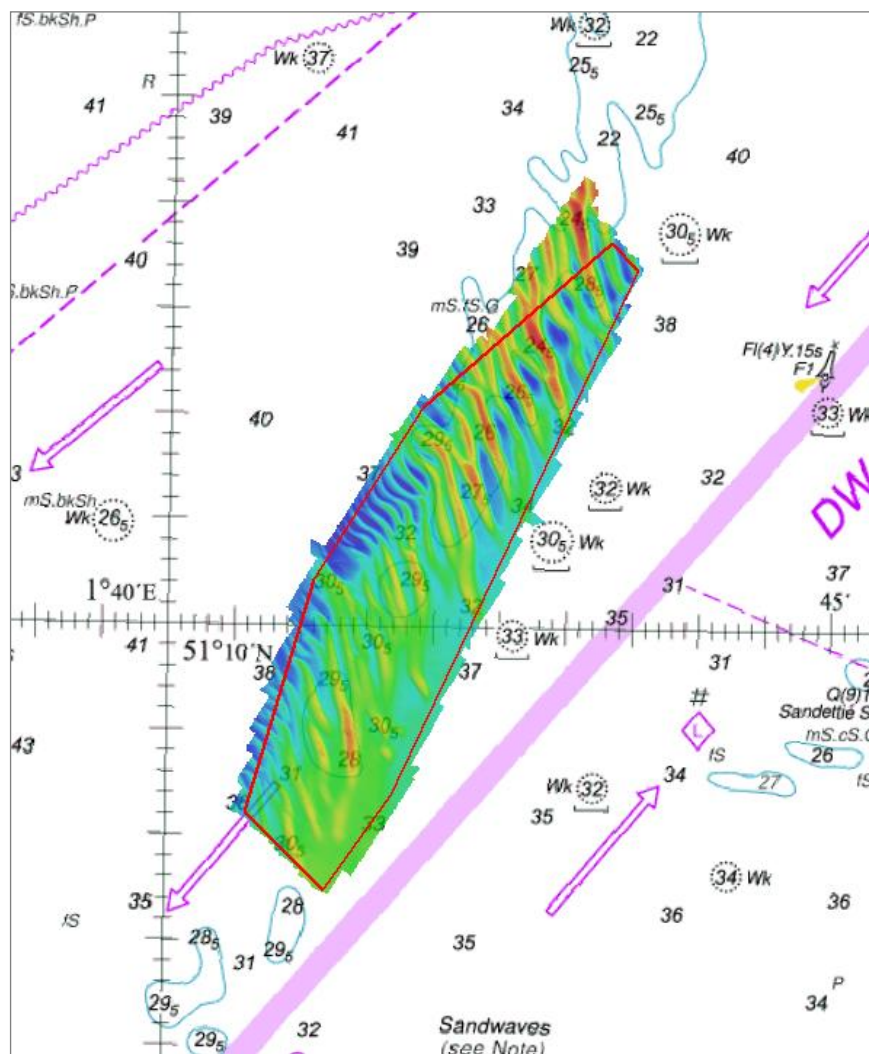




DOVER STRAIT TAIL OF THE FALLS

SUMMARY ASSESSMENT ON THE ANALYSIS OF
ROUTINE RESURVEY AREA DWR C1
FROM THE 2014 SURVEY



DOVER STRAIT

TAIL OF THE FALLS

Summary Assessment DWR C1/2014

A summary assessment of the 2014 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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TAIL OF THE FALLS, 2014

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 every 6 years. All three areas were surveyed in 2012 and fully reported on; this summary report examines the annual survey conducted in 2014.

2 Description of the Areas

- 2.1 DWR C1 lies in the southwest 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 extends south-westwards from Tail of the Falls. These sandwaves dominate the area and run in a broad swathe from the north of DWR C1 to the southern border, with the largest sandwaves up to 15 metres in height.

3 Survey Data

- 3.1 The 2013 survey was conducted on 18, 27 and 28 November, with intervening days spent on weather standby. The 2014 survey was conducted on 15 and 16 June. The Vertical Offshore Reference Frame (VORF) and GPS heighting were used to reduce depths to Chart Datum in both surveys.

4 Changes since the 2013 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 2013 and 2014 surveys are at [Annexes B](#) and [C](#) respectively and allow a comparison of depth values.
- 4.2 The minimum depth in the 2014 survey within DWR C1 limits is 25.9 metres over a sandwave in the north of the area, 0.1 metres deeper than in the 2013 survey. In the south of the area the minimum depth is 27.8 metres, 0.1 metres shallower than in the 2013 survey. Recent surveys have shown a south-westerly migration of sandwaves across most of the area, with north-easterly migration on the western side. The 2014 survey shows a north-easterly migration of sandwave crests across the area, with migration up to 75 metres. This changed regime may be a temporal effect of increased storm activity in early 2014.

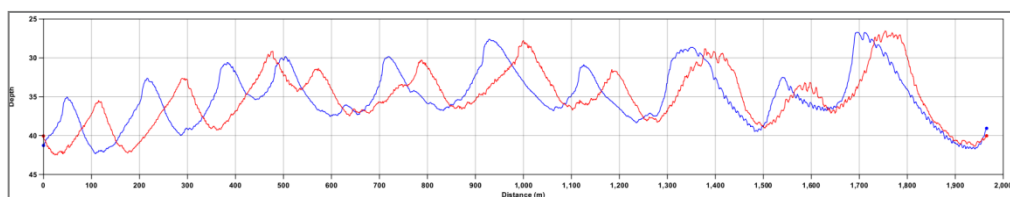
5 Implications for Shipping

- 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 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 22.5 metres.
- 5.3 The minimum depth of 25.9 metres in the 2014 survey is slightly deeper than the 2013 survey, 4.3 metres deeper than the largest vessel observed using the area.

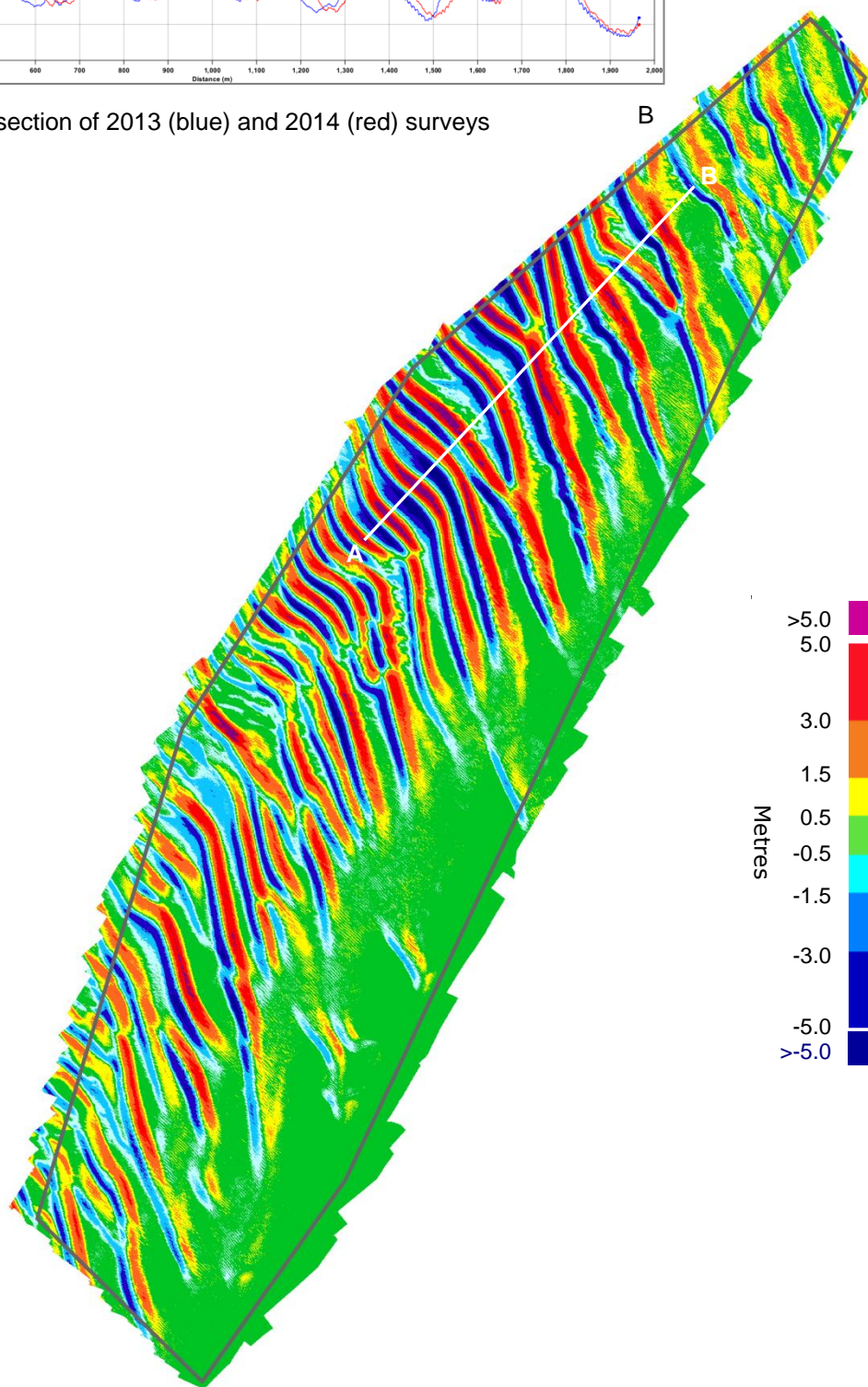
6 Recommendations

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

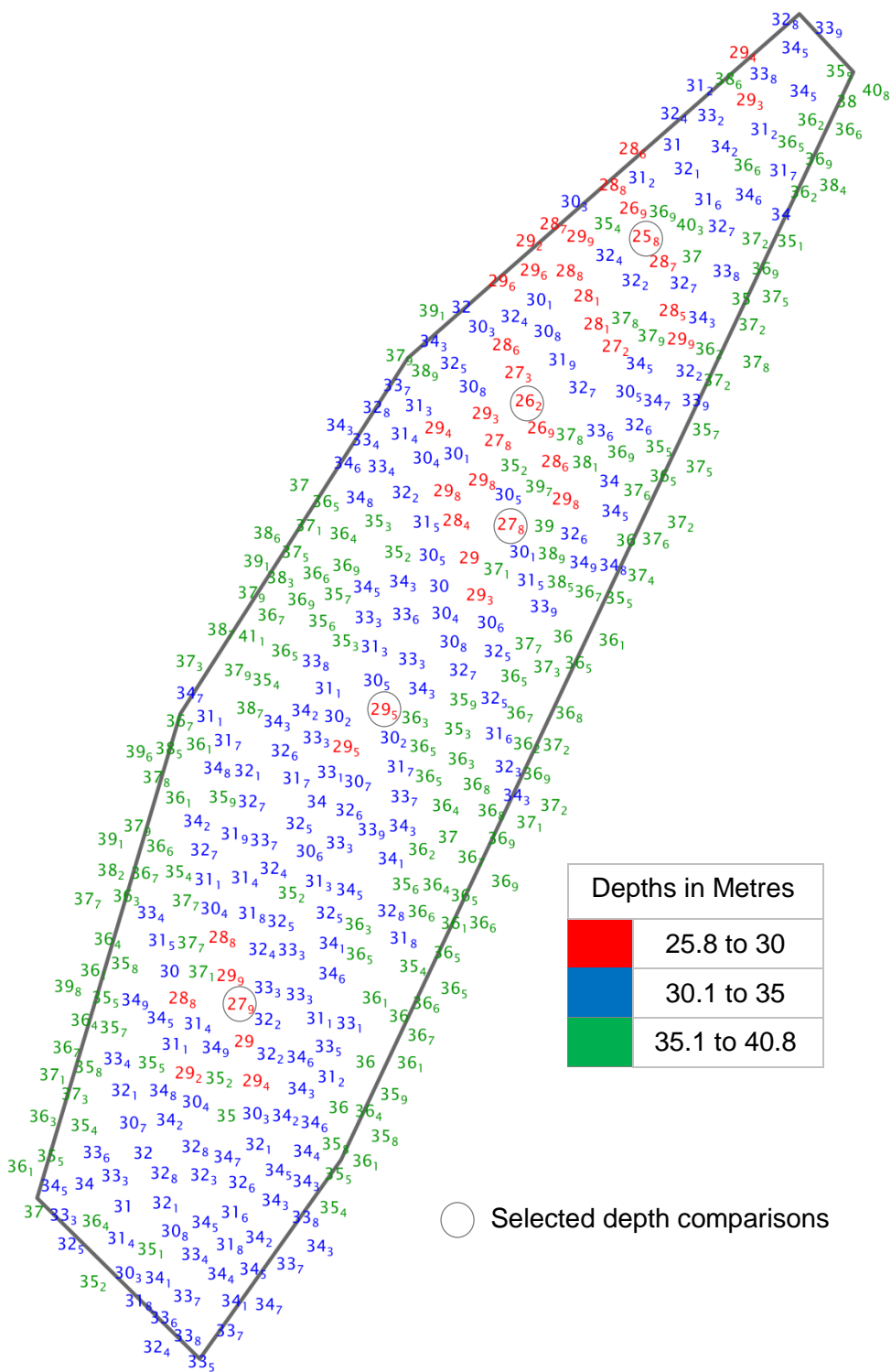
SURFACE DIFFERENCE LAYER SHOWING BATHYMETRIC CHANGES BETWEEN THE 2013 AND 2014 SURVEYS



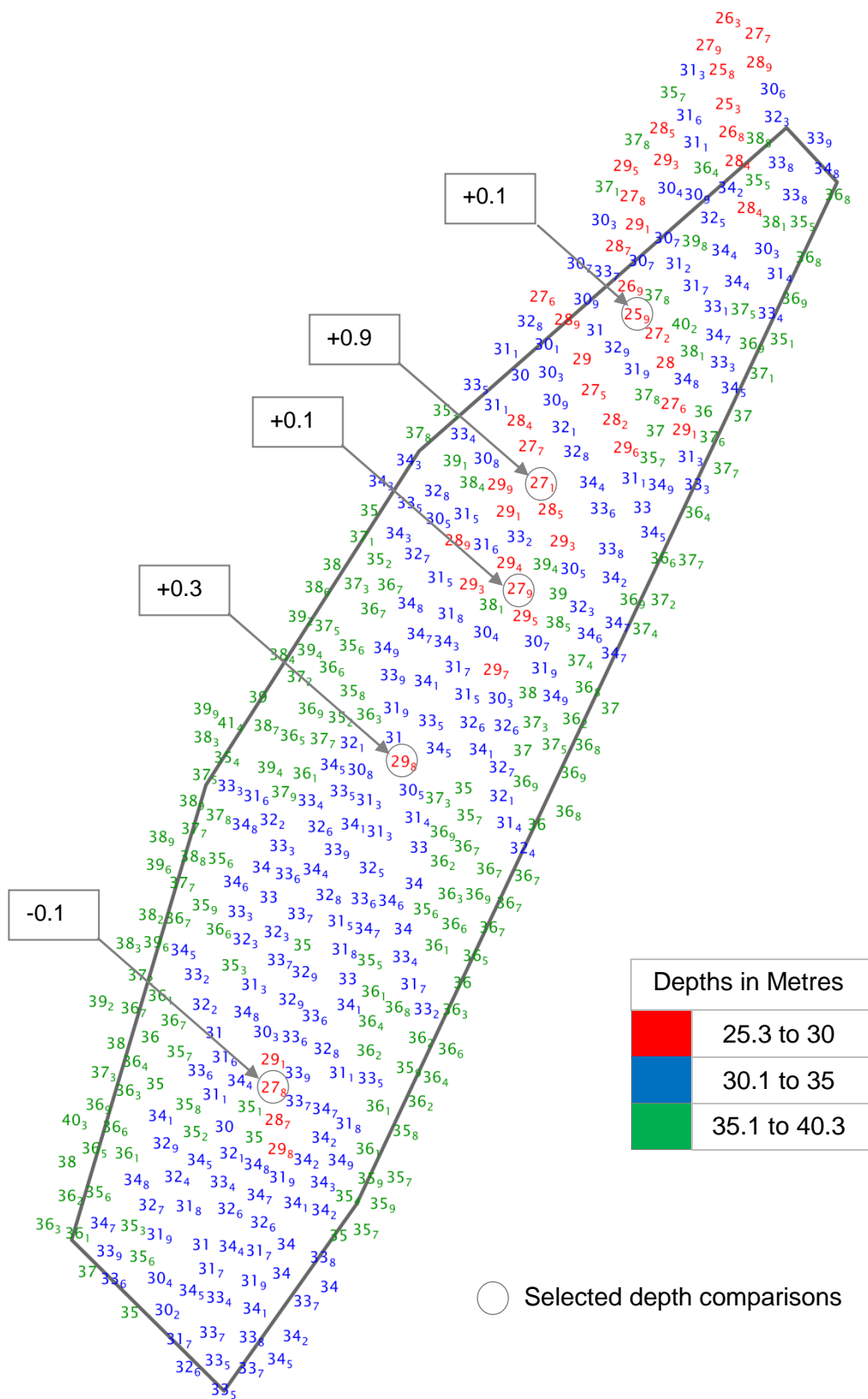
A Cross-section of 2013 (blue) and 2014 (red) surveys



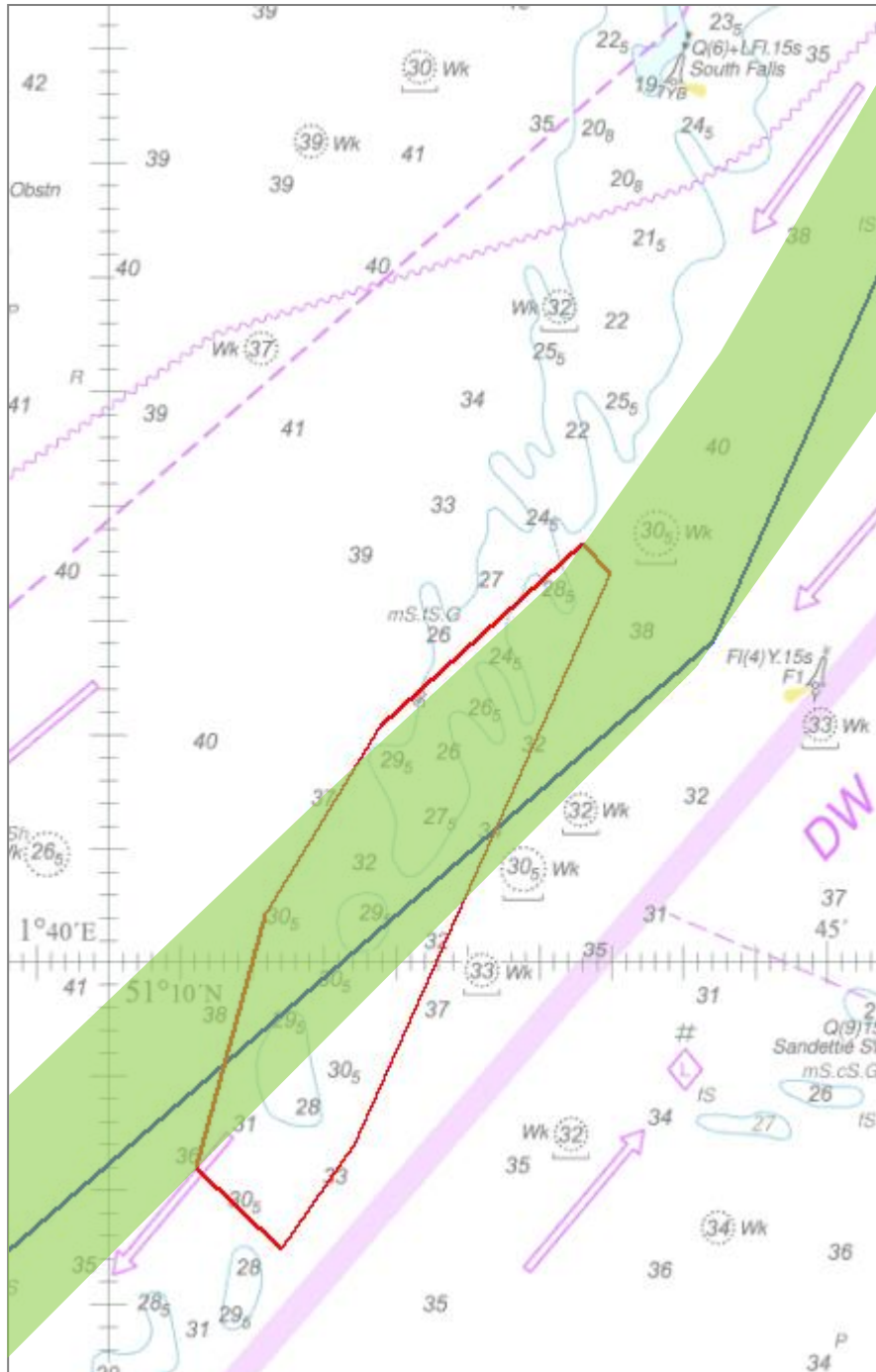
SELECTED DEPTH PLOT
FROM THE 2013 SURVEY




SELECTED DEPTH PLOT
FROM THE 2014 SURVEY



DEEP DRAUGHT SHIPPING ROUTE



 Indicative route of vessels drawing over 20 metres

 Suggested Deep Draught Route