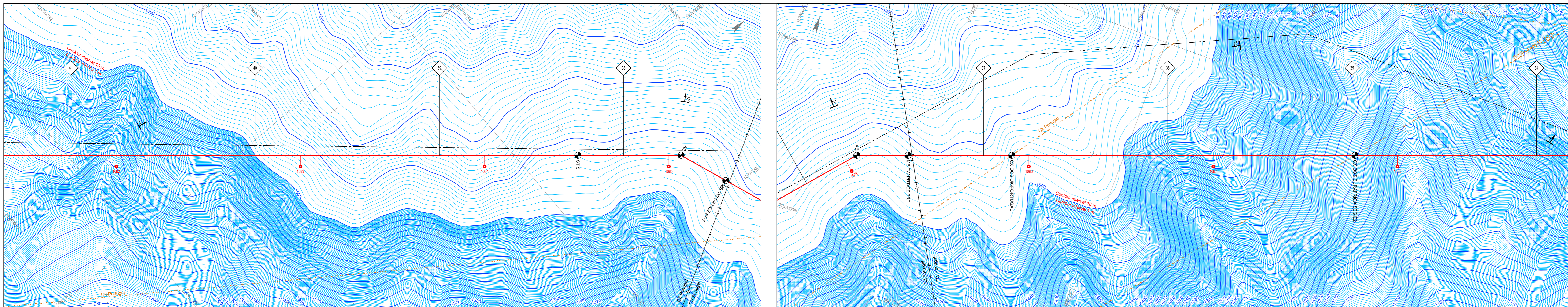
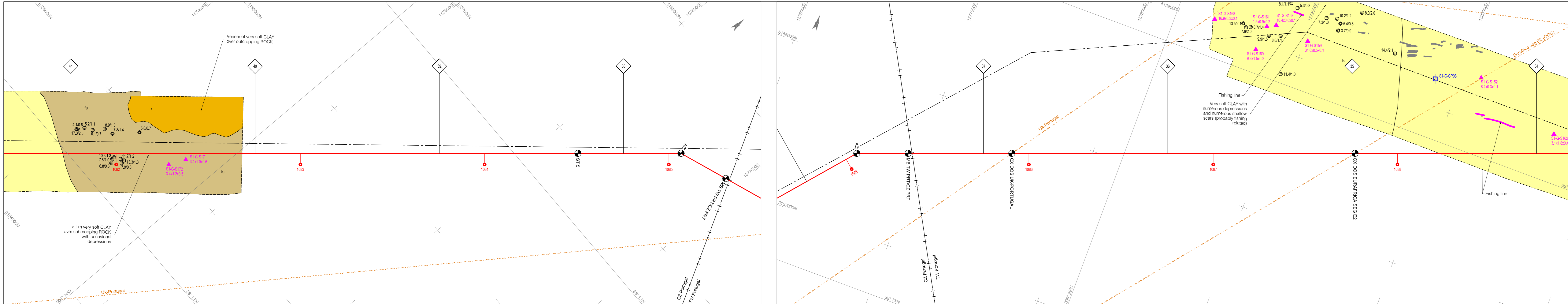


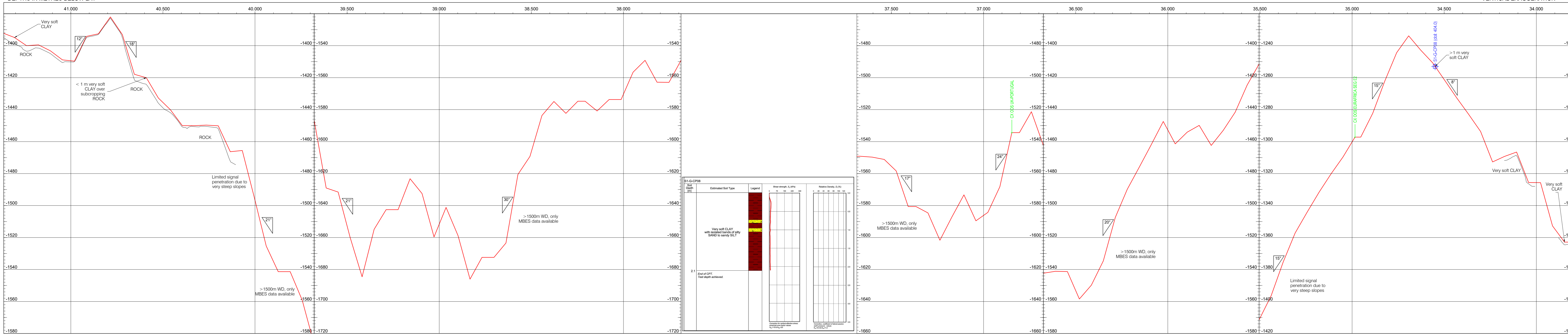
BATHYMETRY PANEL



SEABED FEATURE PANEL



SEABED PROFILE AND GEOLOGICAL INFORMATION PANEL

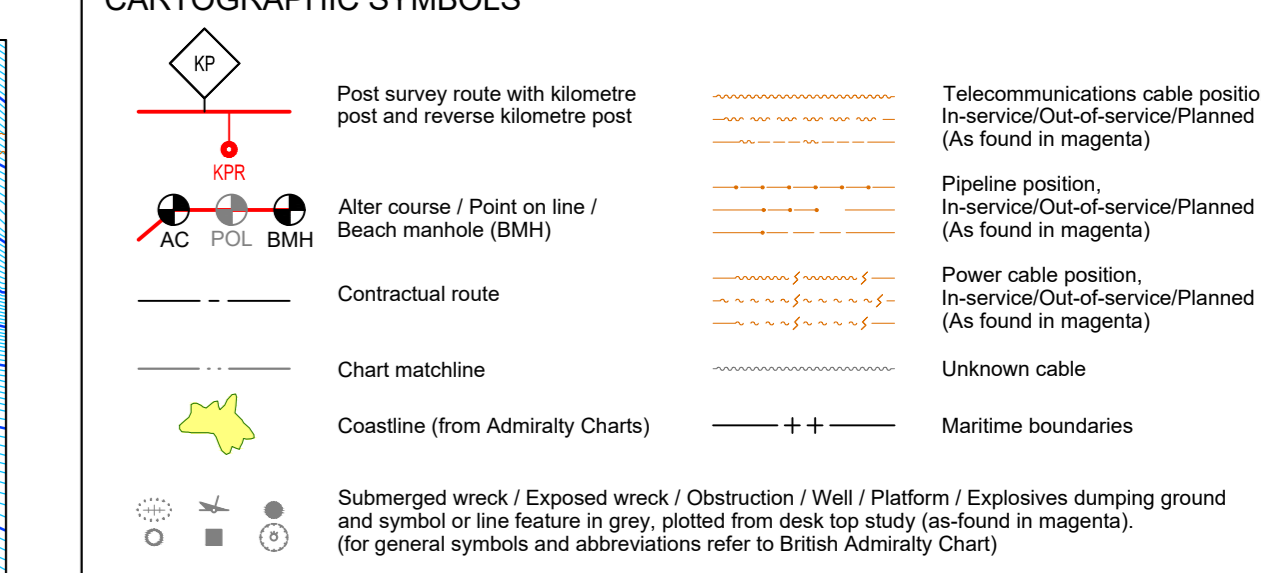


ROUTE ENGINEERING - BURIAL ASSESSMENT

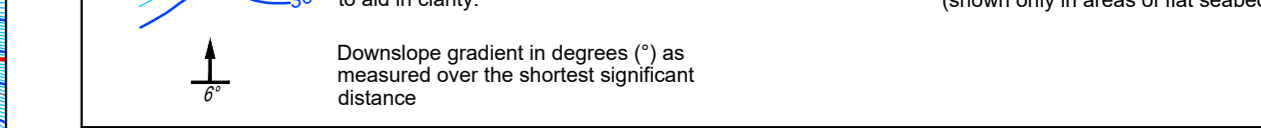


Burial Categories	Installation Risk Assessment (IRA) Categories	Seabed Type Classification for Burial Assessment	Relative Density	Sediment Description
A FALL THROUGH BURIAL - Full depth cable burial expected to be achieved due to seabed conditions. Reduced cable cover depth predicted $\ge 0.5m$	1 Low risk	I very soft / very loose	<math>< 20</math>	Typically, very loose SAND/SILT, or very soft CLAY/SILT
B REDUCED VISIBLE COVER BURIAL - Target burial cover depth might not be achieved due to seabed conditions. Reduced cable cover depth predicted $\ge 0.5m$	2 Moderate risk	II soft / loose	20 - 40	Typically, loose SAND/SILT, or soft CLAY/SILT
C POORLY VISIBLE BURIAL - Poor burial to a predicted $\ge 0.5m$ cover depth	3 Significant risk	III stiff / medium dense	40 - 70	Typically, medium dense SAND/SILT, or firm SILT/CLAY
D UNACCEPTABLE BURIAL - Potential Cable overburial	3 Significant risk	IV stiff / dense	70 - 100	Typically, dense SAND/SILT, or stiff CLAY
E CONTRACT SPECIFIC BURIAL - Cable burial to a specific target cover depth	4 High risk	V very stiff / very dense	100 - 300	Typically, very dense SAND/SILT or very stiff CLAY/SILT
F UNACCEPTABLE - Not appropriate due to seabed conditions or route design criteria	4 High risk	VI Rock	> 300	Weathered bedrock or unweathered bedrock (quartzite, gneiss)

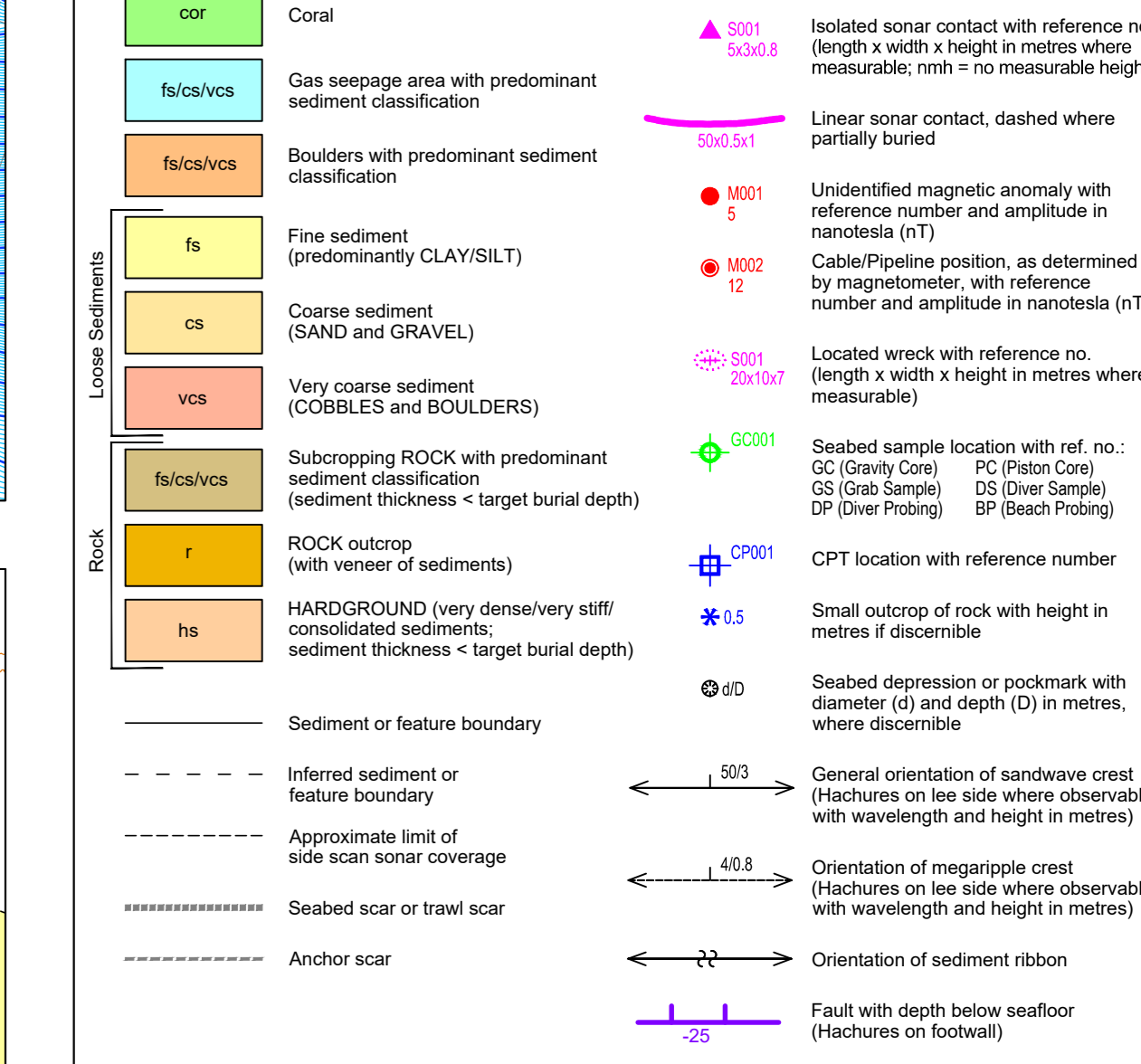
CARTOGRAPHIC SYMBOLS



BATHYMETRY



SEABED FEATURES AND SHALLOW GEOLOGY



SHALLOW GEOLOGY PROFILE



CHART COMMENTS:

Cable and Pipeline Crossing
 CX D05 P21 Corinca (RPL Database), KP: 34 984, water depth: 1303 m, crossing angle: 31°
 CX D05 COAX UK-Portugal (RPL Database), KP: 36 846, water depth: 1544 m, crossing angle: 35°

Hazardous
 This chart is the eastern charted area comprising very soft CLAY with isolated boulders, numerous fishing gears and potential deep long crevasses and shallow reefs (probably fishing gear related). Consider the west, numerous depressions appear on the seabed. Seabed is irregular with very steep slopes (up to 17°). A steep water channel area with very steep slopes (up to 17°) in the southwestern charted area. Seabed comprises very soft CLAY overlying subsooping ROCK with occasional depressions. Slopes are mostly steep to very steep (up to 20°) becoming gentler by heading the slope margin again in the southwestern charted area. There, seabed comprises very soft CLAY with isolated depressions and numerous shallow scars (probably fishing related).

GENERAL NOTES:

Survey Vessel: M/V Fugro Gauss
 Navigation Systems: Seapath 3300
 Underwater Pos. Systems: Kongsberg HP-Pap 351
 Motion Sensor: Kongsberg EM 122 EM 712
 Bathymetry: EdgeTech 4200 / Knudsen 3200
 Magnetometer: G-862 AR4

Descriptive Terms and Definitions:
 The criteria used for interpretation and descriptions are presented in the Survey Report.

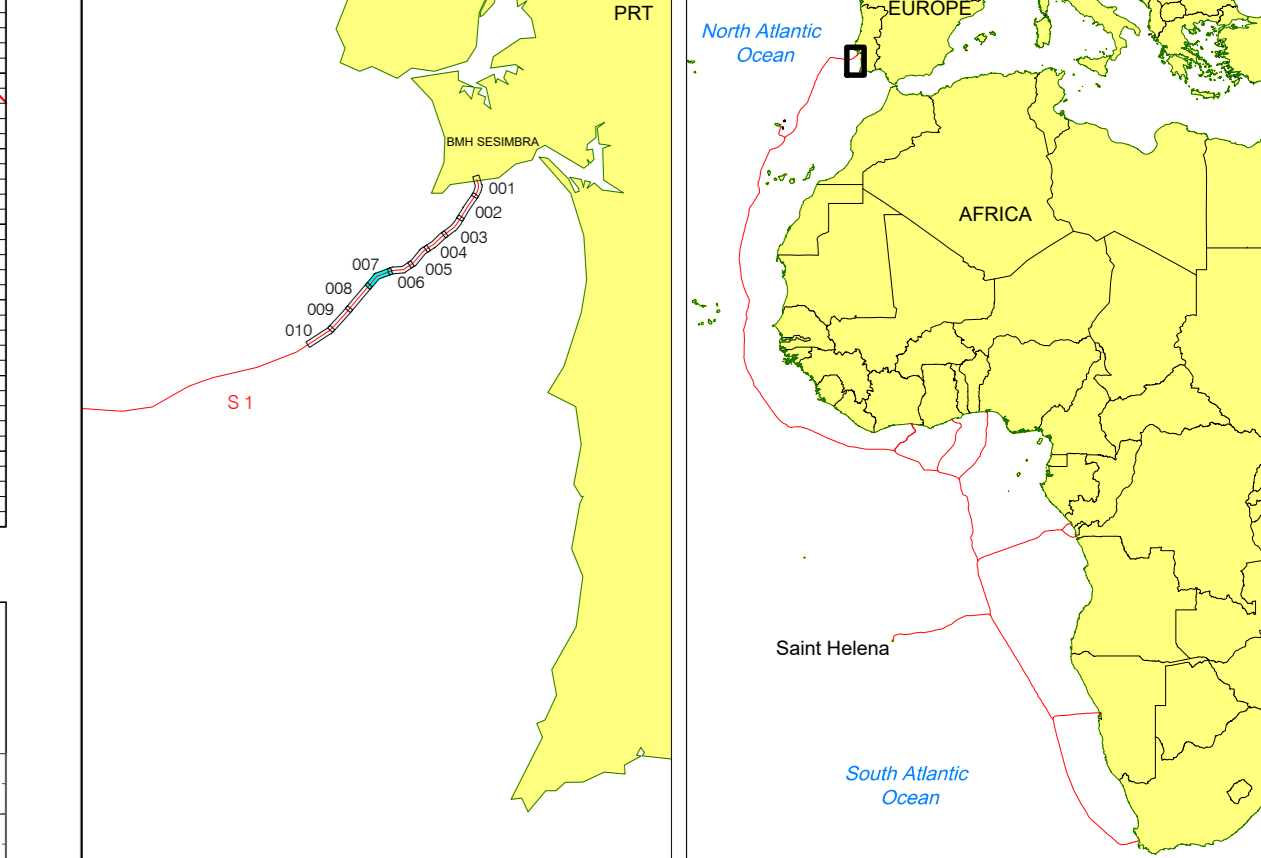
Bathymetry & Tide:
 Depths in metres, reduced to Lowest Astronomical Tide (LAT).

GEODETTIC PARAMETERS:

Projection: Mercator
 Datum: WGS84
 Semi-Major Axis: 6 378 137 000 m
 Inverse Flattening (1/f): 298 257 222 983 (Up to BRD 14/08/2019)

Longitude of Origin: 20° W
 Standard Parallel: 20° N
 False Easting: 0 m
 False Northing: 1 000 000 m
 Scale Factor: 1

CHART LAYOUT PLAN



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Survey Date: December 2019

Scale: NATURAL SCALE 1 : 10 000 AT 25° N
 Scale 6674.824688 at mid-latitude of chart

Contractor: **ALCATEL SUBMARINE NETWORKS**

Surveyor: **FUGRO** Fugro Germany Marine GmbH

Project Name: **EQUIANO**
 Cable Route Survey

Document Title: **SEGMENT 1**
 BMH Sesimbra to BU MAD
 ALIGNMENT CHART NO. 007 OF 010
 (KP 33.774 to KP 41.365)

2.0	06.03.2020	RMJ / JE	KS	BW
1.0	07.02.2020	RMJ / JE	KS	BW
0.0	20.12.2019	AB	OV	RY

Revision: **REVISION 2**

BASED UPON: EQUANO ST. BAH. SESIMBRA TO BU MAD, PR212, 16-JAN-2019

File Name: EQUI_01_AS-007_10k