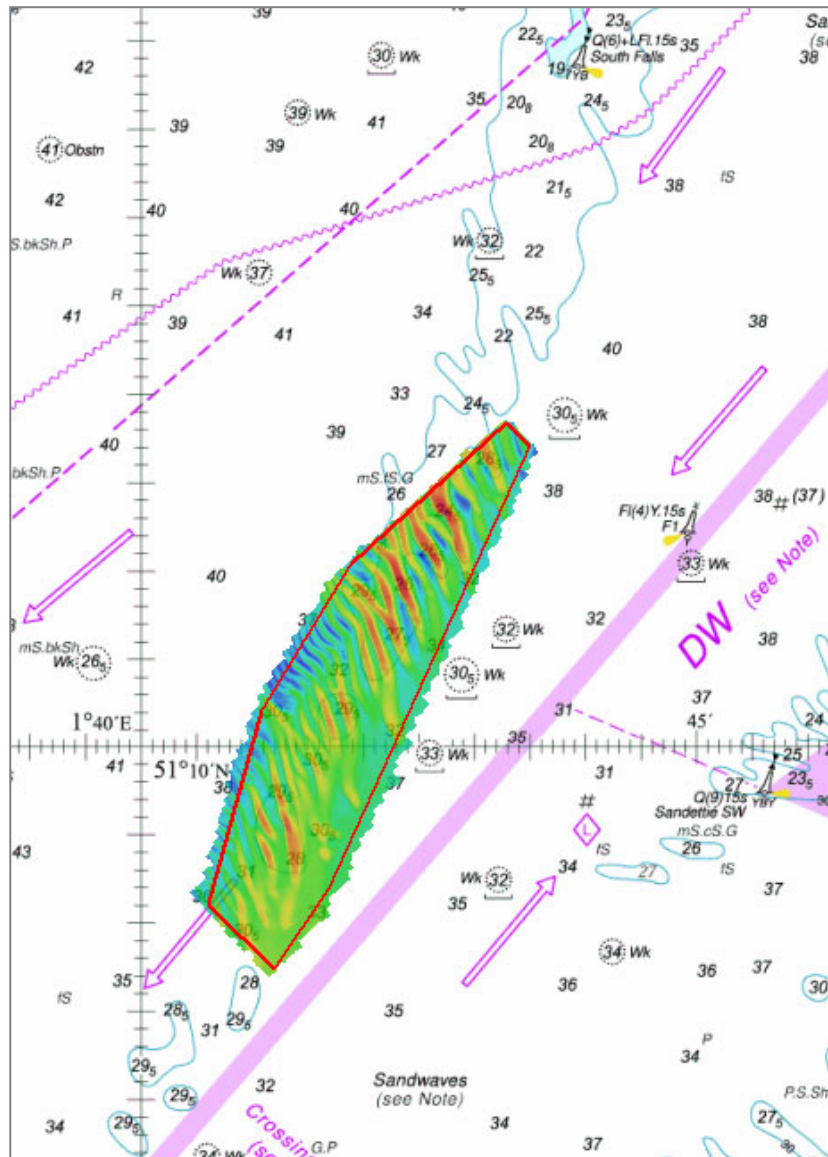




DOVER STRAIT TAIL OF THE FALLS

SUMMARY ASSESSMENT ON THE ANALYSIS OF ROUTINE RESURVEY AREA DWR C1 FROM THE 2013 SURVEY



DOVER STRAIT

TAIL OF THE FALLS

Summary Assessment DWR C1/2013

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.

The Admiralty Chart extracts, other graphics and tables in this Report are included for illustrative purposes only and are NOT TO BE USED FOR NAVIGATION.

This material is protected by Crown Copyright. It may be downloaded from the UK Hydrographic Office's (UKHO) web site and printed in full for personal or non-commercial internal business use. Extracts may also be reproduced for personal or non-commercial internal business use on the condition that the UK Hydrographic Office is acknowledged as the publisher and the Crown is acknowledged as the copyright owner.

Applications for permission to reproduce the material for any other purpose (including any distribution of the material or extracts to third parties) can be made interactively on the UKHO's web site (www.ukho.gov.uk), by e-mail to intellectualproperty@ukho.gov.uk or in writing to Intellectual Property, UK Hydrographic Office, Admiralty Way, Taunton, Somerset, TA1 2DN.

TAIL OF THE FALLS, 2013

1 Introduction

- 1.1 Area DWR C1 is surveyed annually, while adjacent area C3 to the north is surveyed every 3 years and C2 to the south surveyed every 6 years. All three areas were surveyed in 2012 and fully reported on; this summary report examines the annual survey conducted in 2013.

2 Description of the Areas

- 2.1 DWR C1 lies in the south-west bound lane of the Dover Strait Traffic Separation Scheme (TSS) and covers part of a Deep Draught Route (DDR), which comprises of a recommended track and a safety corridor extending 0.5 nautical miles either side of the track. Area DWR C1 consists of an area of 1.75 sq NM (6.00 sq km).
- 2.2 The area covers part of a sandwave field that extend south-westwards from Tail of the Falls. These sandwaves dominate the area and run in a broad swathe from the north-east corner of DWR C1 to the southern border, with the largest sandwaves up to 15 metres in height.

3 Survey Data

- 3.1 The 2012 survey was conducted on 19, 21 and 26 December, with intervening days spent alongside due to bad weather. The 2013 survey was conducted on 18, 27 and 28 November, with intervening days also spent on weather standby. The Vertical Offshore Reference Frame (VORF) and GPS heighting were used to reduce depths to Chart Datum in both surveys.

4 Changes since the 2012 Survey

- 4.1 The surface difference plot at [Annex A](#) shows the changes in depth that have occurred since last surveyed and mainly reflects ongoing migration of sandwaves. Depths plots of the 2012 and 2013 surveys are at [Annexes B](#) and [C](#) respectively and allow a comparison of depth values.
- 4.2 The minimum depth in the 2013 survey is 25.8 metres over a sandwave in the north of the area, which is 1.3 metres deeper than in the 2012 survey. In the south of the area the minimum depth has reduced from 28.3 metres to 27.9 metres. Migration of sandwaves is in a south-westerly direction over much of the area, with migration around 15m/yr in the north, but with some north-easterly migration on the western side.

5 Implications for Shipping

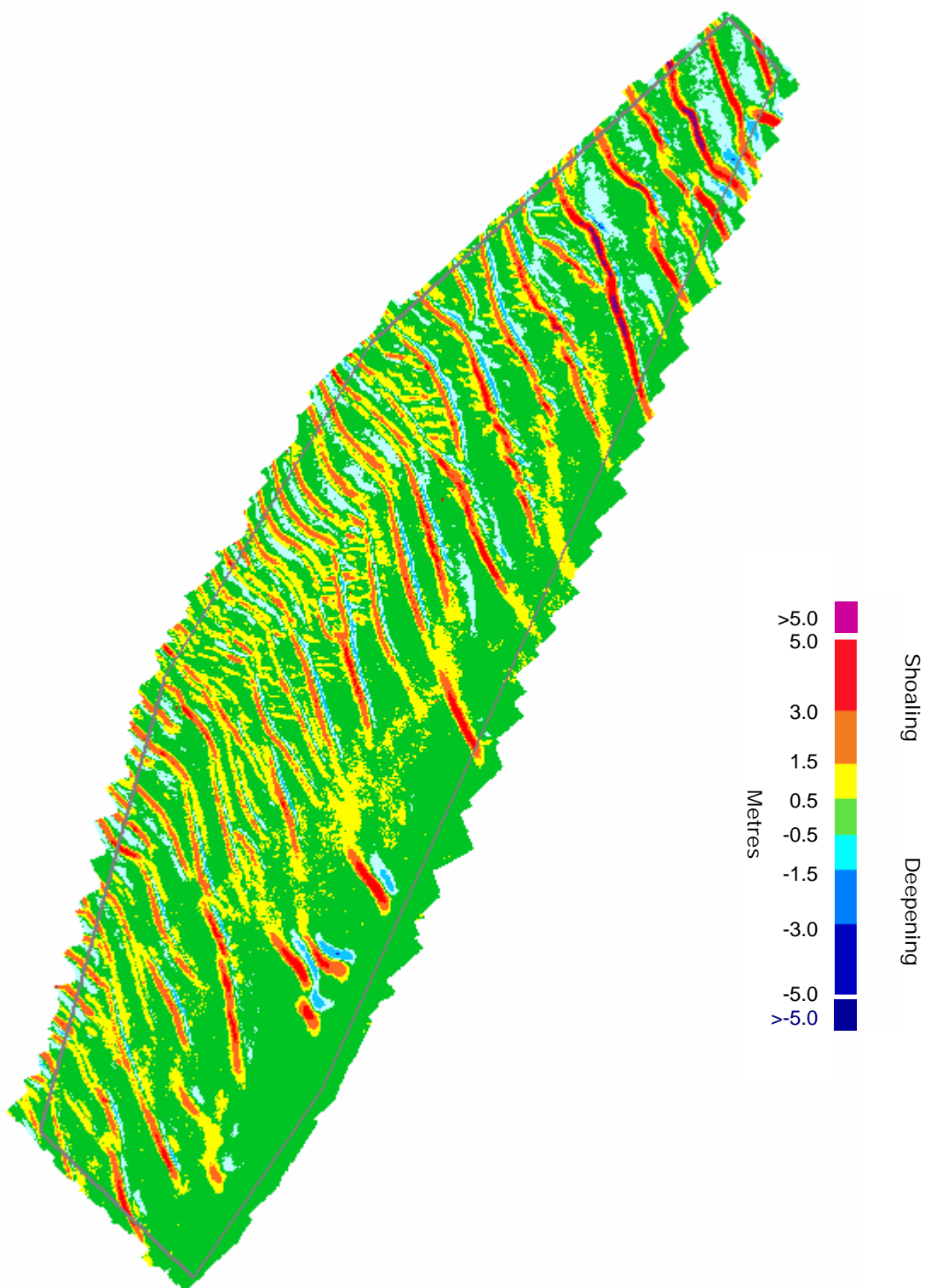
- 5.1 The Department for Transport's recommended under-keel allowance for deep draught vessels using this part of the suggested DDR and travelling at 12 knots is 5.3 metres when under the influence of storm waves and swell.
- 5.2 Sample AIS data indicates that around 40 vessels a year transit the area drawing 20 metres or more, the general route adopted by these vessels is shown at [Annex D](#). The maximum draught observed using the area is 21.6 metres, although Sullom Voe and Mongstad oil terminals can both accommodate 24 metre draught vessels.

5.3 The minimum depth of 25.8 metres in the 2013 survey is deeper than the 2012 survey, 4.2 metres deeper than the largest vessel observed using the area, less than the 5.3 metres recommended under-keel allowance.

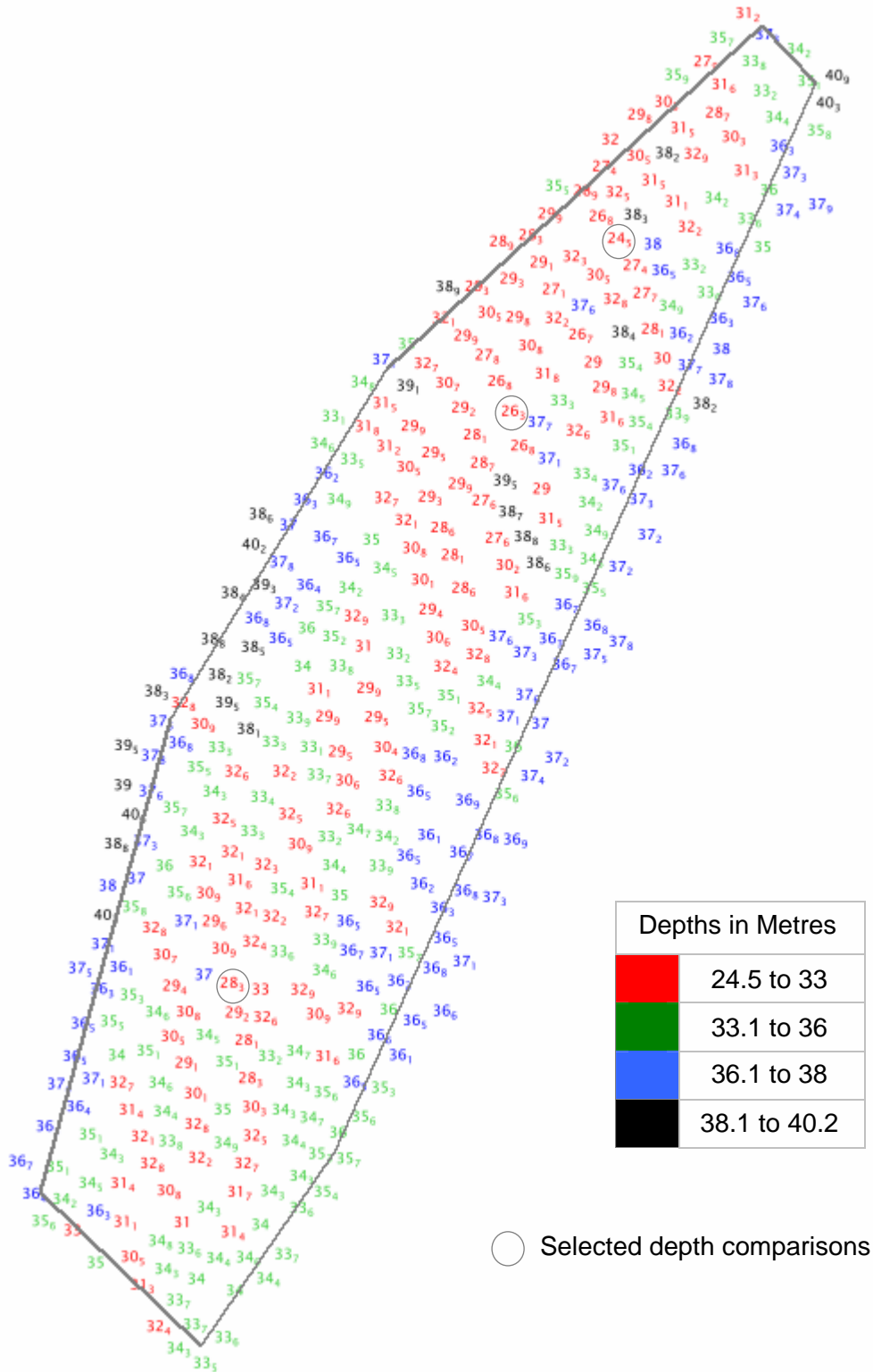
6 Recommendations

6.1 The annual focused areas should be retained with unchanged limits.

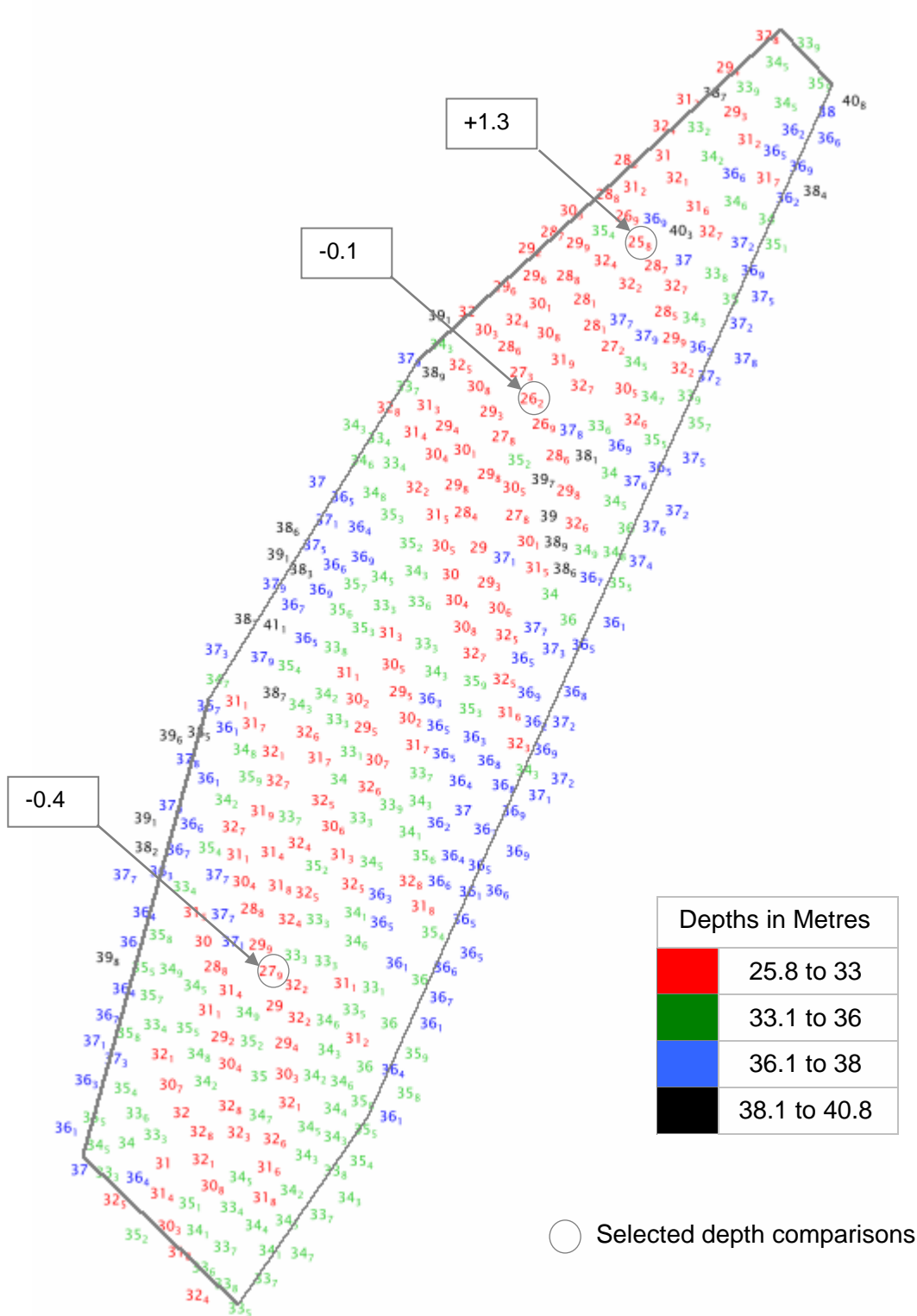
SURFACE DIFFERENCE LAYER SHOWING BATHYMETRIC CHANGES
BETWEEN THE 2012 AND 2013 SURVEYS



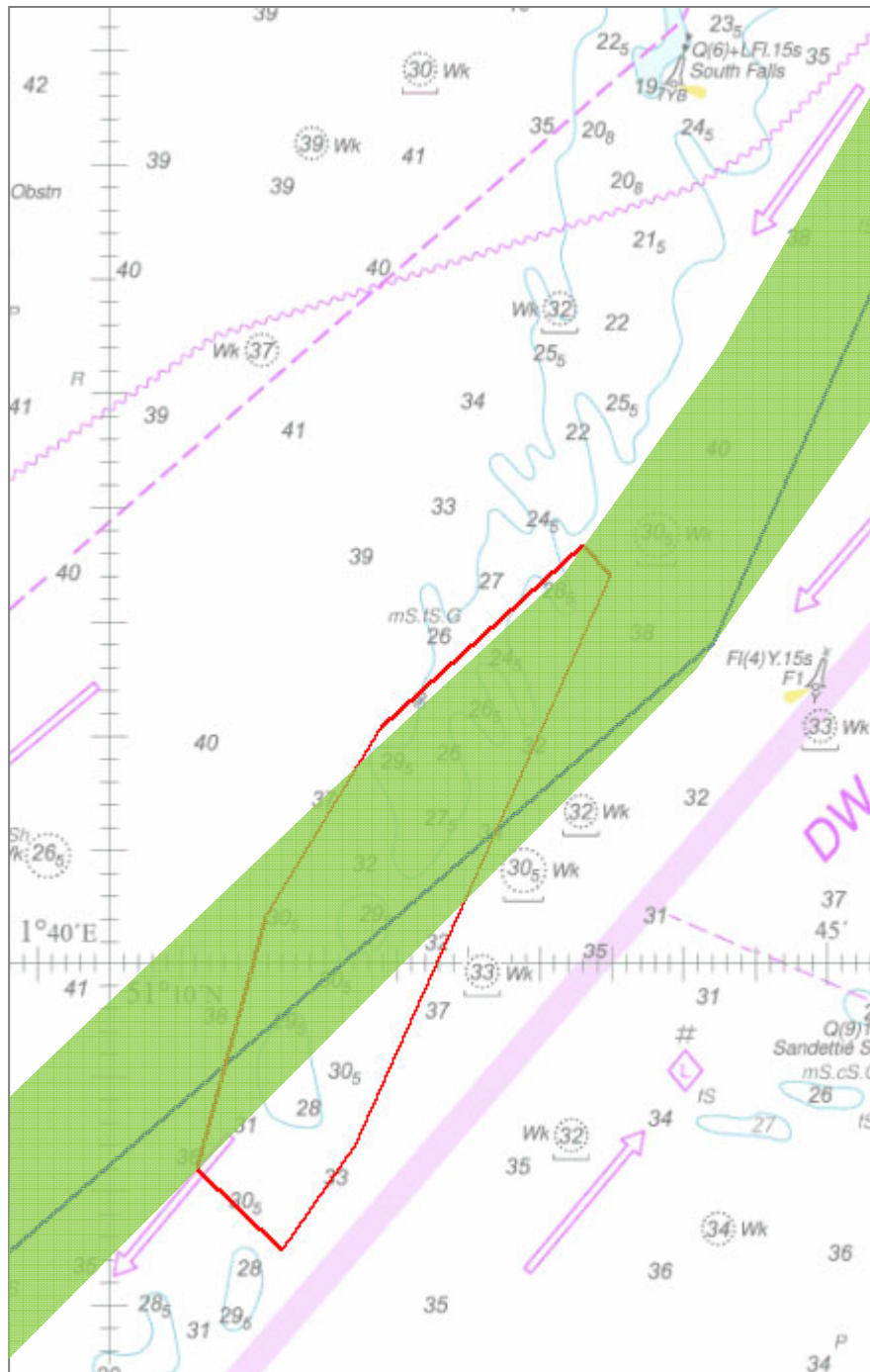
SELECTED DEPTH PLOT
FROM THE 2012 SURVEY




SELECTED DEPTH PLOT
FROM THE 2013 SURVEY



DEEP DRAUGHT SHIPPING ROUTES



 Indicative route of vessels drawing over 20 metres

 Suggested Deep Draught Route