

Notice to Mariners

Scottish Hydro Electric Power Distribution (SHEPD) Pentland Firth East (1) Submarine Cable

Date of Issue: 14th August 2019

Please be advised that Global Offshore and their subcontractors MMT and 4DOcean (on behalf of SHEPD) will be undertaking a marine survey across the Pentland Firth for a new submarine electricity cable. The survey will utilise 2 different vessels to complete the survey operations; a larger offshore vessel and a smaller nearshore vessel. The offshore vessel will be one of two options.

Offshore Survey Vessel (1 of 2 options will be selected for the works)

1. Stril Explorer
2. Havila Subsea

Nearshore Autonomous Survey Vessel

3. ASV Harry

Removal of fishing gear within the survey area is requested during the survey in order to prevent damage to any gear and to the survey equipment being used.

The survey operations will commence once weather allows from **1st September 2019** and will continue over a planned minimum period of 4 weeks, weather permitting. These works will be concentrated within the area highlighted in Figure 1, and defined by the coordinates detailed on the next page.

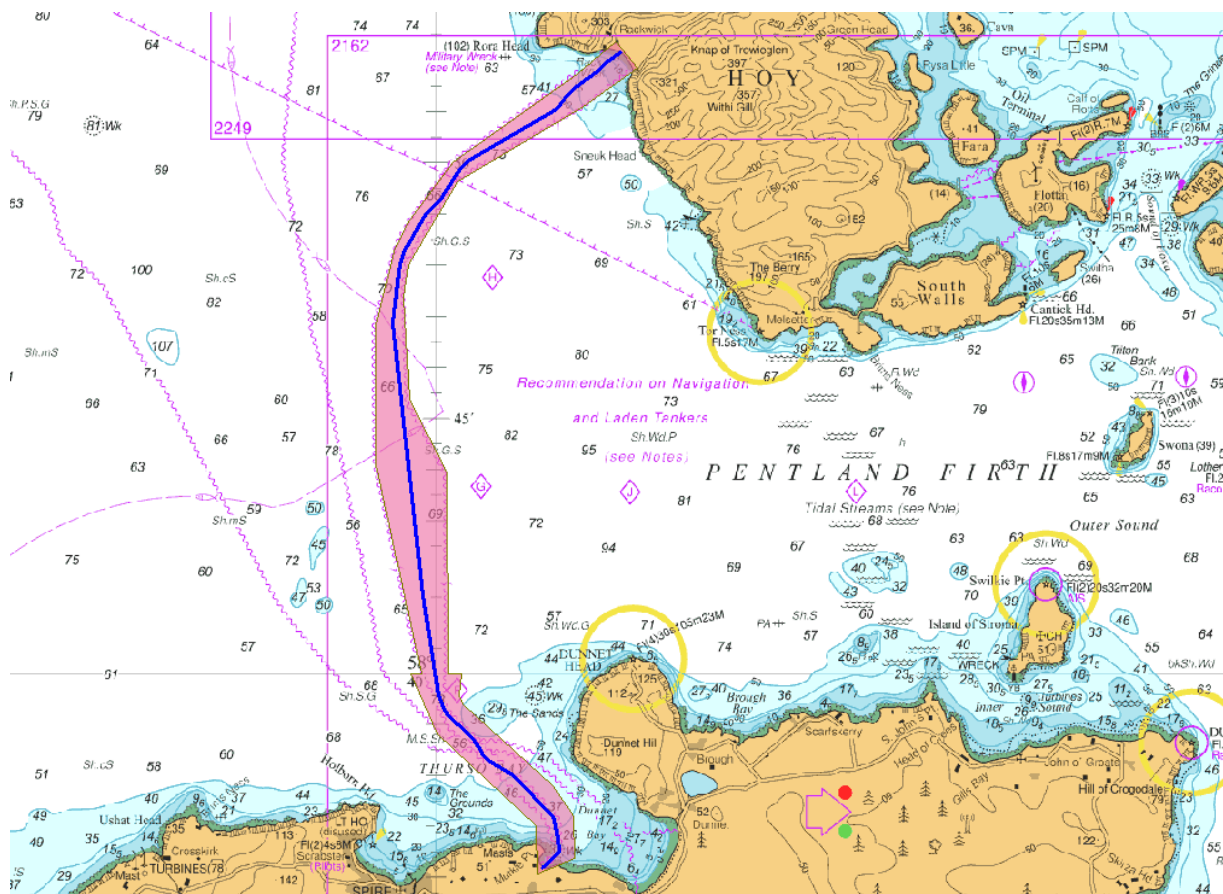


Figure 1- Admiralty chart showing works area

Position	Latitude	Longitude
1	58 ° 51.865 ' N	3 ° 22.447 ' W
2	58 ° 51.108 ' N	3 ° 24.465 ' W
3	58 ° 49.639 ' N	3 ° 29.199 ' W
4	58 ° 48.011 ' N	3 ° 31.064 ' W
5	58 ° 47.382 ' N	3 ° 31.232 ' W
6	58 ° 45.373 ' N	3 ° 31.025 ' W
7	58 ° 43.955 ' N	3 ° 29.610 ' W
8	58 ° 40.000 ' N	3 ° 29.590 ' W
9	58 ° 40.000 ' N	3 ° 29.070 ' W
10	58 ° 39.579 ' N	3 ° 29.151 ' W
11	58 ° 39.401 ' N	3 ° 28.996 ' W
12	58 ° 37.791 ' N	3 ° 25.626 ' W
13	58 ° 37.201 ' N	3 ° 24.840 ' W
14	58 ° 36.385 ' N	3 ° 24.820 ' W
15	58 ° 36.060 ' N	3 ° 26.220 ' W
16	58 ° 37.009 ' N	3 ° 26.274 ' W
17	58 ° 38.814 ' N	3 ° 29.963 ' W
18	58 ° 40.000 ' N	3 ° 30.965 ' W
19	58 ° 40.000 ' N	3 ° 30.562 ' W
20	58 ° 44.102 ' N	3 ° 32.303 ' W
21	58 ° 46.833 ' N	3 ° 32.319 ' W
22	58 ° 48.275 ' N	3 ° 31.612 ' W
23	58 ° 48.813 ' N	3 ° 31.105 ' W
24	58 ° 50.027 ' N	3 ° 29.391 ' W
25	58 ° 51.751 ' N	3 ° 24.714 ' W
26	58 ° 52.372 ' N	3 ° 23.261 ' W
27	58 ° 51.865 ' N	3 ° 22.447 ' W

Table 1 - Works area coordinates

Please contact Brown and May Marine if you require these coordinates in alternative formats such as Olex or Maxsea.

Vessel and Equipment used for the works are listed below:

Vessel Photo	Vessel Description
	Stril Explorer LOA: 76.4m Breadth: 16.2 m Draft: 4.75 m Call Sign: LAZT7 MMSI: 259006000 IM O: 9484845
Equipment Photo	Equipment Description

	<p>Surveyor ROV (SROV) Length: 5.5m Width: 1.2m Height: 1.2m Weight in Air: 4.7T</p>
<p>Vessel Photo</p>	<p>Equipment Description</p>
	<p>Supporter WROV Length: 2.5m Width: 1.7m Height: 1.65m Weight in Air: 2.45T</p>
<p>Vessel Photo</p>	<p>Vessel Description</p>
	<p>Havila Subsea LOA: 98m Breadth: 19.8 m Draft: 8.00m Call Sign: LGSY3 MMSI: 259073000 IMO: 9505508</p>
<p>Equipment Photo</p>	<p>Equipment Description</p>
	<p>Surveyor ROV 2 (SROV2) Length: 5.5m Width: 1.2m Height: 1.2m Weight in Air: 4.7T</p>
<p>Equipment Photo</p>	<p>Equipment Description</p>
	<p>Schilling HD45 WROV Length: 2.9m Width: 1.7m Height: 1.9m Weight in Air: 3.6T</p>
<p>Vessel Photo</p>	<p>Vessel Description</p>



ASV Harry
[SeaRobotics USV 2.5]

Length: 2.48 m
Breadth: 1.24 m
Draft: 0.13 m
Call Sign: MBIY3
MMSI: 232009378

Survey Description

The survey will involve the coverage of dedicated survey lines by the vessel(s) with a full suite of geophysical survey systems - Multi beam Echo Sounder, Side Scan Sonar, Sub Bottom Profiler and Magnetometer mounted on the vessel or the various ROVs.

Geotechnical seabed sampling operations using Vibrocores and CPTs to 3m below the seabed and seabed grab samples will also be undertaken.

Finally, a series of video and photographic records at various locations will be taken of the seabed.

Equipment calibration operations may take place outside the defined corridor but these areas will be chosen so as not to interfere with fishing/shipping activity.

Other vessels should maintain an appropriate and safe distance of 500m when passing the survey vessel(s) whilst undertaking survey operations and should pass at the lowest possible speed to avoid vessel wash effects. The offshore vessels will be working 24-hour operations and will display appropriate day shapes and lights during reduced visibility and night operations. The vessel(s) will also monitor VHF Channels 16 and 12.

Primary Survey Equipment

Primary equipment	Towed / Hull mounted / Sampling	Approximate tow length (if applicable)	Vessel
Multibeam Echosounder	SROV - Tethered	350m	Vessel 1, Vessel 2
Sidescan Sonar	SROV - Tethered	350m	Vessel 1, Vessel 2
Sub Bottom Profiler	SROV - Tethered	350m	Vessel 1, Vessel 2
Gradiometer	WROV - Tethered	350m	Vessel 1, Vessel 2
Drop Down Video System	Sampling	N/A	Vessel 1, Vessel 2
Vibrocorer (3m)	Sampling	N/A	Vessel 1, Vessel 2
CPT (3m)	Sampling	N/A	Vessel 1, Vessel 2
Seabed Grab Sampler	Sampling	N/A	Vessel 1, Vessel 2
Multibeam Echosounder	Hull Mounted	N/A	Vessel 3
Sidescan Sonar	Hull Mounted	N/A	Vessel 3
Sub Bottom Profiler	Hull Mounted	N/A	Vessel 3

Contact Details

The vessel contact details are given in the tables below:

VESSEL 1 – STRIL EXPLORER	
Call sign	LAZT7
Bridge	+47 51 83 09 87
Offshore manager / Party Chief	+47 23 67 43 15
Email	om_stril_explorer@mmt.se
Onshore Site Manager	Kalle.flink@mmt.se

VESSEL 2 – HAVILA SUBSEA	
Call sign	LGSY3
Bridge	+47 22 40 81 90
Offshore manager / Party Chief	+47 22 40 81 86
Email	om_havila_subsea@mmt.se
Onshore Site Manager	Kalle.flink@mmt.se

VESSEL 3	
Offshore manager / Party Chief	+44 7900 883 160
Email	Duncan.mallace@4docean.com
Onshore Site Manager	Kalle.flink@mmt.se

Fisheries Liaison Officers

Fisheries liaison for the survey will be coordinated by Brown and May Marine (BMM). For any commercial fishery queries please contact the Company Fisheries Liaison Officer (CFLO) Alex Winrow-Giffin and the local Fishing Industries Representatives (FIRs) Chris Davidson and James Bremner who will also be in place to liaise with the vessel and fishing operations in the area. The vessel master will issue regular broadcasts whilst the survey vessel is operating to ensure minimal disruption and that vessels maintain an appropriate and safe distance.

Name	Contact Number	Position	Email
Alex Winrow-Giffin	+44 (0)7760 160039/ +44 (0)1379 872144	Company Fisheries Liaison Officer (CFLO)	alex@brownmay.com
Chris Davidson	+44 (0)7810 305100	Fishing Industries Representative (FIR) - Orkney	cad17@hotmail.co.uk
James Bremner	+44 (0)7889 760299	Fishing Industries Representative (FIR) - Mainland	bremnj@aol.com

Further Details

Further enquiries should be addressed to the following MMT personnel in the following order:

Name	Contact Number	Email
Martin Godfrey	+44 (0)7590 515114	Martin.godfrey@mmt.se
Kalle Flink	+46 708 11 28 43	Kalle.flink@mmt.se