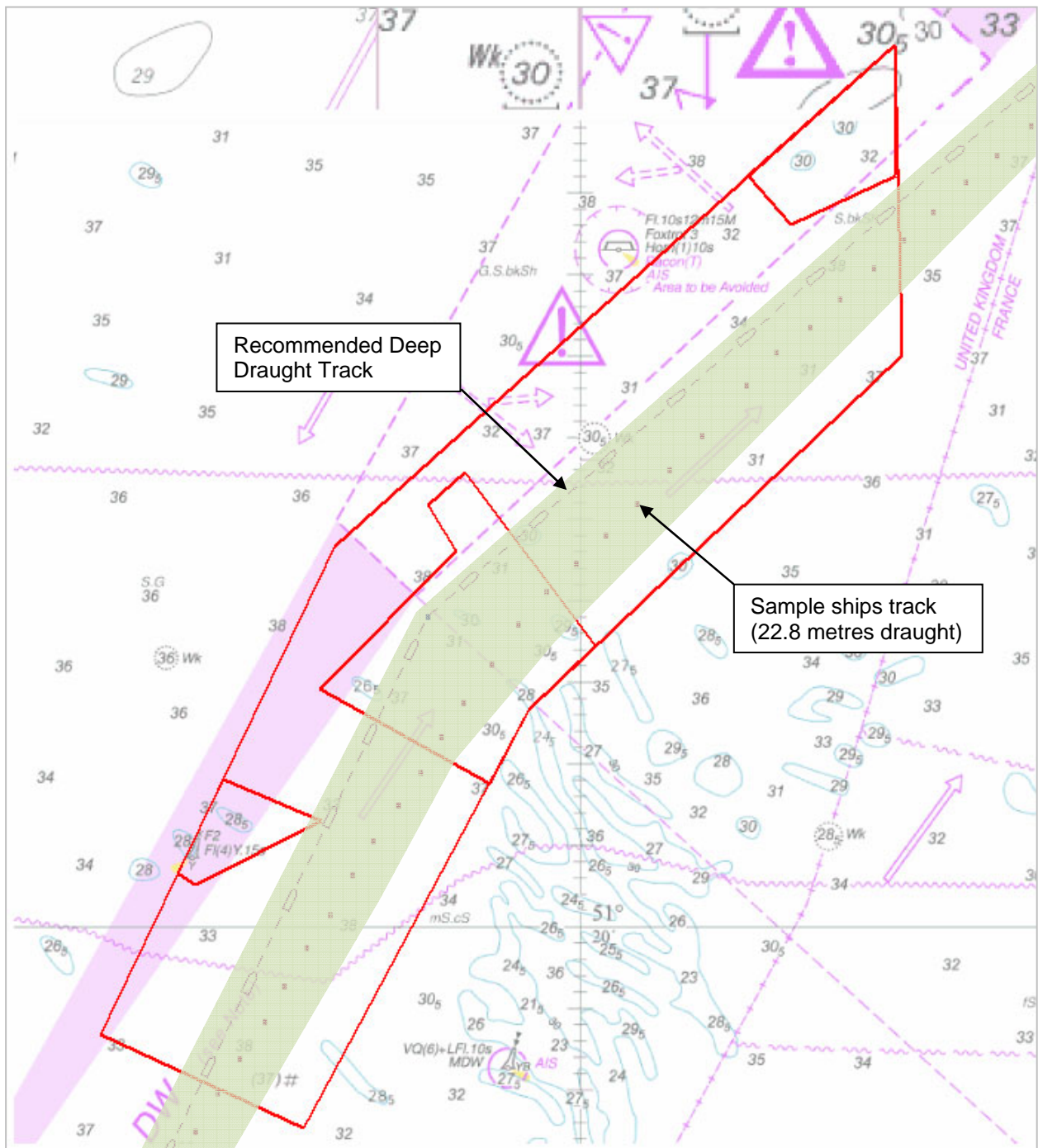
SURFACE DIFFERENCE LAYER SHOWING BATHYMETRIC CHANGES
BETWEEN THE 2006-07 AND 2013 SURVEYS



SELECTED DEPTH PLOTS
FROM THE 2013 SURVEY



DEEP DRAUGHT SHIPPING IN THE AREA



General route of ships drawing >= 20 metres

