



Vattenfall Wind Power Ltd

Thanet Extension Offshore Wind Farm

**Annex 13-2: Archaeological Review of
Geophysical and Geotechnical Data**

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Vattenfall Wind Power Ltd

Thanet Extension Offshore Wind Farm

Annex 13-2: Archaeological Review of Geophysical and Geotechnical

Data

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Thanet Extension Offshore Wind Farm

Archaeological Review of Geophysical and Geotechnical Data

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Thanet Extension Offshore Wind Farm

Archaeological Review of Geophysical and Geotechnical Data

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Thanet Extension Offshore Wind Farm

Archaeological Review of Geophysical Data

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Thanet Extension Offshore Wind Farm

Archaeological Review of Geophysical Data

Summary

Wessex Archaeology was commissioned by GoBe Consultants Ltd on behalf of Vattenfall Wind Power Ltd to provide an archaeological review of geophysical survey data and geotechnical data for the proposed Thanet Extension Offshore Wind Farm and its associated export cable corridor. This report forms Annex 10.2 of the Preliminary Environmental Information Report prepared by Wessex Archaeology.

The principal aim of this report is to provide an archaeological review of the geophysical data, to assess the area for any anomalies of potential archaeological interest within the survey area, and to identify any evidence for palaeolandscapes of archaeological potential within the survey area based on the geophysical and geotechnical data.

A number of palaeogeographic features have been identified within the sub-bottom profiler data. These comprise a channel complex deposit that has been divided into five phases and records the history of the offshore route of the river Thames during periods of sea level lowstand.

Four out of the five phases of features are considered to be of high archaeological potential, with one (Phase 2) interpreted as of medium archaeological potential. These features have the potential to contain both *in situ* and derived archaeological artefacts and palaeoenvironmental material, all dating from periods of time during the Pleistocene when the region will have been dry land and suitable for human habitation.

This review has identified a total of 1,234 seabed anomalies of archaeological potential within the Study Area, 174 within the Thanet Extension Offshore Wind Farm site area and 1,058 within the cable corridor.

Thirty-five have been classified as A1 - anthropogenic origin of archaeological interest. Of these, 16 were classified as wrecks, 18 were classified as debris and one was classified as a debris field.

A further 1,177 anomalies have been classified as A2 - uncertain origin of possible archaeological interest. It is recommended that an avoidance strategy be adhered to with respect to these anomalies within the area; however, no Archaeological Exclusion Zones are recommended for these features at this time.

It is recommended that any artefacts recovered during construction activities, both related to the Prehistoric identified palaeochannel or more recent maritime-related activities, are reported through the Offshore Renewables Protocol for Archaeological Discoveries. It is also recommended that any future geophysical survey data within the scheme, and in particular any acquired from within the intertidal zone at Pegwell Bay, be made available for archaeological assessment.

Stage 1 geoarchaeological assessment of geotechnical logs indicated six vibrocores were acquired from within palaeogeographic features of archaeological potential. As such, it is recommended that samples from VC001, VC002, VC003, VC004, VC006 and VC007 be subject to Stage 2 geoarchaeological recording if available. It is also recommended that, should further geotechnical sampling be undertaken, samples acquired from within any identified Pleistocene/Early Holocene features (Unit 2) be made available for geoarchaeological assessment.



Thanet Extension Offshore Wind Farm

Archaeological Review of Geophysical Data

Acknowledgements

This project was commissioned by GoBe Consultants Ltd on behalf of Vattenfall Wind Power Ltd.

Data was provided by Fugro Survey B.V. Wessex Archaeology is grateful to the staff of all the above organisations for their co-operation during the project.

Megan Metcalfe, Alexandra Jacob, David Howell, Abby Mynett and Laura Andrews carried out the geophysical review, with illustrations prepared by Kenneth Lymer. The report was written by Megan Metcalfe and David Howell with contributions from Dr Andrew Shaw. Euan McNeill managed the project on behalf of Wessex Archaeology.



Thanet Extension Offshore Wind Farm

Archaeological Review of Geophysical Data

1 INTRODUCTION

1.1 Project Background

1.1.1 Wessex Archaeology was commissioned by GoBe Consultants Ltd (the Client) on behalf of Vattenfall Wind Power Ltd (VWPL) to provide a report summarising the archaeological assessment of geophysical and geotechnical data undertaken to date, with reference to the marine element of the proposed Thanet Extension Offshore Wind Farm (TEOWF) and its associated cable corridor, off the Kent coast (hereafter 'the Study Area'). This report forms Annex 10.2 of the Preliminary Environmental Information (PEI) report prepared by Wessex Archaeology (Wessex Archaeology 2017a).

1.1.2 The proposal includes provision for a maximum of 34 wind turbine generators encircling the current Thanet Offshore Wind Farm (TOWF). The proposed development includes turbines, foundations, inter-array cabling and sub-sea export cabling, up to and including its landfall location at Pegwell Bay North. There are currently two possible cable corridors under consideration; this document retains both options at this stage of enquiry until a preferred option is selection.

1.2 Aims and Objectives

1.2.1 The aim of this study is to provide the client with an archaeological assessment of geophysical datasets acquired within the Study Area, and aims to identify any new sites of potential archaeological interest. The objectives are to:

- Assess the geophysical data acquired by Fugro Survey B.V. (Fugro) during the 2016 campaign to identify whether any material of archaeological potential is present on the seabed within the survey area;
- Assess the sub-bottom profiler data acquired by Fugro and identify any evidence for palaeolandscapes of archaeological potential within the survey area;
- To compare the interpretation with the results of any previous archaeological assessments of geophysical data and historic records within the area;
- Recommend mitigation for any identified material of archaeological potential likely to be directly impacted by installation of the windfarm and its associated cabling.

2 METHODOLOGY

2.1 Study Area

2.1.1 The current Thanet wind farm is located approximately 11 km from the Isle of Thanet off the east Kent coast. The Study Area for this report comprises the extension area, of up to 5 km, around the current Thanet Wind Farm (hereafter the 'TEOWF site'), as well as the associated export cable corridor (hereafter the 'TEOWF cable corridor') (**Fig.1**).



2.1.2 The geophysical Study Area for the TEOWF site is as provided in the 'Site Investigation Boundary', supplied by the Client on 8 March 2017. This shapefile incorporates the 500 m vessel turning buffer, however, as there is not full geophysical data coverage within this buffer, the vessel turning areas have not been assessed and are beyond remit of this report.

2.1.3 The Study Area was amended in July 2017, and a new shapefile released for the export cable corridor ('Offshore_cable_route_PEI_final'). This shapefile formed the geophysical Study Area for the TEOWF cable corridor.

2.2 Data Sources

2.2.1 A number of sources of primary and synthesised information were consulted in order to compile this report.

- Geophysical survey datasets acquired by Fugro;
- Geotechnical data, also acquired by Fugro (Fugro 2016);
- The United Kingdom Hydrographic Office (UKHO) data for charted wrecks and obstructions;
- The National Record of the Historic Environment (NRHE) maintained by Historic England, comprising data for marine archaeological sites, find spots and archaeological events;
- The Kent Historic Environment Record (KHER), comprising a database of recorded archaeological sites, find spots, and archaeological events within the county;
- Admiralty Charts and geological charts relevant to the proposed Study Area; and
- Grey literature reports relating to TOWF:
 - Thanet Offshore Wind Farm: Stage 1 Borehole Assessment (Wessex Archaeology 2006a);
 - Thanet Offshore Wind Farm Project: Archaeological Assessment of Marine Geophysical Data (Wessex Archaeology 2006b);
 - Thanet Offshore Wind Farm: Wind Farm Area: Geotechnical Logs and Samples: Stages 1 and 2: Archaeological Report (Wessex Archaeology 2008a);
 - Thanet Offshore Wind Farm: Archaeological Assessment of Marine Geophysical Data: Pre-development Monitoring Report: Thanet Offshore Wind Farm Export Cable Route (Wessex Archaeology 2008);
 - Project NEMO, UK-Belgium Electrical Interconnector Richborough to West-Zeebrugge: Archaeological Environmental Impact Assessment (Wessex Archaeology 2016).
 - Relevant primary and secondary sources and grey literature held in Wessex Archaeology's own library, and those available through the Archaeology Data Service and other websites.



2.3 Geophysical Data Assessment

Technical Specifications

- 2.3.1 The geophysical data comprised sidescan sonar (SSS), magnetometer, sub-bottom profiler (SBP) and multibeam echosounder (MBES) datasets. The data were acquired by Fugro between 29 July and 6 September 2016.
- 2.3.2 For the inshore section of the TEOWF cable corridor, data were collected by the *Valkyrie*, whereas data from the offshore section were collected by the MV *Discovery*. The geophysical survey on the TEOWF site was carried out using the MV *Fugro Pioneer*. The extents covered by each survey vessel are illustrated in **Fig. 1**.
- 2.3.3 The vessel *Fugro Pioneer* deployed an EdgeTech 4200-FS digital SSS towfish operated at frequencies of 100 kHz and 600 kHz. SSS data were acquired with a range of 125 m across the TEOWF site, with line spacing of 100 m and cross lines run at approximately 1,000 m. A G-882 marine magnetometer was used to acquire magnetometer data. MBES data were acquired using a Kongsberg EM2040 Dual Head multibeam echosounder operating at 400 kHz. The SBP data were acquired using 16 element Massa TR-1075 hull mounted pinger.
- 2.3.4 The vessel RV *Discovery* deployed an EdgeTech 4200-FS SSS towfish operated at 300 kHz and 600 kHz, the range varied between 50 m and 75 m with a line spacing of 75 m in the offshore section of the TEOWF corridor, reducing down to 25 m in the nearshore section. A Kongsberg EM2040 dual-head dual-swath system used to acquire MBES data was operated at 200 – 400 kHz. A Geometrics G-882 magnetometer was used to acquire magnetometer data. SBP data were acquired using an STR 3.5 kHz pinger system.
- 2.3.5 The *Valkyrie* acquired SSS data using an EdgeTech 4125 towfish operated at 400 kHz and 900 kHz and a range of 25 m. A Teledyne RESON 7125 dual-head dual-swath system was used to acquire MBES data at 400 kHz. A Geometrics G-882 magnetometer towfish was used to acquire magnetometer data. The data were acquired at a 15 m line spacing as a minimum. The SBP data were acquired using and STR 3.5 kHz pinger system.
- 2.3.6 All SSS data were provided to Wessex Archaeology as *.xtf* files, the magnetometer data were provided as *.csv* files and the MBES data were provided as 1 m or 0.25 m gridded *.xyz* files referenced to lowest astronomical tide (LAT). The SBP data were provided to Wessex Archaeology as processed *.seg* files. Trackplots for all sensors were provided as *.shp* files.
- 2.3.7 All positions for the survey were recorded and expressed as ETRS89 UTM Zone 31 N coordinates.

Data Quality

- 2.3.8 The geophysical data sets used for this report were individually assessed for quality and their suitability for archaeological purposes, and rated using the following criteria (**Table 1**).

Table 1: Criteria for assigning data quality rating

Data Quality	Description
Good	Data which are clear and unaffected by weather conditions or sea state. The dataset is suitable for the interpretation of standing and partially buried metal wrecks and their character and associated debris field. These data also provide the highest chance of identifying wooden wrecks and debris.



Data Quality	Description
Average	Data which are affected by weather conditions and sea state to a slight or moderate degree. The dataset is suitable for the identification and partial interpretation of standing and partially buried metal wrecks, and the larger elements of their debris fields. Wooden wrecks may be visible in the data, but their identification as such is likely to be difficult.
Variable	This category contains datasets with the quality of individual lines ranging from good to average to below average. The dataset is suitable for the identification of standing and some partially buried metal wrecks. Detailed interpretation of the wrecks and debris field is likely to be problematic. Wooden wrecks are unlikely to be identified.

- 2.3.9 The quality of the SSS data collected on board the *Valkyrie* have been rated as 'Average' using the above criteria table. In general, the data were of good quality, however some lines were affected by weather conditions and sea state. However, this did not detrimentally affect the data to a significant degree.
- 2.3.10 The quality of the SSS data collected on board the *Fugro Pioneer* have been rated as 'Average' using the above criteria table. The majority of the files displayed noise interference from cable snatching due to strong tides. The visibility did not extend the full width of the range (125 m) but was limited to approximately 100 m on each channel. Due to the range, detailed interpretation was not possible. However, overall the data quality was found to be suitable for the identification of standing and partially buried wrecks, and smaller objects.
- 2.3.11 The quality of the SSS data collected on board the *Discovery* have been rated as 'Variable' using the above criteria table, with some lines exhibiting good quality data and others displaying below average quality with evidence of poor weather conditions or sea state. However, this did not detrimentally affect the data to a significant degree.
- 2.3.12 A small number of lines of SSS data collected on all vessels appeared to have navigational issues that could not be resolved. These lines have not been used for this assessment.
- 2.3.13 The magnetometer data have been rated as 'Average' using the criteria table. A number of the data files have been affected by noise and some background variation is visible throughout the dataset. In a number of files frequent spiking is visible and some lines display noise created by alterations in tow cable length, however this did not affect the data to a significant degree, and as such, is deemed suitable for archaeological purposes.
- 2.3.14 The MBES data have been rated as 'Good' using the above criteria table. The data quality and resolution of 0.5 m were found to be of a good standard for archaeological assessment.
- 2.3.15 The quality of the SBP data acquired by Fugro on board the *Valkyrie* and *Fugro Pioneer* has been rated as 'Average' using the above criteria. Weather noise and swell affected a number of the lines, and the system used achieved only relatively limited penetration into the seabed. This is mainly a result of the chalk bedrock being close to seabed along the entire route and, as such, did not detrimentally affect the data from an archaeological perspective.
- 2.3.16 The quality of the SBP data acquired by Fugro on board the *Discovery* has been rated as 'Good' using the above criteria, with shallow reflectors clearly visible and the data set as a whole relatively unaffected by environmental conditions.



- 2.3.17 Some sections of the Study Area were not covered by the most recent geophysical survey or by previous surveys associated with the Thanet Offshore Wind Farm. Where possible, interpretation was incorporated from Project NEMO (Wessex Archaeology 2016), however there are some areas with no recent geophysical coverage (**Fig. 1**).
- 2.3.18 The NEMO data assessed were obtained by MMT between 15 and 29 August 2010 on the MV *IceBeam* (offshore) and the MV *Ping* (near shore), and consisted of SSS, SBP (sparker and boomer), MBES and marine magnetometer data sets. Full technical specifications are provided in Wessex Archaeology (2016).

Geophysical Data – Processing

- 2.3.19 The high frequency .*xtf* SSS data files were processed using Coda Geosurvey software. This allowed the data to be replayed with various gain settings in order to optimise the quality of the images. The data were interpreted for any objects of possible anthropogenic origin. This involves creating a database of anomalies within Coda by tagging individual features of possible archaeological potential, recording their positions and dimensions, and acquiring an image of each anomaly for future reference.
- 2.3.20 A mosaic of the sidescan sonar data is produced during this process to assess the quality of the sonar towfish positioning. This process allows the position of anomalies to be checked between different survey lines and for the positioning to be further refined if necessary.
- 2.3.21 The form, size and/or extent of an anomaly is a guide to its potential to be an anthropogenic feature and therefore of archaeological interest. A single small but prominent anomaly may be part of a much more extensive feature that is largely buried. Similarly, a scatter of minor anomalies may define the edges of a buried but intact feature, or it may be all that remains as a result of past impacts from, for example, dredging or fishing.
- 2.3.22 The MBES data were analysed to identify any unusual seabed structures that could be shipwrecks or other anthropogenic debris. The data were gridded at 0.25 m and analysed using Fledermaus software, which enables a 3-D visualisation of the acquired data and geo-picking of seabed anomalies.
- 2.3.23 The magnetometer data were processed using Geometrics MagPick software in order to identify any discreet magnetic contacts which could represent buried metallic debris or structures such as wrecks.
- 2.3.24 The software enables both the visualisation of individual lines of data and gridding of data to produce a magnetic anomaly map. The data were first smoothed to try and eliminate any spiking. A trend was then fitted to the resulting data, and the trend values subtracted from the smoothed values. This was carried out in an attempt to remove natural variations in the data (such as diurnal variation in magnetic field strength and changes in geology). The processed data were then gridded to produce a map of magnetic anomalies, and individual anomalies tagged and images taken in a similar process to that undertaken for the SSS data.
- 2.3.25 The SBP data were processed using Coda Seismic+ software. This software allows the data to be visualised with user selected filters and gain settings in order to optimise the appearance of the data for interpretation. The software then allows an interpretation to be applied to the data by identifying and selecting sedimentary boundaries and shallow geological features that might be of archaeological interest.



- 2.3.26 The SBP data were interpreted with a two-way travel time (TWTT) along the z-axis. In order to convert from TWTT to depth, the velocity of the seismic waves was estimated to be 1,600ms⁻¹. This is a standard estimate for shallow, unconsolidated sediments.
- 2.3.27 Any small reflectors which appear to be buried material such as a wreck site covered by sediment were also recorded, the position and dimensions of any such objects noted in a gazetteer, and an image of each anomaly acquired. It should be noted that anomalies of this type are rare, as the sensors must pass directly over such an object in order to produce an anomaly.

Geophysical Data – Anomaly Grouping and Discrimination

- 2.3.28 The previous section describes the initial interpretation of all available geophysical datasets which were conducted independently of one another. This inevitably leads to the possibility of any one object being the cause of numerous anomalies in different datasets and apparently overstating the number of archaeological features in the exploration area.
- 2.3.29 To address this fact the anomalies were grouped together; allowing one ID number to be assigned to a single object for which there may be, for example, a UKHO record and multiple SSS anomalies.
- 2.3.30 Once all the geophysical anomalies and desk-based information have been grouped, a discrimination flag is added to the record in order to discriminate against those which are not thought to be of an archaeological concern. For anomalies located on the seabed, these flags are ascribed as follows (**Table 2**).

Table 2: Criteria discriminating relevance of seabed features to proposed scheme

Non-Archaeological	U1	Not of anthropogenic origin
	U2	Known non-archaeological feature
	U3	Position of a recorded loss at which no physical wreck remains have ever been identified
Archaeological	A1	Anthropogenic origin of archaeological interest
	A2	Uncertain origin of possible archaeological interest
	A3	Historic record of possible archaeological interest with no corresponding geophysical anomaly

- 2.3.31 Similarly, the discrimination flags applied to shallow geological features of possible archaeological potential are ascribed as follows (**Table 3**).

Table 3: Criteria discriminating relevance of palaeogeographic features to proposed scheme

Non-Archaeological	U2	Feature of non-archaeological interest
Archaeological	P1	Feature of probable archaeological interest, either because of its palaeogeography or likelihood for producing palaeoenvironmental material
	P2	Feature of possible archaeological interest

- 2.3.32 The grouping and discrimination of information at this stage is based on all available information and is not definitive. It allows for all features of potential archaeological interest to be highlighted, while retaining all the information produced during the course of



the geophysical interpretation and desk-based assessment for further evaluation should more information become available.

2.4 Geotechnical Data Assessment

- 2.4.1 The geotechnical data were provided to Wessex Archaeology as part of the Fugro survey technical report, which contained geotechnical logs for the TEOWF site. This comprised geotechnical logs from 10 locations within the TEOWF site and one within the TEOWF cable corridor, which were used to carry out the geoarchaeological assessment.
- 2.4.2 In order to frame geoarchaeological investigations, WA has developed a five-stage approach, encompassing different levels of investigation appropriate to the results obtained, accompanied by formal reporting of the results at the level achieved. These stages are as follows:

Table 4: Stages of geoarchaeological assessment/recording

Stage	Method	Description
1	Assessment	A desk-based archaeological assessment of the borehole and vibrocore logs generated by geotechnical contractors aims to establish the likely presence of horizons of archaeological interest and broadly characterise them, as a basis for deciding whether and what Stage 2 archaeological recording is required. The Stage 1 report will state the scale of Stage 2 work proposed.
2	Geoarchaeological Recording	Archaeological recording of selected retained or new core samples will be undertaken. This will entail the splitting of the cores, with half of each core being cleaned and recorded. The Stage 2 report will state the results of the archaeological recording and will indicate whether any Stage 3 work is warranted.
3	Sampling and Assessment	Dependent upon the results of Stage 2, sub-sampling and palaeoenvironmental assessment (pollen, diatoms and foraminifera) may be required. Subsamples will be taken from one core-half, with the other core-half retained intact for further sub-sampling, should it be required. Assessment will comprise laboratory analysis of the samples to a level sufficient to enable the value of the palaeoenvironmental material surviving within the cores to be identified. Subsamples will also be taken and retained at this stage in case radiocarbon dating is required during Stage 4. The Stage 3 report will set out the results of each laboratory assessment together with an outline of the archaeological implications of the combined results, and will indicate whether any Stage 4 work is warranted.
4	Analysis and Dating	Full analysis of pollen, diatoms and/or foraminifera assessed during Stage 3 will be undertaken. Typically, Stage 4 will be supported by radiocarbon dating of suitable subsamples. Stage 4 will result in an account of the successive environments within the coring area, a model of environmental change over time, and an outline of the archaeological implications of the analysis.
5	Final Report	If required Stage 5 will comprise the production of a final report of the results of the previous phases of work for publication in an appropriate journal. This report will be compiled after the final phase of archaeological work, whichever phase that is.



- 2.4.3 This assessment comprises Stage 1 of the above described approach, with recommendations made for any further Stage 2 work if deemed necessary, and was undertaken alongside the palaeogeographic assessment. Stage 2 and upwards require the analysis and assessment of physical samples, which is dependent upon sample availability and suitability for geoarchaeological assessment.

3 PALAEOGEOGRAPHIC ASSESSMENT

3.1 Geological Baseline

- 3.1.1 Thanet offshore wind farm is situated at the southern end of the North Sea basin, on the northern edge of the Weald-Artois high – an area of uplift created during the Tertiary due to forces arising from Africa colliding with Eurasia. A shallow marine basin has existed in the approximate location of the North Sea since the early Tertiary (although the exact location and extent has altered over time), which is reflected in the geology of the region (Cameron *et al.* 1992).
- 3.1.2 The background geology of the area is dominated by Cretaceous chalk bedrock, deposited in a shallow marine environment millions of years ago and subsequently uplifted. Across some of the study area, the Cretaceous chalk is overlain by early Tertiary (Paleocene) sands and clays, deposited on the edge of the marine basin. Both the chalk and the Tertiary sediments are in turn unconformably overlain by Pleistocene and Holocene deposits.
- 3.1.3 The Pleistocene history of the southern North Sea is dominated by repeated glacial/interglacial cycles and the effects of the associated rises and falls in relative sea level, which resulted in large areas of the southern North Sea being periodically exposed as a terrestrial environment (**Fig. 2**). This is also represented in the geological record, with distinct terrestrial landscape features being present interspersed with deposits of marine sediment (Cameron *et al.* 1992).
- 3.1.4 This is especially the case with the coast off Kent and along the English Channel, which are not thought to have directly experienced any glaciation during this time. As such, the Pleistocene deposits in these areas are only either ice-free terrestrial or marine derived. As the Study Area has not directly experienced a glacial event, any currently submerged palaeolandscapes have the potential to be well preserved. This is in contrast with areas further north (approximately north of the north Norfolk coast) where repeated glaciations are likely to have eroded away much of previous landscapes during the last ice sheet advance.
- 3.1.5 Despite this, the effect of ice sheet advance, particularly during the Anglian glaciation (c. 480,000 – 423,000 BP), is evident within the Study Area. The River Thames did not always run along its current course, but, prior to the Anglian glaciation, originally flowed much further north (Bridgland 1994; Parfitt *et al.* 2010). Advance of the Anglian ice sheet, the most extensive of the Pleistocene glaciations, gradually pushed the river further south until it reached its present day location. At the time, lower global sea levels meant the river continued to flow on land east across the Study Area, rather than into an estuary as is the case at present.
- 3.1.6 Prior to the Anglian, the North Sea was separated from the English Channel by a chalk ridge along the Weald-Artois high. It is currently thought that, during deglaciation of the Anglian ice sheet, the emptying of an ice-dammed lake within the North Sea created a volume of water large enough to breach this high ground and connect the two areas, incising the Lobourg Channel off the Kent coast and some of the English Channel

palaeovalleys in the process (Gupta *et al.*, 2017; Hamblin *et al.*, 1992). This initial catastrophic breaching of Weald-Artois ridge is thought to have been followed by further erosive events leading to the permanent breaching of the English Channel approximately 150 kya (Hijma *et al.* 2012).

- 3.1.7 The breaching of Weald-Artois ridge had a major impact on the palaeogeography of Britain, turning Britain from an island at times of high sea-level, to a peninsula of Europe when sea levels dropped. In periods associated with lower sea levels since the Anglian, the Lobourg Channel is likely to have formed the main drainage route of the major northern European rivers flowing into the dry North Sea Basin (Cameron *et al.* 1992). During periods of lowered sea levels, these river systems, including the Thames, Medway and Great Stour, extended across these now submerged landscapes, resulting in cyclical deposition of associated terrace and flood plain deposits laid down in relation to relative sea level (Wessex Archaeology 2010). These Pleistocene deposits are likely to have been reworked or redeposited to a certain extent during subsequent marine transgressions (Hamblin *et al.* 1992), but some are likely to survive on the seabed.
- 3.1.8 Pegwell Bay, the landfall site of the TEOWF cable corridor, forms the final drainage point of the basin of the Great Stour. The River Stour forms the main axial drainage system in north-east Kent. The modern river rises inside the Wealden basin, passing through the Wealden scarp north-east of Ashford, and then draining north-east towards the Isle of Thanet, where it drains around the Isle both northwards (via the River Wantsum) and eastwards, entering the sea at Pegwell Bay. Various tributary valleys extend sideways from the main Stour valley, notably the East Stour and the Little Stour.
- 3.1.9 The Stour Valley is associated with extensive outcrops of Middle-Late Pleistocene fluvial river terrace deposits (Murton *et al.* 1998; Wenban Smith 2015). These occur all along its length, but the best studied are upstream of the cable landfall, including in the rivers upper stretch to the northwest of Ashford; at Ashford and Kennington where the intra-Wealden drainage network converges and breaches the Wealden scarp; on the northern bank of the Great Stour in the vicinity of Canterbury; and between the Great Stour at Canterbury and the Little Stour.
- 3.1.10 Onshore, there are deeply buried and little-investigated Pleistocene fluvial river terrace deposits in the lower ground (potentially including the intertidal and offshore zone) surrounding the Isle of Thanet, in the vicinity of the River Wantsum, and the lowest stretches of the Stour as it approaches Pegwell Bay to the south of the Isle of Thanet.
- 3.1.11 The Stour Basin and the Isle of Thanet is also associated with extensive deposits of 'Head/Brickearth'. These are complex deposits that include both Pleistocene slope wash (a mixture of reworked Cretaceous and/or Tertiary sands, silts and clays and aeolian sands and silts) and Holocene colluvium. Pleistocene 'Head/Brickearth' deposits have been shown to have been deposited at different periods, extending over at least the period between 160 and 13 kya (Kent County Council 2015). Such deposits are often most extensive within solution features within the chalk; such localities are often associated with Palaeolithic artefacts.
- 3.1.12 These 'Head/Brickearth' deposits include some of the deepest wind-blown loess sequences in Britain, most notably those that expose in the cliffs at Pegwell Bay between Ramsgate and Cliffsend on the Isle of Thanet (Catt 1977; Antoine *et al.* 2003; Murton *et al.* 2003). At Pegwell Bay, these fine-grained deposits have been shown to be deposited in two main phases within the late Pleistocene – 23-17 kya and 15 kya; the younger horizon containing a truncated buried soil (Clarke *et al.* 2007).

- 3.1.13 Although likely to have been eroded by subsequent marine transgressions, 'Head/Brickearth', including loess deposits, may be preserved in localised places in the intertidal and offshore zone.
- 3.1.14 These Pleistocene sediments are post-dated by sequences of Holocene deposits which can be divided into two distinct units. The first consist of terrestrial sediments, and can include channel deposits and associated overbank sediments dating from the early Holocene. The second comprises marine sediments (sands and gravels (British Geological Survey (BGS) 1990)) deposited since the most recent marine transgression (c. 7,000 – 5,000 BP). At present, the Study Area is a fully shallow marine environment.

3.2 Prehistoric Baseline

- 3.2.1 The archaeological history of the southern North Sea is directly linked to the previously described glacial/interglacial cycles and the associated changes of environment across the region. During periods of relatively low sea level, the exposed terrestrial landscape would have been an attractive environment for different Hominin species, including *Homo antecessor*, *Homo heidelbergensis*, *Homo neanderthalensis*, and, eventually, modern humans (*Homo sapiens*) (Fig. 2).
- 3.2.2 The earliest archaeological evidence from the region surrounding the Study Area derives from Pleistocene Terrace deposits of the River Stour; high-level pre-Anglian terrace deposits at Fordwich, Canterbury and on the Blean plateau contain rare evidence of early pre-Anglian occupation, dating to 700,000 - 500,000 BP. This is only slightly younger than the earliest direct evidence for hominin activity in the UK, identified at the Lower Palaeolithic sites of Happisburgh, on the Norfolk coast, and Pakefield, on the Suffolk coast, and dating from from c. 900,000 and 700,000 BP respectively (Parfitt *et al.* 2005; 2010).
- 3.2.3 Middle level terraces of the Stour in the vicinity of Canterbury have produced large concentrations of Lower Palaeolithic artefacts (e.g. at Sturry and at Howlett's), representing evidence of re-settlement in the period after the Anglian Glaciation from 425,000 - 250,000 BP. Other lower/middle level terrace deposits a little to the north-east of Canterbury (at Chislet, on the west side of the Wantsum Channel) contain both artefacts and palaeoenvironmental remains (Kent County Council 2015). Fluvial deposits exposed in the cliffs at Reculver, which are probably associated with an early course of the Stour, have produced large numbers of Lower Palaeolithic artefacts (Murton *et al.* 1998).
- 3.2.4 Such fluvial deposits are also known repositories of Middle and Upper Palaeolithic material. However, the primary source of extant Middle Palaeolithic artefacts in the study Area is the 'Head/Brickearth'. In the Stour Basin, these deposits have produced numbers of Palaeolithic finds, with recovery of more than 400 handaxes, Levallois material and six of the distinctive (and nationally rare) late Middle Palaeolithic bout coupé form (Kent County Council 1995). The latter are thought to be associated with Neanderthal occupation in the last glaciation, c. 80,000 - 50,000 BP (White and Jacobi 2002). 'Head/Brickearth' also has the potential to bury (or contain) evidence of final Upper Palaeolithic, and Mesolithic remains, as demonstrated later Upper Palaeolithic, Federmesser (~13 kya) material found within such deposits at Bapchild (Dines 1929; Wessex Archaeology 2014). The potential for sediments in the southern North Sea region to preserve Palaeolithic archaeology is demonstrated by the recovery of Palaeolithic artefacts from later Middle/early Upper Pleistocene sediments (c. 380,000 - 130,000 BP) associated with the Palaeo-Yare river within Area 240, offshore Great Yarmouth (Wessex Archaeology 2011b; Tizzard *et al.* 2014). This indicates hominin activity possibly

continued, and was associated with river channels, across the southern North Sea region whenever the environment was favourable throughout the Pleistocene. This is potentially also the case with the remains of the Thames and Stour river systems known to cross the Study Area.

- 3.2.5 In the Early Upper Palaeolithic, at the end of the Late Pleistocene, there was a transition period for hominins. Neanderthals died out around 40,000 BP, and modern humans then colonised 'Doggerland', arriving in Britain around 34,000 BP (Bicket and Tizzard 2015). Archaeological evidence for this period is relatively sparse, but submerged palaeolandscapes provide key contextual evidence.
- 3.2.6 Due to changing glacial conditions, the environment was relatively poor for human colonisation, with the Thames Estuary region lying at the north-western extents of possible habitation. During the Devensian glacial maximum (approximately 22,000 BP), ice sheets extended as far south as Norfolk, and sea levels had dropped to approximately 120 m below current levels, exposing much of the North Sea basin and the English Channel (Shennan 1989). However, there was increasing human exploitation after 15,000 BP. Humans at this time were hunting game, such as mammoth and deer, and evidence of these animals has been reported through marine aggregate dredging, and the associated reporting requirements (Bicket and Tizzard 2015).
- 3.2.7 The Mesolithic period began in the early Holocene. Around 10,000 BP, sea levels were still more than 60 m below current levels, and during this period, an extremely large area of the southern North Sea and English Channel was dry land, suitable for human occupation. Evidence of this environment has been identified from the foreshore at Jaywick (Essex), where layers of peat dating from the Early Holocene are present along with a preserved land surface from which Mesolithic artefacts have been recovered (Wessex Archaeology 2011a).
- 3.2.8 However, between 7,000 and 5,000 BP, much of the land was inundated by eustatically driven sea level change (Bicket and Tizzard 2015); by 6,000 BP, sea level was only approximately 7 m below the present level (Cameron *et al.* 1992). Around this time, Britain became an island again (Coles 1998). Settlements at the time were often transitory and seasonal, and therefore leave little trace in the archaeological record, however, new types of stone tools were introduced during this period. It is possible that the now submerged environment of which the Study Area was a part was occupied up until the final marine transgression between 7,000 and 5,000 BP.

3.3 Palaeogeographic Assessment Results

TEOWF site

- 3.3.1 A number of palaeogeographic features of archaeological potential have been identified within the TEOWF site. These features are discussed below, individually described in gazetteer format in **Appendix I**, and their distribution across the site is illustrated in **Figures 3, 5, 7, 9 and 11**.
- 3.3.2 The shallow geology encountered at the TEOWF site can be relatively complex, and can be approximately divided into two areas. In the south, the shallow geology is dominated by chalk bedrock overlain by seabed sediment, with a few isolated channel features cut into the chalk. In the north of the site, Tertiary deposits overlay the chalk bedrock, which are in turn cut by an extensive complex of channel deposits.
- 3.3.3 The identified geology at the site has been divided into four units during previous phases of work (Wessex Archaeology 2006a; 2007). Additionally, based on the complexity of the



channel deposits, the Quaternary development of the site has been divided into five distinct phases, as described below:

Table 5: Shallow stratigraphy of the TEOWF site area

Unit	Age	Phase	Description	Archaeological Potential
Unit 1	Holocene	N/A	Modern seabed sediment (sands and gravels).	Not of potential in itself, but could cover archaeological sites e.g. wrecks
Unit 2	Early Holocene	Phase 5	Channel complex (possible delta top) deposits characterised by numerous small cut and fill features with sandy/gravelly and soft clay fills.	High potential for <i>in situ</i> and derived deposits from within and immediately surrounding feature.
	Pleistocene / Early Holocene	Phase 4	Erosion surface overlain by further layered deposits, found to be soft clay.	High potential for <i>in situ</i> and derived deposits from within and immediately surrounding features.
	Pleistocene / Early Holocene	Phase 3	Series of distinct, meandering channel features cut into bedrock and earlier phase deposits.	High potential for <i>in situ</i> and derived deposits from within and immediately surrounding features.
	Pleistocene	Phase 2	Large channel cut through Phase 1 features, contains an unstructured sandy fill.	Possible erosional feature related to Lobourg Channel development and creation of Dover Strait. May contain re-deposited material in secondary context.
	Pleistocene	Phase 1	Large channel deposit, characterised by sub-parallel internal reflectors, found to be soft clay and sand.	Original route of Thames river in the area, precise potential depends on age – high potential if dates from Cromerian Complex or later.
Unit 3	Tertiary	N/A	Series of shallow marine clay and sand deposits (Thanet Formation/Woolwich Formation).	Pre-dates earliest human occupation of the UK.
Unit 4	Cretaceous	N/A	Chalk bedrock.	Pre-dates earliest human occupation of the UK.

3.3.4 The oldest geological unit within the TEOWF site is the Cretaceous chalk (**Unit 4**). This unit pre-dates the earliest known human occupation of the UK and, as such, is not considered to be of archaeological potential. However, the upper surface of the chalk may have been a land surface during periods of lower sea level, upon which artefacts could have been deposited.

3.3.5 Overlaying the Cretaceous chalk in the northern section of the TEOWF site are a series of Tertiary deposits (**Unit 3**), likely the Thanet Formation and Woolwich Formation. These are a series of sands and stiff clays deposited in a shallow marine environment during the Paleocene. As such, they pre-date the earliest known human occupation of the UK and are not considered to be of archaeological potential. Despite being two separate geological units, their potential is the same from an archaeological perspective and so they have been grouped together here as **Unit 3**.

- 3.3.6 The Pleistocene deposits within the TEOWF site comprise a complex of channel deposits, which together make up **Unit 2**. For the purposes of this report, this unit has been split into five phases to reflect different environments and processes interpreted to have formed **Unit 2** over time (**Table 4**). These five phases of **Unit 2** represent the deposits of archaeological potential within the Study Area.
- 3.3.7 The Phase 1 Pleistocene features within the TEOWF site are represented by features **75005** and **75014**, and their location is illustrated in **Figure 3**. These are broad, regional scale features that cut into the underlying Tertiary deposits, and are characterised by a relatively well-defined, undulating basal reflector and an acoustically layered fill (**Fig. 4**). Vibrocore data (**VC006** and **VC007**, (Fugro 2016)) indicate the fill comprises sand and soft clay, and can contain organic matter. Some areas of acoustic blanking identified within the Phase 1 features (**75007**, **75008**, and **75010**) also suggest the presence of organic matter within the sediments.
- 3.3.8 These Phase 1 features are interpreted to relate to the early development of the river Thames, and are interpreted as being early Anglian in age. They possibly represent the earliest cut of the Thames in its current location, after being pushed south by the Anglian glacial advance (**Section 3.1**).
- 3.3.9 Due to finds made further north (e.g. at Clacton (Bridgland *et al.* 1999)), it is possible that the Thames during this initial period may have been a focus of human activity. As such, the Phase 1 cut of **Unit 2** is considered to be of high archaeological potential, and may contain both *in situ* and derived artefacts alongside preserved organic material.
- 3.3.10 Phase 2 of **Unit 2** is represented solely by a single feature, **75016**. This is a large, approximately NNW-SSE trending cut and fill feature that cuts through the Phase 1 features in the east of the site, and down into the Tertiary and Cretaceous bedrock (**Fig. 5**).
- 3.3.11 The basal reflector is generally relatively poorly defined and is often present at or below the depth of penetration of the equipment used. However, the feature can clearly be seen to cut through channel **75014**. The feature contains a single phase of acoustically unstructured fill, found by vibrocoring (**VC002**, **VC003**, (Fugro 2016)) to comprise a deposit of mainly sand, containing some silt and clay layers and shell fragments (**Fig. 6**).
- 3.3.12 The exact origins of this feature are uncertain, although the feature extends NNW from the western edge of the Lobourg Channel. It is possible that feature **75016** is a smaller tributary of the Lobourg Channel, created at approximately the same time and then infilled with marine sediment during subsequent marine transgressions. However, this interpretation is uncertain and more work would have to be undertaken to confirm.
- 3.3.13 If feature **75016** is directly associated with the Lobourg Channel, then it is likely to be Late Anglian in date. As an erosive feature with potentially later infill, **75016** is considered of medium archaeological potential and may contain reworked, redeposited artefacts in a secondary context.
- 3.3.14 Phase 3 of **Unit 2** is represented by a number of features identified across the TEOWF site, mainly **75000**, **75001**, **75006**, **75011**, **75017** and **75019**. These are distinct, relatively narrow, meandering channel features cut into both the chalk bedrock and through the Phase 1 and Phase 2 channel deposits (**Fig. 7**).
- 3.3.15 These channel features are characterised by a generally well defined basal reflector and an acoustically layered or chaotic fill (**Fig. 8**). The basal reflector is less well defined when

observed cutting through Phase 1 deposits, and is mainly identified in these cases by a disruption of the internal reflectors of the Phase 1 deposits. In a number of areas, particularly feature **75001**, two phases of cut and fill have been identified.

- 3.3.16 These are interpreted as fluvial channels produced at a time of low relative sea level. A more specific date is difficult to determine, although they are here interpreted to be either Pleistocene or Early Holocene in age. These numerous smaller channels are very different to the single, large channel feature observed during Phase 1, and possibly indicates that a large braid plain developed in the area following silting up of the original single Thames channel (**75005** and **75014**).
- 3.3.17 Some of the features, particularly **75017**, are potentially associated with a surrounding land surface that may contain either over bank deposits or more organic material, such as localised peats. A number of these features correlate with channel features identified during previous phases of work on the original Thanet wind farm site (Wessex Archaeology 2006b) – **75001** with 5035 and 7001, **75019** with 7003, and **75017** with 7010, 7012 and 7013.
- 3.3.18 As fluvial landscape features, the Phase 2 features are considered to be of high archaeological potential, and may contain both *in situ* and derived artefacts. The presence of a small amount of acoustic blanking (**75018**) within feature **75017** suggest preserved organic material may also be present within at least some of the channels.
- 3.3.19 Phase 4 of **Unit 2** is represented by just two features, **75012** and **75013**, both of which are limited to within the boundaries of Phase 1 channel **75005** (**Fig. 9**). These are relatively shallow features compared with the rest of the channel complex deposits, and are characterised by a poorly defined, low relief basal reflector overlain by a single phase of fill characterised by numerous sub-parallel internal reflectors (**Fig. 10**).
- 3.3.20 The fill appears very similar to that of channel **75005**, and the extents of **75012** and **75013** are often mapped using changes in dip of the internal reflectors between the two phases. No vibrocores have been acquired from within these features, but the similarity of fill with **75005** suggests it comprises sand and soft clay.
- 3.3.21 Due to their relative shallow nature, **75012** and **75013** appear to represent fills of topographic lows rather than channel cuts. Because of this they may represent over bank deposits from nearby channels not present within the site, deposited on top of a previous erosion surface. The basal reflector appears to form a surface potentially associated with Phase 3 channel **75011**. As with the Phase 3 features, the age of Phase 4 is difficult to determine, and they are again classified as being either Pleistocene or Early Holocene in date.
- 3.3.22 Phase 5 of **Unit 2** is very different in appearance to the earlier phases and is represented by a single feature, **75015**. This feature is located in the northern part of the site, and overlays Phase 1 features **75005** and **75014** (**Fig. 11**). Although classified as a single feature, **75015** is very complex.
- 3.3.23 The basal reflector is very distinctive, and is often composed of numerous small, dipping reflectors rather than a single continuous horizon, suggesting a gravel base to the unit. In the west, the basal reflector is sub-horizontal and the feature is relatively thin, with an acoustically layered fill. In the east, the basal reflector becomes more irregular and the fill becomes a complex of numerous small, cross cutting channel features (**Fig. 12**). Information from vibrocore **VC004** (Fugro 2016) indicate the sediments in the western part of the feature comprise side with beds of soft, organic clay.

- 3.3.24 This feature is interpreted as a possible delta top deposit, created relatively close to the coastline during the most recent (Holocene) marine transgression. As a terrestrial feature of this age, **75015** is considered of high archaeological potential, and may contain both in situ and derived artefacts alongside preserved organic material. The eastern channel complex section of **75015** appears to correlate with feature 7007 from previous phases of work (Wessex Archaeology 2006b).
- 3.3.25 Overlying the other units is a blanket deposit of **Unit 1**, the modern marine sediment deposited since the Holocene marine transgression. This unit is interpreted by BGS as gravelly sands and sandy gravels (BGS 1990), and varies in thickness from a thin veneer (<1 m) to over 10 m thick, with sand waves seen in numerous areas of the site suggesting the superficial sediment is mobile.
- 3.3.26 The thickest deposits of this sand are located along the eastern edge of the TEOWF site, on the edge and in the base of the Lobourg Channel. These could potentially include remnant channel fill from the Lobourg Channel, but this is unlikely due to tidal scouring along the channel during marine transgression, and so these sediments are thought to be Holocene in age.
- 3.3.27 Due to its age and depositional environment, **Unit 1** is not considered of archaeological potential in itself. However, in areas of mobile seabed sediment, **Unit 1** has the potential to periodically bury seabed archaeological sites such as shipwrecks.

TEOWF cable corridor

- 3.3.28 The shallow geology of the TEOWF cable corridor is considerably simpler than that of the TEOWF site. Of the stratigraphic units outlined in Table 4, only three have been identified along the export cable corridor – **Unit 4**, **Unit 3** and **Unit 1**. However, only one geotechnical sample was acquired by Fugro along the cable corridor, and so the palaeogeographic interpretation is mainly based on a combination of the SBP data, BGS charts and the geotechnical samples acquired from the TEOWF site.
- 3.3.29 Along most of the route, **Unit 4** (Cretaceous chalk) is present just below seabed. As previously described, this unit pre-dates to the earliest known human occupation of the UK and is not of archaeological potential. However, it could have provided a land surface upon which artefacts may have been deposited.
- 3.3.30 Close to landfall, **Unit 4** is overlain by a relatively thick deposit of **Unit 3** (Thanet Formation). Again, these pre-date the earliest known human occupation of the UK and are not considered to be of archaeological potential.
- 3.3.31 Both of these geological units are overlain by **Unit 1** (modern seabed sediment), sometimes as a thin veneer and sometimes as a unit thick enough to form sand waves. These seabed sediments are not considered to be of archaeological interest in themselves but they may cover archaeological sites (e.g. shipwrecks), especially in areas of mobile seabed sediment where larger sand waves can form.
- 3.3.32 No palaeolandscape features of archaeological potential were identified along the TEOWF cable corridor.



4 STAGE 1 GEOARCHAEOLOGICAL ASSESSMENT

4.1 Introduction

4.1.1 A total of nine vibrocores, plus eleven CPTs, were acquired from eleven locations within the Study Area. Ten locations were within the TEOWF site, and one was within the TEOWF cable corridor(**Fig. 3**):

Table 6: Geotechnical logs subject to Stage 1 assessment

Location	Easting	Northing	Sample Type
001	410897	5702000	VC and CPT
002	407557	5701680	VC and CPT
003	409499	5699455	VC and CPT
004	403321	5702423	VC and CPT
005	409601	5697392	VC and CPT
006	396717	5701852	VC and CPT
007	398973	5701189	VC and CPT
008	399485	5698585	VC and CPT
009	409006	5694927	CPT
011	405812	5694431	CPT
013	400717	5692265	VC and CPT

4.1.2 The logs for all of the samples listed in **Table 6** were provided to Wessex Archaeology and used for the Stage 1 geoarchaeological assessment. Although CPT tests do not return physical samples, the logs were still assessed at this stage to aid the palaeogeographic assessment.

4.2 Stage 1 Geoarchaeological Assessment Results

4.2.1 The interpreted stratigraphy for the area, derived from the geophysical and geoarchaeological assessments, is outlined in **Table 5** and is used to frame the geoarchaeological results. It should be noted that the shallow geology varies across the site, and no single location contains the full stratigraphic sequence presented in **Table 5**. As such, it is not possible to sample the full sequence in a single core.

Unit 4

4.2.2 **Unit 4**, Cretaceous Chalk, was only sampled in one vibrocore (**VC013**) and interpreted from CPT data from three other locations (**CPT008**, **CPT009** and **CPT011**). The unit is interpreted to be present at depth across the whole Study Area, but is overlain by increasingly thicker Tertiary and Quaternary deposits in the north of the TEOWF site area. As such, it is buried beyond the penetration of the geotechnical equipment in this area.

4.2.3 As it is Cretaceous in age, **Unit 4** is not considered to be of archaeological potential.

Unit 3

4.2.4 **Unit 3** is a combined unit comprising both the Thanet Formation and the Woolwich Formation. Due to the similarities in their lithology, these formations are difficult to definitively delineate in both the geophysical and geotechnical data. The archaeological potential is also the same for both formations, and so they have been grouped into a single unit.

4.2.5 **Unit 3** has been sampled in five vibrocores (**VC001**, **VC004B**, **VC005**, **VC007** and **VC008**), and interpreted from CPT data at a further three locations (**CPT002**, **CPT003** and **CPT006**). It has been found to comprise a series of dense silty sand containing stiff clay



layers, and stiff sandy clay. The clay occasionally contains black organic streaking and staining.

- 4.2.6 This correlates with the geophysical data, where **Unit 3** has only been identified in the northern half of the TEOWF site. BGS data (Cameron *et al.* 1992) indicates that the Thanet Formation should also be present close to landfall along the cable corridor, and within Pegwell Bay.
- 4.2.7 Since no geotechnical samples were acquired from most of the cable corridor, this cannot be verified using the current data set. However, historic boreholes acquired from the site of the Hoverlloyd hoverport in Pegwell Bay, suggest the foreshore/intertidal deposits comprise up to 10 ft (3 m) of modern beach deposits overlying Tertiary sediments (BGS, 2018).
- 4.2.8 As it is Tertiary in age, **Unit 3** is not considered to be of archaeological potential.

Unit 2

- 4.2.9 **Unit 2** represents the Pleistocene and Early Holocene deposits within the Study Area, and in the geophysical data comprises five phases of channel cut and fill and associated deposits. **Unit 2** has been sampled in six vibrocores (**VC001**, **VC002**, **VC003**, **VC004**, **VC006** and **VC007**), all of which are situated within the northern section of the TEOWF site area.
- 4.2.10 The lithology is similar between the five phases of channel fill, and so difficult to separate definitively using the vibrocore logs alone. However, comparison with the geophysical data increases the confidence of identifying sediments from each phase.
- 4.2.11 Sediments interpreted as from Phase 1 features have been identified in every of the six vibrocores, with the exception of **VC004**. In most of the vibrocores, Phase 1 is identified as a dense silty sand with some clay layers, occasional shell fragments, and traces of organic matter. The exception is **VC007**, in which Phase 1 is represented by soft sandy clay, suggesting lateral variation within the unit. **VC001** indicates Phase 1 sediments can be up to at least 5 m thick.
- 4.2.12 Sediments interpreted as from Phase 2 features have been identified in **VC003** and tentatively within **VC002**. These sediments are characterised as a dense silty sand with thin clay laminae; very similar in appearance to Phase 1 but with thinner clay bands. As with Phase 1, information from **VC003** indicates Phase 2 sediments can be up to at least 5 m thick where they occur.
- 4.2.13 No vibrocores were acquired from within any of the identified Phase 3 features, and so the interpretation of these features as buried fluvial channels remains unproven.
- 4.2.14 Sediments interpreted as from Phase 4 features should have been sampled in **VC006**, but were not definitively identified within the logs. If present, they comprise the same dense silty sand as the Phase 1 features and it is difficult to distinguish between the two in the geotechnical logs alone. These features are relatively thin, with geophysical data suggesting they are up to 3.5 m thick.
- 4.2.15 Sediments interpreted as from Phase 5 features were sampled in **VC002** and **VC004**. These sediments are characterised as silty sand containing pockets and beds of soft black clay. They are recorded as approximately 2 m thick in the vibrocores, but geophysical data suggests this unit can reach up to 8 m in thickness.



- 4.2.16 As interpreted channel complex deposits of Pleistocene/Early Holocene age, these sediments are considered to be of high archaeological and geoarchaeological potential. The exception is Phase 2 which, as an interpreted scour/marine infill feature, is considered to be of medium potential. However, the potential of these sediments is dependent upon their precise nature and age.
- 4.2.17 Any future geoarchaeological assessments should focus on the **Unit 2** sediments within vibrocores **VC001**, **VC002**, **VC003**, **VC004**, **VC006** and **VC007**, or from new samples acquired from within the interpreted **Unit 2** features.

Unit 1

- 4.2.18 **Unit 1** has been identified as a relatively thin veneer (up to 1.5 m thick) within every vibrocore, although bathymetry data shows localised thicker areas of sediment characterised by small sand waves. This is a deposit of loose, silty, slightly shelly sand, which is occasionally gravelly and occasionally shelly. This is interpreted as the modern seabed sediment which, as a modern deposit, is not considered to be of archaeological potential.

5 SEABED FEATURES ASSESSMENT

5.1 Introduction

- 5.1.1 An archaeological assessment of the 2016 geophysical survey datasets was undertaken by Wessex Archaeology and the results are discussed below. Where the proposed cable corridor deviates from the original Study Area, interpretation from the 2010 NEMO report (Wessex Archaeology, 2016) have been incorporated. The results are discussed separately for the TEOWF site area and the TEOWF Cable Corridor. Any sites from the previous 2006 and 2008 original Thanet windfarm assessments (Wessex Archaeology, 2006b; 2008), that fall within the current survey areas, have been included in the results.
- 5.1.2 A comprehensive marine archaeological baseline relating to maritime and aviation activity was provided in the desk-based assessment (Wessex Archaeology, 2016).

5.2 Seabed Features Assessment Results

TEOWF site area

- 5.2.1 The results of this assessment are collated in gazetteer format and detailed in **Appendix II**. Below is a summary of the number and types of features identified within the Thanet extension site area. The anomalies have then been divided into their classifications and described accordingly.
- 5.2.2 A total of 174 anomalies of potential archaeological interest were identified within the Study Area. These have been Characterised as follows:

Table 7 Anomalies of archaeological potential within the TEOWF site area

Archaeological Discrimination	Quantity	Interpretation
A1	19	Anthropogenic origin of archaeological interest
A2	150	Uncertain origin of possible archaeological Interest
A3	5	Historic record of possible archaeological interest with no corresponding geophysical anomaly

Total	174	
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5.2.3 Furthermore, these anomalies can be classified by probable type, which can further aid in assigning archaeological potential and importance (**Table 8**).

Table 8: Types of anomaly identified within the TEOWF site area

Anomaly Classification	Number of Anomalies
Wreck	11
Debris	14
Debris Field	6
Seafloor Disturbance	10
Rope/chain	15
Bright Reflector	2
Dark Reflector	75
Mound	6
Magnetic	30
Recorded Wreck/ Obstruction	5
Total	174

5.2.4 From this dataset 19 anomalies have been classified as A1 – Anthropogenic origin of archaeological interest. Of these 19 A1 anomalies, 17 have been classified as possible wrecks or wreck related debris (**Fig. 13**).

5.2.5 Wreck **70018** is identified on the SSS data as a large, relatively intact wreck, measuring 74.8 x 22.0 x 8.3 m, orientated NNE-SSW. The wreck appears to be listing slightly towards the west, with some surrounding associated scour. The wreck is partially broken up in its central and southern section, with some possible associated debris in the immediate vicinity. A large magnetic anomaly of 1,459 nT at the location of the wreck indicates a considerable amount of ferrous material (**Wreck Sheet 1**). The feature was originally identified in the 2006 Thanet investigation (Wessex Archaeology 2006b) as a dark reflector. Differences in the classification of the feature may indicate improvements in data quality, as well as possible cycles of exposure and burial by mobile sediments.

5.2.6 This wreck is charted and included in the UKHO database (ID 13939) as an unknown wreck, first detected and surveyed in 1945, measuring 79.0 x 14.0 x 6.4 m. Survey data from 1996 indicates that the south-east quarter of the wreck appears to be more broken up and has less elevation compared to the rest of the wreck.

5.2.7 Wreck **70034** is a partially buried wreck identified on the SSS data as an elliptical outline of the wreck, orientated north-west to south-east and measuring 89.7 x 27.0 x 6.8 m (**Wreck Sheet 2**). The wreck appears to be upright, with some standing structure still visible. A large, distinct shadow indicates a tall structure at the north-west end and centre of the wreck. A very large associated magnetic anomaly of 12,655 nT indicates a significant amount of ferrous material. The wreck is identified in an area of sand waves and has some surrounding, associated scour.

5.2.8 Two closely spaced dark reflectors, with a joint measurement of 3.7 x 2.3 x 0.8 m, are visible within shadow caused by the wreck structure, suggesting upstanding features. Due to the proximity to the wreck to the dark reflectors, it is not clear whether the features have an associated magnetic anomaly, however it is likely that the features are debris associated to nearby wreck **70034**. Due to their position within the shadow of the wreck, it is not possible to accurately discern the dimensions of the features, therefore the measurements should be considered a minimum.



- 5.2.9 The wreck is identified by the UKHO as an unknown wreck (ID 13976), first surveyed in 1945. The wreck is recorded as measuring 97.0 x 30.0 x 3.7 m, and is thought to be broken up into two main areas of debris.
- 5.2.10 Wreck **70040** is a partially broken up wreck measuring 97.2 x 32.7 x 7.4 m, thought to be the Belgium Steamship *Menapier*, which was torpedoed and sunk by German submarine UB 10 on 1 June 1915 (**Wreck Sheet 3**). On the SSS data, the wreck is a compact upright structure isolated on the seabed. A linear mound extends 13.6 m from its north-eastern edge, which may be part of the main body of the wreck, or an associated linear item of debris. The wreck appears to be partially broken up in the south-western section, with some associated items of debris to the south. Sediment has accumulated along the eastern edge of the wreck, which may partially bury some of the wreckage or associated debris items. There is a deep area of scour to the north and the south of the wreck and some slight scour towards the west. The wreck has a very large associated magnetic anomaly measuring 19,574 nT, indicating ferrous material.
- 5.2.11 This wreck is charted and included in the UKHO database (ID 13993) as the wreckage of steam ship *Menapier*, which had a length of 85.9 m, a beam of 12.5 m and a draught of 5.5 m. The wreck was reported as being broken up, but did not appear to be scattered.
- 5.2.12 Wreck **70041** is an area of wreckage measuring 113.1 x 47.7 x 2.7 m, associated with UKHO record (ID: 13992) for the steamship *Woodtown* (possibly), which sank while en-route from Newlyn to London on 15 November 1939, having struck a mine. Identified on the MBES data as an irregular but compact area of debris with numerous mounds but no coherent structure (**Wreck Sheet 4**). On the sonar data, the feature appears to comprise numerous angular dark reflectors with distinct, irregular shadows. There is a distinct area of scour along the south-western edge of the wreck. A very large associated magnetic signal of 13,283 nT indicates significant amounts of ferrous material. The UKHO record states that when surveyed last in 1996, the wreck was found to be broken up with an area of wreckage measuring 100.0 x 30.0 x 1.5 m. The difference in dimensions between the record and the current assessment could indicate further exposure of the wreck.
- 5.2.13 A small, irregular dark reflector with height (anomaly **70042**), measuring 2.6 x 2.5 x 0.3 m was identified approximately 51 m south-west of wreck feature **70041**, and is interpreted as likely being an associated item of debris. The feature was identified on the MBES data as a small mound surrounded by a scour depression.
- 5.2.14 Wreck **70052** is a large, rounded object with height, measuring 14.2 x 9.7 x 1.9 m, with a distinct area of scour extending approximately 40 m to the southwest (**Wreck Sheet 5**). The feature has an associated UKHO record (ID 13975) categorizing it as foul ground, however the record also states that wreckage has been seen at the location and, as such, the feature has been classified as a possible wreck. The feature does not have an associated magnetic anomaly which may indicate a wooden vessel, however this cannot be confirmed without further investigation. There are numerous small objects with height identified on the SSS data in the immediate vicinity, which may be associated items of debris.
- 5.2.15 Per the UKHO record, the wreck was last identified in 1990 as a small wreck, orientated 045/ 225 degrees, with a length of 20 m and a height of 2.3 m. However, it was not identified in the most recent 1996 survey, which may indicate periodic burial and exposure by mobile sediments.
- 5.2.16 Wreck **70056** is associated with the UKHO record 13968 for the British steamship *Saidlieh*, which was sunk on 1 June 1915 by German submarine UB 6 while on passage



from Alexandria to Hull. The wreck is seen on SSS data to be largely broken up, with some elongated dark reflectors indicating a more coherent structure (**Wreck Sheet 6**). The wreck is orientated NNE–SSW, and measures approximately 117.9 x 33.9 x 6.6 m. A large area of scour can be seen on the bathymetry data, extending approximately 120 m to the south. The wreck has a large associated magnetic anomaly of 4,797 nT, indicating ferrous material. The wreck was last surveyed by the UKHO in 1996 where it was found to be a well broken up wreck measuring 110.0 x 15.0 x 6.2 m. The difference in dimensions between the record and the current assessment could indicate further exposure of the wreck or due to further dispersal.

- 5.2.17 Two possible associated items of debris are identified to the south of wreck **70056**. Anomaly **70057** is a relatively straight object with a distinct shadow, measuring 4.0 x 2.5 x 0.3 m and located approximately 16 m to the south of the wreck. Anomaly **70058** is a small, dark reflector with height with some associated scour, measuring 4.1 x 1.2 x 0.4 m and located approximately 51.7 m to the south. Both these features are deemed to be likely items of debris related to wreck **70056** and, as such, have been classified as A1 anomalies.
- 5.2.18 Wreck **70059** is a small compact wreck with a distinct shadow (**Wreck Sheet 7**). The wreck, measuring 23.9 x 8.6 x 4.3 m, appears to be a relatively intact hull shape, with some possible internal deck structure. The wreck is orientated south-east to north-west, and has a large area of scour extending approximately 45 m to the south and east of the main structure. The wreck has a medium magnetic anomaly of 93 nT indicating some ferrous material. The wreck is recorded and identified in the UKHO database (ID 13964) as a small wreck, measuring 18.0 x 18.0 x 2.9 m with a small magnetic anomaly.
- 5.2.19 A small debris field measuring 9.9 x 8.9 m (anomaly number **70060**), identified on the SSS data as an irregular area of small, dark reflectors with heights of up to 0.3 m, is located at the north-western corner of wreck **70059**, and is thought to be an area of associated debris.
- 5.2.20 Wreck **70062** is an elongated, poorly defined dark reflector with an irregular, bright shadow thought to be a small, non-ferrous wreck (**Wreck Sheet 8**). The wreck has no obvious structure but is identified on the SSS data as a faint angular dark reflector with a very faint rounded dark reflector at one end. An area of scour extends approximately 19 m to the south of the feature. The wreck is located approximately 17 m south of, and thought to be associated to, a UKHO position of possible stones/ masonry/ rubble (ID 14946). The feature was originally recorded in 1970 as a wreck, however was amended to dead when it was not identified on subsequent surveys. The feature was last identified, per the UKHO database, in 1985 when it was found to comprise a small object, approximately 10.1 m in length, with a small magnetic deflection.
- 5.2.21 Wreck **70069** is a distinct wreck, measuring 55.5 x 11.1 x 6.4 m, identified on the MBES data at the edge of a possible rock outcrop (**Wreck Sheet 9**). The wreck appears to be intact and upright, with some deck structures visible. The wreck is slightly less well defined on the SSS data; however, the structure is clearly visible as an elongated dark reflector with a broad, distinct shadow and some straight dark reflectors possibly showing the deck structures. The wreck is orientated south-east to north-west, and has a distinct area of scour to the south-east of the wreck. The wreck has a very large associated magnetic anomaly of 6,453 nT, indicating significant amounts of ferrous material.
- 5.2.22 The wreck is charted and included in the UKHO database as an unknown wreck (UKHO ID 13958). The wreck was last surveyed in 1998, when it was found to be an intact and upright wreck, measuring 45.0 x 15.0 x 3.5 m, and lying at 110/ 290 degrees with a small



associated magnetic anomaly. The record also states that there is probably upper deck detail visible, which is corroborated by the most recent geophysical data.

- 5.2.23 A linear dark reflector (anomaly number **70070**) with a distinct shadow, measuring 15.9 x 2.9 x 0.9 m is identified approximately 7 m west of wreck **70069** and is thought to be an associated linear item of debris. Due to the proximity of the wreck to the anomaly, it is not possible to discern whether the debris feature has an associated magnetic anomaly.
- 5.2.24 Wreck **70117** is a small, partially broken up wreck measuring 22.6 x 10.2 x 3.2 m, identified on the MBES data as a tall, elongate mound aligned north-east to south-west, which appears irregular and broken down at its south-western end (**Wreck Sheet 10**). On the SSS data, the wreck is seen as a poorly defined dark reflector with a distinct shadow. Several small, relatively indistinct dark reflectors with height, some of which appear to be slightly linear, are seen in the immediate vicinity which are likely to be associated items of debris. The wreck is identified in the UKHO record (ID 13904) as being a small wreck measuring 14 m in length with a height of 2.8 m. The UKHO record also makes note of a possible cable extending 20 m to the southwest, however this wasn't identified in the most recent geophysical data which may indicate removal or burial of the feature by mobile sediments
- 5.2.25 Wreck **70117** was not identified on the most recent magnetometer data, however the UKHO record of the wreck reports the wreck as having a good magnetometer deflection of 504 nT based on a 1995 survey. It may be that due to the line spacing of the most recent survey, as well as the feature being located in an area of high magnetic activity, that a magnetic anomaly was not identified at this location, however the possibility remains for ferrous material to be present at the wreck location.
- 5.2.26 Wreck **70128** is a poorly defined wreck, measuring 33.4 x 15.4 x 0.8 m, identified on the MBES data as an angular, hull-shaped outline within a slight depression (**Wreck Sheet 11**). No upstanding structure is immediately apparent, although some possible items of debris are faintly seen towards the south. The wreck is sat within a slight depression, possibly associated scour, and appears to be partially buried by seabed sediments. The wreck is identified on the SSS data as an area of disturbed seafloor with numerous, occasionally straight dark reflectors. The feature has a very large associated magnetic anomaly (2,196 nT), indicating significant amounts of ferrous material. The wreck was originally seen in WA report 60070 (Wessex Archaeology 2006b) as an area of numerous small dark reflectors. Differences between the previous interpretations may reflect improvements in the quality of the sonar data, or differences in the burial of the feature by mobile sediments.
- 5.2.27 The wreck is identified by the UKHO (ID 15157) as being a small contact with a length of 6 m, thought to possibly be wreckage. The wreck is reported as having a strong magnetometer deflection.
- 5.2.28 In addition to the wrecks and wreck debris mentioned above, there are two additional items of debris that has been classified as an A1 anomaly, within the TEOWF site area.
- 5.2.29 Anomaly **70039** is an item of debris measuring 12.2 x 11.8 x 1.3 m, which is identified as a distinct mound within a depression on the MBES data. Although it has not been classified as a wreck, or wreck related debris, it has been retained as an A1 anomaly based on its UKHO record and its distinctive nature. The MBES data shows the feature to be sat within a depression, with a distinct area of scour extending approximately 22 m to the southwest. On the SSS data, the feature is identified as an isolated dark reflector with height. The feature has a large associated magnetic anomaly of 380 nT, indicating ferrous material.



- 5.2.30 In the associated UKHO record (ID 13987), the contact was last identified in 1988 when it was reported as being a very small contact within scour. An earlier survey in 1982 reported two additional smaller contacts nearby that were thought to possibly indicate the site of a larger wreck, almost completely buried, measuring approximately 20 m in length, however there has been no further evidence that this is the case.
- 5.2.31 Similarly, anomaly **70104** has been classified as an item of debris and given an A1 discrimination based on its UKHO record (ID 13930). The feature is identified as a rounded mound, measuring 4.8 x 2.5 x 2.7, within a depression on the MBES data. On the SSS data, the feature is identified as an isolated dark reflector with a large shadow. The feature has a medium associated magnetic anomaly of 107 nT, indicating ferrous material. The UKHO records the feature as being 12.0 x 2.0 x 2.5 m with a good magnetic deflection in a 1995 survey. Differences in the dimensions between previous surveys and the most recent data may indicate partial burial of the feature by mobile sediments.
- 5.2.32 A total of 150 anomalies have an A2 discrimination of features of uncertain origin, but of possible archaeological interest within the TEOWF site area (see **Appendix II** for full list of anomalies).
- 5.2.33 Of these anomalies, seven have been classified as items of debris with an archaeological discrimination of A2. These have been assigned an archaeological potential of A2 due to their anthropogenic appearance and characteristics. The anomalies vary in size and character and are characterised as debris, as opposed to debris fields, as they are single anomalies interpreted as one or possibly two objects at the most and are more complex in appearance.
- 5.2.34 Two of these debris items have associated magnetic anomalies. Feature **70083** is a rounded mound identified on the MBES data measuring 4.5 x 3.8 x 0.4 m, with an associated medium magnetic anomaly of 79 nT. Nothing significant was seen on the SSS data at this location, which may indicate that the item of ferrous debris is covered by mobile sediments.
- 5.2.35 Feature **70114** was identified on the most recent dataset as a small positive monopole measuring 8 nT. This corresponds with an item of debris, measuring 1.6 x 1.4 x 0.6 m, identified in the 2008 Thanet site survey (Wessex Archaeology 2008). Although this feature was not identified on the most recent SSS data, it is likely that they relate to the same feature and that the feature has since been buried by mobile sediments.
- 5.2.36 Anomaly **70125** was identified on the SSS data as two, closely spaced dark reflectors with height, measuring 6.0 x 5.0 x 1.2 m, with corresponding mounds identified on the MBES data. This feature is recorded in the UKHO database as being a small obstruction, with a length of 5 m and a height of 0.8 m. The UKHO record notes a small magnetometer deflection which suggests ferrous debris. Nothing was identified on the most recent magnetometer data; however this may reflect differences in line spacing and therefore the presence of ferrous material remains possible.
- 5.2.37 The remaining four debris items (**70159, 70161, 70163, 70164**) were identified during earlier geophysical surveys of the original Thanet wind farm (Wessex Archaeology 2006b; 2008), however were not observed on the most recent geophysical data. It is possible these features are still present, but buried by mobile sediments and, as such, they have been retained as potential archaeology.
- 5.2.38 Five A2 anomalies have been classed as debris fields (**70149, 70152, 70153, 70156, 7016**) which were all identified during the previous geophysical surveys, but not in the

most recent geophysical data. The largest of these is feature **70156**, which was found in the 2008 geophysical investigation to comprise several objects, measured in the original reports between 2 and 6 m long and 0.9 to 2.1 m wide with a maximum height of 1 m. Though these features were not identified on the most recent geophysical data, it is possible that they are still at their original positions but have been buried by mobile sediments. As such, these features have been retained as potential archaeology.

- 5.2.39 Six Features have been classified as mounds (**70053, 70074, 70097, 70099, 70133, 70142**). The largest of these features is anomaly **70097**, which was seen as an elongated mound, measuring 6.8 x 4.0 x 0.4 m, with some associated scour. These features were identified on the MBES data only and may represent items of non-ferrous debris that have been covered over by mobile sediments.
- 5.2.40 A total of 75 A2 anomalies have been classified as dark reflectors. These features have no clearly associated magnetic anomaly, however they may represent non-ferrous items of debris. These features vary in size. Anomaly **70010** is the smallest of these features and is identified on the SSS data as a small, slightly angular dark reflector, measuring 0.8 x 0.5 m with a height of 0.4 m. Anomaly **70084** is the largest dark reflector identified on the most recent geophysical survey, identified as a slightly curvilinear dark reflector with a distinct but tapered shadow, measuring 18.1 x 2.4 x 0.9 m.
- 5.2.41 Anomalies **70115** and **70116** are both located a little over 20 m northeast of wreck **70117**. Neither feature has an associated magnetic anomaly, and both are identified on the SSS data as a dark reflector with distinct shadows. It is possible that these represent natural features, neither feature looks particularly anthropogenic in the geophysical data and, as such, have been classified as dark reflectors rather than debris. However, they have been retained as potential archaeology based on their proximity to wreck **70117**.
- 5.2.42 Fifteen of these dark reflectors were identified during earlier geophysical surveys of the Thanet wind farm (Wessex Archaeology 2006b; 2008), however were not observed on the most recent geophysical data. It is possible these features are still present, but buried by mobile sediments and, as such, have been retained as potential archaeology.
- 5.2.43 Two anomalies have been classified as bright reflectors, indicating their possible construction of a material such as plastic, rubber, wood or potentially fibreglass. Both these features were identified in the previous Thanet investigation (Wessex Archaeology 2008), however they were not observed on the most recent geophysical datasets. Anomaly **70154** is a small bright reflector, measuring 3.0 x 3.0 m, surrounded by several other objects with height. Anomaly **70157** is a small bright reflector, measuring 2.2 x 1.7 m. In the original report the feature was tagged as a bright reflector with debris however, on review of the images of the feature, only the bright reflector has been retained as potential archaeology. It is possible that the bright reflector represents the shadow of a faint, elongated dark reflector, however this isn't clearly distinguishable and, as such, the feature has been retained as a bright reflector.
- 5.2.44 Fifteen A2 anomalies have been classified as lengths of rope/ chain. The shortest of these features is anomaly **70147** which is identified as a short linear dark reflector with a length of 12.2 m, whereas the longest length was feature **70143** which is identified on the SSS data as a long, curvilinear dark reflector, measuring 185.0 x 0.8 x 0.5 m, with possible associated objects with height.
- 5.2.45 Three of these rope/ chain features (anomalies **70064, 70073, 70143**) have possible objects with height along their length. It is possible that these features are modern fishing

equipment, such as lobster pots, however this cannot be proved without further investigation and, as such, the features have been retained as potential archaeology.

- 5.2.46 Only one of these rope/ chain features has an associated magnetic anomaly indicating ferrous material. It may be that the remaining 14 anomalies are therefore more likely to be lengths of non-ferrous rope rather than chain. Feature **70048** is identified on the SSS data as a long, curvilinear dark reflector, measuring 113.9 x 0.6 x 0.3 m, with a small associated magnetic anomaly of 35 nT. The feature has a distinct, elongated dark reflector (**70047**) at its south-western end, measuring 4.6 x 2.3 x 0.4 m, which may represent an associated item of debris.
- 5.2.47 One other rope/ chain has an associated object with height. Anomaly **70147**, as mentioned in paragraph 4.2.43, is a short, linear dark reflector, measuring 12.2 x 0.2 x 0.2 m, with a very slight shadow which is possibly associated with anomaly **70146**, which is identified as an elongated dark reflector with a slightly jagged shadow (**Fig. 14**).
- 5.2.48 Anomaly **70103** is a long curvilinear mound, measuring 125 x 1.5 x 0.1 m identified on the MBES data. Nothing was identified on the SSS or magnetometer data at this position, therefore it is possible that this represents a length of rope covered in seabed sediment.
- 5.2.49 Ten A2 anomalies are classified as seafloor disturbances. A seafloor disturbance is an area of seabed that appears disturbed, potentially by a buried or partially buried wreck or debris of archaeological interest. These types of features may be groups of what is apparently debris or may be more ephemeral and consist solely of a patch of bright and dark reflectors distinct from the surrounding seabed.
- 5.2.50 The largest of these seafloor disturbances is anomaly **70050**, which is identified as an elongate linear area of seafloor disturbance, measuring 72.6 x 18.2 x 0.4 m. The feature comprises intermittent dark reflectors with some irregular bright shadow.
- 5.2.51 The remaining 30 A2 anomalies are classified as magnetic anomalies with no associated SSS or MBES feature. These vary in size from 8 nT (**70162**) to 118 nT (**70013**). All of the magnetic anomalies classed as A2 have the possibility to be buried objects with ferrous content that are of archaeological potential.
- 5.2.52 Five anomalies have been classified as A3 anomalies, which are records of possible archaeological interest with no corresponding geophysical anomaly. Two of these (**70032** and **70033**) are historic records of possible wrecks. The remaining three (**70049**, **70067** and **70085**) are historic records of obstructions. It is possible that these features are still present, however have been covered over by mobile sediments, therefore they have been retained as potential archaeology.

TEOWF Cable Corridor

- 5.2.53 The results of this assessment are collated in gazetteer format and detailed in **Appendix III**. Below is a summary of the number and types of features identified within the TEOWF cable corridor. The anomalies have then been divided into their classifications and described accordingly.
- 5.2.54 A total of 1,060 anomalies of potential archaeological interest were identified within the Study Area (**Fig. 15**). These have been characterised as follows:



Table 9: Anomalies of archaeological potential within the TEOWF cable corridor area

Archaeological Discrimination	Quantity	Interpretation
A1	16	Anthropogenic origin of archaeological interest
A2	1027	Uncertain origin of possible archaeological Interest
A3	17	Historic record of possible archaeological interest with no corresponding geophysical anomaly
Total	1060	

5.2.55 Furthermore, these anomalies can be classified by probable type, which can further aid in assigning archaeological potential and importance (**Table 10**).

Table 10: Types of anomaly identified within the TEOWF cable corridor area

Anomaly Classification	Number of Anomalies
Wreck	5
Debris	129
Debris Field	6
Seafloor Disturbance	2
Rope/chain	45
Bright Reflector	5
Dark Reflector	100
Mound	3
Magnetic	748
Recorded Wreck/ Obstruction	17
Total	1060

5.2.56 Within the TEOWF cable corridor, 16 anomalies have been given an A1 discrimination. These are classified as being wrecks or wreck related debris.

5.2.57 Wreck **70219** is largely disintegrated wreckage, measuring 44.1 x 32.6 x 3.8 m, associated with the UKHO record for the steamship *Cathay* (ID 13875), which sunk after hitting a German laid mine in 1915 (**Wreck sheet 12**). The wreck appears on the SSS data to be comprised of numerous, mostly linear, dark reflectors with height. One particularly large dark reflector is identified in the centre of the wreckage with a broad shadow, which corresponds with a distinct mound on the MBES data. Numerous items of associated debris are identified around the wreck as dark reflectors on the SSS data, and textured areas of seafloor on the MBES data. The wreck is orientated WSW–ENE, with a large area of scour extending approximately 32 m to the south of the wreck seen on the MBES data. The wreck has a large associated magnetic anomaly of 339 nT, indicating ferrous material.

5.2.58 In the UKHO record, the wreck is described as only a section of the wreckage, with the wreck being reported as being broken in two in 1932. A 1998 survey identified the wreck as being a partially buried wreckage, measuring 30.0 x 25.0 x 2.0 m, with a small magnetic anomaly. The survey also identified quantities of scattered debris lying immediately adjacent to it.

5.2.59 Anomalies **70216**, **70217**, **70218** and **70220** are all thought to be debris items associated with wreck **70219** and as such have been given an A1 discrimination. The largest of these

debris items is **70217**, which measures 2.2 x 1.2 x 0.7 m, and is identified as an elongated dark reflector located 16 m north-east of the main area of wreckage.

- 5.2.60 Debris item **70218** is located furthest from wreck **70219**. It is identified on the SSS data as a small but elongated dark reflector with a distinct shadow, located approximately 20 m south-west from the main area of wreckage. None of the associated debris items appear to have a magnetic anomaly, indicating they comprise non-ferrous material.
- 5.2.61 Wreck **70257** is a spread of debris items, associated with the UKHO record for the dispersed wreckage of the Norwegian steamship *Klar* (ID 15175), which sunk in 1915 after hitting a mine on passage from Tyne to Rouen. The wreck is identified on the SSS data as a sparse area of debris, measuring 78.7 x 41.9 x 1.1 m, within an area of megaripples (**Wreck sheet 13**). The wreck has a very large associated magnetic anomaly of 9,368 nT, indicating significant amounts of ferrous material. Though there is not much apparent wreckage material identified on the seafloor, the very large associated magnetic anomaly and the nature of the seabed sediments may indicate that more wreckage material present but buried beneath mobile sediments.
- 5.2.62 The UKHO record describes the wreck as being 50.0 x 45.0 x 1.0 m with an associated magnetic anomaly, possibly with fishing tackle entangled. The UKHO record also makes note of a possible item of foul 40 m to the SSW of the wreck, which may form part of the wreck, however this wasn't identified on the most recent geophysical data.
- 5.2.63 Wreck **70257** is located approximately 25 m outside the TEOWF cable corridor, however the associated Archaeological Exclusion Zone (AEZ) will impact the cable corridor and, as such, the wreck has been retained as an A1 anomaly.
- 5.2.64 **70348 (Fig. 17)** is an item of debris, identified on the sonar data as an elongated narrow dark reflector, measuring 1.0 x 0.8 x 0.5 m, found at the UKHO position of German submarine UB12 (ID 14934). Two other debris items are identified nearby are thought to possibly relate to UB12. Anomaly **70346** is an elongated dark reflector, measuring 2.5 x 0.7 x 0.7 m, identified approximately 49 m east of the UKHO position for UB12. Anomaly **70347** is a similar dark reflector measuring 1.9 x 1.1 x 0.5 m, located 52 m east of the given position (**Fig.16**). The features correspond with a very large magnetic anomaly measuring 7,934 nT, however due to the size of the anomaly, and the proximity of the debris items, it is not possible to determine whether the magnetic anomaly relates to one or all the features. Although none of these sonar contacts alone are significant enough to suggest a submarine, the very large associated magnetic anomaly indicates a significant amount of ferrous material, which may suggest that the submarine wreckage is present, but buried beneath mobile sediments. As such, all features have been given an A1 discrimination.
- 5.2.65 The UKHO record states that the submarine UB12 had a build length of 28 m, and a beam of 3 m. The record also states that the submarine has not been seen on the seabed, however an isolated contact with a strong magnetic deflection has been identified at this position in a 1986 survey, and again in 1994. This may again suggest that the wreck is present, but buried beneath seabed sediments.
- 5.2.66 Anomaly **70349 (Fig. 17)** is debris item thought to be part of an American B-24 Liberator bomber identified by NRHE (ID: 1398733). The aircraft has been dived and found to lie upside down with its wheels down, standing approximately 4 m from the seabed. On the SSS data, **70349** is identified as an angular dark reflector, measuring 25 x 1.5 x 1.5 m, with one long, distinctive shadow (**Fig. 16**). The anomaly corresponds with a small

magnetic anomaly, measuring 34 nT, indicating some ferrous material. Based on the aircraft record, it may be that this anomaly represents the wheels identified during diving.

- 5.2.67 Although **70349** is not clearly the wreckage of an aircraft, it cannot be proved that it is not and therefore, based on the position provided by the NRHE and the geophysical anomalies identified at the location, has been retained as the aircraft wreckage and given an A1 discrimination.
- 5.2.68 A second potential position was provided for the American B-24 Liberator bomber based on dive records, located approximately 159 m ESE of the position supplied by the NRHE. Nothing was identified on the geophysical data at this location and, as such, was removed from the gazetteer and the original NRHE record of the aircraft retained. It should be noted however that the potential remains for wreckage material to be found within the vicinity of **70349**.
- 5.2.69 Wreck **70366** is a broad area of dispersed debris, thought to be related to the UKHO position for the wreck of the steamship *Harcalo* (ID: 13852) which is identified approximately 57 m ENE of the central **70366** position. The wreck is identified on the SSS data as a large area of debris, measuring 166.1 x 109.7 x 1.8 m, comprised of numerous distinct dark reflectors and linear items of debris with height (**Wreck sheet 14**). The wreck debris has a very large magnetic anomaly of 9,387 nT, indicating significant amounts of ferrous material.
- 5.2.70 The wreck is described in the UKHO database (ID: 13852) as that of a British merchant steamship *Harcalo*, lost on 6 June 1940 after being mined while on passage from Benisaf to London, carrying a cargo of iron ore. The wreckage is described as being a dispersed wreck, last surveyed in 2008 when it was found to be poorly defined with more substantial items located 50 m to the south-west, which corroborates with the position of **70366** identified on the most recent geophysical data.
- 5.2.71 Wreck **70486** is a large pile of debris, measuring 77.2 x 23.4 x 2.0 m, which is associated with the UKHO record (ID 14831) of the cargo of a stone barrier barge that sank when the tug boat *Neg Chieftain* capsized in 1983. The debris are identified as a largely coherent pile of numerous dark reflectors with height. The feature has a large associated magnetic anomaly of 406 nT, indicating ferrous material. Some more isolated dark reflectors are identified in the surrounding area of the debris pile which may represent dispersed but related items of debris. The feature is identified in the bathymetry data as a large mound, orientated north-east to south-west, with some scour around its south-western edge. As the debris is related to a wreck that sank in 1983, it is not classified as archaeology however it has been retained in the gazetteer as an A1 anomaly.
- 5.2.72 The UKHO describes the feature as stones/ masonry/ rubble which was found when surveyed in 1995 to cover an area of 55.0 x 30.0 m with a slight magnetic deflection. The UKHO position is approximately 100 m west of the position of **70486**, as found in the most recent geophysical data, however, based on the record description and the geophysical evidence both are thought to relate to the same feature. Differences in positioning may be due to a different coordinate system being used in the UKHO record.
- 5.2.73 Wreck **71099** is a large, intact wreck measuring 43.0 x 5.4 x 0.7 m. On the MBES data the wreck is seen to be orientated SSW – NNE in an area of megaripples, with some scour towards the north and east (**Wreck sheet 15**). The wreck appears to be partially buried by mobile sediments along its western (starboard) edge. Two rectangular depressions are visible in its main body, possibly representing deck structures. The wreck has a very large associated magnetic anomaly of 7,116 nT, indicating significant amounts of ferrous

material. The wreck is charted and included in the UKHO database (ID 85569) as an unknown wreck, possibly a barge, measuring 37.7 x 4.5 x 0.8 m.

- 5.2.74 Two small dark reflectors are identified at the stern of the vessel. Both are similar features with anomaly **71100** measuring 0.3 x 0.2 x 0.1 m and anomaly **71101** measuring 0.3 x 0.1 x 0.2 m. Due to the proximity to the wreck's magnetic anomaly, it is not possible to tell whether the objects are ferrous, however as both are likely to be debris items related to the wreck, they have been given an A1 discrimination.
- 5.2.75 Wreck **71130** is a rectangular object, measuring 20.9 x 10.3 x 0.4 m, identified at the edge of a sand wave (**Wreck sheet 16**). The feature is not particularly distinct and was only identified on the MBES data, however it is located approximately 51 m south-east from the UKHO position for LCP 586 (ID 13835), a British landing craft which broke away from another vessel on 17 June 1946 and, as such, has been classified as a possible wreck and given an A1 discrimination. There are several small magnetic anomalies identified nearby on the most recent geophysical data, however these are not clearly associated with the feature and, as such, have been kept separate, although the possibility of ferrous material cannot be ruled out. The feature is currently positioned approximately 10 m outside of the cable corridor however, as the recommended AEZ would impact the cable corridor, the feature has been retained as an A1 anomaly.
- 5.2.76 The UKHO record for LCP 586 states that it was originally a wooden vessel, measuring 11.0 x 3.0 x 0.9 m. The vessel was last seen in a 1995 survey as a small wreck with no magnetic debris.
- 5.2.77 A total of 1,027 anomalies have an A2 discrimination of features of uncertain origin, but of possible archaeological interest within the TEOWF Cable Corridor area (see **Appendix III** for full list of anomalies).
- 5.2.78 Of these A2 anomalies, 118 have been classified as possible items of debris. These range in size from the smallest (**70406**) which is a ferrous item of debris measuring 0.2 x 0.1 x 0.2 m with a magnetic anomaly of 68 nT, to the largest identified on the most recent geophysical data (**70879**) which is a ferrous long wavy dark reflector, identified as a mound, measuring 60 x 3.0 x 0.7 m on bathymetry data with a medium corresponding magnetic anomaly measuring 76 nT.
- 5.2.79 A total of 81 of these debris items have associated magnetic anomalies indicating ferrous debris. Anomaly **70480**, identified on the SSS data as an elongated dark reflector with a broad distinct shadow, measuring 1.8 x 0.2 x 0.2 m has the largest corresponding magnetic anomaly of 14,648 nT. This is located approximately 96 m north-west of the UKHO position for a lifted wreck, and therefore is possibly related items of debris. As the UKHO record identifies the wreck as sinking in 1983, the feature would be considered as modern and therefore not classified as archaeology, however the debris feature has been retained as potential archaeology as they cannot be conclusively related.
- 5.2.80 The remaining 37 anomalies have no associated magnetic anomalies, and have been classified as debris based on their irregular size and shape. These are likely to be non-ferrous items of debris.
- 5.2.81 Two anomalies have an associated UKHO record. Anomaly **70285** is a small distinct dark reflector, measuring 1.5 x 0.7 x 0.9 m with an associated magnetic anomaly of 43 nT, identified in the UKHO record (ID 75328) as a firm, round contact, measuring 2.8 x 1.4 x 0.9 m, sat in a scour hole with a strong magnetic deflection. Anomaly **70304** is a large, slightly angular dark reflector measuring 2.7 x 1.7 x 1.5 m with an associated magnetic

anomaly of 183 nT, which has a corresponding UKHO record (ID: 75359) as a single contact measuring 3.0 x 2.1 x 1.1 m with an associated magnetic anomaly.

- 5.2.82 Six anomalies have been classified as debris fields. The largest of these (**70575**) is a broad area measuring 44.6 x 14.3 m comprising numerous small, elongated, dark reflectors with heights of up to 0.6 m. The feature has a large associated magnetic anomaly of 280 nT, indicating ferrous material.
- 5.2.83 Of the six debris fields, four have associated magnetic anomalies (**70541, 70757, 70909, 70956**) indicating ferrous material. The other two (**70333** and **70754**) are likely to be comprised of non-ferrous material.
- 5.2.84 One hundred A2 anomalies have been classified as dark reflectors (See **Appendix III** for full list). These range in size from the smallest (**70814**), which measured 0.2 x 0.1 x 0.6 m and was identified on the SSS data as a narrow elongated dark reflector with a broad shadow, to the largest anomaly seen on the most recent geophysical data (**70441**) which measured 7.0 x 0.5 x 0.3 m and identified as a relatively indistinct dark reflector with height.
- 5.2.85 Anomaly **70991** is a large, slightly rounded dark reflector measuring 3.0 x 2.5 x 0.3 m. The feature is identified on the MBES data as a distinct mound within a depression, with an area of scour extending to the east. The feature has an associated UKHO record (ID 77614) identifying the feature as a foul, possibly a boulder, measuring 3.0 x 3.0 x 0.4 m. Although there is a possibility that the feature is natural, it has been retained as potential archaeology based on its size, distinct nature and associated UKHO record.
- 5.2.86 Of the A2 anomalies classified as dark reflectors, 12 were identified in the original Thanet geophysical investigations (Wessex Archaeology 2006b; 2008) but not on the most recent geophysical data. It is possible that these features have been buried by mobile sediments or impacted by the instillation of the current Thanet export cable. A further six dark reflectors were not covered by the most recent geophysical survey. Three were identified in the original Thanet investigation (Wessex Archaeology 2008), and three in the NEMO survey (Wessex Archaeology 2016). All of these features have been retained as potential archaeology.
- 5.2.87 A number of angular dark reflectors were identified on the SSS data within the nearshore section of the TEOWF cable corridor. Although the features appeared on the data to be quite distinct, it is thought that many of them are likely to be rocks related to the nearby harbour breakwater and as such were not retained as potential archaeology. Only those that looked possibly anthropogenic or had an associated magnetic anomaly were retained.
- 5.2.88 Five anomalies have been classified as bright reflectors. The largest bright reflector identified in the most recent geophysical data (**71036**) has dimensions of 2.4 x 1.1 m and is visible in the SSS data as a rectangular bright reflector. The smallest bright reflector (**70905**) is visible in the SSS data as a circular bright reflector, measuring 1.1 x 0.2 m, with a dark reflector in its centre. Three of the features (**70508, 70586** and **71144**) were identified in the original Thanet Wind Farm geophysical studies (Wessex Archaeology 2006b; 2008) but not in the most recent geophysical data. This may indicate burial of the features by mobile sediments, or disturbance of the features by the installation of the current Thanet export cable. None of the bright reflectors have an associated magnetic contact to indicate the presence of ferrous material.



- 5.2.89 Three anomalies have been classified as mounds. One of these (**70382**), measures 2.7 x 2.7 x 0.4 m and has an associated magnetic anomaly of 235 nT, indicating an item of ferrous debris that has been covered over by mobile sediments. The remaining two mounds (**70437** and **71089**) have no associated magnetic anomaly indicating sediment covered items of non-ferrous material.
- 5.2.90 A total of 45 anomalies have been classified as lengths of rope/ chain. These vary in length from 4.1 x 0.1 x 0.1 m (**70939**) to 203.8 x 0.9 x 0.4 m (**70336**). Twelve of these features have an associated magnetic anomaly, indicating ferrous material, which makes it more likely that these are lengths of chain or cable (**70354**, **Fig. 14**). The remaining 33 rope/ chain features have no obvious associated magnetic anomaly, which may suggest they are lengths of rope.
- 5.2.91 Two features have been classified as seafloor disturbances. Feature **70178** is a curvilinear 'c' shaped seafloor disturbance measuring 31.9 x 0.8 x 0.2 m. Feature **70606** was identified in the original Thanet geophysical survey (Wessex Archaeology 2006b) measuring 62.4 x 14.7 with no height, however was not identified in the most recent geophysical data, which may indicate burial by mobile sediments.
- 5.2.92 The remaining 748 A2 anomalies are classified as magnetic anomalies with no associated SSS or MBES feature. These vary in size from 5 nT (**70583**) to 1,604 nT (**70193**). All of the magnetic anomalies are classed as A2 and have the possibility to be buried objects with ferrous content that are of archaeological potential.
- 5.2.93 Magnetic anomalies **70369** and **70370** are identified just over 100 m south of wreck **70366**. It is possible, due to the dispersed nature of the wreck, that these magnetic anomalies represent buried items of wreck related debris. Feature **70370** is located approximately 18 m east of a dived wreck site identified in a dive report (KHER ID: MKE89659). It is likely that this wreck debris from dispersed wreck **70366**, however the possibility of a separate wreck site remains.
- 5.2.94 Seventeen anomalies have been classified as A3; records of possible archaeological interest with no corresponding geophysical anomaly. Of these, six are classified as recorded wrecks and nine as recorded obstructions.
- 5.2.95 Eight of these A3 anomalies were not covered by the most recent geophysical data (**71189**, **71201-05**, **70209**, **71232**), and therefore cannot be commented upon, however they have been retained at their reported positions based on their records.
- 5.2.96 Record **71209** is the NRHE position for the 1943 wreck of a B-17G Flying Fortress, which ditched at Pegwell Bay, Kent, after running out of fuel. The remains of the aircraft were discovered in the 1990s in marshland at Sandwich Flats, near Pegwell Bay. The wreckage was handed over to the British Breznett Aeronautical Museum. However the site was clearly visible at low tide in 2016, so considerable wreckage remains in the intertidal zone. The positional data for this site is quite vague, and the NRHE position comprises a circular polygon 1 km in diameter. The position provided is the centre point of that circle, not the exact location of the site. Another position for the aircraft, approximately 1.5 km to the south has recently been provided by Elliott Smock (pers. comm.) who was involved in the recovery of material in the 1990s. This location would place the aircraft crash site well outside the cable corridor and Study Area. The feature was not covered by the most recent geophysical data and therefore was not observed, however the NRHE position has been retained as a precautionary measure.

6 ARCHAEOLOGICAL CONCLUSIONS AND RECOMMENDATIONS

Palaeogeographic Features

- 6.1.1 A number of palaeogeographic features of archaeological potential have been identified within the TEOWF site. These are all associated with the offshore route of the Thames and its associated tributaries, created during times of sea level lowstand during the Pleistocene, and have been divided into five separate phases which outline the evolution of the prehistoric landscape:
- Phase 1 – Initial, large cut of the Thames shortly after its migration south caused by the advancing Anglian ice sheet;
 - Phase 2 – Large scour feature cut across the Thames channel, potentially caused by the outflowing of an ice-dammed lake and relating to the Lobourg Channel and formation of the Dover Strait. Filled by marine sediment from the subsequent marine transgression;
 - Phase 3 – Series of meandering smaller channels cutting across the landscape after silting up of the main Thames channel;
 - Phase 4 – Deposition of sediment over an erosion surface, possibly the land surface associated with Phase 3, potentially with overbank and/or lacustrine deposits; and,
 - Phase 5 – Delta top complex formed during the Holocene marine transgression, as rising sea levels pushed the Thames estuary towards its current position.
- 6.1.2 As terrestrial features deposited during periods of known human occupation of the UK, Phases 1, 3, 4 and 5 are considered of high archaeological potential. Phase 2 is interpreted as medium archaeological potential, partly due to the interpreted marine nature of the fill sediments, and partly due to uncertainties about the interpretation.
- 6.1.3 This interpretation is based on the relationships between features identified within the SBP data compared with the current known history of the North Sea, but some of the interpretation is still uncertain. Further geoarchaeological work would aid in refining the interpretation and so determining the archaeological potential of the area.
- 6.1.4 During previous work undertaken during the first phase of construction at Thanet wind farm, geoarchaeological investigations produced no real results due to poor preservation of environmental material in the assessed samples (Wessex Archaeology 2006c). As there are no geoarchaeological results to directly compare to, collection of data to fill this knowledge gap would be beneficial.
- 6.1.5 As such, it is recommended that, should further geotechnical sampling be undertaken within the TEOWF site (e.g. by vibrocore or borehole), samples acquired from within identified Pleistocene/Early Holocene features (**Unit 2**) be made available for geoarchaeological assessment. It is recommended that the retained archaeologist be involved from early in the process of any further planned geotechnical sampling to ensure that sediment sequences of archaeological potential are assessed.
- 6.1.6 Additionally, a number of the 2016 vibrocores sampled some of the Pleistocene/Early Holocene deposits. As such, it is recommended that samples from **VC001**, **VC006** and **VC007** (Phase 1), **VC002** and **VC003** (Phase 2), and **VC004** (Phase 5) be subject to Stage 2 geoarchaeological recording.



- 6.1.7 Further assessment of this kind would refine the sedimentary model for the site, and help determine the archaeological potential of individual deposits and features.
- 6.1.8 No palaeogeographic features of archaeological potential were identified along the TEOWF cable corridor, and so no further work is recommended at this time. However, the assessed data did not include the landfall area, so should data be acquired from this area (either geophysical or geotechnical), it is recommended that it be made available for archaeological assessment to ensure a full assessment of the cable corridor is achieved.
- 6.1.9 Despite this, BGS borehole data suggests the shallow geology of the intertidal area comprises modern sediment over Tertiary deposits, and so the potential for palaeogeographic features of high archaeological potential within Pegwell Bay are relatively low. It is likely that the loess/brickearth deposits present inland, known to be archaeologically significant, have been eroded away within Pegwell Bay and beyond, and only survive as isolated outliers, if at all.

Seabed Features

- 6.1.10 In total, 1,234 seabed features have been identified as being of possible archaeological interest within both of the Study Areas.
- 6.1.11 A total of 174 anomalies have been identified as being of possible archaeological interest within the TEOWF site area. Nineteen of these have been assigned an A1 archaeological potential rating, 150 features have been assigned an A2 rating and five A3 historic record of possible archaeological interest where no corresponding geophysical anomaly has been identified.
- 6.1.12 In the TEOWF cable corridor 1,060 anomalies have been identified in total. Of these, 16 have been assigned an A1 archaeological potential rating, 1,027 features have been assigned an A2 rating and 17 A3 historic record of possible archaeological interest with no corresponding geophysical anomaly has been identified.
- 6.1.13 AEZs have been recommended around all 11 wrecks within the TEOWF site area following the assessment of geophysical survey data. All AEZs consist of 50 m around the extents of the wreck, as recorded in the SSS and MBES data.
- 6.1.14 Of the eight non-wreck A1 anomalies, four are objects of debris likely to be related to the wrecks and covered within the AEZs listed above. Anomalies **70042** and **70058** are both wreck debris, however their 20 m buffer extends slightly beyond that of the wreck. In these cases, the wreck's 50 m AEZ has been merged with associated debris 20 m AEZ to make a single AEZ.
- 6.1.15 Anomalies **70039** and **70104** are both debris items with associated UKHO records. Although nothing was identified on the most recent geophysical data to indicate a wreck, both features have been recommended a precautionary 20m AEZ based on record details.
- 6.1.16 Of the five A3s, four have been recommended a precautionary 100 m AEZ based on their associated UKHO record details. Anomaly **70049** has not been given an AEZ at this time, as there is no indication in the UKHO record of the feature being a wreck.
- 6.1.17 AEZs are recommended around all five wrecks within the TEOWF cable corridor area following the assessment of geophysical survey data. All AEZs consist of 50 m around the extents of the wreck, as recorded in the SSS and MBES data.



- 6.1.18 Of the 11 non-wreck A1 anomalies, six are objects of debris likely to be related to the wrecks and covered within the AEZs listed above.
- 6.1.19 Anomalies **70346-49** are items of debris with an A1 discrimination, thought to be related to the wreckage of American B-24 Liberator bomber and German submarine UB12. Anomaly **70348** is identified close to the UKHO position for German submarine UB12, and as such has been given an AEZ of 50 m. Anomalies **70346** and **70347** are both potentially debris related to UB12, however are slightly offset and as such have been recommended AEZs of 20 m. Anomaly **70349** is likely related to the wreckage of American B-24 Liberator bomber and has a recommended AEZ of 50 m. Due to the proximity of these four anomalies, their recommended AEZs impact one another and, as a result have been merged into one large AEZ.
- 6.1.20 Debris item **70486** is thought to be the spilt cargo of a stone carrier barge that sank in 1983. Although the feature is related to a wreck, no archaeological exclusion zone is recommended at this time as the debris is deemed to be modern. Though the feature has not been given an AEZ, avoidance is advised based on operational grounds.
- 6.1.21 For features assigned A2 archaeological potential ratings, no AEZs are recommended at this time. However, avoidance of these features by micro-siting is recommended if they are proposed to be directly impacted by development in the future.
- 6.1.22 Of the seventeen A3s, two (**70210** and **70379**) have UKHO records indicating historical wrecks and, as such, have been given precautionary 100 m AEZs.
- 6.1.23 A3 anomalies **70479**, **70914** and **71087** are all modern wrecks and, as such, an AEZ was deemed unnecessary. However it should be noted that, although nothing was identified on the geophysical data at these locations, the possibility of finding modern wreckage material at these positions remains.
- 6.1.24 Anomaly **71236** is the position of a possible wreck, supplied by KHER. The dive record does not supply information about the type or wreckage found, and there was nothing to indicate a wreck on the geophysical data. As such, the feature has not been given an AEZ, however it should be noted that there is a possibility of wreckage material being found.
- 6.1.25 Record **71209** is the wreckage of the B-17G Flying Fortress identified in the intertidal zone and not covered by the most recent data. The positional data for this site is quite vague as the NRHE position comprises a circular polygon 1 km in diameter. The position recorded is the centre point of that circle, not the exact location of the site. Another position for the aircraft, approximately 1.5 km to the south, has recently been provided by Elliott Smock (pers. comm.) who was involved in the recovery of material in the 1990s. This location would place the aircraft crash site well outside the Cable Corridor and Study Area. Though the NRHE position has been retained as a precautionary measure, no AEZ is recommended at this time due to the discrepancies in the possible location.
- 6.1.26 The remaining ten A3 anomalies are recorded obstructions rather than wrecks therefore no AEZs are recommended at this times.
- 6.1.27 A number of anomalies identified in previous Thanet wind firm studies (WA 2006b and 2008) had previously recommended AEZs. Based on the most recent, higher-resolution geophysical data, these have been addressed, re-evaluated and recommendations made.
- 6.1.28 A summary of these recommendations can be found in the tables below:



Table 11: Updated AEZs within the TEOWF site area

2017 WA ID	WA 2006b	WA 2008	2017 AEZ recommendations
70034	6049	-	AEZ retained but repositioned based on most recent data.
70128	6054	-	AEZ retained but repositioned based on most recent data.
-	6114	-	Anomaly removed based on review of images.
70164	6045	-	Recommended removal of AEZ.

Table 12: Updated AEZs within the TEOWF cable corridor area

2017 WA ID	WA 2006b	WA 2008	2017 AEZ recommendations
71198	6106	-	Recommended removal of AEZ.
70479	-	-	Recommended removal of AEZ.
-	4326	-	Recommended removal of AEZ.
71189	7321, 7283	-	Recommended removal of AEZ.
70991	6104	7122	Recommended removal of AEZ.
70697	6123	-	Recommended removal of AEZ.
70481	6119, 6124	-	Recommended removal of AEZ.
70606	6091	-	Recommended removal of AEZ.
70443	-	7319	Recommended removal of AEZ.
70591	-	7115	Recommended removal of AEZ.
70233	-	7108	Recommended removal of AEZ.
71190	-	6110	Recommended removal of AEZ.
71162	6101	71162	Recommended removal of AEZ.

- 6.1.29 It is recommended that, if any objects of possible archaeological interest are recovered during any groundwork operations, they should be reported using the established Protocol for Archaeological Discoveries: Offshore Renewables Projects (The Crown Estate, 2014). This will establish whether the recovered objects are of archaeological interest and recommend appropriate mitigation measures.
- 6.1.30 There is currently an approximately 1.5 km data gap between the landfall end of the 2016 data coverage and the landfall itself. It is expected that further high-resolution geophysical data will be acquired in areas of potential impact at a later stage in the project development. It is recommended that this data is also made available for archaeological assessment.

7 REFERENCES

- Antoine, P., Catt, J., Lautridou, J-P., and Somme, J. (2003), The loess and coversands of northern France and southern England. *Journal of Quaternary Science* 18: 309–318
- Bicket, A. and Tizzard, L. (2015), 'A review of the Submerged Prehistory and Palaeolandscapes of the British Isles', In *Proceedings of the Geologists' Association*, 126, pp. 643-663
- Bridgland, D.R. (1994), *The Quaternary of the Thames*. London, Chapman and Hall
- Bridgland, D. R., Field, M. H., Holmes, J. A., McNabb, J., Preece, R. C., Selby, I., Wymer, J. J., Boreham, S., Irving, B. G., Parfitt, S. A., and Stuart, A. J. (1999), 'Middle Pleistocene Interglacial Thames-Medway Deposits at Clacton-on-Sea, England: Reconsideration of the Biostratigraphical and Environmental Context of the Type Clactonian Palaeolithic Industry', *Quaternary Science Reviews*, 18, pp. 109-146
- British Geological Survey (1990), *British Geological Survey 1:250,000 Series, Thames Estuary, Sheet 51°N - 00°, Seabed Sediments and Quaternary Geology*, Copyright NERC, 1990
- British Geological Survey (2018), The BGS Borehole Record Viewer, online resource, <http://www.bgs.ac.uk/data/boreholescans/home.html>, accessed February 2018
- Clarke, M. L., Milodowski, A. E., Bouch, J. E., Leng, M. J., Northmore, K. J. (2007), New OSL dating of UK loess: indications of two phases of Late Glacial dust accretion in SE England and climate implications. *Journal of Quaternary Science* 22:361–371
- Cameron, T. D. J, Crosby, A, Balson, P.S, Jeffery, D.H, Lott, G.K, Bulat, J. and Harrison, D.J. (1992), *The Geology of the Southern North Sea*, British Geological Survey United Kingdom Offshore Regional Report, London HMSO
- Catt, J. A. (1977), Loess and coversands. In *British Quaternary Studies: Recent Advances*, Shotton, F. (ed.). Clarendon Press: Oxford; 221– 229
- Coles, B. J. (1998), 'Doggerland: A Speculative Survey', *Proceedings of the Prehistoric Society*, 64, pp. 45-81
- Emu Ltd. (2009), *Outer Thames Estuary Regional Environmental Characterisation*, ISBN 978-00907545-28-9, published by the MALSF, Crown Copyright 2009
- Fugro Geoconsulting Ltd (2016), *Thanet Extension Offshore Wind Farm, UK Continental Shelf, Report 2 of 3: Geotechnical Investigation Report – Measured and Derived Geotechnical Parameters and Final Results*, Wallingford, unpublished report, reference: GEO51/R2
- Gupta, S., Collier, J. S., Garcia-Moreno, D., Oggioni, F., Trentesaux, A., Vanneste, K., De Batist, M., Camelbeeck, T., Potter, G., Van Vliet, B., and Arthur, J. C. R. (2017), 'Two-Stage Opening of the Dover Strait and the Origin of Island Britain', *Nature Communications*, 8, 15101 doi: 10.1038/ncomms15101



- Hamblin, R. J. O., Crosby, A., Balson, P. S., Jones, S. M., Chadwick, R. A., Penn, I. E. and Arthur, M. J. (1992), *The Geology of the English Channel*, British Geological Survey United Kingdom Offshore Regional Report, London HMSO
- Kent County Council (2018), *Stour Basin Palaeolithic Project*, York: Archaeology Data Service <https://doi.org/10.5284/1046264>
- Murton, J. B., Whiteman, C. A., Bates, M. R., Bridgland, D. R., Long, A. J., Roberts, M. B., and Walker, M.P. (1998) (eds), *The Quaternary of Kent and Sussex: Field Guide*. Quaternary Research Association, London
- Murton, J. B., Bateman, M. D., Baker, C. A., Knox, R., and Whiteman, C. A. (2003), The Devensian periglacial record on Thanet, Kent, UK. *Permafrost and Periglacial Processes* 14: 217–246
- Parfitt, S. A, Barendregt, R. W., Breda, M., Candy, I., Collins, M. J., Coope, G. R., Durbidge, P., Field, M. H., Lee, J. R., Lister, A. M., Mutch, R., Penkman, K. E. H., Preece, R. C., Rose, J., Stringer, C. B., Symmons, R., Whittaker, J. E., Wymer, J. J., and Stuart, A. J. (2005), 'The Earliest Record of Human Activity in Northern Europe', *Nature*, 438 (7070), pp. 1008–1012
- Parfitt, S. A, Ashton, N. M., Lewis, S. G., Abel, R. L., Coope, G. R., Field, M. H., Gale, R., Hoare, P. G., Larkin, N. R., Lewis, M. D., Karloukovski, V., Maher, B. A, Peglar, S. M., Preece, R. C., Whittaker, J. E., and Stringer, C. B. (2010), 'Early Pleistocene Human Occupation at the Edge of the Boreal Zone in Northwest Europe', *Nature*, 466 (7303), pp. 229–233
- Shennan, I. (1989), 'Holocene Crustal Movements and Sea-Level Changes in Britain', *Journal of Quaternary Science*, 4, pp. 77-89
- The Crown Estate (2014), Protocol for Archaeological Discoveries: Offshore Renewables Projects. Prepared by Wessex Archaeology. First edition 2010
- Tizzard, L., Bicket, A. R., Benjamin, J., and De Loecker, D. (2014), 'A Middle Palaeolithic Site in the Southern North Sea: Investigating the Archaeology and Palaeogeography of Area 240', *Journal of Quaternary Science*, 29(7), pp. 698-710.
- Wessex Archaeology (2006a), *Thanet Offshore Wind Farm: Stage 1 Borehole Assessment*, Salisbury, unpublished report, reference: 60070.04
- Wessex Archaeology (2006b), *Thanet Offshore Wind Farm Project: Archaeological Assessment of Geophysical Data*, Salisbury, unpublished report, reference: 60070.05
- Wessex Archaeology (2006c), *Thanet Offshore Wind Farm: Stage 3 Subsample Assessment*, Salisbury, unpublished report, reference: 60070.07
- Wessex Archaeology (2007), *Thanet Offshore Wind Farm: Stage 2 Archaeological Recording*, Salisbury, unpublished report, reference: 60070.06
- Wessex Archaeology (2008), *Thanet Offshore Wind Farm: Archaeological Assessment of Marine Geophysical Data: Pre-development Monitoring Report: Thanet Offshore*



Wind Farm Export Cable corridor, Salisbury, unpublished report, reference: 60077.02

Wessex Archaeology (2010), 'Appendix III-IV: Technical Report: Archaeology', in ERM 2010, *Thames Estuary Dredging Association, Marine Aggregate Regional Environmental Assessment*, Salisbury, report ref: 66061.04

Wessex Archaeology (2011b), *Seabed Prehistory: Site Evaluation Techniques (Area 240)*, Salisbury, report ref: 70754.04

Wessex Archaeology (2014), Roger M. Jacobi, *Palaeolithic and Mesolithic Lithic Artefact (PaMELA) database*.

Wessex Archaeology (2016), *Project NEMO, UK-Belgium Electrical Interconnector Richborough to West-Zeebrugge: Archaeological Environmental Impact Assessment*, Salisbury, unpublished report, reference: 73390.03

Wessex Archaeology (2017a), *Thanet Extension Offshore Wind Farm, Environmental Statement, Volume 1, Chapter 10: Offshore Archaeology and Cultural Heritage*, Salisbury, unpublished report

Wessex Archaeology (2017b), *Thanet Extension Offshore Wind Farm: Marine Archaeological Desk-Based Assessment Technical Report*, Salisbury, unpublished report, reference: 116080.01

White, M. J. and Jacobi, R. M. (2002).. Two sides to every story: bout coupé handaxes revisited. *Oxford Journal of Archaeology* 21(2), 109-133.

Wymer, J. (1982), 'The Palaeolithic Period in Kent', In Leach P. E. (ed), *Archaeology in Kent to AD1500*, CBA Research Report 48, pp. 8-11.

Wymer J. (1999), *The Lower Palaeolithic Occupation of Britain*, Wessex Archaeology and English Heritage.



APPENDIX I – PALAEOGEOGRAPHIC FEATURES OF ARCHAEOLOGICAL POTENTIAL

WA ID	Classification	Development Phase	Archaeological Discrimination	Description
75000	Channel	Phase 3	P1	Distinct cut and fill feature cut into chalk bedrock, identified on a number of survey lines. Generally characterised by a well-defined basal reflector and single phase of acoustically layered fill, although more than one phase of fill maybe present where the feature is deepest and widest. Possible fluvial feature, depth range: 0.6 - 8.4 m BSB.
75001	Channel	Phase 3	P1	Distinct cut and fill feature cut into chalk bedrock, identified on a number of survey lines. Generally characterised by a well-defined basal reflector and either a single phase of acoustically layered fill, or often two distinct phases of cut and fill with the second phase often cutting through or across the edges of the first. Possible fluvial feature, related to channel features 7001 and 5035 identified during previous phases of work. Depth range: 0.7 - 8.9 m BSB.
75002	Simple Cut and Fill	Phase 3	P2	Small, distinct cut and fill feature cut into chalk bedrock, but only identified on one survey line. Well defined basal reflector with single phase of acoustically transparent fill. Possible eroded remnants of a fluvial feature. Depth range: 1.1 - 3.2 m BSB.
75003	Simple Cut and Fill	Phase 3	P2	Small cut and fill feature cut into chalk bedrock, but only identified on one survey line. Relatively poorly defined basal reflector with single phase of acoustically transparent fill. Possible eroded remnants of a fluvial feature. Depth range: 1.4 - 3.6 m BSB.
75004	Simple Cut and Fill	Phase 3	P2	Small, distinct cut and fill feature cut into Tertiary sediments, but only identified on one survey line. Poorly defined basal reflector with single phase of acoustically unstructured fill. Possible eroded remnants of a fluvial feature. Depth range: 1.0 - 2.8 m BSB.
75005	Channel	Phase 1	P1	Large cut and fill feature characterised by a well-defined basal reflector and numerous sub-parallel internal reflectors. This is the earliest, most extensive phase of a large channel complex, and is cut into/overlain by a number of other different cut and fill features, fills and erosion surfaces, with at five phases identified in total. Probable channel feature, possibly relating to the offshore course of the river Thames. Depth Range: 0.6 - 10.9 m BSB.



WA ID	Classification	Development Phase	Archaeological Discrimination	Description
75006	Channel	Phase 3	P1	Cut and fill feature, cut into the deposits of channel 75005 and representing part of the third phase of cut and fill in the area. Generally, poorly defined basal reflector but with an acoustically chaotic fill. Generally, only identified due to a change in fill character, and disruption of internal and basal reflectors of 75005 . Possible fluvial channel. Depth range: 1.0 - 9.6 m BSB.
75007	Acoustic Blanking	Phase 1	P2	Area of possible acoustic blanking within channel 75005 . Appears in the vicinity of channel 75006 , but located below this feature in the stratigraphy and so is unlikely to be related. Possible accumulation of shallow gas, possibly indicating organic material within the sediments. Depth range: 4.6 - 8.0 m BSB.
75008	Acoustic Blanking	Phase 1	P2	Small area of possible acoustic blanking within channel 75005 , only identified on one survey line. Possible accumulation of shallow gas, possibly indicating organic material within the sediments. Depth range: 5.6 - 7.8 m BSB.
75009	Simple Cut and Fill	Phase 3	P2	Small, distinct cut and fill feature, cut into the deposits of channel 75005 and representing part of the third phase of cut and fill in the area. Poorly defined basal reflector but with an acoustically chaotic fill. Only identified on one survey line. Possible remnants of a fluvial channel. Depth range: 1.4 - 7.0 m BSB.
75010	Acoustic Blanking	Phase 1	P2	Area of acoustic blanking within channel 75005 , identified on a number of a survey lines. Possible accumulation of shallow gas, possibly indicating organic material within the sediments. Depth range: 3.6 - 9.0 m BSB.
75011	Channel	Phase 3	P1	Cut and fill feature, cut into the deposits of channel 75005 and representing part of the third phase of cut and fill in the area. Generally, poorly defined basal reflector but with an acoustically chaotic fill. Generally, only identified due to a change in fill character, and disruption of internal and basal reflectors of 75005 . Possible fluvial channel. Depth range: 1.8 - 9.3 m BSB.



WA ID	Classification	Development Phase	Archaeological Discrimination	Description
75012	Erosion Surface	Phase 4	P1	Erosion surface identified within channel 75005 . Characterised by a poorly defined basal reflector overlain by sub-parallel internal reflectors, often identified due to a change in angle of internal reflectors of feature 75005 . Possible represents an erosion surface overlain by later deposition, and forms an upper surface for channel 75011 . Represents the fourth phase of development of the area. Depth range: 0.7 - 3.8 m BSB.
75013	Erosion Surface	Phase 4	P1	Erosion surface identified within channel 75005 . Characterised by a poorly defined basal reflector overlain by sub-parallel internal reflectors, often identified due to a change in angle of internal reflectors of feature 75005 . Possible represents an erosion surface overlain by later deposition. Represents the fourth phase of development of the area. Depth range: 0.7 - 3.8 m BSB.
75014	Channel	Phase 1	P1	Large cut and fill feature characterised by a well-defined basal reflector and numerous sub-parallel internal reflectors. This is the earliest, most extensive phase of a large channel complex, and is cut into/overlain by a number of other different cut and fill features, fills and erosion surfaces, with at five phases identified in total. Probable channel feature, possibly relating to the offshore course of the river Thames. Extents of feature are difficult to determine definitively, as the internal structure appears very similar to the underlying Tertiary deposits. Depth Range: 0.4 - 24.8 m BSB,
75015	Channel Complex	Phase 5	P1	Distinct erosional feature identified within and between channels features 75005 and 75014 . In the west, the feature comprises a well-defined, sub-horizontal reflector overlain by a relatively thin acoustically layered unit. This alters towards the east, where the basal reflector becomes more irregular and the overlying unit thicker and characterised by numerous internal cut and fill features. This unit represents the fifth phase of cut and fill in the area, and possibly represents a series of delta top deposits. The eastern, channel complex section of the feature probably relates to feature 7007 identified during previous phases of work. Depth range: 0.7 - 9.1 m BSB.



WA ID	Classification	Development Phase	Archaeological Discrimination	Description
75016	Channel	Phase 2	P2	Large channel feature characterised by a poorly defined basal reflector overlain by either sub-parallel internal reflectors or an acoustically unstructured unit. Often cuts down through the base of channel 75014 , and so in these areas is the only fill of the channel complex. Represents the second phase of cut and fill in the area. Eastern end of the feature is difficult to distinguish from the overlying seabed sediments. Depth range: 0.6 - 12.8 m BSB.
75017	Channel	Phase 3	P1	Cut and fill feature, partially cut directly into Tertiary deposits and partially into the deposits of channels 75014 and 75016 . Generally, well defined basal reflector but with an acoustically chaotic or layered fill. Represents part of the third phase of cut and fill in the area. Possible fluvial channel, associated with features 7010, 7012 and 7013 identified during previous phases of work. Depth range: 0.7 - 10.3 m BSB.
75018	Acoustic Blanking	Phase 3	P2	Area of acoustic blanking within channel feature 75017 . Possible accumulation of shallow gas, possibly indicating organic material within the sediments. Depth range: 4.8 - 7.1 m BSB.
75019	Channel	Phase 3	P1	Distinct cut and fill feature cut into chalk bedrock, identified on a number of survey lines. Generally characterised by a well-defined basal reflector and a single phase of acoustically layered fill. Possible fluvial feature, possibly related feature 7003 identified during previous phases of work. Depth range: 0.6 - 12.6 m BSB.



APPENDIX II – SEABED FEATURES OF ARCHAEOLOGICAL POTENTIAL WITHIN THE TEOWF SITE AREA

WA ID	Classification	Easting	Northing	Archaeological Discrimination	L (m)	W (m)	H (m)	Magnetic Amplitude (nT)	Description	External Reference
70000	Magnetic	408927	5693387	A2	-	-	-	13	Small dipole identified on one line. Nothing identified in the side scan or bathymetry data which may indicate possible buried ferrous material.	-
70001	Magnetic	408810	5693605	A2	-	-	-	14	Small positive dipole identified across two lines. Nothing identified in the side scan possibly buried ferrous material.	-
70002	Dark reflector	408376	5693671	A2	10.9	2	0.3	-	Straight dark reflector with possible rounded ends and angular side. Feature has some scour visible and a slight shadow.	-
70003	Dark reflector	409431	5694898	A2	3.2	1.6	0.6	-	Angular object with corresponding distinct, irregular shadow.	-
70004	Dark reflector	409093	5695088	A2	2.6	1.1	0.9	-	Small angular object with angular bright shadow. Appears to have linear scour either side.	-
70005	Dark reflector	409375	5695337	A2	3.4	3	0	-	Irregular object with no obvious shadow but scour to the south. Identified as a small mound on the bathymetry data.	-
70006	Magnetic	409533	5695263	A2	-	-	-	16	Small dipole identified across two lines. Nothing identified in the side scan or bathymetry data which may indicate possible buried ferrous material.	-
70007	Dark reflector	409644	5695828	A2	5	3	0.5	-	Irregular object with bright shadow, looks like possible build-up between two sand waves in the bathymetry. Feature is seen as a mound in the bathymetry and a dark reflector with an irregular shadow on the side scan data.	-
70008	Dark reflector	409113	5696073	A2	4.1	0.5	0	-	Slightly curved, elongated dark reflector with no obvious shadow but some possible slight scour.	-
70009	Dark reflector	409809	5696634	A2	8.1	3.9	0.8	-	Angular object with a slight scour and rounded bright shadow. Smaller angular object adjacent. Object appears as an irregular mound in the bathymetry.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	L (m)	W (m)	H (m)	Magnetic Amplitude (nT)	Description	External Reference
70010	Dark reflector	409717	5697170	A2	0.8	0.5	0.9	-	Small, distinct, slightly angular dark reflector with a relatively broad shadow. Possible slight disturbance to surrounding sediment, or another smaller contact nearby.	-
70011	Seafloor disturbance	409197	5697577	A2	33	16.9	1.2	-	Irregular area of seafloor disturbance, possible with some faint, elongated dark reflectors, some small some more distinguishable. Feature has a slightly irregular shadow and is identified in an area of sand waves.	-
70012	Dark reflector	410144	5697602	A2	5	2.8	0.9	-	Small distinct dark reflector with clear shadow. Isolated feature on the seafloor, possibly a natural feature however looks a little anomalous and, as such, has been retained as potential archaeology.	-
70013	Magnetic	410643	5698379	A2	-	-	-	118	Medium positive monopole identified over two lines. Nothing identified in the side scan or bathymetry data which may indicate possible buried ferrous material.	-
70014	Dark reflector	410044	5698592	A2	2.8	0.2	0.9	-	Small distinct dark reflector with height. Located close to several similar objects on the seabed.	-
70015	Dark reflector	410069	5698613	A2	0.9	0.2	0.5	-	Small distinct dark reflector with height. Located close to several similar objects on the seabed.	-
70016	Dark reflector	410066	5698611	A2	1.3	0.1	0.8	-	Small distinct dark reflector with height. Located close to several similar objects on the seabed.	-
70017	Dark reflector	410053	5698600	A2	1.7	0.1	0.7	-	Small distinct dark reflector with height. Located close to several similar objects on the seabed.	-
70018	Wreck	409888	5698582	A1	74.8	22	8.3	1459	UKHO records the position of a dangerous wreck. Identified on the sonar data as a large, relatively intact wreck with large shadow. Appears as though the wreck might be leaning slightly on its side, with an area of debris to the south of the wreck. The wreck appears to be partially broken up in some areas, with some items of associated debris in the central section. Originally seen in WA report 60070 (WA 2006b) as a dark reflector.	13939 (UKHO), 6052 (WA 60070), 2110 (WA, 2017B)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	L (m)	W (m)	H (m)	Magnetic Amplitude (nT)	Description	External Reference
70019	Dark reflector	409882	5698973	A2	10.9	9.2	0.6	-	Dark reflector with shadow across its extents. Isolated feature on the seabed in a region of sand waves. Feature appears as a sub-angular mound with deep scour to the south in the MBES data. Position taken from the bathymetry.	-
70020	Dark reflector	411151	5702528	A2	4.3	2	0.5	-	Dark reflector with shadow, located near to another feature on the seabed.	-
70021	Dark reflector	411150	5702520	A2	11.2	4.8	0.6	-	Elongated dark reflector with distinct shadow located in an area of megaripples.	-
70022	Seafloor disturbance	410833	5701699	A2	49.8	20.7	0	-	Seafloor disturbance with several dark reflectors. Located in an area of megaripples.	-
70023	Magnetic	410568	5701458	A2	-	-	-	19	Small, positive monopole identified on one line. Nothing identified in the side scan or bathymetry data which may indicate possible buried ferrous material.	-
70024	Magnetic	410216	5701858	A2	-	-	-	15	Small, negative monopole identified on one line. Nothing identified in the side scan or bathymetry data which may indicate possible buried ferrous material.	-
70025	Magnetic	409926	5701747	A2	-	-	-	55	Medium negative monopole identified on one line. Nothing identified in the side scan or bathymetry data which may indicate possible buried ferrous material.	-
70026	Magnetic	410307	5701619	A2	-	-	-	30	Small asymmetric dipole identified on one line. Nothing identified in the side scan or bathymetry data which may indicate possible buried ferrous material.	-
70027	Magnetic	409501	5701587	A2	-	-	-	21	Small, positive monopole identified on one line. Nothing identified in the side scan or bathymetry data which may indicate possible buried ferrous material.	-
70028	Magnetic	409162	5701411	A2	-	-	-	48	Small dipole identified over two lines. Nothing identified in the side scan or bathymetry data which may indicate possible buried ferrous material.	-
70029	Magnetic	408976	5700690	A2	-	-	-	22	Small, positive monopole identified on one line. Nothing identified in the side scan or bathymetry data which may indicate possible buried ferrous material.	-
70030	Magnetic	408238	5700910	A2	-	-	-	22	Small, negative monopole identified on one line. Nothing identified in the side scan or bathymetry data which may indicate possible buried ferrous material.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	L (m)	W (m)	H (m)	Magnetic Amplitude (nT)	Description	External Reference
70031	Magnetic	409246	5702831	A2	-	-	-	19	Small dipole identified over two lines. Nothing identified in the side scan or bathymetry data which may indicate possible buried ferrous material.	-
70032	Recorded wreck	406938	5701739	A3	-	-	-	-	One of two UHKO positions for the remains of a British steam ship <i>Empress of Midland</i> , which sank 27 March 2016 after striking a mine laid by UC-1. A survey of this location in 1953 indicated a small hump which may not be a wreck. The site was relocated in 1973, but in 1996 nothing was found and the record was amended to 'dead'. Nothing was identified on the most recent geophysical survey at this location.	13971 (UKHO), 2103 (WA, 2017B)
70033	Recorded wreck	406676	5702176	A3	-	-	-	-	Reported as a possible small wreck in 1970, a survey in 1996 failed to locate the site, and the record was amended to 'dead'. Nothing was identified on the most recent geophysical survey at this location.	13979 (UKHO), 2116 (WA, 2017B)
70034	Wreck	405318	5701987	A1	89.7	27	6.8	12655	UKHO and NHRE identify the position of the remains of a broken up wreck. Identified on the sonar data by an irregular outline of an elliptical wreck, possibly upright and partially buried with some standing structure still visible. Tall structure at the northwest end and centre indicated from a distinct shadow. Identified within an area of sand waves with some surrounding scour and some possible surrounding debris. Originally seen in WA report 60070 (WA 6006b) as a partially buried wreck.	13976 (UKHO), 6049 (WA 60070), 831809 (NRHE), 2113 (WA, 2017B)
70035	Debris	405276	5702020	A1	3.7	2.3	0.8	-	Two dark reflectors visible within shadow caused by wreck structure, suggesting upstanding features. Possibly debris related to nearby wreck.	-
70036	Magnetic	404276	5702235	A2	-	-	-	18	Small, positive monopole identified on one line. Nothing identified in the side scan or bathymetry data which may indicate possible buried ferrous material.	-
70037	Dark reflector	404544	5702685	A2	2.5	1.1	0.6	-	Small irregular object with a slight scour and slight shadow.	-
70038	Magnetic	403154	5702840	A2	-	-	-	75	Small dipole identified across one line. Nothing identified in the side scan or bathymetry data which may indicate possible buried ferrous material.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	L (m)	W (m)	H (m)	Magnetic Amplitude (nT)	Description	External Reference
70039	Debris	401517	5702855	A1	12.2	11.8	1.3	380	UKHO records suggest an area of foul ground, comprised of a small contact about 1 m height, of indistinct nature and difficult to locate. Records also suggest two smaller contacts nearby could be the site of a larger wreck, almost completely buried, measuring approximately 20 m in length. The contact was relocated in 1988, but not in 1996 when the record was amended to 'dead'. A small, distinct mound within a depression was identified on the MBES data. The scour depression appears to extend to the SW of the feature. The feature is identified on the sonar data as an isolated dark reflector on the seabed. Feature has an associated large magnetic anomaly, indicating ferrous material.	13987 (UKHO), 831814 (NRHE), 2126 (WA, 2017B)
70040	Wreck	400729	5703004	A1	97.2	32.7	7.4	19574	Wreckage of the Belgian steamship <i>Menapier</i> , which was torpedoed and sunk by German submarine UB 10 on 1 June 1915. Identified on the sonar data as a compact upright wreck isolated on the seabed. To the south of the wreck there appears to be some debris, most likely related to the wreck. Wreck has sediment accumulation to the east and slight scour to the west. There is a deep area of scour to the north of the wreck and large area of scour to the south. Wreck appears to be broken to the south-west. Feature has a very large associated magnetic anomaly indicating ferrous material.	13993 (UKHO), 904740 (NRHE), MKE13358 (KHER), 2104 (WA, 2017B)
70041	Wreck	397200	5703004	A1	113.1	47.7	2.7	13283	Remains of a British steamship <i>Woodtown</i> which sank, while en-route from Newlyn to London on 15 November 1939, having struck a mine. Identified on the MBES data as an irregular but compact area of debris with numerous peaks but no coherent structure. On the sonar data the feature appears to be comprised numerous angular dark reflectors with distinct, irregular shadows. The wreck has a very large associated magnetic signal indicating ferrous material.	13992 (UKHO), 904739 (NRHE), MKE13358 (KHER), 2106 (WA, 2017B)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	L (m)	W (m)	H (m)	Magnetic Amplitude (nT)	Description	External Reference
70042	Debris	397134	5702959	A1	2.6	2.5	0.3	-	Debris consisting of an irregular dark reflector with a bright shadow, likely debris associated to nearby wreck 70041 . Feature identified on the MBES data as a small mound surrounded by a scour depression.	-
70043	Magnetic	396666	5702634	A2	-	-	-	34	Small, positive monopole identified on one line. Nothing identified in the side scan or bathymetry data which may indicate possible buried ferrous material.	-
70044	Seafloor disturbance	396101	5702211	A2	37.9	5.1	0.2	-	Thin area of seafloor disturbance, possibly with numerous small dark reflectors. Could be natural feature however the possibility remains for it to be an area of debris. As such, it has been retained as potential archaeology.	-
70045	Magnetic	395810	5702153	A2	-	-	-	37	Medium dipole identified on one line. Nothing identified in the side scan or bathymetry data which may indicate possible buried ferrous material.	-
70046	Rope/chain	396770	5701590	A2	184.7	1.4	0.2	-	Curvilinear intermittent dark reflector with some bright shadow. Possible rope/chain.	-
70047	Dark reflector	397333	5702040	A2	4.6	2.3	0.4	-	Small distinct elongated object with some shadow. Possibly with an associated linear anomaly 70048 , extending to the NE, though to be a rope/chain.	-
70048	Rope/chain	397375	5702079	A2	113.9	0.6	0.3	35	Curvilinear dark reflector with some bright shadow, possibly with an associated object with height (Anomaly number 70047) at its south western end.	-
70049	Recorded Obstruction	397988	5702064	A3	-	-	-	-	Obstruction recorded by UKHO. Found in 1970, but not located in 1984 or 1996. The record was amended to 'dead'. Nothing was identified at this position on the most recent geophysical data.	13973 (UKHO), 2139 (WA, 2017B)
70050	Seafloor disturbance	398959	5702273	A2	72.6	18.2	0.4	-	Elongate linear area of intermittent dark reflector with some irregular bright shadow.	-
70051	Dark reflector	400324	5702116	A2	3.8	2.2	0.4	-	Distinct dark reflector with a relatively broad shadow and some possible disturbance to surrounding sediment.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	L (m)	W (m)	H (m)	Magnetic Amplitude (nT)	Description	External Reference
70052	Wreck	401365	5702114	A1	14.2	9.7	1.9	-	Obstruction / foul ground recorded at this position. Reported as wreck in 1918, amended to 'dead' in 1922. In 1970 a small piece of wreckage was found. In 1982, a small wreck was reported. In 1996, the record was amended to 'foul' after it was not relocated. Identified on the most recent geophysical survey data as a rounded object with an irregular bright shadow that appears interrupted by sediment. Surrounded by smaller objects, which may be associated items of debris. On the MBES data the feature is identified as a distinct mound with scour to the south of the feature.	13975 (UKHO), 831806 (NRHE), MKE9867 (KHER), 2130 (WA, 2017B)
70053	Mound	401906	5701869	A2	5	4	0.2	-	Small rounded mound identified on the MBES data in a relatively featureless area of seafloor.	-
70054	Dark reflector	401943	5701347	A2	16	7	0.2	-	Short straight linear object with slight shadow. The feature is seen as a mound in the bathymetry and a dark reflector on the side scan data.	-
70055	Magnetic	400280	5701910	A2	-	-	-	41	Medium, negative monopole identified on one line. Nothing identified in the side scan or bathymetry data which may indicate possible buried ferrous material.	-
70056	Wreck	399929	5701751	A1	117.9	33.9	6.6	4797	Remains of a British steamship <i>Saidieh</i> which was sunk on 1 June 1915 by German submarine UB 6 while on passage from Alexandria to Hull. Identified on the MBES data as a distinct isolated wreck. There is an area of scour to the north and south of the wreck. Wrecks consists of many peaks, to the East of the wreck the distinct shape of an end of a ship is visible. On the sonar data the wreck appears to be partially broken up with some elongated dark reflectors indicating a more coherent structure. Wreck has a very large associated magnetic anomaly, indicating ferrous material. Originally seen in WA report 60070 as a seafloor disturbance.	13968 (UKHO), 904723 (NRHE), MKE13342 (KHER), 6090 (WA 60070), 2105 (WA, 2017B)
70057	Debris	399962	5701728	A1	4	2.5	0.3	-	Small, relatively straight object with bright shadow. Possibly debris related to nearby wreck 70056 .	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	L (m)	W (m)	H (m)	Magnetic Amplitude (nT)	Description	External Reference
70058	Debris	399938	5701686	A1	4.1	1.2	0.4	-	Small dark reflector with height identified within scour. Possibly debris related to nearby wreck 70056 .	-
70059	Wreck	398737	5701263	A1	23.9	8.6	4.3	93	A UKHO survey in 1996 indicated a small wreck well scoured into the seabed with a small magnetic anomaly. Identified on the most recent sonar data as a small, compact wreck with a distinct shadow. The wreck looks like a hull with some possible internal deck structure and some possible debris items in the surrounding area. Large area of scour to the S and E of the main structure identified on the MBES data. A medium magnetic anomaly indicates ferrous material.	13964 (UKHO), 831802 (NRHE), MKE9863, (KHER), 2112 (WA, 2017B)
70060	Debris field	398727	5701260	A1	9.9	8.9	0.3	-	Irregular angular area of small dark reflectors with shadow interpreted as debris related to the nearby wreck 70059 .	-
70061	Dark reflector	396784	5700931	A2	7.1	3.9	0	-	Angular area of dark and bright reflector. Not particularly distinct, however looks a little anomalous and, as such, has been retained as potential archaeology.	-
70062	Wreck	396958	5700153	A1	18.1	17.1	2.5	-	Obstruction identified in UKHO record as possible stones/masonry/rubble. A 1970 survey suggested a possible wreck site. A 1985 survey identified a small object, approximately 10 m in length, orientated 100/280 degrees. The site was interpreted as an isolated rock pinnacle in 1985 and amended to 'dead' when it wasn't relocated in 1998. Feature was identified in the most recent geophysical data as an elongated, poorly defined dark reflector with an irregular, bright shadow. No obvious structure but appears to be a faint angular dark reflector and very faint rounded dark reflector at one end. Area of scour extends approximately 19 m to the south of the feature.	14946 (UKHO), 2128 (WA, 2017B)
70063	Magnetic	397370	5699772	A2	-	-	-	26	Small dipole identified across one line. Nothing identified in the side scan or bathymetry data which may indicate possible buried ferrous material.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	L (m)	W (m)	H (m)	Magnetic Amplitude (nT)	Description	External Reference
70064	Rope/chain	398607	5700424	A2	48.6	1.2	0.2	-	Linear array with objects attached. Possible modern anthropogenic fishing gear, however this cannot be confirmed without further investigation and, as such, has been retained as potential archaeology.	-
70065	Rope/chain	399532	5701113	A2	47.7	0.7	0.1	-	Curvilinear dark reflector with some slight shadow. Possible length of rope/chain.	-
70066	Seafloor Disturbance	399963	5700946	A2	17.1	6.3	0.3	-	Irregular area of small dark reflectors with slight shadow. Possibly with an associated linear item of debris, however this isn't clearly discernible.	-
70067	Recorded Obstruction	401343	5700886	A3	-	-	-	-	Obstruction recorded by UKHO. In 1970, it was thought a few small pieces of wreckage were present near the charted position, but there was no sonar response. In 1982, a survey indicated that nothing was standing higher than 0.5 m above general depth. Record was amended to 'dead'. Nothing was identified at this position on the most recent geophysical data.	13962 (UKHO), 2127 (WA, 2017B)
70068	Seafloor disturbance	400317	5700741	A2	33.7	17.2	0.6	-	Irregular mound in an area of smooth seabed identified on the bathymetry data. Possibly natural however looks a little anomalous. Originally seen as a seafloor disturbance in WA report 60070 (WA 6006b).	6013 (WA 60070)
70069	Wreck	399876	5700385	A1	55.5	11.1	6.4	6453	Distinct, wreck identified on the MBES data, possibly at the edge of a rock outcrop. The wreck has an area of scour to the SE of the wreck. The wreck appears to be intact and upright. Feature is slightly less defined on the side scan data, however the structure is clearly visible with a broad, distinct shadow. Feature has a very large associated magnetic anomaly, indicating ferrous material. Originally seen in WA report 60070 as a wreck. Wreck was also surveyed by UKHO in 1998, found to comprise an intact and upright wreck, measuring 45 m in length, 15 m in width, and lying at 110/290 degrees with a small magnetic anomaly.	13958 (UKHO), 6007 (WA 60070), 831796 (NRHE), MKE9857 (KHER), 2111 (WA, 2017B)
70070	Debris	399846	5700382	A1	15.9	2.9	0.9	-	Straight dark reflector with a distinct shadow. Identified on the MBES data as a straight, linear mound. Likely an item of debris associated to nearby wreck 70069 .	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	L (m)	W (m)	H (m)	Magnetic Amplitude (nT)	Description	External Reference
70071	Dark reflector	398253	5699998	A2	2.5	1.4	1.2	-	Small rounded object with a relatively broad, distinct shadow. Identified in an area of textured seafloor.	-
70072	Dark reflector	398080	5699832	A2	5.2	1.8	0.7	-	Slightly elongated, curved dark reflector with a distinct shadow.	-
70073	Rope/chain	398045	5699802	A2	145.3	2.1	0.4	-	Linear area of small dark reflectors, possibly joined with a narrow linear feature. Feature may extend beyond that tagged, however it is relatively indistinct. Possibly an item of modern fishing gear, however this is not possible to confirm without further investigation and, as such, feature has been retained as potential archaeology.	-
70074	Mound	397806	5699464	A2	3	2.6	0.4	-	Circular mound within a depression, in a relatively featureless area of seafloor. To the south of the feature there is a distinct area of scour.	-
70075	Dark reflector	398208	5699102	A2	4.9	0.2	0.2	-	Small thin dark reflector with corresponding bright shadow.	-
70076	Dark reflector	398161	5699076	A2	3.7	0.7	0.3	-	Small straight dark reflector with slight shadow.	-
70077	Rope/chain	398479	5699045	A2	18.5	0.8	0.5	-	Curvilinear dark reflector with slight height shadow.	-
70078	Seafloor disturbance	399143	5699443	A2	36.7	19.3	0.7	-	Small area of seafloor disturbance, possibly comprised numerous dark reflectors with height. Possibly natural however looks a little anomalous and, as such, has been retained as potential archaeology.	-
70079	Seafloor disturbance	399254	5699630	A2	26.6	14.3	1	-	Small area of seafloor disturbance, possibly comprised numerous dark reflectors with height. Possibly natural however looks a little anomalous and, as such, has been retained as potential archaeology. Second smaller disturbance approximately 90 m away but both in isolation.	-
70080	Seafloor disturbance	399276	5699552	A2	17.5	14.3	0.3	-	Sub angular area of small dark reflectors with some shadow visible. Partially obscured by tow fish. In isolation, though could be associated with 70079 .	-
70081	Seafloor disturbance	399184	5699569	A2	67.4	29.3	0.7	-	Irregular area of seafloor disturbance comprised small dark reflectors with some bright shadow. In isolation. Could be a rocky outcrop or could be debris. As such has been retained as potential archaeology.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	L (m)	W (m)	H (m)	Magnetic Amplitude (nT)	Description	External Reference
70082	Dark reflector	399213	5699857	A2	2.4	1	0.3	-	Two distinct, slightly angular objects with bright shadow between. Feature looks a little anomalous and, as such, has been retained as potential archaeology.	-
70083	Debris	399536	5699727	A2	4.5	3.8	0.4	79	Rounded mound within a depression identified on the MBES data. Feature appears to correspond with a medium dipole on the magnetometer data, indicating a buried item of ferrous debris.	-
70084	Dark reflector	399555	5699740	A2	18.1	2.4	0.9	-	Slightly curvilinear dark reflector with a distinct, but tapered shadow.	-
70085	Recorded Obstruction	400715	5700342	A3	-	-	-	-	A 1932 survey indicated a small obstruction, and it is possible that it may be a small shoal patch. A 1970 survey indicated a sonar contact, thought to be a possible wreck. It was not located in 1998, and the record was amended to dead. Nothing was identified at this position during the most recent geophysical survey.	13956 (UKHO), 2115 (WA, 2017B)
70086	Dark reflector	399787	5699424	A2	5.5	0.6	0.2	-	Slight curvilinear object with slight bright shadow at one end. Feature has some associated scour.	-
70087	Rope/chain	399176	5699028	A2	81	1	0.3	-	Linear dark reflector with shadow across its extents. Isolated on the seabed.	-
70088	Magnetic	399246	5698893	A2	-	-	-	17	Small dipole identified across one line. Nothing identified in the side scan or bathymetry data which may indicate possible buried ferrous material.	-
70089	Magnetic	399136	5698804	A2	-	-	-	17	Small positive monopole identified on one line. Nothing identified in the side scan or bathymetry. Possibly buried ferrous material.	-
70090	Dark reflector	399497	5698355	A2	4.2	1.5	0.5	-	Dark reflector with associated shadow. Isolated amongst the sand waves.	-
70091	Dark reflector	399972	5698646	A2	6	0.6	0.2	-	Dark reflector with associated shadow. Isolated feature on the seabed.	-
70092	Dark reflector	399972	5699024	A2	6.8	1	0.9	-	Slightly elongated dark reflector with a broad, distinct shadow.	-
70093	Dark reflector	400343	5699010	A2	2.9	0.8	0.9	-	Dark reflector with associated shadow. Located next to a similar feature.	-
70094	Dark reflector	400517	5698877	A2	2.8	1	0.7	-	Distinct dark reflector with shadow.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	L (m)	W (m)	H (m)	Magnetic Amplitude (nT)	Description	External Reference
70095	Dark reflector	400585	5698779	A2	8.9	1.5	0.5	-	Dark reflector with large rounded shadow. Feature appears to have a distinct associated area of scour.	-
70096	Rope/chain	400703	5699259	A2	63.7	0.6	0.1	-	Slightly wavy linear dark reflector with slight height identified in a relatively featureless area of seabed. Possible length of rope/chain.	-
70097	Mound	401172	5698860	A2	6.8	4	0.4	-	Elongate mound within some associated scour identified on the MBES data, which may represent a buried feature. Possibly natural, however looks a little anomalous and, as such, has been retained as potential archaeology.	-
70098	Dark reflector	401235	5698468	A2	3	2	1	-	Rounded object seen as a dark reflector with associated shadow in the side scan and a mound in the bathymetry. Isolated feature in an area of sand waves within some scour.	-
70099	Mound	401586	5698125	A2	2.5	2.5	0.4	-	Rounded object with some scour on the edge of sand waves.	-
70100	Rope/Chain	400272	5698096	A2	45.3	0.8	0.2	-	Irregular linear dark reflector with some bright shadow. Interpreted as being a length of rope/chain.	-
70101	Rope/Chain	399734	5697104	A2	101.5	0.6	0.1	-	Curvilinear dark reflector with a slight shadow in a 'C' shape. Isolated on the seabed. Possible length of rope/chain.	-
70102	Magnetic	401814	5697252	A2	-	-	-	54	Medium negative monopole identified on two lines. Nothing identified within the side scan or bathymetry, possible buried ferrous material.	-
70103	Rope/Chain	401855	5697420	A2	125	1.5	0.1	-	Curvilinear mound identified in the MBES data, possibly with some very slight scour to the east. May represent a length of buried debris of rope/chain.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	L (m)	W (m)	H (m)	Magnetic Amplitude (nT)	Description	External Reference
70104	Debris	401853	5697490	A1	4.8	2.5	2.7	107	A small, intact contact with no scour is identified at this position by the UKHO. Identified on the most recent sonar data as a dark reflector with a large shadow, isolated on the seabed. Feature is reflected by a medium negative monopole on the magnetometer data, indicating ferrous material, and a rounded mound with an area of scour on the bathymetry. Originally seen in WA report 60070 as a dark reflector.	13930 (UKHO), 831781, (NRHE), MKE9843 (KHER), 6006 (WA 60070), 2109 (WA, 2017B)
70105	Dark reflector	402293	5697527	A2	2.3	0.6	0.5	-	Small dark reflector with shadow, located near to a similar object on the seabed. Possibly a natural feature, however appear to be a little anomalous and, as such, has been retained as potential archaeology.	-
70106	Dark reflector	402727	5697103	A2	2.8	1.3	0.2	-	Dark reflector with shadow, isolated feature on the seabed.	-
70107	Rope/chain	402131	5697117	A2	42.2	0.8	0.3	-	Curvilinear dark reflector with shadow along its extents. Possible length of rope/chain.	-
70108	Dark reflector	402159	5697143	A2	1.8	0.1	2.6	-	Small dark reflector with shadow.	-
70109	Dark reflector	402053	5697097	A2	1.3	0.7	0.9	-	Dark reflector with rectangular shadow, isolated on the seabed.	-
70110	Dark reflector	401985	5697039	A2	1	0.4	0.4	-	Small dark reflector with shadow, likely a natural feature.	-
70111	Dark reflector	402177	5696771	A2	7.4	1.2	1.1	-	Dark reflector with associated shadow isolated on the seabed. Originally seen as a dark reflector in WA report 60070. Position updated based on central position between original and latest geophysical data.	6002 (WA 60070)
70112	Magnetic	401735	5695812	A2	-	-	-	18	Medium positive monopole identified on one line. Nothing identified in the side scan or bathymetry data which may indicate possible buried ferrous material.	-
70113	Rope/chain	402953	5696668	A2	47.4	0.4	0.1	-	Linear dark reflector height. Possible length of rope/chain.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	L (m)	W (m)	H (m)	Magnetic Amplitude (nT)	Description	External Reference
70114	Debris	402282	5695191	A2	1.6	1.4	0.6	8	Small positive monopole identified on one line of magnetometer data. Feature was originally seen in WA report 60077 as an item of debris. Though nothing was seen on the most recent sonar data at this position, the small magnetic anomaly indicates that it is still present, however possibly buried by mobile sediments.	-
70115	Dark reflector	402866	5695360	A2	7.4	3	0.7	-	Small dark reflector with a distinct shadow identified on the sonar data approximately 22 m NE of wreck 70117 . Identified as an elongate mound within a slight depression on the MBES data. Possibly a natural feature, however tagged and retained as potential archaeology due to proximity to wreck.	-
70116	Dark reflector	402852	5695367	A2	4.5	2	0.6	-	Small dark reflector with a distinct shadow identified on the sonar data approximately 21 m NNE of wreck 70117 . Identified as a small round mound within a depression on the MBES data. Possibly a natural feature, however tagged and retained as potential archaeology due to proximity to wreck.	-
70117	Wreck	402845	5695341	A1	22.6	10.2	3.2	-	Remains of a small wreck recorded at this position in the UKHO record, possibly with a length of cable extending to the SW. Wreck was observed on the MBES data as a tall, elongate mound aligned NE to SW which appears irregular and broken down at the SW end. Wreck was identified on the sonar data as a poorly defined dark reflector with a distinct shadow, and some possible surrounding items of debris.	13904 (UKHO), 831770 (NRHE), MKE9832 (KHER), 2108 (WA, 2017B)
70118	Dark reflector	402345	5694575	A2	0.9	0.3	1	-	Dark reflector with associated shadow. Isolated feature on the seabed.	-
70119	Dark reflector	402390	5694524	A2	2.7	1	0.8	-	Dark reflector with associated shadow. Possibly a natural feature, however looked a little anomalous and, as such, was retained as potential archaeology.	-
70120	Magnetic	402522	5694510	A2	-	-	-	11	Small positive monopole identified on one line. Nothing identified in the side scan or bathymetry data which may indicate possible buried ferrous material.	-
70121	Dark reflector	402224	5694157	A2	1.6	0.5	0.3	-	Distinct dark reflector with associated shadow.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	L (m)	W (m)	H (m)	Magnetic Amplitude (nT)	Description	External Reference
70122	Magnetic	403636	5694861	A2	-	-	-	21	Medium positive monopole identified on one line. Nothing identified in the side scan or bathymetry data which may indicate possible buried ferrous material.	-
70123	Magnetic	403836	5695434	A2	-	-	-	24	Small dipole identified on one line. Nothing identified in the side scan or bathymetry data which may indicate possible buried ferrous material.	-
70124	Dark reflector	402701	5693736	A2	4.8	1.3	0.6	-	Distinct dark reflector with a relatively broad shadow. Numerous similar, but smaller features identified nearby. Feature retained as potential archaeology based on dimensions.	-
70125	Debris	403111	5694165	A2	6	5	1.2	-	Obstruction identified by UKHO record, having been found in a 1995 survey to be a small magnetic anomaly, and small obstruction less than 1 m in height. Identified on the most recent side scan sonar data as a small dark reflector with height, located next to another dark reflector of a similar nature. These are reflected in the MBES data as two closely spaced mounds.	15156 (UKHO), 2119 (WA, 2017B)
70126	Magnetic	404642	5693415	A2	-	-	-	31	Medium negative monopole identified on two lines. Nothing identified in the side scan or bathymetry data which may indicate possible buried ferrous material.	-
70127	Magnetic	404928	5693737	A2	-	-	-	24	Small positive monopole identified over two lines. Nothing identified in the side scan or bathymetry data which may indicate possible buried ferrous material.	-
70128	Wreck	405075	5695283	A1	33.4	15.4	0.8	2196	Obstruction / foul ground identified by the UKHO, thought possibly to be a wreckage. Identified in the MBES data as an angular, hull-shaped outline within a slight depression. No apparent upstanding structure, although some possible debris to the south are faintly seen. Identified on the sonar data as an area of disturbed seafloor with numerous, occasionally straight dark reflectors. Feature has a very large associated magnetic anomaly, indicating ferrous material. Originally seen in WA report as an area of numerous small dark reflectors.	15157 (UKHO), 6054 (WA 60070), 2118 (WA, 2017B)
70129	Dark reflector	406258	5695349	A2	12	8	0.8	-	Two small curved dark reflectors with some bright shadow. Identified as an irregularly shaped mound on the MBES data.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	L (m)	W (m)	H (m)	Magnetic Amplitude (nT)	Description	External Reference
70130	Dark reflector	406173	5694840	A2	3.7	0.4	0.2	-	Small thin irregular linear object with corresponding shadow. Image possibly distorted by movement of the sonar fish, therefore dimensions may not be accurate.	-
70131	Dark reflector	405703	5694356	A2	5.7	0.3	0.5	-	Dark reflector with associated shadow. Isolated on the seabed.	-
70132	Dark reflector	405357	5693419	A2	4.6	0.7	0.6	-	Small dark reflector with shadow.	-
70133	Mound	405720	5693491	A2	3.5	3.5	0.4	-	Distinct, rounded mound identified on the MBES data within a depression. Possibly partially buried. Possibly a rock however has been retained as potential archaeology based on dimensions.	-
70134	Dark reflector	406142	5693534	A2	5	1.2	0.7	-	Small dark reflector with shadow, located near to a similar object on the seabed. Likely a natural feature.	-
70135	Dark reflector	406095	5693613	A2	3.8	2	0.9	-	Elongate mound within depression, shown as a dark reflector in the side scan. Possibly partially buried. Probable rock but large however looks a little anomalous and therefore retained as potential archaeology. Position taken from the bathymetry.	-
70136	Dark reflector	406078	5693970	A2	4.7	4.6	1.2	-	Poorly defined dark reflector with a relatively broad, distinct shadow.	-
70137	Dark reflector	406727	5694101	A2	3	0.4	0.8	-	Poorly defined dark reflector with a broad, distinct shadow identified at the edge of an area of megaripples.	-
70138	Dark reflector	407892	5694895	A2	3	2.1	1	-	Angular small object with irregular bright shadow and some surrounding scour.	-
70139	Dark reflector	408043	5695100	A2	4.6	1.3	0.7	-	Elongated dark reflector with a broad, distance shadow identified in an area of megaripples.	-
70140	Dark reflector	408503	5694743	A2	9.6	3.3	0.4	-	Slightly elongated dark reflector with a distinct shadow. Seen on the MBES data as a small elongated mound with large amount of scour to the south.	-
70141	Dark reflector	407318	5693722	A2	3	2	1	-	Small angular object with angular bright shadow. Seen as a small mound within a depression in the bathymetry.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	L (m)	W (m)	H (m)	Magnetic Amplitude (nT)	Description	External Reference
70142	Mound	406656	5693477	A2	3.5	3.5	0.6	-	Circular mound within a depression identified on the MBES data. Possibly indicative of a buried feature of archaeological interest.	-
70143	Rope/Chain	401830	5694755	A2	185.4	0.4	0.3	-	Long, curvilinear slight dark reflector, possibly with objects with height along length. Possibly modern fishing gear however this cannot be confirmed without further investigation and, as such, feature has been retained as potential archaeology.	-
70144	Dark reflector	401521	5694841	A2	3.1	0.9	0.7	-	Slightly elongated dark reflector with a broad, distinct shadow. Identified in a relatively featureless area of seabed.	-
70145	Magnetic	401571	5695041	A2	-	-	-	10	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70146	Dark reflector	401358	5695060	A2	6.5	1.8	0.6	-	Slightly elongated distinct dark reflector with an irregular, slightly jagged shadow. Feature appears to have an associated linear item of debris (feature 70147), however this is not clearly associated.	-
70147	Rope/chain	401357	5695053	A2	12.2	0.2	0.2	-	Short, linear dark reflector with a very slight shadow. Possibly associated with small object with height (anomaly number 70146) at its northern end. Possible rope/chain	-
70148	Dark reflector	402821	5695932	A2	5	1.2	0.5	-	Feature identified in WA report 60077 as a piece of debris in a dense area of material, however was not identified on the most recent geophysical data, which may indicate burial of the feature by mobile sediments. On review of the original screen grabs from the 2008 WA study (WA report 60077) the feature appears to be a dark reflector in an area of textured seafloor. Based on the image the feature has been retained as potential archaeology, however has been reclassified as a dark reflector.	7149 (WA 60077)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	L (m)	W (m)	H (m)	Magnetic Amplitude (nT)	Description	External Reference
70149	Debris field	402825	5695953	A2	7.8	4.3	0	-	Feature identified in WA report 60077 as a debris field, however was not identified on the most recent geophysical data, which may indicate burial of the feature by mobile sediments. On review of the original screen grabs from the 2008 WA study (WA report 60077) the corresponding image shows several dark reflectors. Based on the review of the images, these features are being retained as potential archaeology.	7289 (WA 60077)
70150	Dark reflector	402743	5696016	A2	2	2	1	-	Feature identified in WA report 60077 as an item of debris, however not identified on the most recent geophysical data, which may indicate burial of the feature by mobile sediments. On review of the original screen grabs from the 2008 WA study (WA report 60077) the corresponding image shows a small dark reflector. Based on the image the feature has been retained as potential archaeology, however has been reclassified as a dark reflector.	7291 (WA 60077)
70151	Dark reflector	402721	5695991	A2	1	1	1	-	Feature identified in WA report 60077 as an item of debris, however not identified on the most recent geophysical data, which may indicate burial of the feature by mobile sediments. On review of the original screen grabs from the 2008 WA study (WA report 60077) the corresponding image shows a small dark reflector. Based on the image the feature has been retained as potential archaeology, however has been reclassified as a dark reflector.	7292 (WA 60077)
70152	Debris field	402762	5695954	A2	17	4	0	-	Feature identified in WA report 60077, however not identified on the most recent geophysical data, which may indicate burial of the feature by mobile sediments. On review of the original screen grabs from the 2008 WA study (WA report 60077) there are numerous small objects with height that were thought to be a sparsely spread area of debris. As such, the feature has been retained as potential archaeology.	7293 (WA 60077)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	L (m)	W (m)	H (m)	Magnetic Amplitude (nT)	Description	External Reference
70153	Debris field	402738	5695919	A2	12	3.8	0	-	Feature identified in WA report 60077 as a debris field, however not identified on the most recent geophysical data, which may indicate burial of the feature by mobile sediments. On review of the original screen grabs from the 2008 WA study (WA report 60077) there are several closely spaced small dark reflectors and, as such, the feature has been retained as potential archaeology.	7294 (WA 60077)
70154	Bright reflector	402852	5695925	A2	3	3	0	-	Feature identified in WA report 60077 as bright reflectors, however not identified on the most recent geophysical data, which may indicate burial of the feature by mobile sediments. On review of the original screen grabs from the 2008 WA study (WA report 60077) it is possible to discern a small bright reflector, possibly with a small dark reflector at one side, surrounded by several other objects with height. It is possible that the bright reflector is in fact the shadow of a poorly defined dark reflector, however this cannot be confirmed and as such the feature has been retained as a bright reflector of potential archaeological interest.	7295 (WA 60077)
70155	Dark reflector	402278	5695277	A2	7.9	2.9	0.7	-	Feature identified in WA report 60077 as debris with bright reflectors, however not identified on the most recent geophysical data, which may indicate burial of the feature by mobile sediments. On review of the original screen grabs from the 2008 WA study (WA report 60077) it is possible to discern an elongated dark reflector with broad shadow. There are several other possible objects which are likely natural. Therefore has been reclassified as a dark reflector. Originally this feature was tagged as debris (bright reflectors) but this has been reclassified as a dark reflector as this is the most significant feature in the image.	7105 (WA 60077)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	L (m)	W (m)	H (m)	Magnetic Amplitude (nT)	Description	External Reference
70156	Debris field	402332	5695161	A2	43	22	1	-	Feature identified in WA report 60077 as a debris field, however not identified on the most recent geophysical data, which may indicate burial of the feature by mobile sediments. On review of the original screen grabs from the 2008 WA study (WA report 60077) it is possible to discern the debris field which consists of several objects measured in the original reports between 2 and 6 m long and 0.9 - 2.1 m wide with a maximum height of 1 m. Due to the size and nature of these features they will be retained for archaeological potential.	7107 (WA 60077)
70157	Bright reflector	402148	5695068	A2	2.2	1.7	0	-	Feature identified in WA report 60077 as a bright reflector and debris, however not identified on the most recent geophysical data, which may indicate burial of the feature by mobile sediments. On review of the original screen grabs from the 2008 WA study (WA report 60077) the corresponding image shows a distinct bright reflector which may be the shadow of a small elongated dark reflector, however this is difficult to discern from the images. The bright reflector is surrounded by possible scour. The feature was originally tagged as bright reflector and debris, however there is no clear indication of debris and therefore the feature has been reclassified as just a bright reflector, and retained as potential archaeology.	7160 (WA 60077)
70158	Dark reflector	402464	5695200	A2	3.2	2.7	0.1	-	Feature identified in WA report 60077 as debris, however not identified on the most recent geophysical data, which may indicate burial of the feature by mobile sediments. On review of the original screen grabs from the 2008 WA study (WA report 60077) it is possible to discern a dark reflector with height, however being at the edge of the data window not all of the feature is identified and, as such, all measurements should be considered a minimum. There are several other small objects with height nearby which are not considered of archaeological potential, however the main contact has been reclassified as a dark reflector and retained for archaeological potential.	7161 (WA 60077)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	L (m)	W (m)	H (m)	Magnetic Amplitude (nT)	Description	External Reference
70159	Debris	402491	5695259	A2	2.2	1	0.5	-	Feature identified in WA report 60077 as an item of debris, however not identified on the most recent geophysical data, which may indicate burial of the feature by mobile sediments. On review of the original screen grabs from the 2008 WA study (WA report 60077) the corresponding image shows a small dark reflector with a large irregular shadow. The feature was originally classified as debris and due to its shape will be retained for archaeological potential.	7162 (WA 60077)
70160	Debris field	402411	5695280	A2	13.5	7	0.4	-	Feature identified in WA report 60077 as a debris field and bright reflector, however not identified on the most recent geophysical data, which may indicate burial of the feature by mobile sediments. On review of the original screen grabs from the 2008 WA study (WA report 60077) the corresponding image shows a small elongated dark reflector and its associated shadow. There are several small objects some with height in its vicinity. Based on review of the images, this feature has been retained as potential archaeology.	7303 (WA 60077)
70161	Debris	402029	5694404	A2	1.8	1.5	0.5	-	Feature identified in WA report 6007 as debris, however not identified on the most recent geophysical data, which may indicate burial of the feature by mobile sediments. On review of the original screen grabs from the 2008 WA study (WA report 60077) the corresponding image shows an elongated dark reflector and irregular shadow. As such the feature is being retained for archaeological potential.	7112 (WA 60077)
70162	Magnetic	402117	5694365	A2	-	-	-	8	Magnetic Anomaly identified in previous WA report 60077. Feature was not identified in the most recent geophysical magnetometer data, however this may reflect a difference in positions of the lines run. As such the feature has been retained as potential archaeology.	7203 (WA 60077)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	L (m)	W (m)	H (m)	Magnetic Amplitude (nT)	Description	External Reference
70163	Debris	402186	5694334	A2	2.9	0.7	0.3	-	Feature identified in WA report 60077 as debris, however not identified on the most recent geophysical data, which may indicate burial of the feature by mobile sediments. On review of the original screen grabs from the 2008 WA study (WA report 60077) the corresponding image shows a small dark reflector with a large irregular shadow. The feature was originally classified as debris and due to its shape will be retained for archaeological potential.	7102 (WA 60077)
70164	Debris	408919	5695451	A2	14.9	0.3	0	-	Feature identified in WA report 60070 as a linear dark reflector, however not identified on the most recent geophysical data, which may indicate burial of the feature by mobile sediments. On review of the original screen grabs from the 2006 WA study (WA report 60070) the corresponding image shows an elongated dark reflector in an area of textured seabed with no distinct height. As such, the feature has been reclassified as debris based on its dimensions, and retained as potential archaeology.	6045 (WA 60070)
70165	Dark reflector	406826	5702168	A2	30.3	1	0	-	Feature identified in WA report 60070 as a linear dark reflector on edge of sand wave, however not identified on the most recent geophysical data, which may indicate burial of the feature by mobile sediments. On review of the original screen grabs from the 2006 WA study (WA report 60070) the corresponding image shows a distinct linear dark reflector which is possibly a natural feature, however based on its dimensions has been retained as potential archaeology.	6053 (WA 60070)
70166	Dark reflector	401218	5700700	A2	2	0.3	1.4	-	Feature identified in WA report 60070 as a dark reflector, however not identified on the most recent geophysical data, which may indicate burial of the feature by mobile sediments. On review of the original images from the 2006 WA study (WA report 60070) it is possible to discern the tagged feature a small indistinct dark reflector with an irregular shadow and possible associated scour. Based on the images the feature has been retained as potential archaeology.	6023 (WA 60070)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	L (m)	W (m)	H (m)	Magnetic Amplitude (nT)	Description	External Reference
70167	Dark reflector	399531	5700322	A2	6.2	1	0	-	Feature identified in WA report 60070 as an isolated dark reflector, however not identified on the most recent geophysical data, which may indicate burial of the feature by mobile sediments. On review of the original screen grabs from the 2006 WA study (WA report 60070) the corresponding image shows a distinct linear dark reflector isolated on the seabed with no distinct shadow. Based on the image and the dimensions, the feature has been retained as potential archaeology.	6004 (WA 60070)
70168	Dark reflector	399917	5699688	A2	6.1	0.5	0	-	Feature identified in WA report 60070 as an isolated dark reflector, however not identified on the most recent geophysical data, which may indicate burial of the feature by mobile sediments. On review of the original screen grabs from the 2006 WA study (WA report 60070) the corresponding image shows a distinct elongated dark reflector isolated on the seabed without a distinct shadow. Based on the image and the dimensions, the feature has been retained as potential archaeology.	6005 (WA 60070)
70169	Dark reflector	400230	5698966	A2	3.1	1.1	0	-	Feature identified in WA report 60070 as four closely spaced dark reflectors within area of scour, however not identified on the most recent geophysical data, which may indicate burial of the feature by mobile sediments. On review of the original screen grabs from the 2006 WA study (WA report 60070) the feature has been retained as potential archaeology	6001 (WA 60070)
70170	Dark reflector	400535	5698907	A2	6.2	0.1	0	-	Feature identified in WA report 60070 as an isolated dark reflector, however not identified on the most recent geophysical data, which may indicate burial of the feature by mobile sediments. On review of the original screen grabs from the 2006 WA study (WA report 60070) the corresponding image shows an elongated dark reflector isolated on the seabed with no distinct shadow. Based on the review of the images, the feature has been retained as potential archaeology.	6003 (WA 60070)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	L (m)	W (m)	H (m)	Magnetic Amplitude (nT)	Description	External Reference
70171	Dark reflector	401990	5697916	A2	6.8	1.2	0	-	Feature identified in WA report 60070 as an isolated dark reflector, however not identified on the most recent geophysical data, which may indicate burial of the feature by mobile sediments. On review of the original screen grabs from the 2006 WA study (WA report 60070) the corresponding image shows a distinct elongated dark reflector on the seabed with no discernible height. Possible natural however due to shape will be retained as potential archaeology.	6008 (WA 60070)
70172	Dark reflector	402897	5695314	A2	23.2	19.5	0	-	Feature identified in WA report 60070 as a dark reflector, however not identified on the most recent geophysical data, which may indicate burial of the feature by mobile sediments. On review of the original screen grabs from the 2006 WA study (WA report 60070) it is possible to discern a relatively indistinct square dark reflector. The feature is to be retained as potential archaeology due to its slightly anomalous shape.	6089 (WA 60070)
70173	Dark reflector	404955	5694270	A2	21.2	2.1	0	-	Feature identified in WA report 60070 as a dark reflector, however not identified on the most recent geophysical data, which may indicate burial of the feature by mobile sediments. On review of the original screen grabs from the 2006 WA study (WA report 60070) it is possible to discern an elongated dark reflector in a broad 'C' shape within an area of mobile sediments. The feature has been retained as potential archaeology based on review of the images.	6127 (WA 60070)

1. Co-ordinates are in ETRS89 UTM31 N
2. Positional accuracy estimated ± 10 m



APPENDIX III – SEABED FEATURES OF ARCHAEOLOGICAL POTENTIAL WITHIN THE TEOWF CABLE CORRIDOR

WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70174	Magnetic	401463	5694789	A2	-	-	-	54	Medium dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70175	Dark reflector	401264	5694609	A2	3	1.5	0.8	-	Irregular dark reflector with a slightly jagged shadow.	-
70176	Dark reflector	401280	5694541	A2	4.6	0.6	0.5	-	Elongated dark reflector, appears to be quite straight, with a broad distinct shadow.	-
70177	Magnetic	401368	5694589	A2	-	-	-	10	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70178	Seafloor disturbance	401580	5694307	A2	31.9	0.8	0.2	-	Curvilinear 'c' shaped seafloor disturbance, possibly with height. Not particularly distinct, possibly a seabed scar however looked slightly anomalous. Only identified on one line and with no associated magnetic anomaly.	-
70179	Magnetic	401585	5694060	A2	-	-	-	13	Small, negative monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70180	Magnetic	401767	5693974	A2	-	-	-	71	Medium dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70181	Debris	401536	5693750	A2	2.4	2	0.3	23	Small dipole identified on one line. Corresponds with a narrow, elongated dark reflector with a distinct bright reflector. Possible item of debris	-
70182	Magnetic	401597	5693652	A2	-	-	-	15	Small dipole identified over two lines. Possibly indicative of buried item of ferrous debris.	-
70183	Magnetic	401742	5693678	A2	-	-	-	31	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70184	Rope/chain	401078	5693426	A2	26	0.6	0.1	-	Curvilinear dark reflector with a slight shadow. Feature does not have an associated magnetic signal, which may indicate a length of rope.	-
70185	Magnetic	401263	5693509	A2	-	-	-	49	Small positive monopole identified on one line. Feature appears to be close to a row of similar features- possibly related. Possibly indicative of buried item of ferrous debris.	-
70186	Magnetic	401540	5693396	A2	-	-	-	40	Small asymmetrical dipole identified on one line. Close to EOL. Possibly indicative of buried item of ferrous debris.	-
70187	Rope/chain	401441	5693219	A2	65.9	1.1	0.1	-	Relatively indistinct dark reflector with slight height. Feature is not always well defined. Possibly partially buried. Feature does not have an associated magnetic signal, which may indicate a length of rope. Feature may be associated with the installation of the current Thanet export cable, however without further investigation this cannot be confirmed and, as such, has been retained as potential archaeology.	-
70188	Dark reflector	401715	5693020	A2	2.4	0.6	0.8	-	Dark reflector with a distinct but tapered shadow. Possibly natural however looks quite distinct. Other smaller contacts nearby however not tagged based on size. Identified in WA report 60077 as an item of debris measuring (1.8 x 0.7 x 0.6). The position has been updated based on the most recent geophysical data.	7309 (WA 60077)
70189	Magnetic	401104	5693202	A2	-	-	-	15	Small asymmetric dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70190	Dark reflector	400871	5693145	A2	6.4	4.3	1.3	-	Large, poorly defined dark reflector with a distinct but tapered shadow. Identified on the bathymetry data as Circular mound with area of large area of scour to the south of the feature.	-
70191	Dark reflector	401038	5693081	A2	3.6	0.8	0.4	-	Small, elongated dark reflector with a slight shadow. Not particularly distinct, possibly a natural feature.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70192	Dark reflector	401102	5693105	A2	2.9	1.1	0.4	-	Elongated dark reflector with a broad, distinct shadow. Identified within a slight depression.	-
70193	Magnetic	400976	5692907	A2	-	-	-	1604	Very large dipole identified over two lines. Possibly indicative of buried item of ferrous debris.	-
70194	Magnetic	401514	5692830	A2	-	-	-	122	Medium dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70195	Debris	401610	5692742	A2	4.4	1.9	0.2	5	Elongated, narrow dark reflector with a slight shadow. Feature appears to curve round in an 'L' shape. Identified approximately 18 m from a small magnetic anomaly identified in the WA report 60077. The 2016 mag data was checked and a very small magnetic anomaly is visible, but hasn't been tagged due to its size. This may however indicate a small amount of ferrous material.	7202 (WA 60077)
70196	Magnetic	400544	5692751	A2	-	-	-	112	Medium asymmetric dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70197	Dark reflector	400943	5692634	A2	4.6	0.3	0.2	-	Elongated dark reflector with a distinct shadow.	-
70198	Magnetic	401509	5692596	A2	-	-	-	82	Medium asymmetric dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70199	Magnetic	400847	5692337	A2	-	-	-	44	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70200	Rope/chain	401012	5692091	A2	54.8	0.8	0.2	-	Relatively straight, narrow dark reflector with a slight shadow. Feature does not have an associated magnetic signal, which may indicate a length of rope. Feature may be associated with the installation of the current Thanet export cable, however without further investigation this cannot be confirmed and, as such, has been retained as potential archaeology.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70201	Magnetic	400556	5691755	A2	-	-	-	22	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70202	Magnetic	400483	5691893	A2	-	-	-	26	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70203	Magnetic	400345	5691901	A2	-	-	-	22	Small, positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70204	Magnetic	400274	5691897	A2	-	-	-	16	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70205	Magnetic	400355	5692049	A2	-	-	-	47	Small, positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70206	Magnetic	400276	5691951	A2	-	-	-	14	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70207	Magnetic	400201	5692071	A2	-	-	-	27	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70208	Magnetic	400219	5692100	A2	-	-	-	24	Small, negative monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70209	Magnetic	400737	5691478	A2	-	-	-	31	Small, negative monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70210	Recorded wreck	400584	5691630	A3	-	-	-	-	Identified on UKHO records as part of the <i>Cathay</i> , a steamship built in 1898 by Ramage & Ferguson Ltd, Leith. Previously named the <i>Kitai</i> and the <i>Cathay</i> . The vessel had three boilers, a triple expansion engine of 327 NHP, and a single shaft. NOTE: HER plots point between two UKHO/NRHE points. In 1932 the wreck was recorded as being broken in two, however when surveyed in 1998 the wreck was not identified at this position and amended to dead. Nothing was identified on the geophysical data at this position.	2142 (WA, 2017B), 13874 (UKHO)
70211	Magnetic	400532	5691574	A2	-	-	-	15	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70212	Magnetic	400629	5691306	A2	-	-	-	196	Large asymmetric dipole identified on one line. Identified in WA report 60077 as a small magnetic anomaly measuring 11 nT. Possibly indicative of buried item of ferrous debris.	7180 (WA 60077)
70213	Magnetic	400374	5691468	A2	-	-	-	26	Small, positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70214	Rope/chain	400313	5691530	A2	28	0.4	0.1	-	Curvilinear dark reflector with slight height. Slightly bent round at one end. Feature does not have an associated magnetic signal, which may indicate a length of rope.	-
70215	Rope/chain	400315	5691637	A2	89.4	0.6	0.5	-	Long curvilinear dark reflector identified with slight height. MBES data suggests feature is within a slight depression. Not always clearly distinct, may be partially buried. May be associated to nearby dispersed wreck/debris field. Feature does not have an associated magnetic signal, which may indicate a length of rope.	-
70216	Debris	400254	5691651	A1	2.5	0.6	0.2	-	Slightly elongated dark reflector with slight height. Possibly an item of debris associated with nearby wreck 70219 .	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70217	Debris	400271	5691677	A1	2.2	1.2	0.7	-	Elongated dark reflector with slight height. Possibly an item of debris associated with nearby wreck 70219 .	-
70218	Debris	400206	5691649	A1	1.7	0.3	0.5	-	Small but elongated dark reflector with a distinct shadow. Relatively close to wreck 70219 . Possible associated item of debris.	-
70219	Wreck	400237	5691668	A1	44.1	32.6	3.8	339	Section of the wreckage of the steamship <i>Cathay</i> , which sunk after hitting a German laid mine in 1915. The wreck appears on the side scan sonar data to be largely disintegrated, and is comprised of numerous, mostly linear, dark reflectors with height. One particularly large dark reflector in its centre with a broad shadow. The wreck has an associated magnetic anomaly of 339 nT indicating ferrous material. Wreck was identified on the bathymetry data as a partially buried feature with two distinct peaks. The wreck has a distinct scour mark to the SW of the wreck whilst there is two visible linear areas of sediment accumulation S of the two main peaks of the wreck. Some outlying debris most probably associated with the wreck located mainly to the NW.	6092 (WA 60070), 2141 (WA, 2017B), 13875 (UKHO), 904904 (NRHE), MKE13522 (KHER)
70220	Debris	400214	5691662	A1	1.3	0.6	0.5	-	Small dark reflector with slight height. Not particularly distinct however tagged based on proximity to wreck 70219. Possibly associated piece of debris	-
70221	Magnetic	399979	5691631	A2	-	-	-	13	Small, positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70222	Magnetic	399841	5691646	A2	-	-	-	13	Small, negative monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70223	Magnetic	399999	5691799	A2	-	-	-	26	Small, negative monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70224	Dark reflector	399989	5691717	A2	3.9	0.4	0.2	-	Narrow, elongated dark reflector with slight height. not particularly distinct but looks slightly anomalous	-
70225	Magnetic	400072	5691338	A2	-	-	-	66	Medium dipole identified over two lines. Possibly indicative of buried item of ferrous debris.	-
70226	Magnetic	399966	5691462	A2	-	-	-	22	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70227	Dark reflector	399906	5691434	A2	3.1	0.3	0.2	-	Elongated, narrow dark reflector with slight height. Not particularly distinct.	-
70228	Dark reflector	399538	5691341	A2	2.5	1.9	0.5	-	Faint, seemingly slightly triangular dark reflector with height. Shadow appears to extend out beyond the limits of the contact.	-
70229	Rope/chain	399931	5691256	A2	98	1.2	0.3	17	Long, curvilinear dark reflector with height identified on the sonar and MBES data. Not always particularly distinct, possibly partially buried or broken up into sections. Identified on the magnetometer data as a series of small anomalies, with a maximum amplitude of 17 nT, indicating some ferrous material. Possible length of chain.	-
70230	Rope/chain	400202	5691153	A2	20.5	0.3	0.2	-	Linear, slightly wavy dark reflector with height. Possible rope or chain. Feature appears to have a distinct contact, possibly an anchor, at one end, and a possible contact at the other however, as this was only seen on one line, it may be that this is an associated section of rope.	-
70231	Dark reflector	400200	5691155	A2	1.6	0.4	0.2	-	Small, dark reflector, or possible a few dark reflectors close together, with linear feature attached. Not particularly distinct, may be a section of the associated rope/chain.	-
70232	Debris	400205	5691147	A2	2.8	0.5	0.3	-	Small, dark reflector in a slight 'T' shape with an associated linear feature attached. Possible anchor with associated rope/chain, however the potential remains for this to be modern anthropogenic fishing gear.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70233	Dark reflector	400305	5690671	A2	2.5	0.6	0.6	-	Curved, distinct dark reflector with a broad but tapered shadow. Two smaller contacts either side of feature. Feature was identified in Identified in WA report 60077 as an item of debris measuring (5.7 x 4.9 x 0.4 m). The difference in dimensions may represent partial burial of the feature by mobile sediments. Feature identified as two, small, separate mounds on the MBES data.	7108 (WA 60077)
70234	Magnetic	400248	5690707	A2	-	-	-	35	Small, positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70235	Dark reflector	399915	5690836	A2	2.1	1	0.6	-	Small, rounded dark reflector with a broad, distinct shadow.	-
70236	Magnetic	399810	5691083	A2	-	-	-	20	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70237	Rope/chain	399642	5690970	A2	32	0.8	0.4	-	Linear dark reflector with height. Feature appears to be in three sections, however this is likely to be due to it being partially buried and therefore has been grouped as one feature. Possible length of rope. Identified on the MBES data as a thin, elongated linear mound.	-
70238	Magnetic	399584	5691008	A2	-	-	-	11	Small asymmetrical dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70239	Rope/chain	399586	5691058	A2	47	0.3	0.2	-	Linear dark reflector with height. One of a series of two similar contacts. Possibly represents a length of partially buried length of rope. Feature appears to curve round at one end.	-
70240	Rope/chain	399623	5691111	A2	26	0.3	0.3	-	Linear dark reflector with height. One of a series of two similar contacts. Feature does not have an associated magnetic signal, which may indicate a length of rope.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70241	Magnetic	399449	5691085	A2	-	-	-	23	Small, negative monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70242	Dark reflector	399422	5691133	A2	3.3	1.4	0.7	-	Slightly elongated dark reflector with a broad, distinct shadow. Feature possibly has bright reflector in its centre or is comprised two, closely spaced dark reflectors. Identified on the MBES data as a small, circular mound within a slight depression.	-
70243	Magnetic	399234	5690744	A2	-	-	-	13	Small, negative monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70244	Rope/chain	399856	5690566	A2	47	1.1	0	-	Straight wavy linear dark reflector. Possibly with height but this is hard to discern. Feature does not have an associated magnetic signal, which may indicate a length of rope. Feature may be associated with the installation of the current Thanet export cable, however without further investigation this cannot be confirmed and, as such, has been retained as potential archaeology.	-
70245	Rope/chain	400049	5689995	A2	66.6	0.4	0.2	-	Relatively long linear dark reflector with slight height. Not particularly distinct. Feature does not have an associated magnetic signal, which may indicate a length of rope. Possibly part of a longer linear feature identified just outside of the site investigation boundary. Feature may be associated with the installation of the current Thanet export cable, however without further investigation this cannot be confirmed and, as such, has been retained as potential archaeology.	-
70246	Magnetic	399828	5690042	A2	-	-	-	18	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70247	Debris	399884	5690116	A2	9	0.5	0.2	43	Elongated dark reflector with slight height. Possible short, linear item of debris. Identified on the magnetometer data as a small negative monopole, indicating ferrous material.	-
70248	Rope/chain	399829	5690149	A2	142.9	0.8	0.1	-	Long, curvilinear dark reflector with slight height. Other similar features identified nearby. Feature does not have an associated magnetic signal, which may indicate a length of rope. Feature may be associated with the installation of the current Thanet export cable, however without further investigation this cannot be confirmed and, as such, has been retained as potential archaeology.	-
70249	Rope/chain	399827	5690207	A2	47.7	1	0.3	-	Linear dark reflector with height. Section in the centre appears to have a particularly distinct shadow. Possible separate object with height however this is not clear. Other similar features identified nearby. Feature does not have an associated magnetic signal, which may indicate a length of rope. Feature may be associated with the installation of the current Thanet export cable, however without further investigation this cannot be confirmed and, as such, has been retained as potential archaeology.	-
70250	Rope/chain	399837	5690361	A2	31.2	0.4	0.1	-	Curvilinear dark reflector, slightly curved round with slight height. Object with height identified within arch however looks relatively natural. Feature does not have an associated magnetic signal, which may indicate a length of rope.	-
70251	Rope/chain	399746	5690080	A2	90.4	0.7	0	-	Curvilinear dark reflector, possibly with slight height. Other similar features identified nearby, possibly related. Feature does not have an associated magnetic signal, which may indicate a length of rope.	-
70252	Magnetic	399689	5690242	A2	-	-	-	36	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70253	Magnetic	399018	5690203	A2	-	-	-	54	Medium dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70254	Magnetic	399245	5690198	A2	-	-	-	18	Small dipole identified on one line. Possibly weakly observed on adjacent line. Possibly indicative of buried item of ferrous debris.	-
70255	Dark reflector	399106	5690229	A2	4.7	0.3	0.2	-	Narrow, elongated dark reflector with height.	-
70256	Rope/chain	399129	5690279	A2	37.2	0.4	0.2	-	Curvilinear dark reflector with slight height. Not particularly distinct. Feature does not have an associated magnetic signal, which may indicate a length of rope.	-
70257	Wreck	398785	5690031	A1	78.7	41.9	1.1	9368	Remains of Norwegian Steamship <i>Klar</i> , sunk in 1915 after hitting a mine on passage from Tyne to Rouen. Identified on the sonar data as a large spread of sporadic dark reflectors with height identified in an area of megaripples, with a very large corresponding magnetic anomaly indicating ferrous material. The wreck is located outside the cable corridor, however the associated AEZ with impact the route and therefore, the feature has been retained.	2143 (WA, 2017B), 6082 (WA 60070), 15175 (UKHO)
70258	Magnetic	399295	5689619	A2	-	-	-	27	Small, positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70259	Magnetic	399428	5689829	A2	-	-	-	15	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70260	Dark reflector	399875	5689699	A2	3.4	0.3	0.4	-	Elongated, narrow dark reflector with a distinct, rectangular shadow. Image possibly stretched by movement of the sonar fish.	-
70261	Magnetic	398629	5689590	A2	-	-	-	25	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70262	Magnetic	398735	5689757	A2	-	-	-	24	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70263	Rope/chain	399149	5688822	A2	32	0.5	0.7	243	Long, wavy curvilinear dark reflector with a slight shadow, with a dark reflector with height, measuring 1 x 0.5 x 0.7 m, at eastern end. Feature appears to have an associated large magnetic anomaly indicating ferrous material, however it is not clear whether this is related to the linear feature or the debris item. Possible anchor with associated chain. Identified in WA report 60077 as an item of debris measuring (2.1 x 2 x 0.9).	7113 (WA 60077)
70264	Dark reflector	399315	5688593	A2	0.9	0.8	0.3	-	Elongated dark reflector with a relatively broad shadow. Identified within an area of megaripples. Image possibly distorted by movement of sonar fish. Possibly a stretched rock. Possibly close to pipeline.	-
70265	Magnetic	398677	5688834	A2	-	-	-	142	Medium, positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70266	Magnetic	398611	5688888	A2	-	-	-	30	Small, negative monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70267	Magnetic	398810	5688441	A2	-	-	-	50	Medium dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70268	Magnetic	398537	5688379	A2	-	-	-	16	Small, positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70269	Magnetic	397930	5688609	A2	-	-	-	47	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70270	Magnetic	398096	5688648	A2	-	-	-	75	Medium, negative monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70271	Magnetic	398266	5688687	A2	-	-	-	16	Small, negative monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70272	Magnetic	397804	5688889	A2	-	-	-	27	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70273	Magnetic	397822	5688727	A2	-	-	-	31	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70274	Rope/chain	397704	5688384	A2	15.5	0.2	0	73	A series of magnetic anomalies close to each other. Identified on the sonar data as a Short 'C' shaped curvilinear dark reflector identified in an area of megaripples. Possibly with very slight shadow. Possible rope/chain or short length of cable. Magnetic anomaly extends beyond linear feature, possibly indicating partial burial.	-
70275	Magnetic	397832	5688377	A2	-	-	-	63	Medium, negative monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70276	Magnetic	397797	5688209	A2	-	-	-	14	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70277	Magnetic	397648	5688007	A2	-	-	-	33	Small dipole identified over two lines. Possibly indicative of buried item of ferrous debris. Feature may be associated with the installation of the current Thanet export cable, however without further investigation this cannot be confirmed and, as such, has been retained as potential archaeology.	-
70278	Magnetic	397653	5688118	A2	-	-	-	49	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70279	Magnetic	397542	5688114	A2	-	-	-	16	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70280	Magnetic	397491	5688202	A2	-	-	-	26	Small, positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70281	Magnetic	397575	5688221	A2	-	-	-	42	Small, positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70282	Magnetic	397317	5688259	A2	-	-	-	22	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70283	Magnetic	397358	5688409	A2	-	-	-	46	Small asymmetric dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70284	Magnetic	397410	5688280	A2	-	-	-	86	Medium asymmetric dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70285	Debris	397413	5688511	A2	1.5	0.7	0.9	43	Small, distinct dark reflector identified in an area of megaripples. Some associated scour, MBES data suggests mound sits within a slight depression. Identified on the magnetometer data as a small dipole. UKHO identify it as foul ground comprised of a firm rounded contact in scour hole.	2183 (WA, 2017B), 75328 (UKHO)
70286	Magnetic	397182	5688491	A2	-	-	-	28	Small, positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70287	Magnetic	397099	5688541	A2	-	-	-	17	Small, negative monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70288	Magnetic	397124	5688674	A2	-	-	-	16	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70289	Magnetic	396824	5688667	A2	-	-	-	25	Small asymmetric dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70290	Magnetic	396935	5688630	A2	-	-	-	12	Small, positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70291	Magnetic	396937	5688524	A2	-	-	-	91	Medium asymmetric dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70292	Magnetic	396808	5688406	A2	-	-	-	24	Small asymmetric dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70293	Magnetic	396818	5688356	A2	-	-	-	149	Medium dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70294	Magnetic	396831	5688322	A2	-	-	-	16	Small dipole identified on one line. Possibly part of larger anomaly on adjacent line. Possibly indicative of buried item of ferrous debris.	-
70295	Magnetic	396963	5688236	A2	-	-	-	65	Small, negative monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70296	Magnetic	397214	5688196	A2	-	-	-	17	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70297	Magnetic	397205	5688292	A2	-	-	-	21	Small, negative monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70298	Magnetic	397067	5688149	A2	-	-	-	16	Small asymmetric dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70299	Magnetic	396991	5688063	A2	-	-	-	19	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70300	Magnetic	396990	5688023	A2	-	-	-	58	Medium, positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70301	Magnetic	397125	5687768	A2	-	-	-	14	Small, positive monopole identified on more than one line. Possibly indicative of buried item of ferrous debris.	-
70302	Magnetic	397444	5687895	A2	-	-	-	23	Small, negative monopole identified on more than one line. Possibly indicative of buried item of ferrous debris.	-
70303	Magnetic	396824	5687765	A2	-	-	-	21	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70304	Debris	396685	5687829	A2	2.7	1.7	1.5	183	Large, slightly angular dark reflector with a broad, distinct shadow identified in an area of megaripples. Identified on the magnetometer data as a large dipole identified over two lines, indicating ferrous debris. The feature is also identified as a small, isolated mound on the MBES data. UKHO records have described it as a single contact in a scour hole with a medium magnetic anomaly, and classified it as obstruction/foul ground.	2184 (WA, 2017B), 75359 (UKHO)
70305	Magnetic	396615	5687936	A2	-	-	-	14	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70306	Magnetic	396599	5688043	A2	-	-	-	38	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70307	Magnetic	396679	5688111	A2	-	-	-	13	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70308	Dark reflector	396492	5688093	A2	2.3	1	0.8	-	Irregular dark reflector with a distinct shadow. Possibly two object close together. Identified in an area of megaripples. Possibly natural but looks quite distinct. Identified on the MBES data as a small rounded object within depression.	-
70309	Magnetic	396709	5688451	A2	-	-	-	12	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70310	Magnetic	396487	5688160	A2	-	-	-	18	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70311	Magnetic	396388	5688310	A2	-	-	-	19	Small, negative monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70312	Magnetic	396472	5688452	A2	-	-	-	21	Small, negative monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70313	Magnetic	396296	5688565	A2	-	-	-	21	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70314	Magnetic	395886	5688448	A2	-	-	-	344	Large dipole identified on more than one line. Possibly indicative of buried item of ferrous debris.	-
70315	Magnetic	395793	5688384	A2	-	-	-	118	Medium positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70316	Magnetic	395839	5688393	A2	-	-	-	22	Small positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70317	Magnetic	395872	5688320	A2	-	-	-	16	Small dipole identified over two lines. Possibly indicative of buried item of ferrous debris.	-
70318	Magnetic	395950	5688295	A2	-	-	-	28	Small dipole identified on one line, close to another, larger anomaly. Possibly indicative of buried item of ferrous debris.	-
70319	Magnetic	395931	5688274	A2	-	-	-	87	Medium dipole identified over two lines. Possibly indicative of buried item of ferrous debris.	-
70320	Magnetic	395885	5688265	A2	-	-	-	126	Medium positive monopole identified on more than one line. Possibly indicative of buried item of ferrous debris.	-
70321	Magnetic	395706	5688248	A2	-	-	-	45	Small asymmetric dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70322	Magnetic	396115	5688247	A2	-	-	-	12	Small negative monopole identified on one line. Possibly part of very large nearby feature. Possibly indicative of buried item of ferrous debris.	-
70323	Magnetic	396170	5688209	A2	-	-	-	84	Medium dipole identified on more than one line. Possibly indicative of buried item of ferrous debris.	-
70324	Magnetic	396201	5688146	A2	-	-	-	42	Small irregular magnetic anomaly, possibly identified on adjacent line. Appears to be part of a larger, curvilinear feature. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70325	Magnetic	396159	5688105	A2	-	-	-	32	Small irregular magnetic anomaly, close to/part of another magnetic anomaly. Appears to be part of a larger, curvilinear feature. Possibly indicative of buried item of ferrous debris.	-
70326	Magnetic	396131	5688098	A2	-	-	-	65	Medium positive monopole, close to/part of another magnetic anomaly. Appears to be part of a larger, curvilinear feature. Possibly indicative of buried item of ferrous debris.	-
70327	Debris	396059	5688077	A2	1.8	0.6	0.4	-	Elongated dark reflector with a faint, slightly irregular shadow. Identified within an area of megaripples.	-
70328	Magnetic	396083	5688036	A2	-	-	-	11	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70329	Magnetic	396107	5687785	A2	-	-	-	64	Medium positive monopole identified on more than one line. Possibly indicative of buried item of ferrous debris.	-
70330	Magnetic	396045	5687705	A2	-	-	-	63	Medium irregular anomaly identified over two lines. Possibly indicative of buried item of ferrous debris.	-
70331	Debris	396097	5687695	A2	23.7	0.2	0.3	-	Poorly defined curvilinear dark reflector with a very slight shadow, or possibly several elongated dark reflectors. Identified in an area of megaripples and possibly partially buried, therefore is quite hard to discern. Possible linear item of debris or debris field. In line with a relatively linear magnetic trend, possibly indicating a longer, buried ferrous debris.	-
70332	Magnetic	396147	5687673	A2	-	-	-	137	Medium dipole identified over two lines. Should possibly be tagged as two separate anomalies, possibly part of a longer, linear magnetic trend. Possibly indicative of buried item of ferrous debris.	-
70333	Debris field	396046	5687645	A2	32.8	3.9	0.3	-	Spread of debris identified in an area of megaripples. Several relatively straight dark reflectors with height.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70334	Magnetic	396030	5687517	A2	-	-	-	28	Small positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70335	Dark reflector	396110	5686921	A2	2.1	0.2	0.2	-	Narrow, elongated dark reflector with slight height identified in an area of megaripples.	-
70336	Rope/chain	396068	5686885	A2	203.8	0.9	0.4	-	Long curvilinear dark reflector with height identified within an area of megaripples on both the sonar and the MBES data. Feature does not have an associated magnetic signal, which may indicate a length of rope. Identified in WA report 60070 as a rope/chain measuring approximately 90 m.	6069 (WA 60070)
70337	Magnetic	396062	5687001	A2	-	-	-	31	Small positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70338	Magnetic	395814	5687534	A2	-	-	-	30	Small positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70339	Debris	395863	5687710	A2	3.6	0.4	0.3	225	Elongated, narrow dark reflector with a slight shadow. Identified within an area of megaripples. Corresponds with a large dipole identified on one line of magnetometer data indicating ferrous debris.	-
70340	Magnetic	395686	5687743	A2	-	-	-	22	Small negative monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70341	Rope/chain	395838	5687840	A2	68.1	0.7	0.2	-	Intermittent curvilinear dark reflector with a slight shadow. Identified in an area of megaripples, possibly with a contact at one end. Possible rope/chain. Possible associated magnetic anomaly however it is unclear whether this is related to the linear feature or the associated object with height, therefore has been grouped with object. Feature may be associated with the installation of the current Thanet export cable, however without further investigation this cannot be confirmed and, as such, has been retained as potential archaeology.	-
70342	Debris	395848	5687825	A2	1.7	0.5	0.5	278	Elongated dark reflector with a relatively broad shadow. Identified within an area of megaripples. Possibly with an associated rope/chain. Corresponds with a large dipole on the magnetometer data.	-
70343	Magnetic	395423	5688241	A2	-	-	-	32	Small negative monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70344	Magnetic	395447	5688286	A2	-	-	-	76	Medium negative monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70345	Magnetic	395440	5688354	A2	-	-	-	34	Small negative monopole identified on more than one line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70346	Debris	395532	5688157	A1	2.5	0.7	0.7	7974	Elongated, narrow dark reflector with a relatively broad shadow, close to other similar features. Identified as a large area of small objects with an extensive area of scour to the north on the MBES data. Corresponds with a very large, very broad magnetic anomaly, however due to the size of the magnetic anomaly and the proximity of the other possible debris items it is difficult to see whether this is associated with one or all of them. A UKHO record of a recorded loss of a German submarine <i>UB12</i> is identified approximately 49 m ENE from the feature, however this has never been seen on the seafloor, therefore it is possible that instead this is debris related to the HER PMRA site of American B-24 Liberator bomber, which is located approximately 103 m to the SW, and has been dived and found to lie upside down with its wheels down approximately 4 m from the seabed.	2147 (WA, 2017B), 2100 (WA, 2017B), 2100b (WA, 2017B), 14934 (UKHO), 904896 (NRHE), MKE13515 (KHER), 1398733 (NRHE), MKE43650 (KHER)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70347	Debris	395536	5688150	A1	1.9	1.1	0.5	7934	Elongated, narrow dark reflector with a relatively broad shadow, close to other similar features. Corresponds with a very large, very broad magnetic anomaly, however due to the size of the magnetic anomaly and the proximity of the other possible debris items it is difficult to see whether this is associated with one or all of them. A UKHO record of a recorded loss of a German submarine UB12 is identified approximately 52 m ENE from the feature, however this has never been seen on the seafloor, therefore it is possible that instead this is debris related to the HER PMRA site of American B-24 Liberator bomber, which is located approximately 103 m to the SW, and has been dived and found to lie upside down with its wheels down approximately 4 m from the seabed.	2147 (WA, 2017B), 2100 (WA, 2017B), 2100b (WA, 2017B), 14934 (UKHO), 904896 (NRHE), MKE13515 (KHER), 1398733 (NRHE), MKE43650 (KHER)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70348	Debris	395480	5688151	A1	1	0.8	0.5	7974	Elongated, narrow dark reflector with a relatively broad shadow, close to other similar features. Corresponds with a very large, very broad magnetic anomaly, however due to the size of the magnetic anomaly and the proximity of the other possible debris items it is difficult to see whether this is associated with one or all of them. A UKHO record of a recorded loss of a German submarine UB12 is identified approximately 5 m NW from the feature, however this has never been seen on the seafloor, therefore it is possible that instead this is debris related to the HER PMRA site of American B-24 Liberator bomber, which is located approximately 61 m to the SW, and has been dived and found to lie upside down with its wheels down approximately 4 m from the seabed.	2147 (WA, 2017B), 2100 (WA, 2017B), 2100b (WA, 2017B), 14934 (UKHO), 904896 (NRHE), MKE13515 (KHER), 1398733 (NRHE), MKE43650 (KHER)
70349	Debris	395439	5688097	A1	2.5	1.5	1.5	34	Angular dark reflector with height and one long narrow shadow. Identified on the magnetometer data as a small dipole on one line. HER have recorded a PMRA site of American B-24 Liberator bomber, which is located approximately 61 m to the SW, and has been dived and found to lie upside down with its wheels down approximately 4 m from the seabed. It may be that this anomaly represents the wheels identified during diving.	2100 (WA, 2017B), 2100b (WA, 2017B), 1398733 (NRHE), MKE43650 (KHER)
70350	Magnetic	395520	5688064	A2	-	-	-	800	Large positive monopole identified on more than one line. Identified approximately 82 m SE from the recorded position of American B-24 Liberator bomber, therefore the potential remains that is an associated item of debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70352	Magnetic	395632	5688107	A2	-	-	-	28	Small positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70353	Rope/chain	395437	5688022	A2	15.9	0.4	0.3	-	Slightly wavy linear dark reflector with slight height. Feature does not have an associated magnetic signal, which may indicate a length of rope.	-
70354	Rope/chain	395348	5687983	A2	189.1	0.9	0.3	135	Long, wavy linear dark reflector with very slight shadow. Possible rope/chain or length of cable. Feature is not always clearly discernible which may indicate partial burial. Identified on magnetometer data as a curvilinear magnetic trend with a maximum amplitude of approximately 135 nT, which indicates ferrous material.	-
70355	Magnetic	395427	5687802	A2	-	-	-	42	Small positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70356	Magnetic	395414	5687863	A2	-	-	-	14	Small positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70357	Magnetic	395377	5687854	A2	-	-	-	11	Small negative monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70358	Magnetic	395247	5687624	A2	-	-	-	45	Small negative monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70359	Magnetic	395410	5687359	A2	-	-	-	115	Medium negative monopole identified on one line. Possibly part of very large nearby feature. Possibly indicative of buried item of ferrous debris.	-
70360	Debris	395485	5687376	A2	0.7	0.4	0.7	21	Small, poorly defined dark reflector with an irregular shadow. Corresponds with a small negative monopole identified on one line, indicating ferrous debris.	-
70361	Magnetic	395588	5687404	A2	-	-	-	83	Medium asymmetric dipole identified on one line. Possibly part of large nearby magnetic feature. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70362	Magnetic	395665	5687475	A2	-	-	-	14	Small asymmetric dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70363	Magnetic	395645	5687520	A2	-	-	-	26	Small negative monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70364	Magnetic	395550	5687549	A2	-	-	-	22	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70365	Magnetic	395797	5687259	A2	-	-	-	32	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70366	Wreck	395542	5687276	A1	166.1	109.7	1.8	9387	Remains of a British merchant steamship <i>Harcalo</i> , lost in 1940. The vessel was mined while on passage from Benisaf to London on 6 June 1940, carrying a cargo of iron ore and later dispersed. The wreck is identified on the sonar data as a broad area of dark reflectors with height, some of which are quite straight. This corresponds with a very large magnetic anomaly identified on several lines and a mound identified on the MBES data.	2154 (WA, 2017B), 13852 (UKHO), 904890 (NRHE), MKE13509 (KHER)
70367	Magnetic	395481	5687213	A2	-	-	-	569	Large dipole identified close to another large magnetic anomaly. Possibly associated to nearby dispersed wreck. Possibly indicative of buried item of ferrous debris.	-
70368	Magnetic	395501	5687187	A2	-	-	-	480	Large irregular magnetic anomaly identified over two lines. Possibly associated to nearby dispersed wreck. Possibly indicative of buried item of ferrous debris.	-
70369	Dark reflector	395497	5687136	A2	1.2	0.2	0.2	-	Elongated dark reflector with a slight shadow. Identified in an area of megaripples. Possibly related to dispersed wreck 70366 .	-
70370	Magnetic	395553	5687130	A2	-	-	-	521	Large dipole identified over two lines. Possibly indicative of buried item of ferrous debris. Feature is located approximately 18 m east of a dived wreck site. It is likely that this wreck	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
									debris from dispersed wreck 70366 , however the possibility of a separate wreck site remains.	
70371	Dark reflector	395573	5687111	A2	0.7	0.3	0.6	-	Small dark reflector with a height identified within an area of megaripples. Not particularly distinct, possibly a natural feature.	-
70372	Debris	395653	5687175	A2	9.9	0.3	0.4	-	Narrow, angular dark reflector in an 'L' shape with slight height. Not particularly distinct however looks a little anomalous. Feature possibly has an associated medium magnetic anomaly measuring approximately 94 nT, which was not picked as a magnetic target due to the broad, irregular nature of the magnetic signal. However, the possibility for ferrous debris remains.	-
70373	Magnetic	395697	5687102	A2	-	-	-	25	Small positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70374	Magnetic	395798	5687002	A2	-	-	-	348	Magnetic Anomaly identified in WA report 60077 as a large magnetic anomaly measuring 348 nT. The feature was identified in the most recent data however only as a negative dipole measuring 44 nT. No sonar contact was identified at this location which may indicate a buried piece of debris.	7208 (WA 60077)
70375	Magnetic	395483	5686842	A2	-	-	-	27	Small negative monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70376	Magnetic	395766	5686896	A2	-	-	-	52	Medium positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70377	Debris	395491	5686767	A2	14.6	1.2	0.2	10	Elongated, slightly rectangular seafloor disturbance. Not particularly distinct but possibly slightly slatted. Identified as a sub-angular mound on the MBES data. Appears to correspond with a small dipole identified on one line.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70378	Debris	395524	5686714	A2	83.8	3.9	2.3	55	Medium negative monopole identified on one line. Corresponds with a seafloor disturbance identified in WA report 60070 however nothing was identified on the most recent sonar data, possibly indicating burial of the feature by mobile sediments. Dimensions taken from 60070 report.	6116 (WA 60070)
70379	Recorded Wreck	395648	5686693	A3	-	-	-	-	UKHO records position of an area of wreck debris, possibly part of SS <i>Merel</i> , a British Cargo ship on passage Le Harve for London. 1000 tons of general cargo, including brass rods, aniline and casein. Sunk on 08/12/1939 after having struck a mine. UKHO provide two positions for SS <i>Merel</i> , however nothing has been identified at this position since 1939 and it has since been amended to dead. Nothing identified on the geophysical data at this location.	2152 (WA, 2017B), 58819 (UKHO), 7320 (WA 60077)
70380	Magnetic	395593	5686551	A2	-	-	-	50	Medium dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70381	Dark reflector	395551	5686580	A2	0.9	0.3	1.3	-	Distinct small dark reflector with a relatively broad shadow. Possibly natural but looks quite distinct. Identified as a Small isolated mound within a slight depression on the MBES data.	-
70382	Mound	395434	5686531	A2	2.7	2.7	0.4	235	Small isolated mound within a slight depression. Identified on the magnetometer data as a large magnetic anomaly, which may indicate a buried ferrous item of debris.	-
70383	Magnetic	395401	5686757	A2	-	-	-	46	Small positive monopole identified on one line. Corresponds with a large asymmetric dipole identified on one line, indicating a possible buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70384	Debris	395339	5686628	A2	1.5	1	0.8	53	Elongated, narrow dark reflector with an irregular shadow. Possibly a few objects close together. Corresponds with a medium positive monopole indicating ferrous debris. Identified as a small mound on the bathymetry data.	-
70385	Rope/chain	395155	5686770	A2	95.7	0.4	0.3	-	Relatively long, slightly curvilinear dark reflector with height. Not always clearly defined. Appears to have associated object with height at its south western end (anomaly number 70386).	-
70386	Debris	395192	5686735	A2	3.2	1.4	1.2	664	Slightly angular dark reflector with an irregular shadow. Corresponds with a large monopole on one line indicating ferrous debris. Object has an associated linear contact which is interpreted as being a rope/chain (anomaly number 70385). Possible anchor or item of debris. Identified as a dark reflector measuring 5.8 x 2.1 m in WA report 60070.	6115 (WA 60070)
70387	Magnetic	395152	5686760	A2	-	-	-	33	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70388	Magnetic	395037	5686755	A2	-	-	-	65	Medium positive monopole identified on more than one line. Possibly indicative of buried item of ferrous debris.	-
70389	Debris	395217	5687317	A2	1	0.5	0.7	58	Small dark reflector with a distinct shadow. Possibly natural however looks quite distinct. Corresponds with a medium dipole indicating ferrous debris.	-
70390	Magnetic	395170	5687345	A2	-	-	-	58	Medium positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70391	Debris	394621	5687257	A2	1.6	0.7	0.7	102	Slightly elongated dark reflector with a broad, distinct shadow, identified as a small mound on the MBES data. Object corresponds with a medium dipole, indicating ferrous material. Coordinates taken from bathy positioning.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70392	Debris	394607	5687257	A2	2.3	0.4	0.7	-	Slightly elongated dark reflector with a broad, distinct shadow. Close to another similar feature. Possibly natural however looks a little anomalous.	-
70393	Magnetic	394452	5687235	A2	-	-	-	14	Small positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70394	Magnetic	394628	5687154	A2	-	-	-	33	Small asymmetric dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70395	Magnetic	394482	5687101	A2	-	-	-	12	Small positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70396	Magnetic	394364	5687093	A2	-	-	-	23	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70397	Dark reflector	394385	5687044	A2	1.6	0.4	0.4	-	Elongated dark reflector with a relatively broad, distinct shadow. Image possibly distorted by the movement of the sonar fish.	-
70398	Dark reflector	394399	5687054	A2	1.8	1.6	0.8	-	Slightly angular dark reflector with a distinct but tapered shadow. Identified as a small mound on the MBES data. Coordinates taken from bathy positioning.	-
70399	Debris	394728	5686942	A2	3.1	0.3	0.2	745	Straight elongated dark reflector with a distinct shadow. Corresponds with a Large asymmetric dipole identified over two lines, indicating ferrous debris	-
70400	Rope/chain	394802	5686904	A2	54.4	1.1	0.3	-	Long, relatively faint curvilinear dark reflector with an intermittent shadow. Feature does not have an associated magnetic signal, which may indicate a length of rope.	-
70401	Magnetic	394870	5686758	A2	-	-	-	37	Small negative monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70402	Magnetic	394858	5686789	A2	-	-	-	24	Small irregular negative monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70403	Magnetic	395238	5686476	A2	7	3.6	0	46	Small asymmetric dipole identified on one line. Identified in WA report 60077 as an area of debris measuring 7 x 3.6 x 0 m and two separate magnetic anomalies, however they have all been grouped due to the irregular nature of the magnetic signal in the area. Though nothing anomalous was identified on the sonar data at this position in the most recent data set, it may be that the feature has been buried by mobile sediments therefore the dimensions have been retained.	7109 (WA 60077), 7190 (WA 60077), 7197 (WA 60077)
70404	Magnetic	395114	5686425	A2	-	-	-	252	Large asymmetric dipole identified on more than one line. Possibly indicative of buried item of ferrous debris.	-
70405	Magnetic	395135	5686445	A2	-	-	-	664	Large asymmetric dipole identified over two lines. Possibly indicative of buried item of ferrous debris.	-
70406	Debris	395056	5686508	A2	0.2	0.1	0.2	68	Very narrow, elongated dark reflector with a slight shadow. Not particularly distinct however appears to correspond with a medium dipole identified on more than one line.	-
70407	Magnetic	394893	5686456	A2	-	-	-	25	Small negative monopole identified on more than one line. Possibly indicative of buried item of ferrous debris. Feature may be associated with the installation of the current Thanet export cable, however without further investigation this cannot be confirmed and, as such, has been retained as potential archaeology.	-
70408	Magnetic	394879	5686524	A2	-	-	-	15	Small positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70409	Magnetic	394781	5686312	A2	-	-	-	54	Medium dipole identified over two lines. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70410	Debris	394747	5686371	A2	1.7	0.7	0.6	155	Small dark reflector, possibly part of, or with an associated elongated dark reflector. A large dipole is identified close to the sonar anomaly, however due to the proximity of the contacts and the nature of the magnetic signal it is hard to discern whether it is related to one of both of the sonar contacts.	-
70411	Debris	394745	5686367	A2	5.9	0.1	0.2	155	Short linear dark reflector with height. Not particularly distinct but appears to have an associated object with height. A large dipole is identified close to the sonar anomaly, however due to the proximity of the contacts and the nature of the magnetic signal it is hard to discern whether it is related to one of both of the sonar contacts.	-
70412	Rope/chain	394793	5686366	A2	51	0.7	0.4	51	Slightly wavy linear dark reflector with slight shadow. Not particularly distinct. Possible rope/chain. Small contact with height identified close to the end (anomaly number 70413). Feature appears to have a corresponding medium asymmetric dipole identified on the magnetometer data, indicating ferrous material, however due to the nature of the magnetic signal in this area this is hard to confirm. Feature may be associated with the installation of the current Thanet export cable, however without further investigation this cannot be confirmed and, as such, has been retained as potential archaeology.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70413	Debris	394779	5686377	A2	0.5	0.3	0.4	248	Small dark reflector with height. Possibly with associated rope/chain (anomaly number 70412). Feature appears to have a corresponding large dipole identified on the magnetometer data, indicating ferrous material, however due to the nature of the magnetic signal in this area this is hard to confirm. A magnetic anomaly was identified close to this position in WA report 60077, measuring 89 nT, however has now been grouped in with the most recent geophysics results and its position updated.	7183 (WA 60077)
70414	Magnetic	394565	5686267	A2	-	-	-	231	Large dipole identified over two lines. Possibly indicative of buried item of ferrous debris.	-
70415	Magnetic	394416	5686300	A2	-	-	-	60	Medium asymmetric dipole identified over two lines. Possibly indicative of buried item of ferrous debris.	-
70416	Magnetic	394596	5686312	A2	-	-	-	30	Small asymmetric dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70417	Dark reflector	394287	5686479	A2	2.1	0.5	0.2	-	Narrow, elongated dark reflector with height. Image possibly distorted by movement of the sonar fish- may be a stretched rock.	-
70418	Debris	394593	5686446	A2	9.3	2.4	0	31	Small positive monopole identified over two lines on the most recent dataset. Corresponds with a seafloor disturbance and dark reflector (measuring 3.2 x 1.4 m) identified in WA report 60077. This wasn't identified on the most recent sonar data, however this may indicate burial. I tag has been reclassified to 'debris' based on the magnetic anomaly, and the position updated to reflect the central point.	7103 (WA 60077)
70419	Debris	394761	5686612	A2	1.9	0.4	0.3	99	Elongated dark reflector with a very slight shadow, appears to slightly bed round at one end. Corresponds with a medium magnetic anomaly, indicating ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70420	Magnetic	394405	5686849	A2	-	-	-	15	Small positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70421	Magnetic	394473	5686776	A2	-	-	-	115	Medium negative monopole identified over two lines. Possibly indicative of buried item of ferrous debris.	-
70422	Magnetic	394444	5686739	A2	-	-	-	698	Large dipole identified over two lines. Possibly indicative of buried item of ferrous debris.	-
70423	Dark reflector	394179	5687187	A2	3.7	0.7	1.2	-	Slightly angular dark reflector with a long, narrow distinct shadow. Looks slightly anomalous.	-
70424	Debris	394117	5687174	A2	2.1	0.5	0.6	15	Poorly defined, relatively indistinct dark reflector with a distinct irregular shadow. Corresponds with a small magnetic anomaly, indicating ferrous material.	-
70425	Magnetic	393912	5687029	A2	-	-	-	156	Large negative monopole identified on one line. Relatively broad. Possibly indicative of buried item of ferrous debris.	-
70426	Magnetic	394210	5687042	A2	-	-	-	63	Medium dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70427	Magnetic	393953	5687084	A2	-	-	-	16	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70428	Magnetic	393816	5687117	A2	-	-	-	97	Medium asymmetric dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70429	Magnetic	394167	5687017	A2	-	-	-	53	Medium positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70430	Rope/chain	394042	5686902	A2	35.1	0.9	0.2	58	Curvilinear dark reflector with height, curved round at one end. Possible rope/chain. Corresponds with a medium magnetic anomaly, indicating ferrous material.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70431	Magnetic	394191	5686894	A2	-	-	-	16	Small negative monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70432	Magnetic	394272	5686283	A2	-	-	-	101	Medium asymmetric dipole identified over two lines. Possibly indicative of buried item of ferrous debris.	-
70433	Debris	393880	5686276	A2	0.4	0.3	0.2	91	Narrow elongated dark reflector, in a slight 'L' shape, with height. Corresponds with a magnetic anomaly, indicating ferrous material.	-
70434	Magnetic	393830	5686509	A2	-	-	-	39	Slightly irregular medium magnetic anomaly identified on one line. Possibly indicative of buried item of ferrous debris.	-
70435	Magnetic	393761	5686769	A2	-	-	-	16	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70436	Magnetic	393751	5686848	A2	-	-	-	16	Small, slightly irregular dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70437	Mound	394012	5686544	A2	3.8	3.6	0.3	-	Small isolated mound within a slight depression.	-
70438	Dark reflector	393152	5686273	A2	1.6	0.2	0.4	-	Narrow elongated dark reflector with height. Image possibly distorted by movement of the sonar fish. May be a stretched rock however has been retained as potential archaeology based on shape.	-
70439	Rope/chain	393571	5686511	A2	23.4	0.8	0.4	26	Faint, curvilinear dark reflector with irregular shadows. Not always clearly discernible, possibly partially buried. Corresponds with a small magnetic anomaly which may indicate ferrous material. Feature may be associated with the installation of the current Thanet export cable, however without further investigation this cannot be confirmed and, as such, has been retained as potential archaeology.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70440	Debris	393541	5686515	A2	7.3	0.3	0.3	32	Curvilinear dark reflector in a slight 'V' shape with slight height and corresponding magnetic anomaly indicating ferrous material. Possible linear item of debris. May be part of similar feature nearby, however this is hard to discern.	-
70441	Dark reflector	393552	5686508	A2	7	0.5	0.3	-	Large relatively indistinct dark reflector with height. Not particularly distinct but looks a little anomalous. Close to linear contacts, possibly related however this is hard to discern.	-
70442	Magnetic	393647	5686568	A2	-	-	-	167	Large positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70443	Recorded Obstruction	393439	5686614	A3	-	-	-	-	UKHO Position for live foul. Records suggest a possible sonar contact and slight magnetic deflection were identified during 1995 search, however nothing distinct has been identified at this position during the most recent, nor the previous WA geophysical data interpretation. An irregular area of small mounds was identified approximately 17 m NNE of the given UKHO position which may represent buried debris, however it is also possible that this is just a natural feature. A series of magnetic anomalies were also identified over 37 m NE of the position (70448, 70449).	7319 (WA 60077), 2185 (WA, 2017B), 15131 (UKHO)
70444	Magnetic	393439	5686745	A2	-	-	-	37	Small negative monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70445	Magnetic	393464	5686692	A2	-	-	-	477	Large asymmetric dipole identified on more than one line. Possibly indicative of buried item of ferrous debris.	-
70446	Magnetic	393426	5686693	A2	-	-	-	21	Small positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70447	Magnetic	393339	5686665	A2	-	-	-	25	Small positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70448	Magnetic	393451	5686652	A2	-	-	-	47	Small negative monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70449	Magnetic	393493	5686663	A2	-	-	-	24	Small positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70450	Dark reflector	393541	5686724	A2	1.3	0.5	1.1	-	Irregularly shaped dark reflector with a slightly jagged. Possible separate contacts identified within shadow. May be natural.	-
70451	Dark reflector	393560	5686723	A2	2.1	0.8	1.2	-	Slightly elongated dark reflector with a broad distinct shadow. Image possibly distorted by movement of the sonar fish. May be a stretched rock.	-
70452	Dark reflector	393595	5686743	A2	1.5	0.2	0.1	-	Faint, elongated dark reflector with height. Possibly a part of linear item 30263.	-
70453	Rope/chain	393628	5686743	A2	29.8	0.2	0.2	-	Faint, curvilinear dark reflector. Shadows in some areas. Not always clearly defined- may extend beyond that tagged. Feature does not have an associated magnetic signal, which may indicate a length of rope.	-
70454	Magnetic	393488	5686889	A2	-	-	-	132	Medium irregular magnetic anomaly identified on one line. Possibly indicative of buried item of ferrous debris.	-
70455	Magnetic	393390	5686862	A2	-	-	-	42	Small positive monopole identified on one line, close to another, larger anomaly. Possibly indicative of buried item of ferrous debris.	-
70456	Debris	393354	5686846	A2	0.8	0.2	0.2	394	Slightly elongated dark reflector with a relatively broad distinct shadow. Corresponds with a large, relatively broad magnetic anomaly suggesting ferrous material.	-
70457	Dark reflector	393591	5686988	A2	2.1	0.6	0.2	-	Slightly triangular dark reflector with a slight shadow.	-
70458	Rope/chain	393605	5686949	A2	15.7	1.3	0.2	-	Slightly wavy linear dark reflector with height. Feature does not have an associated magnetic signal, which may indicate a length of rope.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70459	Magnetic	393463	5687132	A2	-	-	-	16	Small negative monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70460	Magnetic	393509	5687102	A2	-	-	-	31	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70461	Dark reflector	393561	5687232	A2	1.1	0.9	1.5	-	Distinct, irregularly shaped dark reflector with a distinct shadow and one, long, narrow shadow extending beyond the range of the data. Possible feature extending to sea surface. Possibly modern anthropogenic however, as this can't be confirmed without further investigation, has been retained as possible archaeology.	-
70462	Magnetic	393084	5687289	A2	-	-	-	12	Small asymmetric dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70463	Magnetic	393190	5687285	A2	-	-	-	23	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70464	Dark reflector	393001	5687255	A2	1	0.2	0.3	-	Elongated dark reflector with a relatively broad distinct shadow. Image possibly distorted by movement of the sonar fish. May be a stretched rock.	-
70465	Magnetic	393006	5687094	A2	-	-	-	16	Small positive monopole identified on one line. Possibly indicative of buried item of ferrous debris. Feature is identified within a maintained dredge area therefore may be related to, or impacted by dredging operations.	-
70466	Magnetic	393101	5687215	A2	-	-	-	14	Small negative monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70467	Magnetic	393098	5687119	A2	-	-	-	12	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris. Feature is identified within a maintained dredge area therefore may be related to, or impacted by dredging operations.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70468	Magnetic	392915	5687124	A2	-	-	-	13	Small negative monopole identified on one line. Possibly indicative of buried item of ferrous debris. Feature is identified within a maintained dredge area therefore may be related to, or impacted by dredging operations.	-
70469	Magnetic	392789	5687073	A2	-	-	-	11	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris. Feature is identified within a maintained dredge area therefore may be related to, or impacted by dredging operations.	-
70470	Magnetic	392833	5686949	A2	-	-	-	103	Medium dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70471	Magnetic	393151	5686838	A2	-	-	-	33	Small positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70472	Magnetic	393128	5686793	A2	-	-	-	39	Small positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70473	Magnetic	393048	5686797	A2	-	-	-	18	Small negative monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70474	Magnetic	393056	5686762	A2	-	-	-	66	Medium positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70475	Magnetic	392975	5686593	A2	-	-	-	24	Small positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70476	Magnetic	392831	5686383	A2	-	-	-	11	Small positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70477	Magnetic	392791	5686510	A2	-	-	-	14	Small positive monopole identified on one line. Possibly weakly observed on adjacent line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70478	Magnetic	392610	5686392	A2	-	-	-	112	Medium dipole identified on one line. Identified in WA report 60077 as a small magnetic anomaly measuring 13 nT. Possibly indicative of buried item of ferrous debris.	7195 (WA 60077)
70479	Recorded wreck	392546	5686555	A3	-	-	-	-	UKHO position of tug boat <i>Neg Chieftain</i> , which capsized on 11 August 1983 while towing a barge stone carrier, while en-route to Ramsgate. The wreck was raised by barge crane Taklift I in 1984. A survey in 1986 indicated that small sections of wreckage may remain in the area. Though nothing was identified at this position in the latest WA site investigation, a very large magnetic anomaly is identified approximately 95 m NNW of UKHO position, which may be related.	2161 (WA, 2017B), 14829 (UKHO)
70480	Debris	392511	5686645	A2	1.8	0.2	0.2	14648	Elongated dark reflector with a broad distinct shadow identified on the sonar data. Corresponds with a very large dipole identified over two lines. Possible debris associated with UKHO position for a lifted wreck (anomaly number 70479), located approximately 96 m to the SE.	2161 (WA, 2017B), 14829 (UKHO)
70481	Debris	392531	5686689	A2	6.2	2.2	1.5	190	Large dipole identified on one line close to another, larger feature. Feature is identified close to two sonar features reported in in WA report 60070, one of which is a seafloor disturbance and the other is a dark reflector measuring 2 x 1.1 m. Having reviewed the images from the previous tags, the features are thought to all be related and have therefore been grouped together. Though nothing has been tagged on the most recent sonar data at this location, this may indicate burial of the feature and therefore the dimensions have been taken from the previous tags. The position has been updated to reflect the central position of all the tags.	6119 (WA 60070), 6124 (WA 60070)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70482	Debris	392611	5686698	A2	5.1	0.3	0.3	1134	Elongated dark reflector with height. Corresponds with a very large irregular dipole identified on more than one line.	-
70483	Magnetic	392675	5686649	A2	-	-	-	813	Very large dipole identified on more than one line. Possibly observed on adjacent line, however this isn't clearly discernible. Possibly indicative of buried item of ferrous debris.	-
70484	Magnetic	392739	5686720	A2	-	-	-	86	Medium negative monopole identified on more than one line. Possibly indicative of buried item of ferrous debris.	-
70485	Magnetic	392720	5686776	A2	-	-	-	22	Small negative monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70486	Debris	392627	5686839	A1	77.2	23.4	2	406	Mound of numerous dark reflector with height. Largely in a coherent pile, however smaller, likely related dark reflectors identified nearby. Thought to be the cargo of the stone carrier barge what sank when the tug boat <i>Neg Chieftain</i> capsized in 1983, however the UKHO position is approximately 100 m west of the position found in the geophysical data.	6093 (WA 60070), 6094 (WA 60070), 2173 (WA, 2017B), 14831 (UKHO)
70487	Magnetic	392576	5686837	A2	-	-	-	90	Medium dipole identified on more than one line. Possibly related to nearby wreck feature 70486 .	-
70488	Magnetic	392659	5686871	A2	-	-	-	110	Medium negative monopole identified on one line. Possibly part of a larger magnetic anomaly. Feature may be a buried item of ferrous debris, possibly related to nearby wreck feature 70486 .	-
70489	Magnetic	392670	5686833	A2	-	-	-	75	Medium, relatively broad dipole identified on more than one line. Possibly part of a larger magnetic anomaly. Feature may be a buried item of ferrous debris, possibly related to nearby wreck feature 70486 .	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70490	Debris	392619	5686870	A2	1.6	0.9	0.7	116	Small, distinct dark reflector with a relatively long shadow. Possibly part of the nearby area of lost cargo, however appears to be quite isolated and with an associated distinct individual magnetic anomaly. Shadow extends beyond range of data therefore height should be considered a minimum.	-
70491	Magnetic	392566	5686863	A2	-	-	-	22	Small asymmetric dipole identified on one line. Possibly indicative of buried item of ferrous debris and may be related to nearby wreck 70486 .	-
70492	Magnetic	392606	5686960	A2	-	-	-	13	Small positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70493	Debris	392566	5686975	A2	1.3	0.2	0.1	30	Slightly elongated dark reflector with a slight shadow. Not particularly distinct however appears to have a small associated magnetic contact indicating ferrous debris.	-
70494	Magnetic	392524	5686978	A2	-	-	-	10	Small positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70495	Magnetic	392501	5687060	A2	-	-	-	20	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70496	Magnetic	392697	5687106	A2	-	-	-	23	Small negative monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70497	Dark reflector	392324	5687220	A2	1.8	0.9	0.9	-	Dark reflector with a distinct, but tapered shadow. Possibly related to nearby buoy however this isn't clear and therefore has been retained as potential archaeology.	-
70498	Debris	392287	5687179	A2	1.9	1.1	0.2	56	Elongated dark reflector with a broad, distinct shadow identified in an area of megaripples. Corresponds with a medium magnetic anomaly indicating ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70499	Debris	392144	5687137	A2	0.7	0.6	0.8	276	Elongated dark reflector with a broad, distinct shadow. Possible associated scour. Appears to have associated large magnetic anomaly indicating ferrous debris.	-
70500	Dark reflector	392296	5686991	A2	5.3	1.2	0.9	-	Elongated dark reflector with a broad, slightly irregular shadow.	-
70501	Magnetic	392233	5686990	A2	-	-	-	22	Small negative monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70502	Magnetic	392355	5686619	A2	-	-	-	61	Medium asymmetric dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70503	Debris	392321	5686581	A2	0.5	0.4	0.2	643	Elongated dark reflector with a slightly jagged shadow. Corresponds with a large magnetic anomaly indicating ferrous debris.	-
70504	Magnetic	392239	5686407	A2	-	-	-	102	Medium positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70505	Debris	392307	5686389	A2	2.1	1.1	0.3	451	Elongated, slightly curved, dark reflector with a distinct shadow. Corresponds with a large magnetic anomaly. Magnetic anomaly was identified in the WA report 60077 close to the position, and as such has been grouped in and the position updated based on the most recent datasets.	7219 (WA 60077)
70506	Magnetic	392086	5686413	A2	-	-	-	17	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70507	Magnetic	392046	5686808	A2	-	-	-	28	Small positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70508	Magnetic	391928	5686718	A2	-	-	-	22	Small dipole identified over two lines. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70509	Magnetic	392000	5686921	A2	-	-	-	12	Small negative monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70510	Magnetic	392140	5686915	A2	-	-	-	17	Small positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70511	Magnetic	392055	5686883	A2	-	-	-	29	Small negative monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70512	Magnetic	392125	5686882	A2	-	-	-	32	Small negative monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70513	Debris	392121	5686990	A2	9.2	0.3	0.2	90	A relatively straight, narrow dark reflector with a slight shadow. Corresponds with medium magnetic dipole indicating ferrous material. Possible linear item of debris.	-
70514	Magnetic	391710	5686908	A2	-	-	-	15	Small positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70515	Magnetic	391793	5686905	A2	-	-	-	19	Small positive monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70516	Magnetic	391571	5687123	A2	-	-	-	21	Small asymmetric dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70517	Magnetic	391632	5687150	A2	-	-	-	18	Small asymmetric dipole only identified on both the discovery and the Valkyrie data. Possibly indicative of buried item of ferrous debris.	-
70518	Magnetic	391765	5687146	A2	-	-	-	917	Very large dipole identified on more than one line. Possibly indicative of buried item of ferrous debris.	-
70519	Magnetic	391835	5687267	A2	-	-	-	23	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70520	Magnetic	391630	5686825	A2	-	-	-	48	Small negative monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70521	Magnetic	391712	5686823	A2	-	-	-	21	Small asymmetric dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70522	Magnetic	391576	5686763	A2	-	-	-	65	Medium asymmetric dipole identified on both the Discover and the Valkyrie magnetometer data. Possibly indicative of buried item of ferrous debris.	-
70523	Debris	391559	5686724	A2	2.8	0.3	0.1	38	Straight, elongated dark reflector with a short, but distinct shadow. Feature has associated small magnetic anomaly indicating ferrous debris.	-
70524	Dark reflector	391629	5686735	A2	0.9	0.8	0.6	-	Angular dark reflector with a broad, distinct shadow. Image possibly distorted by movement of the sonar fish. Feature is identified as a large mound (measuring 5 x 3.5 x 0.3 m) on the MBES data, which may indicate that the feature is partially buried, and extends beyond the area identified on the sonar data.	-
70525	Magnetic	391784	5686714	A2	-	-	-	26	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70526	Magnetic	391634	5686600	A2	-	-	-	79	Medium dipole identified on one line. Identified in previous WA report 60077 as a magnetic anomaly measuring 73 nT. The features have been grouped together and the position updated to reflect the central position. Possibly indicative of buried item of ferrous debris.	7130 (WA 60077)
70527	Magnetic	391811	5686590	A2	-	-	-	42	Small dipole identified on one line. Identified in previous WA report 60077 as a magnetic anomaly measuring 25 nT. The features have been grouped together and the position updated to reflect the central position. Possibly indicative of buried item of ferrous debris.	7286 (WA 60077)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70528	Debris	391937	5686425	A2	1.5	0.3	0.2	17	Narrow, elongated dark reflector with a slight height. Feature bends round in an 'L' shape. Though no magnetic anomaly was identified at the location in the most recent geophysical campaign, the feature appears to correspond with a magnetic anomaly identified in WA report 60077, which may indicate ferrous material. As such the original magnetic anomaly has been grouped with the most recent sonar anomaly. The position has been updated to reflect the latest position.	7187 (WA 60077)
70529	Magnetic	391679	5686419	A2	-	-	-	173	Large asymmetric dipole identified over two lines. Identified on both the Discover and Valkyrie magnetometer data. Possibly indicative of buried item of ferrous debris.	-
70530	Magnetic	391866	5686403	A2	-	-	-	31	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70531	Magnetic	391935	5686374	A2	-	-	-	11	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70532	Magnetic	391738	5686470	A2	-	-	-	37	Small asymmetric dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70533	Magnetic	391599	5686556	A2	-	-	-	23	Small dipole identified over two lines. Possibly indicative of buried item of ferrous debris.	-
70534	Magnetic	391729	5686557	A2	-	-	-	16	Small dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70535	Magnetic	391563	5686573	A2	-	-	-	160	Large negative monopole identified on more than one line. Identified in previous WA report 60077 as a magnetic anomaly measuring 22 nT. The features have been grouped together and the position updated to reflect the central position. Possibly indicative of buried item of ferrous debris.	7266 (WA 60077)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70536	Magnetic	391490	5686412	A2	-	-	-	262	Large asymmetric dipole identified on one line. Possibly related to nearby pipeline however looks like a single anomaly. Identified in previous WA report 60077 as a magnetic anomaly measuring 72 nT. The features have been grouped together and the position updated to reflect the central position. Possibly indicative of buried item of ferrous debris.	7215 (WA 60077)
70537	Dark reflector	391461	5686432	A2	1	0.4	0.3	-	Slightly angular dark reflector with a distinct shadow. Possibly natural.	-
70538	Dark reflector	391401	5686434	A2	0.9	0.9	0.4	-	Slightly rectangular dark reflector with a distinct shadow. Possibly natural but looks quite distinct.	-
70539	Dark reflector	391446	5686462	A2	1.4	0.2	0.2	-	Elongated dark reflector with a distinct shadow. Image possibly distorted by movement of the sonar fish. May be a stretched rock.	-
70540	Debris	391443	5686495	A2	1.6	0.3	1	-	Poorly defined, irregularly shaped dark reflector with a long narrow shadow. Possibly with three prongs. Feature identified in an area of high magnetic activity making it difficult to discern whether the feature has an associated magnetic anomaly, therefore the possibility remains for ferrous material. Possible anchor.	-
70541	Debris field	391522	5686517	A2	32.4	6	0.7	526	A number of small, straight dark reflectors with height. Corresponds with a large magnetic anomaly, on the most recent magnetometer, as well as a large magnetic anomaly identified in WA report 60077. The position of the feature has been taken from the central point of all the anomalies, however the magnetic amplitude has been taken from the original tag due to size.	7129 (WA 60077)
70542	Debris	391479	5686575	A2	0.8	0.6	0.5	91	Slightly rectangular dark reflector with a distinct shadow. Corresponds with a medium magnetic anomaly indicating ferrous material.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70543	Debris	391426	5686571	A2	0.8	0.3	0.4	65	Slightly rectangular dark reflector with a distinct shadow. Corresponds with a small magnetic anomaly indicating ferrous material.	-
70544	Magnetic	391493	5686618	A2	-	-	-	42	Small dipole identified over two lines. Possibly indicative of buried item of ferrous debris.	-
70545	Debris	391449	5686640	A2	1.2	0.4	0.3	58	Elongated dark reflector with a slight shadow. Identified in an area of numerous contacts however tagged due to anomalous shape. Feature appears to have associated medium magnetic anomaly, possibly indicating ferrous debris.	-
70546	Magnetic	391415	5686620	A2	-	-	-	24	Small dipole identified over two lines. Possibly indicative of buried item of ferrous debris.	-
70547	Dark reflector	391464	5686680	A2	0.9	0.6	0.5	-	Relatively broad dark reflector with a distinct shadow. In an area of numerous other contacts. Possibly natural however appears to be slightly larger and more angular than the surrounding features and, as such, has been retained as potential archaeology.	-
70548	Dark reflector	391455	5686693	A2	1.4	0.8	0.6	-	Elongated, slightly rectangular dark reflector with a broad, distinct shadow. Image distorted by movement of the sonar fish. In an area of numerous other contacts. Possibly natural however appears to be slightly larger and more angular than the surrounding features and, as such, has been retained as potential archaeology.	-
70549	Dark reflector	391445	5686687	A2	1.7	0.2	0.5	-	Narrow elongated dark reflector with a broad with an irregular shadow. Image possibly distorted by movement of the sonar fish. In an area of numerous other contacts. Possibly natural however appears to be slightly larger and more angular than the surrounding features and, as such, has been retained as potential archaeology.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70550	Magnetic	391452	5686764	A2	-	-	-	130	Large positive monopole only identified on both the Discovery and the Valkyrie magnetometer data. Possibly indicative of buried item of ferrous debris.	-
70551	Magnetic	391489	5686787	A2	-	-	-	37	Small negative monopole identified on more than one line. Possibly indicative of buried item of ferrous debris.	-
70552	Magnetic	391523	5686784	A2	-	-	-	77	Medium dipole identified on both the Discovery and the Valkyrie data. Possibly indicative of buried item of ferrous debris.	-
70553	Dark reflector	391481	5686829	A2	1.7	0.5	0.6	-	Slightly angular, elongated dark reflector with a relatively broad distinct shadow.	-
70554	Magnetic	391448	5686834	A2	-	-	-	149	Medium dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70555	Magnetic	391471	5686908	A2	-	-	-	51	Medium dipole identified on more than one line. Possibly indicative of buried item of ferrous debris.	-
70556	Debris	391487	5686873	A2	2.4	0.6	0.6	51	Slightly elongated dark reflector with a relatively irregular distinct shadow. Feature corresponds with medium magnetic anomaly indicating ferrous debris.	-
70557	Debris	391516	5686876	A2	1.6	0.4	0.4	75	Slightly angular dark reflector with a relatively broad distinct shadow. Feature corresponds with medium magnetic anomaly indicating ferrous debris.	-
70558	Debris	391546	5686880	A2	1.1	0.1	0.1	80	Elongated, straight dark reflector with a slight shadow. Feature corresponds with medium magnetic anomaly indicating ferrous debris.	-
70559	Dark reflector	391551	5686989	A2	1.1	0.8	0.7	-	Angular dark reflector with a broad, distinct shadow. Close to another similar feature.	-
70560	Dark reflector	391557	5686990	A2	1.3	0.3	0.4	-	Straight, distinct dark reflector with a broad shadow. Close to another similar feature.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70561	Magnetic	391417	5687107	A2	-	-	-	111	Medium asymmetric dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70562	Debris	391450	5687190	A2	1.2	0.3	0.8	30	Small, round dark reflector with a bright reflector in its centre and a distinct shadow identified on the sonar data. Some possible associated scour. Feature appears to have associated small magnetic anomaly, indicating ferrous debris.	-
70563	Magnetic	391334	5687268	A2	-	-	-	46	Small negative monopole identified on one line. Line appears to be a little irregular. Possibly indicative of buried item of ferrous debris.	-
70564	Magnetic	391363	5687268	A2	-	-	-	40	Small positive monopole identified on one both the Valkyrie and Discovery magnetometer data. Possibly indicative of buried item of ferrous debris.	-
70565	Debris	391290	5687185	A2	1.4	0.6	0	30	Small, round bright reflector with a dark reflector in the centre. Appear to correspond with a small dipole, indicating ferrous debris.	-
70566	Debris	391278	5687121	A2	1.6	0.8	0.6	44	Elongated dark reflector with a broad, slightly irregular shadow. Feature has a small associated magnetic anomaly, indicating ferrous material.	-
70567	Magnetic	391319	5686888	A2	-	-	-	53	Medium dipole identified over two lines. Possibly indicative of buried item of ferrous debris.	-
70568	Magnetic	391403	5686911	A2	-	-	-	71	Medium dipole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70569	Magnetic	391345	5686796	A2	-	-	-	116	Medium negative monopole identified on one both the Valkyrie and the Discovery magnetometer data. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70570	Dark reflector	391327	5686750	A2	1.9	0.7	0.4	-	Elongated dark reflector with a broad distinct shadow. Image possibly distorted by movement of the sonar fish. Several similar features identified nearby but not within grouping distance. May represent natural features however have been retained as potential archaeology based on shape.	-
70571	Magnetic	391388	5686747	A2	-	-	-	136	Medium dipole identified on both the Discovery and the Valkyrie magnetometer data. Possibly indicative of buried item of ferrous debris.	-
70572	Magnetic	391304	5686714	A2	-	-	-	52	Medium negative monopole identified on one line. Possibly indicative of buried item of ferrous debris.	-
70573	Debris	391352	5686673	A2	1.4	0.4	0.5	56	Faint rectangular dark reflector with a broad, distinct shadow, located near to other similar features on the seabed. Corresponds with a medium magnetic anomaly, indicating ferrous debris.	-
70574	Dark reflector	391375	5686528	A2	2.9	0.3	0.7	-	Slightly elongated, narrow dark reflector with a distinct shadow. Possibly with a second prong. Possibly an anchor. Feature may be associated with nearby mag anomaly measuring 406 nT, however this is hard to discern due to proximity to the pipeline and therefore hasn't been grouped in.	-
70575	Debris field	391310	5686503	A2	44.6	14.3	0.6	280	A number of small, straight dark reflectors with height. Possibly natural area of rocks, however features appear to be relatively angular. Has a large associated magnetic anomaly indicating ferrous material.	-
70576	Dark reflector	391058	5686490	A2	1.4	0.4	0.4	-	Relatively square dark reflector with a relatively distinct shadow. Possibly natural however the shape looks slightly anomalous.	-
70577	Dark reflector	391106	5686919	A2	1	0.1	0.1	-	Small, round dark reflector with a slight shadow. Possible natural however looks quite distinct.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70578	Rope/chain	391015	5687076	A2	28	0.5	0.2	267	Curvilinear dark reflector with height. The feature appears to be in two sections, possibly indicating partial burial, with an object with height at one end. Possible length of rope/chain. The feature has a large associated magnetic anomaly indicating ferrous debris.	-
70579	Debris	401784	5693149	A2	1.7	1.3	0.5	-	Feature identified in WA report 60077. On review of original screen grabs from the 2008 WA study (WA report 60077), the feature appears to be a slightly elongated dark reflector with some disturbance to surrounding sediment. Though the feature is not particularly distinct, it has been retained as potential archaeology based on review of the images of the original tag. The feature was not identified in most recent geophysical data, which may indicate burial of the feature by mobile sediments.	7304 (WA 60077)
70580	Bright reflector	401755	5693177	A2	6.6	3.6	0	-	Feature identified in WA report 60077. On review of original screen grabs from the 2008 WA study (WA report 60077), the feature appears to be a slightly elongated dark reflector with some disturbance to surrounding sediment. Though the feature is not particularly distinct, it has been retained as potential archaeology based on review of the images of the original tag. The feature was not identified in most recent geophysical data, which may indicate burial of the feature by mobile sediments. Feature may have been impacted by the installation of the current Thanet export cable corridor.	7306 (WA 60077)
70581	Magnetic	401733	5692955	A2	-	-	-	20	Magnetic Anomaly identified in previous WA report 60077. Feature was not identified in the most recent geophysical magnetometer data, however this may reflect a difference in positions of the lines run. As such the feature has been retained as potential archaeology.	7181 (WA 60077)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70582	Magnetic	401688	5693035	A2	-	-	-	7	Magnetic Anomaly identified in previous WA report 60077. Feature was not identified in the most recent geophysical data, however this may reflect a difference in positions of the lines run. As such the feature has been retained as potential archaeology. Feature may have been impacted by the installation of the current Thanet export cable corridor.	7182 (WA 60077)
70583	Magnetic	400928	5691716	A2	-	-	-	5	Magnetic Anomaly identified in previous WA report 60077. Feature was not identified in the most recent geophysical magnetometer data, however this may reflect a difference in positions of the lines run. As such the feature has been retained as potential archaeology.	7201 (WA 60077)
70584	Debris	400118	5690787	A2	3.2	1.7	0.8	-	Feature identified in WA report 60077. On review of original screen grabs from the 2008 WA study (WA report 60077), the feature appears to be a distinct dark reflector with a long shadow. The feature has been retained as potential archaeology based on review of the images of the original tag and it's dimensions. The feature was not identified in most recent geophysical data, which may indicate burial of the feature by mobile sediments.	7106 (WA 60077)
70585	Debris	400159	5690521	A2	2	1.1	0.1	-	Feature identified in WA report 60077. On review of original screen grabs from the 2008 WA study (WA report 60077), the feature appears to be a slightly elongated dark reflector with height. The feature has been retained as potential archaeology based on review of the images of the original tag and its dimensions. The feature was not identified in most recent geophysical data, which may indicate burial of the feature by mobile sediments.	7315 (WA 60077)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70586	Bright reflector	400156	5690540	A2	1.5	1.1	0	-	Feature originally identified in WA report 60077 as a bright reflector. The feature has been retained as potential archaeology based on description and dimensions. Feature may have been impacted by the installation of the current Thanet export cable corridor.	7316 (WA 60077)
70587	Dark reflector	400170	5690549	A2	2.3	1.9	0	-	Feature originally identified in WA report 60077 as a dark reflector. The feature has been retained as potential archaeology based on description and dimensions.	7317 (WA 60077)
70588	Magnetic	399093	5688307	A2	-	-	-	7	Magnetic Anomaly. Possibly identified on most recent dataset however hasn't been tagged based on proximity to (and therefor issues differentiating it from) the nearby cable. As such, the feature has been retained as potential archaeology. Feature may have been impacted by the installation of the current Thanet export cable corridor.	7185 (WA 60077)
70589	Magnetic	399018	5688362	A2	-	-	-	19	Magnetic Anomaly. Possibly identified on most recent dataset however hasn't been tagged based on proximity to (and therefor issues differentiating it from) the nearby cable. As such, the feature has been retained as potential archaeology. Feature may have been impacted by the installation of the current Thanet export cable corridor.	7198 (WA 60077)
70590	Dark reflector	398946	5688227	A2	4.7	1.9	0	-	Feature identified in WA report 60077. On review of original screen grabs from the 2008 WA study (WA report 60077), the feature appears to be a slightly irregular, elongated dark reflector in an area of megaripples. The feature has been retained as potential archaeology based on review of the images of the original tag and it's dimensions. The feature was not identified in most recent geophysical data, which may indicate burial of the feature by mobile sediments.	7152 (WA 60077)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70591	Debris	396714	5687892	A2	6.9	4.6	0.9	-	Feature identified in WA report 60077. On review of original screen grabs from the 2008 WA study (WA report 60077), the feature appears to be a large, distinct dark reflector. The feature has been retained as potential archaeology based on review of the images of the original tag and it's dimensions. The feature was not identified in most recent geophysical data, which may indicate burial of the feature by mobile sediments, however a similar feature was identified on the most recent geophysics and UKHO record approximately 50 m SW.	7115 (WA 60077)
70592	Debris	396634	5687700	A2	2.7	1.7	0.5	-	Feature identified in WA report 60077. On review of original screen grabs from the 2008 WA study (WA report 60077), the feature appears to be a slightly elongated dark reflector with a relatively irregular shadow identified in an area of megaripples. The feature has been retained as potential archaeology based on review of the images of the original tag and its dimensions. The feature was not identified in most recent geophysical data, which may indicate burial of the feature by mobile sediments.	7177 (WA 60077)
70593	Magnetic	395858	5687262	A2	-	-	-	98	Magnetic Anomaly identified in previous WA report 60077. Feature was not identified in the most recent geophysical magnetometer data, however this may reflect a difference in positions of the lines run. As such the feature has been retained as potential archaeology.	7207 (WA 60077)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70594	Debris	395510	5687333	A2	40.5	3.3	0	-	Dark reflector identified in WA report 60070. On review of original screen grabs from the 2006 WA study (WA report 60070), the feature appears to be a slightly curved, elongated dark reflector with height. The feature possibly corresponds with a positive monopole measuring around 40 nT on the most recent data, however this hasn't been tagged due to proximity to (and therefore difficulty differentiating it from) a very large magnetic anomaly nearby. However, based on the images of the original tag, and due to the fact there may be an associated magnetic anomaly, the feature has been retained as potential archaeology. The feature was not identified in most recent sonar data, which may indicate burial of the feature by mobile sediments.	6128 (WA 60070)
70595	Dark reflector	395615	5686908	A2	6	4.2	0	-	Feature identified in WA report 60070 as two closely spaced objects. On review of original screen grabs from the 2006 WA study (WA report 60070), the features appear to be two slightly elongated dark reflectors in line with each other. The feature has been retained as potential archaeology based on review of the images of the original tag and its dimensions. The features were not identified in most recent geophysical data, which may indicate burial of the feature by mobile sediments.	6070 (WA 60070)
70596	Debris	395697	5686788	A2	3.8	1.3	0.4	-	Feature identified in WA report 60077. On review of original screen grabs from the 2008 WA study (WA report 60077), the feature appears to be a dark reflector with a relatively distinct shadow. The feature has been retained as potential archaeology based on review of the images of the original tag. The feature was not identified in most recent geophysical data, which may indicate burial of the feature by mobile sediments.	7164 (WA 60077)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70597	Debris	395922	5686650	A2	4.5	2.1	0.7	-	Feature identified in WA report 60077. On review of original screen grabs from the 2008 WA study (WA report 60077), the feature appears to be a slightly irregular, elongated dark reflector in an area of megaripples, possibly with some disturbance to surrounding sediment. The feature has been retained as potential archaeology based on review of the images of the original tag and its dimensions. The feature was not identified in most recent geophysical data, which may indicate burial of the feature by mobile sediments.	7165 (WA 60077)
70598	Debris	395102	5686395	A2	0.9	0.8	0	57	Feature identified in WA report 60077. Though originally tagged as a bright reflector, on review of original screen grabs from the 2008 WA study (WA report 60077) it appears that the feature appears to be a small, poorly defined dark reflector with a slight shadow, possibly with some disturbance to surrounding sediment and an associated magnetic anomaly. As a result the feature has been reclassified as debris and retained as potential archaeology. The feature was not identified in most recent geophysical data, which may indicate burial of the feature by mobile sediments.	7133 (WA 60077)
70599	Magnetic	394449	5686407	A2	-	-	-	85	Feature identified in WA report 60077 as a medium magnetic anomaly. The feature was possibly identified in the most recent magnetometer data, however due to the proximity to the cable is hard to discern whether the signal is related to the cable or a separate anomaly. As such, it has been retained as potential archaeology.	7189 (WA 60077)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70600	Debris	394051	5686430	A2	2.3	2.1	0.4	-	Feature identified in WA report 60077. On review of original screen grabs from the 2008 WA study (WA report 60077), the feature appears to be a small, poorly defined dark reflector. The internal tag references suggest a possible associated magnetic anomaly however it has not been possible to locate the details of this. The feature has been retained as potential archaeology based on the possible associated magnetic anomaly. The feature was not identified in most recent geophysical data, which may indicate burial of the feature by mobile sediments.	7136 (WA 60077)
70601	Debris	393481	5686418	A2	1	0.8	0.3	17	Feature identified in WA report 60077 as debris with a magnetic signal. On review of original screen grabs from the 2008 WA study (WA report 60077) it appears that the feature appears to be a small, poorly defined dark reflector with a slight shadow. The feature has been retained as potential archaeology based on the magnetic signal suggesting ferrous debris. A possible magnetic anomaly is identified at this position on the most recent magnetometer data, however this can't be confidently confirmed due to proximity to the large magnetic signal associated to the pipeline. The feature was not identified in most recent sonar data, which may indicate burial of the feature by mobile sediments.	7134 (WA 60077)
70602	Magnetic	393484	5686412	A2	-	-	-	17	Magnetic Anomaly identified in previous WA report 60077. Feature was not identified in the most recent geophysical magnetometer data, however this may reflect a difference in positions of the lines run. As such the feature has been retained as potential archaeology.	7193 (WA 60077)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70603	Magnetic	393484	5686437	A2	-	-	-	12	Magnetic Anomaly identified in previous WA report 60077. Feature was not identified in the most recent geophysical magnetometer data, however this may reflect a difference in positions of the lines run. As such the feature has been retained as potential archaeology.	7194 (WA 60077)
70604	Magnetic	393254	5686382	A2	-	-	-	7	Magnetic Anomaly. Possibly identified on most recent dataset however hasn't been tagged based on proximity to (and therefor issues differentiating it from) the nearby pipeline. As such, the feature has been retained as potential archaeology.	7199 (WA 60077)
70605	Dark reflector	393211	5686409	A2	3.9	1.3	0	-	Feature identified in WA report 60077 as a dark reflector. On review of original screen grabs from the 2008 WA study (WA report 60077), the feature appears to be a slightly angular dark reflector with no discernible height. The feature has been retained as potential archaeology based on review of the images of the original tag and its dimensions. The feature was not identified in most recent geophysical data, which may indicate burial of the feature by mobile sediments.	7156 (WA 60077)
70606	Seafloor disturbance	392289	5686736	A2	62.4	14.7	0	-	Feature identified in WA report 60070 as a seafloor disturbance with dark reflectors of unknown origin, however nothing was identified at this location on the most recent geophysical data. On review of original screen grabs from the 2006 WA study (WA report 60070), the feature appears to be an elongated, poorly defined patch of disturbed sediment with some poorly defined, but slightly angular dark reflectors. The feature has been retained as potential archaeology based on review of the images of the original tag. The feature was not identified in most recent geophysical data, which may indicate burial of the feature by mobile sediments.	6091 (WA 60070)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70607	Magnetic	391914	5686517	A2	-	-	-	15	Magnetic Anomaly identified in previous WA report 60077. Feature was not identified in the most recent geophysical magnetometer data, however this may reflect a difference in positions of the lines run. As such the feature has been retained as potential archaeology.	7196 (WA 60077)
70608	Debris	391815	5686420	A2	4.7	0.6	0.3	5	Feature identified in WA report 60077 as debris with a magnetic signal. On review of original screen grabs from the 2008 WA study (WA report 60077) it appears that the feature appears to be an elongated dark reflector with height, though the image does appear to be distorted by movement of the sonar fish therefore dimensions might not be accurate. The feature has been retained as potential archaeology based on the magnetic signal suggesting ferrous debris. The feature was not identified in most recent geophysical data, which may indicate burial of the feature by mobile sediments.	7132 (WA 60077)
70609	Magnetic	391755	5686457	A2	-	-	-	18	Magnetic Anomaly identified in previous WA report 60077. Feature was not identified in the most recent geophysical magnetometer data, however this may reflect a difference in positions of the lines run. As such the feature has been retained as potential archaeology.	7220 (WA 60077)
70610	Magnetic	391654	5686437	A2	-	-	-	27	Magnetic Anomaly identified in previous WA report 60077. Feature was not identified in the most recent geophysical magnetometer data, however this may reflect a difference in positions of the lines run. As such the feature has been retained as potential archaeology.	7131 (WA 60077)
70611	Magnetic	391605	5686502	A2	-	-	-	135	Magnetic Anomaly identified in previous WA report 60077. Feature was not identified in the most recent geophysical magnetometer data, however this may reflect a difference in positions of the lines run. As such the feature has been retained as potential archaeology.	7217 (WA 60077)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70612	Magnetic	391694	5686507	A2	-	-	-	65	Magnetic Anomaly identified in previous WA report 60077. Feature was not identified in the most recent geophysical magnetometer data, however this may reflect a difference in positions of the lines run. As such the feature has been retained as potential archaeology.	7188 (WA 60077)
70613	Magnetic	391390	5686477	A2	-	-	-	77	Magnetic Anomaly identified in previous WA report 60077. Feature was not identified in the most recent geophysical magnetometer data, however this may reflect a difference in positions of the lines run. As such the feature has been retained as potential archaeology.	7126 (WA 60077)
70614	Magnetic	391525	5686607	A2	-	-	-	101	Magnetic Anomaly identified in previous WA report 60077. Feature was not identified in the most recent geophysical magnetometer data, however this may reflect a difference in positions of the lines run. As such the feature has been retained as potential archaeology.	7128 (WA 60077)
70615	Dark reflector	391496	5687078	A2	8.2	4	0	-	Feature identified in WA report 60070 as an isolated dark reflector. On review of original screen grabs from the 2006 WA study (WA report 60070), the feature appears to be a slightly irregular, elongated dark reflector with no discernible height. The feature has been retained as potential archaeology based on review of the images of the original tag and it's dimensions. The feature was not identified in most recent geophysical data, which may indicate burial of the feature by mobile sediments.	6073 (WA 60070)
70616	Magnetic	391326	5686549	A2	-	-	-	18	Magnetic Anomaly identified in previous WA report 60077. Possibly identified on most recent magnetometer data however this is hard to discern due to proximity to the pipeline. As such the feature has been retained as potential archaeology.	7127 (WA 60077)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70617	Magnetic	391265	5686466	A2	-	-	-	35	Magnetic Anomaly identified in previous WA report 60077. Feature was not identified in the most recent geophysical magnetometer data, however this may reflect a difference in positions of the lines run. As such the feature has been retained as potential archaeology.	7125 (WA 60077)
70618	Magnetic	391345	5686431	A2	-	-	-	11	Magnetic Anomaly identified in previous WA report 60077. Feature was not identified in the most recent geophysical magnetometer data, however this may reflect a difference in positions of the lines run. As such the feature has been retained as potential archaeology.	7285 (WA 60077)
70619	Magnetic	391451	5687349	A2	-	-	-	17	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70620	Magnetic	391403	5687361	A2	-	-	-	22	Small asymmetric dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70621	Magnetic	391565	5687170	A2	-	-	-	80	Medium dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70622	Magnetic	391583	5686817	A2	-	-	-	34	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70623	Magnetic	391583	5686837	A2	-	-	-	15	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70624	Magnetic	391584	5686421	A2	-	-	-	100	Large asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70625	Magnetic	391486	5686428	A2	-	-	-	85	Medium dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70626	Magnetic	391431	5686549	A2	-	-	-	25	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70627	Magnetic	391333	5686593	A2	-	-	-	155	Large dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70628	Magnetic	391394	5686587	A2	-	-	-	31	Small negative monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70629	Magnetic	391415	5686620	A2	-	-	-	79	Medium dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70630	Magnetic	391487	5686709	A2	-	-	-	77	Medium dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70631	Magnetic	391431	5686748	A2	-	-	-	28	Small asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70632	Magnetic	391369	5686775	A2	-	-	-	114	Large negative monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70633	Magnetic	391266	5686699	A2	-	-	-	48	Small asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70634	Dark reflector	391300	5686743	A2	0.8	0.6	0.4	-	Dark reflector with large shadow. Data appears to be stretched in this area. Several similar features identified nearby but not within grouping distance. May represent natural features however have been retained as potential archaeology based on shape.	-
70635	Magnetic	391248	5686752	A2	-	-	-	44	Small asymmetric dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70636	Magnetic	391322	5686780	A2	-	-	-	36	Small asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70637	Magnetic	391197	5686781	A2	-	-	-	282	Large dipole identified on more than one survey line, values from adjacent. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70638	Magnetic	391250	5686775	A2	-	-	-	52	Medium dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70639	Magnetic	391290	5686817	A2	-	-	-	281	Large anomaly identified on more than one survey line, values taken from adjacent. Possibly indicative of buried item of ferrous debris.	-
70640	Magnetic	391347	5686896	A2	-	-	-	77	Medium dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70641	Magnetic	391258	5686985	A2	-	-	-	140	Large asymmetric dipole possibly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70642	Magnetic	391324	5686980	A2	-	-	-	135	Large anomaly identified on more than one survey line, values taken from adjacent. Possibly indicative of buried item of ferrous debris.	-
70643	Magnetic	391299	5687037	A2	-	-	-	126	Large dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70644	Magnetic	391377	5686996	A2	-	-	-	29	Small negative monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70645	Magnetic	391234	5687075	A2	-	-	-	14	Small asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70646	Magnetic	391244	5687259	A2	-	-	-	33	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70647	Magnetic	391307	5687278	A2	-	-	-	43	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70648	Magnetic	391394	5687175	A2	-	-	-	247	Large dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70649	Magnetic	391305	5687230	A2	-	-	-	16	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70650	Magnetic	391303	5687134	A2	-	-	-	27	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70651	Magnetic	391174	5687116	A2	-	-	-	16	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70652	Magnetic	391154	5687309	A2	-	-	-	20	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70653	Magnetic	391154	5687349	A2	-	-	-	23	Small asymmetric dipole identified on more than one survey line, values taken from adjacent. Possibly indicative of buried item of ferrous debris.	-
70654	Magnetic	391077	5687305	A2	-	-	-	15	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70655	Magnetic	391009	5687293	A2	-	-	-	26	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70656	Magnetic	390976	5687203	A2	-	-	-	108	Large negative monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70657	Magnetic	390891	5687191	A2	-	-	-	25	Small negative monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70658	Debris	391091	5687174	A2	1.8	0.4	0.5	-	Distinct, angular dark reflector with a slight bright reflector in the centre. Feature looks little anomalous, possibly anthropogenic.	-
70659	Magnetic	390998	5687120	A2	-	-	-	25	Small negative monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70660	Debris	391026	5687107	A2	0.8	0.5	0.1	-	Debris which consists of a dark reflector surrounded by a bright reflector.	-
70661	Magnetic	391078	5687086	A2	-	-	-	22	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70662	Dark reflector	391144	5687099	A2	1.3	0.3	0.3	-	Elongated dark reflector with irregular shadow.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70663	Dark reflector	391234	5687016	A2	5.1	0.3	0	-	Small curvilinear dark reflector with no distinct shadow. Isolated feature.	-
70664	Magnetic	391219	5686969	A2	-	-	-	49	Small negative monopole identified on more than one survey line, values from adjacent. Possibly indicative of buried item of ferrous debris.	-
70665	Magnetic	391176	5686967	A2	-	-	-	40	Medium negative monopole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70666	Magnetic	391126	5686881	A2	-	-	-	49	Small dipole possibly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70667	Magnetic	391227	5686882	A2	-	-	-	28	Small dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70668	Debris	391159	5686845	A2	1.8	1.2	0.3	70	Broad dark reflector with a distinct shadow. Image possibly distorted by movement of the sonar fish. Feature appears to correspond with a medium magnetic anomaly, indicating ferrous material.	-
70669	Magnetic	391014	5686936	A2	-	-	-	117	Large anomaly identified on more than one survey line, values taken from adjacent. Possibly indicative of buried item of ferrous debris.	-
70670	Magnetic	391111	5686992	A2	-	-	-	86	Medium dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70671	Magnetic	391003	5686989	A2	-	-	-	37	Large dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70672	Magnetic	391134	5686989	A2	-	-	-	50	Medium dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70673	Debris	391120	5686956	A2	0.9	0.2	0.4	79	Small, dark reflector with a distinct, but tapered shadow. Appears to correspond with a medium magnetic anomaly, indicating ferrous debris.	-
70674	Magnetic	391008	5686916	A2	-	-	-	124	Large anomaly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70675	Magnetic	391024	5686867	A2	-	-	-	35	Small asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70676	Magnetic	391051	5686865	A2	-	-	-	26	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70677	Magnetic	391128	5686779	A2	-	-	-	130	Large dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70678	Magnetic	391129	5686801	A2	-	-	-	82	Medium dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70679	Magnetic	391105	5686827	A2	-	-	-	125	Large dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70680	Magnetic	391066	5686761	A2	-	-	-	97	Medium dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70681	Dark reflector	391125	5686757	A2	1.3	1.1	0.5	-	Relatively square dark reflector with a broad, distinct shadow. Feature looks relatively anomalous, possibly anthropogenic.	-
70682	Magnetic	391174	5686707	A2	-	-	-	204	Large asymmetric dipole possibly identified on more than one survey line, wide spacing. Possibly indicative of buried item of ferrous debris.	-
70683	Magnetic	391171	5686727	A2	-	-	-	215	Large dipole. Possibly indicative of buried item of ferrous debris.	-
70684	Magnetic	391227	5686665	A2	-	-	-	101	Large dipole possibly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70685	Debris	391115	5686675	A2	2	0.8	0.3	26	Small dipole only identified on one survey line. Appears to correspond with an item of debris reported in WA report 60077. This feature wasn't identified on the most recent sonar data, however this may indicate burial by mobile sediments. The dimensions were taken from the previous report and the position was updated to reflector the central position between the two datasets.	7147 (WA 60077)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70686	Debris	391075	5686683	A2	1.7	0.9	0	142	A large dipole identified on one line. Appears to correspond with a relatively large item of debris and magnetic anomaly identified in previous WA study 60077. Though these were originally tagged separately, they have been grouped together base on proximity and most recent magnetic anomaly. No feature was identified on the most recent sonar data, however this may be due to burial of the feature by mobile sediments. Dimensions taken from original tag and magnetic amplitude from the most recent magnetometer data. The position has been updated to reflect the central position of all three tags.	7145 (WA 60077), 7155 (WA 60077)
70687	Magnetic	391033	5686683	A2	-	-	-	113	Large anomaly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70688	Magnetic	391046	5686708	A2	-	-	-	60	Medium positive monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70689	Magnetic	390981	5686763	A2	-	-	-	47	Small anomaly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70690	Magnetic	390980	5686710	A2	-	-	-	92	Medium asymmetric dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70691	Debris	391008	5686686	A2	2.5	1.2	0.3	54	Medium negative monopole identified on one line. Appears to correspond with a relatively large item of debris with an associated magnetic anomaly measuring 19 nT in previous WA study 60077. Though no feature was identified on the most recent sonar data, this may be due to burial of the feature by mobile sediments. Dimensions taken from original tag and magnetic amplitude from the most recent magnetometer data. The position has been updated to reflect the central position.	7146 (WA 60077)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70692	Magnetic	390995	5686609	A2	-	-	-	130	Large dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70693	Magnetic	391227	5686621	A2	-	-	-	151	Large dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70694	Magnetic	391289	5686615	A2	-	-	-	86	Medium dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70695	Magnetic	391166	5686629	A2	-	-	-	103	Large negative monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70696	Dark reflector	391264	5686558	A2	0.4	0.8	0.4	-	Distinct dark reflector with a broad shadow. Image distorted by movement of the sonar fish.	-
70697	Dark reflector	391147	5686591	A2	3.3	2.2	0.8	-	Angular dark reflector with a broad, distinct shadow. Possible object within its shadow. Looks a little anthropogenic. Located approximately 11 m SW of an isolated dark reflector reported on in WA report 60070, likely the same object therefore position has been updated based on most recent geophysical data. Several magnetic anomalies identified around feature however not clearly associated with contact.	6123 (WA 60070)
70698	Magnetic	391194	5686565	A2	-	-	-	38	Small asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70699	Magnetic	391159	5686565	A2	-	-	-	76	Medium negative monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70700	Magnetic	391104	5686601	A2	-	-	-	47	Small asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70701	Dark reflector	391070	5686552	A2	0.8	0.8	0.6	-	Dark reflector with large shadow. Most likely a natural feature located amongst other similar features.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70702	Magnetic	391218	5686435	A2	-	-	-	203	Large dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70703	Magnetic	391257	5686435	A2	-	-	-	107	Large asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70704	Dark reflector	391165	5686453	A2	1.4	1.4	0.4	-	Relatively small, rectangular dark reflector with a distinct shadow.	-
70705	Magnetic	391184	5686425	A2	-	-	-	72	Medium dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70706	Magnetic	390996	5686437	A2	-	-	-	1233	Very large dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70707	Magnetic	390953	5686467	A2	-	-	-	28	Small asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70708	Magnetic	391006	5686523	A2	-	-	-	45	Small anomaly identified on more than one survey line. Identified as a small magnetic anomaly measuring 10 nT in WA report 60077. Position and magnetic amplitude updated to reflect the most recent dataset. Differences in amplitude and positioning may be a result of differenced in positioning of the magnetometer.	7249 (WA 60077)
70709	Magnetic	390929	5686540	A2	-	-	-	104.81	Small anomaly identified on more than one survey line. Identified as a medium magnetic anomaly in WA report 60077. Position updated to reflect central position between the two magnetic anomalies, however the amplitude has been taken from the original tag based on side. Differences in amplitude and positioning may be a result of differenced in positioning of the magnetometer.	7143 (WA 60077)
70710	Magnetic	390948	5686611	A2	-	-	-	30	Small asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70711	Magnetic	390917	5686623	A2	-	-	-	67	Medium asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70712	Magnetic	390907	5686591	A2	-	-	-	72	Large asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70713	Magnetic	390876	5686715	A2	-	-	-	832	Very large anomaly identified on one survey line. Identified as a small magnetic anomaly measuring 16 nT in WA report 60077. Position and magnetic amplitude updated to reflect the most recent dataset. Differences in amplitude and positioning may be a result of differenced in positioning of the magnetometer.	7264 (WA 60077)
70714	Magnetic	390886	5686791	A2	-	-	-	35	Small asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70715	Magnetic	390881	5686810	A2	-	-	-	90	Medium anomaly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70716	Magnetic	390889	5686683	A2	-	-	-	95	Medium dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70717	Magnetic	390925	5686721	A2	-	-	-	337	Large anomaly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70718	Dark reflector	390957	5686757	A2	1.3	0.1	0.3	-	Relatively square dark reflector with a broad, distinct shadow.	-
70719	Magnetic	390952	5686859	A2	-	-	-	168	Large positive monopole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70720	Magnetic	390961	5686859	A2	-	-	-	346	Large positive monopole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70721	Magnetic	390902	5686856	A2	-	-	-	225	Large anomaly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70722	Magnetic	390878	5686858	A2	-	-	-	53	Medium anomaly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70723	Debris	390923	5686901	A2	1.7	0.6	0.6	221	Distinct rounded dark reflector with height. Corresponds with a large magnetic anomaly indicating ferrous material. Possibly has an associated linear dark reflector which may be a rope/chain.	-
70724	Rope/chain	390933	5686911	A2	12.7	0.1	0	-	Curvilinear dark reflector with height. Appears have associated rounded object with height at one end. Feature does not have an associated magnetic signal, which may indicate a length of rope.	-
70725	Debris	390932	5686916	A2	3.9	0.3	0.2	-	Linear dark reflector with height. Possibly a linear piece od debris with associated curvilinear dark reflector, however may also be part of curvilinear dark reflector.	-
70726	Magnetic	390858	5686931	A2	-	-	-	78	Medium positive monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70727	Magnetic	390965	5686988	A2	-	-	-	30	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70728	Magnetic	390843	5687079	A2	-	-	-	83	Medium dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70729	Magnetic	390882	5687060	A2	-	-	-	106	Large positive monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70730	Magnetic	390868	5687031	A2	-	-	-	34	Small irregular anomaly possibly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70731	Magnetic	390871	5687057	A2	-	-	-	71	Medium negative monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70732	Debris	390654	5687123	A2	4.1	0.3	0.1	-	Fairly straight linear dark reflector with a slight shadow. Possibly has an associated object with height at one end. Possible linear item of debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70733	Dark reflector	390654	5687124	A2	1.6	0.4	0.1	-	Dark reflector with shadow. Identified at one end of a linear item of debris, possibly related.	-
70734	Dark reflector	390644	5687102	A2	2.5	0.9	0.2	-	Elongated dark reflector with an irregular shadow. Possible numerous objects close together.	-
70735	Magnetic	390557	5687053	A2	-	-	-	251	Large dipole identified on more than one survey line. Possibly indicating a buried item of ferrous debris.	-
70736	Magnetic	390648	5687044	A2	-	-	-	34	Small anomaly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70737	Debris	390770	5687081	A2	15.2	0.4	1.6	-	Curvilinear dark reflector with height. Two distinct object with height identified nearby which may be related. Feature is close to a marker buoy on the admiralty chart. Possibly modern anthropogenic however as it is slightly offset from the buoy position, it has been retained as potential archaeology.	-
70738	Dark reflector	390773	5687082	A2	0.6	0.5	0.7	-	Distinct dark reflector with shadow. Feature is close to a marker buoy on the admiralty chart. Possibly modern anthropogenic however as it is slightly offset from the buoy position, it has been retained as potential archaeology.	-
70739	Dark reflector	390765	5687073	A2	1.1	0.8	0.4	-	Distinct, angular dark reflector with a broad shadow. Feature is close to a marker buoy on the admiralty chart. Possibly modern anthropogenic however as it is slightly offset from the buoy position, it has been retained as potential archaeology.	-
70740	Dark reflector	390707	5687025	A2	2.1	0.3	0.2	-	Elongated dark reflector with a relatively broad, distinct shadow. Possibly related to nearby buoy, however this isn't clear and as such has been retained as potential archaeology.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70741	Magnetic	390711	5687012	A2	-	-	-	31	Small negative monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70742	Magnetic	390682	5687023	A2	-	-	-	31	Small irregular anomaly only identified on one survey line, prob. Possibly indicative of buried item of ferrous debris.	-
70743	Magnetic	390726	5686959	A2	-	-	-	20	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70744	Magnetic	390803	5686953	A2	-	-	-	59	Medium dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70745	Magnetic	390753	5686912	A2	-	-	-	91	Medium positive monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70746	Magnetic	390738	5686899	A2	-	-	-	77	Medium dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70747	Rope/Chain	390621	5686978	A2	34	0.1	0	-	Curvilinear dark reflector with slight shadow. Feature appeared to be round on itself. Feature does not have an associated magnetic signal, which may indicate a length of rope.	-
70748	Dark reflector	390649	5686872	A2	1.5	0.9	0.4	-	Distinct, relatively rectangular dark reflector with a broad shadow. Some possible disturbance to surrounding seabed.	-
70749	Dark reflector	390636	5686868	A2	1.2	0.2	0.4	-	Distinct, relatively rectangular dark reflector with a broad shadow. Some possible disturbance to surrounding seabed. Similar, but smaller object identified nearby.	-
70750	Magnetic	390751	5686821	A2	-	-	-	61	Medium dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70751	Magnetic	390698	5686839	A2	-	-	-	17	Small asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70752	Magnetic	390687	5686749	A2	-	-	-	21	Small negative monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70753	Dark reflector	390651	5686792	A2	2.2	0.7	0.5	-	Distinct, angular dark reflector with a broad shadow. Close to a small debris field, possible associated item of debris.	-
70754	Debris field	390644	5686797	A2	9.3	8.8	1	-	A group of numerous angular dark reflectors with distinct shadows. Identified on the MBES data as three small mounds within a depression. Possible debris field.	-
70755	Rope/chain	390635	5686775	A2	26.6	0.1	0.2	-	Relatively straight linear dark reflector with slight height. Feature appears to bend round on itself. Feature does not have an associated magnetic signal, which may indicate a length of rope.	-
70756	Dark reflector	390713	5686791	A2	3.4	0.8	0.3	-	Relatively square dark reflector with a broad, distinct shadow. Possible item of debris.	-
70757	Dark reflector	390788	5686757	A2	1.2	0.2	0.3	-	Distinct angular dark reflector with a broad shadow, One of a series of three similar features. Possible debris.	-
70758	Dark reflector	390787	5686756	A2	1.5	0.7	0.2	-	Distinct angular dark reflector with a broad shadow, One of a series of three similar features. Possible debris.	-
70759	Dark reflector	390786	5686758	A2	1	0.5	0.3	-	Distinct angular dark reflector with a broad shadow, One of a series of three similar features. Possible debris.	-
70760	Magnetic	390595	5686669	A2	-	-	-	39	Small positive monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70761	Magnetic	390685	5686680	A2	-	-	-	125	Large dipole possibly identified on more than one survey line. Identified as a small magnetic anomaly in WA report 60077. Magnetic amplitude updated to reflect the most recent dataset. The position has been updated as the central point between the two tags. Differences in amplitude and positioning may be a result of differences in positioning of the towed magnetometer.	7279 (WA 60077)
70762	Debris	390737	5686648	A2	1.1	0.5	0.3	52	Rectangular dark reflector with a broad distinct shadow close to another similar feature. Possible associated medium magnetic anomaly indicating ferrous debris. Cannot discern whether magnetic anomaly is related to one or both of the features.	-
70763	Debris	390741	5686645	A2	1.8	0.1	0.3	52	Elongated, rectangular dark reflector with a distinct shadow close to another similar feature. Possible associated medium magnetic anomaly indicating ferrous debris. Cannot discern whether magnetic anomaly is related to one or both of the features.	-
70764	Magnetic	390676	5686614	A2	-	-	-	161	Large dipole possibly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70765	Magnetic	390880	5686471	A2	-	-	-	28	Small dipole only identified on one survey line. Identified as a small magnetic anomaly in WA report 60077. Magnetic amplitude updated to reflect the most recent dataset. The position has been updated as the central point between the two tags. Differences in amplitude and positioning may be a result of differences in positioning of the towed magnetometer.	7258 (WA 60077)
70766	Magnetic	390861	5686429	A2	-	-	-	20	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70767	Magnetic	390850	5686391	A2	-	-	-	135	Large negative monopole identified on more than one survey line. Identified as a medium magnetic anomaly in WA report 60077. Magnetic amplitude updated to reflect the most recent dataset. The position has been updated as the central point between the two tags. Differences in amplitude and positioning may be a result of differences in positioning of the towed magnetometer.	7250 (WA 60077)
70768	Magnetic	390872	5686387	A2	-	-	-	119	Large dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70769	Magnetic	390825	5686505	A2	-	-	-	252	Large dipole possibly identified on more than one survey line. Identified as a small magnetic anomaly in WA report 60077. Magnetic amplitude updated to reflect the most recent dataset. The position has been updated as the central point between the tags. Differences in amplitude and positioning may be a result of differences in positioning of the towed magnetometer.	7259 (WA 60077)
71236	Magnetic	390829.7	5686491	A2	-	-	-	34	Small dipole possibly related to 70769. Nothing identified on the sonar or bathymetry data therefore possibly indicative of buried item of ferrous debris.	-
70770	Magnetic	390754	5686324	A2	-	-	-	143	Large irregular anomaly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70771	Magnetic	390741	5686335	A2	-	-	-	458	Large dipole possibly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70772	Magnetic	390742	5686365	A2	-	-	-	32	Small dipole identified on more than one survey line	-
70773	Magnetic	390730	5686370	A2	-	-	-	72	Medium dipole only identified on one survey line	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70774	Magnetic	390728	5686393	A2	-	-	-	55	Medium dipole only identified on one survey nonidentified as a small magnetic anomaly in WA report 60077. Magnetic amplitude updated to reflect the most recent dataset. The position has been updated as the central point between the tags. Differences in amplitude and positioning may be a result of differences in positioning of the towed magnetometer.	7256 (WA 60077)
70775	Magnetic	390748	5686410	A2	-	-	-	122	Large asymmetric dipole only identified on one survey line. Identified as a medium magnetic anomaly in WA report 60077. Magnetic amplitude updated to reflect the most recent dataset. The position has been updated as the central point between the tags. Differences in amplitude and positioning may be a result of differences in positioning of the towed magnetometer.	7251 (WA 60077)
70776	Magnetic	390766	5686473	A2	-	-	-	265	Large dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70777	Debris	390704	5686516	A2	3	2.3	0.9	-	Irregularly shaped, poorly defined dark reflector. Identified in WA report as a large item of debris. Dimensions taken from the original tag as they are slightly larger, possibly indicating partial burial of the feature. Position updated to reflect the integration with the most recent dataset.	7123 (WA 60077)
70778	Magnetic	390671	5686434	A2	-	-	-	59	Small negative monopole only identified on one survey line. Identified as a medium magnetic anomaly in WA report 60077. Magnetic amplitude has been taken from the original magnetometer data based on size. The position has been updated as the central point between the tags. Differences in amplitude and positioning may be a result of differences in positioning of the towed magnetometer.	7255 (WA 60077)
70779	Magnetic	390569	5686542	A2	-	-	-	22	Small asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70780	Magnetic	390553	5686394	A2	-	-	-	25	Small dipole identified on more than one survey line, values from adjacent. Possibly indicative of buried item of ferrous debris.	-
70781	Magnetic	390672	5686322	A2	-	-	-	69	Medium dipole in noisy area. Possibly indicative of buried item of ferrous debris.	-
70782	Magnetic	390528	5686311	A2	-	-	-	22	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70783	Magnetic	390530	5686351	A2	-	-	-	123	Large anomaly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70784	Magnetic	390554	5686335	A2	-	-	-	63	Medium dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70785	Magnetic	390597	5686301	A2	-	-	-	218	Large asymmetric dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70786	Magnetic	390574	5686371	A2	-	-	-	85	Medium dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70787	Magnetic	390619	5686367	A2	-	-	-	64	Medium dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70788	Magnetic	390591	5686355	A2	-	-	-	38	Small asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70789	Magnetic	390610	5686380	A2	-	-	-	46	Small asymmetric dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70790	Magnetic	390556	5686251	A2	-	-	-	79	Medium anomaly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70791	Magnetic	390537	5686176	A2	-	-	-	23	Small positive monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70792	Magnetic	390513	5686173	A2	-	-	-	82	Medium dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70793	Magnetic	390536	5686197	A2	-	-	-	33	Small positive monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70794	Magnetic	390566	5686206	A2	-	-	-	33	Small positive monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70795	Dark reflector	390612	5686199	A2	0.5	0.3	0.5	-	Distinct dark reflector with large shadow.	-
70796	Magnetic	390274	5686073	A2	-	-	-	47	Small anomaly only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70797	Magnetic	390315	5686079	A2	-	-	-	226	Large dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70798	Magnetic	390355	5686075	A2	-	-	-	66	Medium dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70799	Magnetic	390433	5686158	A2	-	-	-	23	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70800	Magnetic	390385	5686123	A2	-	-	-	47	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70801	Magnetic	390330	5686141	A2	-	-	-	46	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70802	Magnetic	390396	5686091	A2	-	-	-	41	Small irregular anomaly only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70803	Magnetic	390466	5686137	A2	-	-	-	20	Small positive monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70804	Magnetic	390291	5686097	A2	-	-	-	22	Small asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70805	Magnetic	390413	5686203	A2	-	-	-	105	Large anomaly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70806	Debris	390285	5686217	A2	146.2	22.3	0	39	Small dipole identified on more than one survey line of the most recent geophysical data. Identified in WA report 60070 as a large dark reflector. On review of the originally tagged sonar image, it looks to be a possible natural feature, however due to the fact there is a possible associated magnetic anomaly, the feature has been retained as potential archaeology. The dimensions have been taken from the original tag, and the magnetic amplitude from the recent data. The position has been updated to reflector the central position of the two tags.	6062 (WA 60070)
70807	Magnetic	390196	5686250	A2	-	-	-	23	Small dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70808	Magnetic	390425	5686252	A2	-	-	-	32	Small dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70809	Magnetic	390485	5686247	A2	-	-	-	1350	Very large dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70810	Magnetic	390441	5686275	A2	-	-	-	35	Small negative monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70811	Magnetic	390394	5686283	A2	-	-	-	38	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70812	Magnetic	390308	5686313	A2	-	-	-	12	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70813	Dark reflector	390446	5686397	A2	0.6	0.5	0.6	-	Relatively square dark reflector with a distinct shadow. Surrounded by numerous small objects with height. Possibly item of debris.	-
70814	Dark reflector	390383	5686416	A2	0.2	0.1	0.6	-	Narrow, elongated dark reflector with a broad distinct shadow in a relatively featureless area of seafloor. Possible item of debris.	-
70815	Magnetic	390175	5686496	A2	-	-	-	36	Small dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70816	Magnetic	390347	5686488	A2	-	-	-	53	Medium negative monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70817	Magnetic	390303	5686545	A2	-	-	-	18	Small negative monopole only identified on one survey line. Identified as a small magnetic anomaly in WA report 60077. Magnetic amplitude has been taken from most recent magnetometer data based on size. The position has been updated as the central point. Differences in amplitude and positioning may be a result of differences in positioning of the towed magnetometer.	7261 (WA 60077)
70818	Magnetic	390526	5686705	A2	-	-	-	92	Large dipole identified on more than one survey nonidentified as a small magnetic anomaly in WA report 60077. Magnetic amplitude has been taken from the most recent magnetometer data based on size. The position has been updated as the central point. Differences in amplitude and positioning may be a result of differences in positioning of the towed magnetometer.	-
70819	Magnetic	390496	5686727	A2	-	-	-	19	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70820	Magnetic	390475	5686761	A2	-	-	-	87	Medium asymmetric dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70821	Magnetic	390497	5686683	A2	-	-	-	48	Small positive monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70822	Magnetic	390234	5686724	A2	-	-	-	62	Medium negative monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70823	Magnetic	390259	5686715	A2	-	-	-	44	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70824	Magnetic	390383	5686745	A2	-	-	-	27	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70825	Magnetic	390333	5686821	A2	-	-	-	65	Medium irregular dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70826	Magnetic	390303	5686799	A2	-	-	-	46	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70827	Magnetic	390271	5686847	A2	-	-	-	26	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70828	Magnetic	390403	5686839	A2	-	-	-	22	Small asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70829	Magnetic	390409	5686877	A2	-	-	-	21	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70830	Magnetic	390379	5686891	A2	-	-	-	54	Medium dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70831	Debris	390363	5686881	A2	1.1	0.6	0.3	-	Small, circular dark reflector with a bright reflector in the centre and a relatively broad, distinct shadow. Feature is in relatively featureless area of seabed.	-
70832	Magnetic	390402	5686941	A2	-	-	-	33	Small positive monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70833	Debris	390468	5686969	A2	1.3	0.9	0.2	-	Circular dark reflector with a broad, distinct shadow. Looks anthropogenic.	-
70834	Magnetic	390313	5687025	A2	-	-	-	32	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70835	Magnetic	390410	5687069	A2	-	-	-	84	Medium asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70836	Magnetic	390427	5687000	A2	-	-	-	68	Medium asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70837	Debris	390348	5687016	A2	13.9	0.4	0.1	-	An indistinct linear dark reflector with height and a patchy bright reflector at one end. Possible linear item of debris.	-
70838	Dark reflector	390336	5686991	A2	2.1	0.5	0.4	-	Large dark reflector with a distinct shadow in an area of flat seabed.	-
70839	Magnetic	390227	5686870	A2	-	-	-	141	Large negative monopole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70840	Magnetic	390172	5686962	A2	-	-	-	58	Medium asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70841	Magnetic	390233	5686997	A2	-	-	-	12	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70842	Magnetic	390160	5686892	A2	-	-	-	61	Medium asymmetric dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70843	Magnetic	390114	5686870	A2	-	-	-	37	Small positive monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70844	Magnetic	390131	5686938	A2	-	-	-	62	Medium dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70845	Magnetic	390019	5686947	A2	-	-	-	67	Medium dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70846	Debris	390098	5686964	A2	2.6	0.5	1.1	38	One of a series of two similar, angular dark reflectors with a broad, distinct shadow. Possibly has a corresponding small magnetic anomaly, however due to the proximity of the two features it is difficult to discern whether the magnetic anomaly relates to one or both of the features. Possible items of debris	-
70847	Debris	390104	5686969	A2	11.8	0.7	0.7	38	One of a series of two similar, angular dark reflectors with a broad, distinct shadow. Possibly has a corresponding small magnetic anomaly, however due to the proximity of the two features it is difficult to discern whether the magnetic anomaly relates to one or both of the features. Possible items of debris	-
70848	Magnetic	390058	5686927	A2	-	-	-	329	Large dipole possibly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70849	Magnetic	390013	5686922	A2	-	-	-	389	Large asymmetric dipole possibly seen on second line. Possibly indicative of buried item of ferrous debris.	-
70850	Magnetic	389974	5686920	A2	-	-	-	85	Medium positive monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70851	Magnetic	390033	5686891	A2	-	-	-	121	Large asymmetric dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70852	Magnetic	389945	5686895	A2	-	-	-	86	Medium dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70853	Magnetic	389993	5686856	A2	-	-	-	780	Very large dipole identified on more than one survey line. Identified as a small magnetic anomaly in WA report 60077. Magnetic amplitude has been taken from the most recent magnetometer data based on size. The position has been updated as the central point between the previous and newest tag. Differences in amplitude and positioning may be a result of differences in positioning of the towed magnetometer.	7224 (WA 60077)
70854	Magnetic	389969	5686831	A2	-	-	-	28	Small asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70855	Magnetic	389947	5686799	A2	-	-	-	40	Small dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70856	Magnetic	390004	5686837	A2	-	-	-	17	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70857	Magnetic	390094	5686851	A2	-	-	-	44	Small asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70858	Magnetic	390179	5686845	A2	-	-	-	26	Small positive monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70859	Magnetic	390072	5686802	A2	-	-	-	45	Small dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70860	Magnetic	390215	5686799	A2	-	-	-	20	Small negative monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70861	Magnetic	390159	5686826	A2	-	-	-	52	Medium dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70862	Magnetic	390153	5686725	A2	-	-	-	110	Large dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70863	Magnetic	390141	5686727	A2	-	-	-	26	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70864	Magnetic	390026	5686738	A2	-	-	-	31	Small dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70865	Magnetic	389968	5686672	A2	-	-	-	23	Small dipole only identified on one survey line, close to cable. Possibly indicative of buried item of ferrous debris. Feature may be associated with the installation of the current Thanet export cable, however without further investigation this cannot be confirmed and, as such, has been retained as potential archaeology.	-
70866	Magnetic	389822	5686595	A2	-	-	-	31	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70867	Magnetic	390002	5686479	A2	-	-	-	20	Small asymmetric dipole only seen on one survey line. Possibly indicative of buried item of ferrous debris.	-
70868	Magnetic	389953	5686447	A2	-	-	-	26	Small negative monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70869	Magnetic	389958	5686301	A2	-	-	-	29	Small anomaly identified on more than one survey line, positive value is cut by EOL. Possibly indicative of buried item of ferrous debris.	-
70870	Magnetic	389987	5686446	A2	-	-	-	54	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70871	Magnetic	390039	5686407	A2	-	-	-	100	Large negative monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70872	Magnetic	390056	5686298	A2	-	-	-	27	Small dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70873	Magnetic	390139	5686355	A2	-	-	-	15	Small positive monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70874	Magnetic	390123	5686283	A2	-	-	-	114	Large positive monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70875	Magnetic	390156	5686233	A2	-	-	-	250	Large anomaly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70876	Debris	390115	5686184	A2	1	0.1	0.4	586	Small rounded dark reflector with a distinct, but tapered shadow and some possible associated scour. Corresponds with a large magnetic anomaly, indicating ferrous debris.	-
70877	Dark reflector	390037	5686208	A2	0.8	0.3	0.3	-	Curved dark reflector with shadow in an area of flat seabed.	-
70878	Magnetic	389939	5686232	A2	-	-	-	58	Medium dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70879	Debris	390001	5686045	A2	60	3	0.7	76	Long, slightly wavy linear dark reflector with height. Feature possibly bends tightly back on itself. Possibly separate elongated object with an irregular shadow at its south eastern end, identified as a slightly prominent mound on the MBES data, however this is not clearly separate feature and, as such, has been grouped as one. Feature has an associated medium magnetic anomaly, indicating ferrous debris.	-
70880	Magnetic	390089	5686029	A2	-	-	-	17	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70881	Magnetic	390023	5685988	A2	-	-	-	23	Small dipole identified on more than one survey line.. Possibly indicative of buried item of ferrous debris.	-
70882	Magnetic	390355	5685966	A2	-	-	-	29	Small dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70883	Magnetic	390335	5685934	A2	-	-	-	15	Small positive monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70884	Magnetic	390277	5685961	A2	-	-	-	29	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70885	Magnetic	390225	5686009	A2	-	-	-	52	Medium dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70886	Magnetic	390070	5685979	A2	-	-	-	23	Small dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70887	Magnetic	390175	5686006	A2	-	-	-	20	Small dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70888	Magnetic	390280	5685992	A2	-	-	-	11	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70889	Magnetic	390303	5685971	A2	-	-	-	20	Small dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70890	Debris	390263	5685923	A2	0.7	0.2	0.2	464	Distinct angular dark reflector with three short, straight prongs protruding from the side and some associated scour. Large associated magnetic anomaly indicates ferrous debris.	-
70891	Magnetic	390247	5685910	A2	-	-	-	369	Large dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70892	Magnetic	390205	5685918	A2	-	-	-	20	Small anomaly identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70893	Magnetic	390244	5685732	A2	-	-	-	20	Small anomaly identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70894	Magnetic	390183	5685719	A2	-	-	-	18	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70895	Magnetic	390080	5685785	A2	-	-	-	49	Small positive monopole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70896	Rope/chain	389892	5685888	A2	42.8	1.1	0	474	Large anomaly identified on more than one survey line of the most recent geophysical data, close to other similar magnetic anomalies. Possibly part of a linear trend. Identified in WA 73390 NEMO report as a long linear dark reflector without a shadow but possibly associated with a small magnetic anomaly. Although the linear feature was not identified on the most recent sonar data, the linear-trending magnetic anomaly suggests the feature is still present, however may be buried by mobile sediments.	7022 (WA73390, NEMO)
70897	Magnetic	389993	5685876	A2	-	-	-	48	Small anomaly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70898	Magnetic	390052	5685905	A2	-	-	-	67	Medium asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70899	Magnetic	390003	5685800	A2	-	-	-	30	Small anomaly possibly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70900	Magnetic	389964	5685761	A2	-	-	-	19	Small asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris. Identified in WA NEMO report (WA 73390) as a small anomaly measuring 11 nT.	7023 (WA73390, NEMO)
70901	Magnetic	389745	5685758	A2	-	-	-	46	Small anomaly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70902	Debris	389739	5685778	A2	4.3	0.2	0.1	-	Distinct short linear dark reflector with height. Possible linear item of debris.	-
70903	Dark reflector	389703	5685840	A2	0.6	0.4	0.3	-	Distinct, elongated isolated dark reflector with a broad shadow. Feature comprises two, short straight parallel sections. Possible small object within shadow.	-
70904	Magnetic	389622	5685839	A2	-	-	-	102	Large anomaly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70905	Bright reflector	389744	5685890	A2	1.1	0.2	0	-	Circular bright reflector with a dark reflector in its centre. Some possible associated scour.	-
70906	Magnetic	389594	5685952	A2	-	-	-	54	Medium negative monopole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70907	Magnetic	389649	5685956	A2	-	-	-	22	Small dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70908	Magnetic	389713	5685983	A2	-	-	-	47	Small dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70909	Debris field	389737	5686000	A2	6.1	2.9	0.3	59	Small, irregularly shapes and poorly defined patch of dark reflectors with a corresponding medium magnetometer anomaly. Possible debris field.	-
70910	Rope/chain	389737	5685980	A2	13.4	0.2	0.1	-	Linear dark reflector with height. Possible object with height at one end. Feature does not have an associated magnetic signal, which may indicate a length of rope.	-
70911	Rope/chain	389772	5685980	A2	14.9	0.6	0.2	61	Linear dark reflector with height and associated medium magnetic anomaly indicating ferrous debris. Possible rope/chain. Magnetic anomaly extends beyond the linear reflector identified on the sonar data, possibly indicating partial burial. The magnetic anomaly is larger at the northern end, suggesting a higher concentration of ferrous material which may be indicative of a buried anchor and its associated chain, however without further investigation this cannot be confirmed.	-
70912	Magnetic	389840	5686036	A2	-	-	-	31	Small dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70913	Magnetic	389791	5686037	A2	-	-	-	15	Small asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70914	Recorded wreck	389816	5686074	A3	-	-	-	-	UKHO position of a barge which sank while in tow of tug Influence on 30 August 1986. The barge was soon after moved closer to shore and then salvaged. The record was amended to 'lift'. A series of small magnetic anomalies are identified within the area, however they are not clearly associated with the wreck position and, as such, have been kept separate. While it is possible that material from the barge remains on the seabed in the general vicinity, as a modern barge it would not be of archaeological interest.	58820 (UKHO), 7287 (WA73390, NEMO), 2162 (WA, 2017B)
70915	Magnetic	389847	5686101	A2	-	-	-	28	Small dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70916	Magnetic	389801	5686146	A2	-	-	-	150	Large dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70917	Debris	389883	5686234	A2	4	0.4	0.2	32	Irregularly shaped, elongated dark reflector with slight height. Similar, but less distinct feature identified close by. Small associated magnetic anomaly indicated ferrous material.	-
70918	Magnetic	389635	5686079	A2	-	-	-	34	Small dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70919	Magnetic	389682	5686079	A2	-	-	-	19	Small asymmetric dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70920	Magnetic	389805	5686451	A2	-	-	-	13	Small asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70921	Magnetic	389713	5686399	A2	-	-	-	13	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70922	Magnetic	389735	5686421	A2	-	-	-	55	Medium dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70923	Magnetic	389722	5686477	A2	-	-	-	63	Medium dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70924	Magnetic	389810	5686861	A2	-	-	-	117	Medium dipole only identified on one survey line. Identified as a small magnetic anomaly in WA report 60077. Magnetic amplitude has been taken from the most recent magnetometer data based on size. The position has been updated as the central point between the previous and newest tag. Differences in amplitude and positioning may be a result of differences in positioning of the towed magnetometer. Possibly part of a linear trend.	7248 (WA 60077)
70925	Magnetic	389773	5686879	A2	-	-	-	36	Small dipole only identified on one survey line. Possibly part of a linear trend. Possibly indicative of buried item of ferrous debris.	-
70926	Magnetic	389839	5686843	A2	-	-	-	54	Medium dipole only identified on one survey line. Possibly part of a linear trend. Possibly indicative of buried item of ferrous debris.	-
70927	Magnetic	389920	5686841	A2	-	-	-	428	Large dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70928	Magnetic	389927	5686887	A2	-	-	-	31	Small negative monopole. Possibly indicative of buried item of ferrous debris.	-
70929	Magnetic	389857	5686892	A2	-	-	-	16	Small asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70930	Magnetic	389924	5686927	A2	-	-	-	65	Medium dipole only seen on one survey line. Possibly indicative of buried item of ferrous debris.	-
70931	Magnetic	389885	5686919	A2	-	-	-	55	Medium dipole possibly seen on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70932	Magnetic	389781	5686946	A2	-	-	-	975	Very large asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70933	Magnetic	389789	5686982	A2	-	-	-	91	Medium asymmetric dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70934	Magnetic	389719	5686929	A2	-	-	-	20	Small asymmetric dipole only seen on one survey line. Possibly indicative of buried item of ferrous debris.	-
70935	Magnetic	389861	5686937	A2	-	-	-	13	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70936	Rope/chain	389943	5686960	A2	19.9	1.8	0.1	-	A faint curvilinear dark reflector with slight height identified coiled round on itself. Possible coiled length of rope.	-
70937	Debris	389929	5686959	A2	1.5	0.7	0.4	-	Two narrow, elongated dark reflectors running parallel to each other with a broad, distinct shadow. Likely to be two sides of the same object.	-
70938	Debris	389906	5686968	A2	8.9	0.2	0.2	1287	Relatively straight, distinct linear dark reflector with height. Feature appears to have a very large associated magnetic anomaly which indicates ferrous material, however due to the size of the magnetic anomaly, and the proximity to the harbour wall, it cannot be guaranteed that this magnetic anomaly is associated with this feature.	-
70939	Rope/Chain	389872	5686961	A2	4.1	0.1	0.1	-	A faint curvilinear dark reflector with slight height identified coiled round on itself. Possible coiled length of rope.	-
70940	Magnetic	389677	5686761	A2	-	-	-	18	Small negative monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70941	Magnetic	389738	5686759	A2	-	-	-	103	Large dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70942	Magnetic	389753	5686812	A2	-	-	-	13	Small dipole only identified on one survey line. Identified as a small magnetic anomaly in WA report 60077. Magnetic amplitude has been taken from the most recent magnetometer data based on size. The position has been updated as the central point between the previous and newest tag. Differences in amplitude and positioning may be a result of differences in positioning of the towed magnetometer.	7280 (WA 60077)
70943	Magnetic	389721	5686833	A2	-	-	-	89	Medium dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70944	Magnetic	389690	5686851	A2	-	-	-	974	Very large dipole only identified on one survey nonidentified as a small magnetic anomaly in WA report 60077. Magnetic amplitude has been taken from the most recent magnetometer data based on size. The position has been updated as the central point between the previous and newest tag. Differences in amplitude and positioning may be a result of differences in positioning of the towed magnetometer.	7247 (WA 60077)
70945	Debris	389540	5686856	A2	6.5	0.3	0.1	153	Curvilinear dark reflector with height. Possible linear item of debris. Feature appears to have an associated large magnetic anomaly indicating ferrous debris.	-
70946	Debris	389530	5686861	A2	3.2	0.9	1.1	-	Distinct, relatively square dark reflector with a broad shadow. Identified in WA report 60077 as two separate items of debris, both of a similar size, however these have been grouped together based on proximity and the most recent dataset. The length and width have been taken from the most recent sonar data, however the height has been taken from the original report based on the size. Positioning has been updated to reflector the central position of all the tags.	7171 (WA 60077), 7174 (WA 60077)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70947	Magnetic	389537	5686816	A2	-	-	-	682	Very large negative monopole identified on more than one survey line. Identified as a small magnetic anomaly in WA report 60077. Magnetic amplitude has been taken from the original magnetometer data based on size. The position has been updated as the central point between the previous and newest tag. Differences in amplitude and positioning may be a result of differences in positioning of the towed magnetometer.	7226 (WA 60077)
70948	Magnetic	389567	5686907	A2	-	-	-	286	Large dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70949	Magnetic	389680	5686903	A2	-	-	-	202	Large dipole identified on more than one survey line. Identified in a noisy area of magnetometer data.. Possibly indicative of buried item of ferrous debris.	-
70950	Magnetic	389651	5686917	A2	-	-	-	132	Large irregular anomaly, possibly seen on a second line but not distinct. Possibly indicative of buried item of ferrous debris.	-
70951	Magnetic	389672	5686931	A2	-	-	-	115	Large asymmetric dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70952	Debris	389583	5686972	A2	2.6	0.4	1.2	104	Debris field with numerous dark reflectors and a distinct shadow. Could be rocks associated with harbour breakwater, however as the feature appears to correlate with a medium magnetic anomaly, which may indicate some ferrous material, the feature has been retained as potential archaeology.	-
70953	Magnetic	389636	5686969	A2	-	-	-	70	Medium anomaly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70954	Debris	389568	5686986	A2	2.3	0.7	0.9	263	Distinct, slightly angular dark reflector with a broad shadow. Appears to correspond with a large magnetic anomaly indicating ferrous material. Possibly part of nearby breakwater and harbour wall, however feature has been retained based on magnetic amplitude.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70955	Dark reflector	389614	5686992	A2	0.6	0.1	0.3	-	Distinct, elongated dark reflector with a broad shadow. Isolated feature on the seabed. Possible item of debris.	-
70956	Debris field	389538	5686973	A2	2.6	0.4	0.5	252	Patch of numerous dark reflectors with height. Possibly natural or part of harbour wall, however appears to have associated large magnetic anomaly. Due to the proximity to the harbour wall, it is possible that this is modern anthropogenic however has been retained as potential archaeology based on size.	-
70957	Magnetic	389482	5686927	A2	-	-	-	113	Large anomaly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70958	Magnetic	389504	5686908	A2	-	-	-	93	Medium dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70959	Magnetic	389502	5686938	A2	-	-	-	33	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70960	Rope/Chain	389405	5686828	A2	51.3	0.3	0.2	34	Long, curvilinear ark reflector with a slight height. Feature appears to bend round and overlap itself. Small associated magnetic anomaly indicates ferrous material. Possible coiled length of rope/chain.	-
70961	Dark reflector	389409	5686848	A2	2.6	0.6	0.4	-	Rectangular dark reflector with a broad, distinct shadow. Possible item of debris.	-
70962	Debris	389513	5686873	A2	2.7	1.3	0.9	-	Distinct, angular dark reflector with long, but tapered shadow. Identified in WA report 60077 as an item of debris. Dimensions have been taken from the original tag, based on size. Differences in dimensions may reflector partial burial of the feature. The position has been updated to reflect the central point between the two tags.	7175 (WA 60077)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70963	Debris	389476	5686885	A2	2.1	0.8	0.3	19	Small negative monopole identified on one survey line. Feature is likely related to an item of debris identified in WA report 60077, which may suggest a ferrous item of debris. Though this item of debris wasn't identified on the most recent sonar data, this may be due to the burial of the feature by mobile sediments. As such, the dimensions have been taken from the original report, and the position updated to reflect the central point between the two tags.	7176 (WA 60077)
70964	Rope/chain	389410	5686880	A2	20.2	0.2	0.1	15	Curvilinear dark reflector with a slight shadow. Associated small magnetic anomaly indicates ferrous material. Possible length or rope/chain.	-
70965	Magnetic	389433	5686918	A2	-	-	-	17	Small negative monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70966	Rope/chain	389412	5686972	A2	28.4	1.3	0.2	-	Short curvilinear dark reflector with height. Feature may have associated magnetic anomaly however, due to the proximity to a cable with a large associated magnetic anomaly, this is difficult to discern. Therefore the potential remains for ferrous material.	-
70967	Rope/chain	389404	5686950	A2	15.6	0	0.1	-	Faint curvilinear dark reflector with height. Feature may have associated magnetic anomaly however, due to the proximity to a pipeline with a large associated magnetic anomaly, this is difficult to discern. Therefore the potential remains for ferrous material and, as such, the feature has been retained as potential archaeology. Possible length of rope/chain.	-
70968	Magnetic	389248	5686909	A2	-	-	-	115	Large irregular anomaly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70969	Magnetic	389336	5686926	A2	-	-	-	17	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70970	Magnetic	389168	5686926	A2	-	-	-	29	Small dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70971	Magnetic	389109	5686883	A2	-	-	-	18	Small dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70972	Debris	389086	5686867	A2	1.7	1	0	14	Small dipole identified on more than one survey line. Appears to correspond with an isolated dark reflector identified in WA report 60060 indicating a ferrous item of debris. Though this feature wasn't identified on the most recent sonar data, possibly indicating burial of the feature by mobile sediments, the dimensions have been taken from the original tag and the position updated to reflector the central point between the two tags.	6102 (WA 60070)
70973	Dark reflector	388976	5686871	A2	0.5	0.2	0.4	-	Distinct, slightly irregularly shaped dark reflector with a broad shadow.	-
70974	Magnetic	388854	5686878	A2	-	-	-	47	Small dipole possibly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70975	Magnetic	388848	5686888	A2	-	-	-	54	Small dipole possibly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70976	Magnetic	388766	5686800	A2	-	-	-	50	Medium dipole only identified on one survey line. Identified as a small magnetic anomaly in WA report 60077. Magnetic amplitude has been taken from the latest magnetometer data based on size. The position has been updated as the central point between the previous and newest tag. Differences in amplitude and positioning may be a result of differences in positioning of the towed magnetometer.	7231 (WA 60077)
70977	Magnetic	388669	5686725	A2	-	-	-	1030	Very large anomaly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70978	Magnetic	388574	5686622	A2	-	-	-	40	Small dipole only identified on one survey line. Identified as a small magnetic anomaly in WA report 60077. Magnetic amplitude has been taken from the original magnetometer data based on size. The position has been updated as the central point between the previous and newest tag. Differences in amplitude and positioning may be a result of differences in positioning of the towed magnetometer.	7228 (WA 60077)
70979	Magnetic	388632	5686631	A2	-	-	-	18	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70980	Magnetic	388685	5686641	A2	-	-	-	21	Small positive monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70981	Magnetic	388797	5686545	A2	-	-	-	56	Medium asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70982	Magnetic	388845	5686636	A2	-	-	-	15	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70983	Magnetic	388792	5686722	A2	-	-	-	87	Medium dipole identified over a few lines. Identified as a small magnetic anomaly in WA report 60077. Magnetic amplitude has been taken from the latest magnetometer data based on size. The position has been updated as the central point between the previous and newest tags. Differences in amplitude and positioning may be a result of differences in positioning of the towed magnetometer.	7229 (WA 60077)
70984	Magnetic	388868	5686714	A2	-	-	-	13	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70985	Magnetic	388906	5686727	A2	-	-	-	63	Medium anomaly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70986	Magnetic	388980	5686690	A2	-	-	-	27	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70987	Magnetic	388931	5686568	A2	-	-	-	17	Small asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70988	Magnetic	388979	5686600	A2	-	-	-	413	Large dipole identified on more than one survey line. Identified as a medium magnetic anomaly in WA report 60077. Magnetic amplitude has been taken from the latest magnetometer data based on size. The position has been updated as the central point between the previous and newest tags. Differences in amplitude and positioning may be a result of differences in positioning of the towed magnetometer.	7140 (WA 60077)
70989	Magnetic	388997	5686557	A2	-	-	-	31	Small anomaly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
70990	Magnetic	389026	5686580	A2	-	-	-	14	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70991	Dark reflector	389132	5686686	A2	3	2.5	0.3	-	Large, slightly rounded distinct dark reflector with a long, broad, irregular shadow and some associated scour identified on the sonar data. MBES data showed the feature to be a large circular mound within a depression. Identified in both WA report 60060 and 60077 as a large item of debris. UKHO record suggests an obstruction or possible boulder. The possibility remains that this is a natural feature, however it has been retained as potential archaeology based on size. Position and dimensions taken from the MBES data.	77614 (UKHO), 6104 (WA 60070), 7122 (WA 60077)
70992	Magnetic	389168	5686549	A2	-	-	-	63	Medium dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
70993	Magnetic	389273	5686618	A2	-	-	-	33	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70994	Magnetic	389560	5686769	A2	-	-	-	30	Small asymmetric dipole only seen on one survey line. Possibly indicative of buried item of ferrous debris.	-
70995	Magnetic	389463	5686615	A2	-	-	-	29	Small asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70996	Magnetic	389559	5686641	A2	-	-	-	26	Small asymmetric dipole only seen on one survey line. Identified as a medium magnetic anomaly in WA report 60077. Magnetic amplitude has been taken from the latest magnetometer data based on size. The position has been updated as the central point between the previous and newest tags. Differences in amplitude and positioning may be a result of differences in positioning of the towed magnetometer.	7142 (WA 60077)
70997	Magnetic	389671	5686613	A2	-	-	-	15	Small asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70998	Magnetic	389646	5686557	A2	-	-	-	35	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
70999	Magnetic	389613	5686483	A2	-	-	-	85	Medium dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71000	Magnetic	389672	5686481	A2	-	-	-	69	Medium dipole possibly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
71001	Magnetic	389649	5686495	A2	-	-	-	111	Large dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
71002	Magnetic	389644	5686428	A2	-	-	-	17	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
71003	Magnetic	389600	5686273	A2	-	-	-	11	Small negative monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71004	Magnetic	389627	5686313	A2	-	-	-	66	Medium anomaly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
71005	Magnetic	389584	5686320	A2	-	-	-	35	Small anomaly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
71006	Magnetic	389581	5686351	A2	-	-	-	18	Small dipole possibly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
71007	Magnetic	389483	5686289	A2	-	-	-	22	Small asymmetric dipole, possibly on more than one survey line but quite far away. Possibly indicative of buried item of ferrous debris.	-
71008	Magnetic	389433	5686275	A2	-	-	-	28	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71009	Recorded obstruction	389348	5686330	A3	-	-	-	-	UKHO records suggest an obstruction, possibly of a buried feature but most recently listed as a rocky area, last identified in 2011. Nothing was identified on the most recent geophysical data however the potential remains that the feature has been buried by mobile sediments and, as such, has been retained as potential archaeology.	15015 (UKHO), 7284 (WA73390, NEMO), 2195 (WA, 2017B)
71010	Magnetic	389452	5686398	A2	-	-	-	24	Small dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
71011	Magnetic	389460	5686399	A2	-	-	-	15	Small positive monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71012	Magnetic	389365	5686475	A2	-	-	-	22	Small irregular anomaly only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71013	Magnetic	389398	5686411	A2	-	-	-	93	Medium dipole possibly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
71014	Magnetic	389389	5686401	A2	-	-	-	38	Small irregular anomaly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
71015	Magnetic	389440	5686526	A2	-	-	-	224	Large negative monopole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
71016	Magnetic	389810	5686168	A2	-	-	-	15	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71017	Magnetic	389267	5686460	A2	-	-	-	28	Small negative monopole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
71018	Magnetic	388981	5686353	A2	-	-	-	32	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71019	Magnetic	388789	5686451	A2	-	-	-	15	Small dipole possibly identified on two survey lines though quite far away. Possibly indicative of buried item of ferrous debris.	-
71020	Magnetic	388804	5686435	A2	-	-	-	14	Small asymmetric dipole possibly over two lines. Possibly indicative of buried item of ferrous debris.	-
71021	Magnetic	388746	5686372	A2	-	-	-	22	Small anomaly over two lines. Possibly indicative of buried item of ferrous debris.	-
71022	Magnetic	388760	5686383	A2	-	-	-	24	Small anomaly over two lines. Possibly indicative of buried item of ferrous debris.	-
71023	Magnetic	388776	5686371	A2	-	-	-	28	Small dipole. Possibly indicative of buried item of ferrous debris.	-
71024	Magnetic	388564	5686413	A2	-	-	-	12	Small positive monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris. Identified in WA NEMO report (WA 73390) as a small magnetic anomaly measuring 11 nT.	7009 (WA73390, NEMO)
71025	Magnetic	388684	5686320	A2	-	-	-	27	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
71026	Magnetic	388549	5686233	A2	-	-	-	11	Small asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71027	Magnetic	388526	5686175	A2	-	-	-	68	Medium anomaly. Possibly indicative of buried item of ferrous debris.	-
71028	Magnetic	388632	5686228	A2	-	-	-	34	Small anomaly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
71029	Magnetic	388666	5686227	A2	-	-	-	80	Medium anomaly identified on more than one survey line, close to similar anomalies. Possibly indicative of buried item of ferrous debris.	-
71030	Magnetic	388682	5686226	A2	-	-	-	65	Medium anomaly identified on more than one survey line, close to similar anomalies. Possibly indicative of buried item of ferrous debris.	-
71031	Magnetic	388755	5686189	A2	-	-	-	11	Small dipole, possibly over two survey lines. Possibly indicative of buried item of ferrous debris.	-
71032	Magnetic	388717	5686095	A2	-	-	-	22	Small negative monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71033	Magnetic	388785	5686282	A2	-	-	-	66	Medium negative monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71034	Debris	388901	5686271	A2	3.8	1.7	0.7	101	Poorly defined large dark reflector with an irregular shadow and associated scour. Possibly small mound of numerous small objects. Corresponds with a medium magnetic anomaly indicating possible ferrous material. Possible debris. Identified in WA NEMO report (WA 73390) as a small magnetic anomaly measuring 8 nT.	7013 (WA73390, NEMO)
71035	Dark reflector	388869	5686230	A2	4.7	1.2	0	-	Irregularly shaped dark reflector, possibly elongated however this isn't clearly distinct. Possibly natural however looks a little anomalous and, as such, has been retained as potential archaeology.	-
71036	Bright reflector	388856	5686222	A2	2.4	1.2	0	-	Rectangular bright reflector in a relatively featureless area of seafloor.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
71037	Debris	388931	5686278	A2	2.6	1.3	0.2	11	A broad, slightly curved dark reflector, possibly with another, smaller contact extending from one side. Some associated scour. Feature is not particularly distinct but looks a little anomalous. Close to another similar, but smaller anomaly. Possible small associated magnetic anomaly indicated ferrous material, however due to the position of the magnetometer target, it is not clear whether it related to this or the nearby sonar anomaly.	-
71038	Debris	388924	5686284	A2	1.5	0.9	0.3	11	A small, slightly singular dark reflector with height and some associated scour. Feature is not particularly distinct but looks a little anomalous. Close to another similar, but larger anomaly. Possible small associated magnetic anomaly indicated ferrous material, however due to the position of the magnetometer target, it is not clear whether it related to this or the nearby sonar anomaly.	-
71039	Debris	388827	5686066	A2	3.5	0.4	0.5	68	Medium anomaly identified on more than one survey line of the most recent geophysical data. Identified in the WA NEMO report (WA 73390) as a large dark reflector with large shadow. The feature was not identified on the most recent sonar data, which may indicate burial of the feature by mobile sediments.	7011 (WA73390, NEMO)
71040	Magnetic	388852	5686123	A2	-	-	-	50	Medium dipole possibly related to larger nearby anomaly though far apart lines. Possibly indicative of buried item of ferrous debris.	-
71041	Magnetic	388838	5686139	A2	-	-	-	300	Large dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
71042	Magnetic	388815	5686141	A2	-	-	-	27	Small asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
71043	Magnetic	389036	5686127	A2	-	-	-	66	Medium dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71044	Magnetic	389015	5686139	A2	-	-	-	26	Small dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
71045	Magnetic	388985	5686175	A2	-	-	-	215	Large dipole not seen on other lines so suspicious. Possibly indicative of buried item of ferrous debris. Identified in WA NEMO report (WA 73390) as a small magnetic anomaly measuring 18 nT, however due to its position between anomalies 71045 and 71046 , it is not clear which anomaly this is related to.	7012 (WA73390, NEMO)
71046	Magnetic	388974	5686206	A2	-	-	-	631	Large anomaly identified on more than one survey line. Possibly indicative of buried item of ferrous debris. Identified in WA NEMO report (WA 73390) as a small magnetic anomaly measuring 18 nT, however due to its position between anomalies 71045 and 71046 , it is not clear which anomaly this is related to.	7012 (WA73390, NEMO)
71047	Magnetic	388947	5686181	A2	-	-	-	47	Small irregular anomaly only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71048	Magnetic	388990	5686241	A2	-	-	-	23	Small negative monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71049	Debris	389065	5686290	A2	1.8	1.5	0.2	8	Relatively indistinct square dark reflector with height. Small associated magnetic anomaly suggests some ferrous debris.	-
71050	Magnetic	389212	5686285	A2	-	-	-	16	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71051	Magnetic	389169	5686155	A2	-	-	-	85	Medium asymmetric dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
71052	Magnetic	389104	5686064	A2	-	-	-	22	Small asymmetric dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
71053	Magnetic	389121	5686106	A2	-	-	-	244	Large anomaly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
71054	Magnetic	389087	5686025	A2	-	-	-	26	Small dipole identified on more than one survey line of the most recent geophysical data. Identified in WA NEMO report (WA 73390) Small but well-defined magnetic anomaly measuring 13 nT without any associated sidescan sonar or multibeam bathymetry anomaly. Though the feature was identified very slightly outside the Study Area on the most recent geophysical data, it has been retained based on the fact the position of the anomaly in the NEMO report is within the area.	7015 (WA73390, NEMO)
71055	Magnetic	389207	5686063	A2	-	-	-	31	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71056	Magnetic	389299	5686167	A2	-	-	-	44	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71057	Magnetic	389327	5686165	A2	-	-	-	75	Medium dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71058	Magnetic	389414	5686139	A2	-	-	-	82	Medium dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71059	Magnetic	389448	5686137	A2	-	-	-	61	Medium anomaly only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71060	Magnetic	389433	5686079	A2	-	-	-	67	Medium dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71061	Magnetic	389390	5686085	A2	-	-	-	39	Small negative monopole. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
71062	Dark reflector	389551	5686205	A2	3.5	0.3	0.3	-	Poorly defined dark reflector with a relatively broad shadow. Image possibly distorted by movement of the sonar fish.	-
71063	Debris	389536	5686186	A2	2.7	0.1	0.1	16	Small, narrow, linear dark reflector with a slight shadow. Appears to have an associated small magnetic anomaly. Possible linear item of debris.	-
71064	Magnetic	389497	5686082	A2	-	-	-	102	Medium positive monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71065	Magnetic	389496	5686051	A2	-	-	-	20	Small positive monopole possibly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
71066	Magnetic	389528	5686051	A2	-	-	-	33	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71067	Magnetic	389501	5686041	A2	-	-	-	31	Small dipole possibly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
71068	Magnetic	389468	5686051	A2	-	-	-	148	Large asymmetric dipole possibly seen on second line. Possibly indicative of buried item of ferrous debris.	-
71069	Magnetic	389387	5686047	A2	-	-	-	17	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71070	Magnetic	389459	5685985	A2	-	-	-	12	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71071	Magnetic	389475	5685966	A2	-	-	-	25	Small anomaly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
71072	Magnetic	389506	5685963	A2	-	-	-	15	Small dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
71073	Magnetic	389457	5686017	A2	-	-	-	80	Medium dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
71074	Magnetic	389479	5686017	A2	-	-	-	35	Small negative monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris. Identified in WA NEMO report (WA 73390) as a small magnetic anomaly with no associated sidescan sonar or bathymetry anomaly.	7018 (WA73390, NEMO)
71075	Magnetic	389399	5686015	A2	-	-	-	20	Small positive monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71076	Magnetic	389403	5685984	A2	-	-	-	17	Small negative monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71077	Magnetic	389481	5685937	A2	-	-	-	28	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71078	Magnetic	389469	5685886	A2	-	-	-	41	Small anomaly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
71079	Debris	389473.8	5685852.66	A2	1.4	0.4	0.3	25	Small asymmetric dipole only identified on one survey line of the latest geophysical data. Identified in WA NEMO report (WA 73390) as an isolated dark reflector. The feature was not identified on the most recent sonar data which may indicate burial of the feature by mobile sediments.	7019 (WA73390, NEMO)
71080	Magnetic	389284	5685871	A2	-	-	-	49	Small negative monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71081	Magnetic	389303	5685871	A2	-	-	-	46	Small positive monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71082	Magnetic	389243	5685860	A2	-	-	-	22	Small asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71083	Magnetic	389294	5685797	A2	-	-	-	32	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
71084	Magnetic	389344	5685805	A2	-	-	-	28	Small irregular anomaly only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71085	Magnetic	389342	5685839	A2	-	-	-	54	Medium asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71086	Magnetic	389387	5685832	A2	-	-	-	23	Small asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71087	Recorded Wreck	389200	5685809	A3	-	-	-	-	UKHO record the position of British fishing vessel <i>Pisces</i> which sank on 8th December 1995. The one crew member was recovered. A 1995 survey indicated that the hull lies flat on the seabed in sand, and a diver's report indicated that the engine block lies in a trench by a chalk ridge. Nothing was identified on the geophysical data at this position which may indicate that the vessel has since been lifted, or possibly buried by mobile sediments.	15159 (UKHO), 2163 (WA, 2017B), 7017 (WA73390, NEMO)
71088	Magnetic	389237	5685516	A2	-	-	-	13	Small dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
71089	Mound	389208	5685665	A2	3.1	2.7	0.4		Small distinct mound within a slight depression. Isolated on the seafloor amongst sand waves.	-
71090	Magnetic	389309	5685677	A2	-	-	-	32	Small anomaly only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71091	Magnetic	389327	5685593	A2	-	-	-	40	Small dipole possibly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
71092	Magnetic	389332	5685526	A2	-	-	-	41	Small asymmetric dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
71093	Magnetic	389465	5685676	A2	-	-	-	18	Small positive monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
71094	Magnetic	389441	5685564	A2	-	-	-	44	Small asymmetric dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
71095	Magnetic	389626	5685595	A2	-	-	-	14	Small anomaly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
71096	Magnetic	389684	5685465	A2	-	-	-	28	Small asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71097	Magnetic	389564	5685434	A2	-	-	-	28	Small asymmetric dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
71098	Magnetic	389562	5685374	A2	-	-	-	13	Small asymmetric dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
71099	Wreck	389783	5685533	A1	43	5.4	0.7	7116	Large intact wreck, identified on the sonar and bathymetry data, possibly with its western side partially buried by sediment. The wreck appears to have two visible rectangular depressions in its main body. The feature corresponds with a very large magnetic anomaly, indicating ferrous material. The UKHO record suggests a possible barge. Two small features are located at the stern of the vessel, possibly representing associated items of debris.	85569 (UKHO), 2167 (WA, 2017B), 7024 (WA73390, NEMO)
71100	Debris	389788	5685551	A1	0.3	0.2	0.1	-	Small dark reflector with height at the stern of wreck 71099 . Possible related item of debris.	-
71101	Debris	389788	5685553	A1	0.3	0.1	0.2	-	Small dark reflector with height at the stern of wreck 71099 . Possible related item of debris.	-
71102	Magnetic	389881	5685629	A2	-	-	-	64	Medium asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71103	Magnetic	389861	5685590	A2	-	-	-	116	Large asymmetric dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
71104	Magnetic	390160	5685625	A2	-	-	-	17	Small anomaly identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
71105	Magnetic	390146	5685571	A2	-	-	-	11	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71106	Magnetic	390064	5685470	A2	-	-	-	157	Large positive monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71107	Magnetic	390073	5685522	A2	-	-	-	158	Large asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71108	Magnetic	390077	5685324	A2	-	-	-	69	Medium dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
71109	Magnetic	390097	5685328	A2	-	-	-	11	Small dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
71110	Magnetic	390072	5685391	A2	-	-	-	12	Small irregular anomaly only identified on one survey line, possibly noise. Possibly indicative of buried item of ferrous debris.	-
71111	Magnetic	389842	5685455	A2	-	-	-	18	Small anomaly only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71112	Magnetic	389937	5685498	A2	-	-	-	22	Small asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71113	Magnetic	389975	5685470	A2	-	-	-	23	Small asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71114	Debris	389906	5685421	A2	0.8	0.7	0.4	-	Slightly rectangular, elongated dark reflector with a broad, distinct shadow.	-
71115	Magnetic	389907	5685362	A2	-	-	-	19	Small asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
71116	Magnetic	389821	5685410	A2	-	-	-	11	Small asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71117	Magnetic	389783	5685313	A2	-	-	-	17	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71118	Magnetic	389683	5685323	A2	-	-	-	10	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71119	Magnetic	389831	5685224	A2	-	-	-	11	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71120	Magnetic	389813	5685200	A2	-	-	-	13	Small negative monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71121	Magnetic	389666	5685179	A2	-	-	-	15	Small positive monopole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71122	Magnetic	389618	5685228	A2	-	-	-	13	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71123	Magnetic	389527	5685311	A2	-	-	-	13	Small dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
71124	Magnetic	389406	5685263	A2	-	-	-	99	Medium magnetic anomaly. Possibly indicative of buried item of ferrous debris.	-
71125	Magnetic	389451	5685318	A2	-	-	-	27	Small dipole identified on more than one survey line, possibly noise. Possibly indicative of buried item of ferrous debris.	-
71126	Magnetic	389197	5685275	A2	-	-	-	29	Small dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
71127	Magnetic	389196	5685296	A2	-	-	-	30	Small dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
71128	Magnetic	389320	5685080	A2	-	-	-	63	Medium dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71130	Wreck	389501	5684992	A1	20.9	10.3	0.4	-	Rectangular object at the edge of a sand wave on the MBES data. Located approximately 51 m SE from the UKHO position for LCP 586. A British landing craft broke away from ASA Lothrop on 17 June 1946. In 1995, a small wreck was located in the vicinity of the position, although not investigated. There are several small magnetic anomalies identified nearby on the most recent geophysical data, however these are not clearly associated with the feature and, as such, have been kept separate. However the possibility remains that these are associated ferrous items of debris. Possibly a natural feature however has been retained as potential archaeology based on possibility of ferrous material and UKHO record.	13835 (UKHO), 2159 (WA, 2017B), 7274 (WA73390, NEMO)
71131	Magnetic	389597	5685123	A2	-	-	-	21	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71132	Magnetic	389607	5685087	A2	-	-	-	12	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71133	Magnetic	389654	5685002	A2	-	-	-	44	Small dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
71134	Magnetic	389674	5685083	A2	-	-	-	31	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71135	Magnetic	390055	5685125	A2	-	-	-	12	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71136	Magnetic	389935	5685070	A2	-	-	-	21	Small dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
71137	Magnetic	389772	5685012	A2	-	-	-	12	Small dipole only identified on one survey line, possibly natural. Possibly indicative of buried item of ferrous debris.	-
71138	Magnetic	389779	5684962	A2	-	-	-	71	Medium dipole identified on more than one survey line. Possibly indicative of buried item of ferrous debris.	-
71139	Magnetic	389856	5684957	A2	-	-	-	12	Small asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71140	Magnetic	389879	5684942	A2	-	-	-	11	Small asymmetric dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71141	Magnetic	389795	5684908	A2	-	-	-	17	Small dipole only identified on one survey line. Possibly indicative of buried item of ferrous debris.	-
71142	Magnetic	389871	5684902	A2	-	-	-	13	Small dipole only identified on one survey line, maybe natural. Possibly indicative of buried item of ferrous debris.	-
71143	Debris	391141	5686672	A2	3.1	0.8	0	6	Feature identified in WA report 60077 as three dark reflectors with magnetic signal. The features have been retained as archaeology based on description and associated magnetic signal. Nothing was identified on the most recent geophysical data at this location, which may indicate burial of the feature by mobile sediments.	7121 (WA 60077)
71144	Bright reflector	391126	5686690	A2	1.1	0.6	0	-	Feature originally tagged as a bright reflector in WA report 60077. The features have been retained as archaeology based on description and associated magnetic signal. Nothing was identified on the most recent geophysical data at this location, which may indicate burial of the feature by mobile sediments.	7154 (WA 60077)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
71145	Magnetic	391250	5686587	A2	-	-	-	50	Magnetic Anomaly identified in previous WA report 60077. Feature was not identified in the most recent geophysical magnetometer data, however this may reflect a difference in positions of the lines run. As such the feature has been retained as potential archaeology.	7265 (WA 60077)
71146	Magnetic	391135	5686542	A2	-	-	-	12	Magnetic Anomaly identified in previous WA report 60077. Feature was not identified in the most recent geophysical magnetometer data, however this may reflect a difference in positions of the lines run. As such the feature has been retained as potential archaeology.	7276 (WA 60077)
71147	Magnetic	391215	5686497	A2	-	-	-	18	Magnetic Anomaly identified in previous WA report 60077. Feature was not identified in the most recent geophysical magnetometer data, however this may reflect a difference in positions of the lines run. As such the feature has been retained as potential archaeology.	7257 (WA 60077)
71148	Magnetic	390825	5686662	A2	-	-	-	10	Magnetic Anomaly identified in previous WA report 60077. Feature was not identified in the most recent geophysical magnetometer data, however this may reflect a difference in positions of the lines run. As such the feature has been retained as potential archaeology.	7278 (WA 60077)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
71149	Dark reflector	390945	5686939	A2	8.1	2.9	0	-	Feature identified in WA report 60070 as an isolated dark reflector. On review of original screen grabs from the 2006 WA study (WA report 60070), the feature appears to be comprised two parallel, closely spaced elongated dark reflectors. The feature was not identified on the most recent sonar data, however there are several possible magnetic anomalies in the surrounding area which may be related, although none are clearly associated and therefore they haven't been grouped together. The feature has been retained as potential archaeology based on review of the images of the original tag, as well as the possibility of associated ferrous material.	6120 (WA 60070)
71150	Magnetic	390785	5686567	A2	-	-	-	47	Magnetic Anomaly identified in previous WA report 60077. Feature was not identified in the most recent geophysical magnetometer data, however this may reflect a difference in positions of the lines run. As such the feature has been retained as potential archaeology.	7254 (WA 60077)
71151	Magnetic	390815	5686471	A2	-	-	-	24	Magnetic Anomaly identified in previous WA report 60077. Feature was not identified in the most recent geophysical magnetometer data, however this may reflect a difference in positions of the lines run. As such the feature has been retained as potential archaeology.	7253 (WA 60077)
71152	Magnetic	390775	5686446	A2	-	-	-	21	Magnetic Anomaly identified in previous WA report 60077. Feature was not identified in the most recent geophysical magnetometer data, however this may reflect a difference in positions of the lines run. As such the feature has been retained as potential archaeology.	7252 (WA 60077)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
71153	Magnetic	390585	5686416	A2	-	-	-	25	Magnetic Anomaly identified in previous WA report 60077. Feature was not identified in the most recent geophysical magnetometer data, however this may reflect a difference in positions of the lines run. As such the feature has been retained as potential archaeology.	7262 (WA 60077)
71154	Magnetic	390355	5686607	A2	-	-	-	8	Magnetic Anomaly identified in previous WA report 60077. Feature was not identified in the most recent geophysical magnetometer data, however this may reflect a difference in positions of the lines run. As such the feature has been retained as potential archaeology.	7260 (WA 60077)
71155	Magnetic	390405	5686752	A2	-	-	-	19	Magnetic Anomaly identified in previous WA report 60077. Feature was not identified in the most recent geophysical magnetometer data, however this may reflect a difference in positions of the lines run. As such the feature has been retained as potential archaeology.	7222 (WA 60077)
71156	Magnetic	390275	5686792	A2	-	-	-	7	Magnetic Anomaly identified in previous WA report 60077. Feature was not identified in the most recent geophysical magnetometer data, however this may reflect a difference in positions of the lines run. As such the feature has been retained as potential archaeology.	7267 (WA 60077)
71157	Magnetic	390215	5686727	A2	-	-	-	10	Magnetic Anomaly identified in previous WA report 60077. Feature was not identified in the most recent geophysical magnetometer data, however this may reflect a difference in positions of the lines run. As such the feature has been retained as potential archaeology.	7245 (WA 60077)
71158	Magnetic	390005	5686607	A2	-	-	-	18	Magnetic Anomaly identified in previous WA report 60077. Feature was not identified in the most recent geophysical magnetometer data, however this may reflect a difference in positions of the lines run. As such the feature has been retained as potential archaeology.	7225 (WA 60077)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
71159	Magnetic	389595	5686917	A2	-	-	-	105	Magnetic Anomaly identified in previous WA report 60077. Feature was not identified in the most recent geophysical magnetometer data, however this may reflect a difference in positions of the lines run. As such the feature has been retained as potential archaeology.	7227 (WA 60077)
71160	Debris	389522	5686873	A2	2.4	1.4	0.3	-	Feature identified in WA report 60077 as an item of debris. On review of original screen grabs from the 2008 WA study (WA report 60077), the feature appears to be a large, distinct dark reflector with height. The feature has been retained as potential archaeology based on review of the images of the original tag and its dimensions. The feature was not identified in most recent geophysical data, which may indicate burial of the feature by mobile sediments	7172 (WA 60077)
71161	Magnetic	389415	5686917	A2	-	-	-	22	Magnetic Anomaly identified in previous WA report 60077. Feature was not identified in the most recent geophysical magnetometer data, however this may reflect a difference in positions of the lines run. As such the feature has been retained as potential archaeology.	7281 (WA 60077)
71162	Dark reflector	389146	5686858	A2	11.9	6.1	0	-	Feature identified in WA report 60070 as a dark reflector. On review of original screen grabs from the 2006 WA study (WA report 60070), the feature appears to be a poorly defined irregular dark reflector, possibly a small patch of disturbed seabed. Though the feature is not particularly distinct, it has been retained as potential archaeology based on review of the images of the original tag. The feature was not identified in most recent geophysical data, which may indicate burial of the feature by mobile sediments.	6101 (WA 60070)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
71163	Dark reflector	388953	5686887	A2	3.1	1.2	0	-	Feature identified in WA report 60070 as an isolated dark reflector. On review of original screen grabs from the 2006 WA study (WA report 60070), the feature appears to be a small, distinct dark reflector. Though the feature is not particularly distinct, it has been retained as potential archaeology based on review of the images of the original tag. The feature was not identified in most recent geophysical data, which may indicate burial of the feature by mobile sediments.	6103 (WA 60070)
71164	Dark reflector	389073	5686518	A2	9.2	1.3	0	-	Feature identified in WA report 60070 as an isolated dark reflector. On review of original screen grabs from the 2006 WA study (WA report 60070), the feature appears to be a small, distinct dark reflector, possibly with associated scour. Though the feature is not particularly distinct, it has been retained as potential archaeology based on review of the images of the original tag. The feature was not identified in most recent geophysical data, which may indicate burial of the feature by mobile sediments.	6107 (WA 60070)
71165	Magnetic	389275	5686587	A2	-	-	-	17	Magnetic Anomaly identified in previous WA report 60077. Feature was not identified in the most recent geophysical magnetometer data, however this may reflect a difference in positions of the lines run. As such the feature has been retained as potential archaeology.	7141 (WA 60077)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
71166	Debris	389496	5686776	A2	2.3	1.7	0.4	-	Feature identified in WA report 60077 as an item of debris. On review of original screen grabs from the 2008 WA study (WA report 60077), the feature appears to be a rounded, poorly defined dark reflector with a broad shadow, possibly with an associated faint curvilinear bright reflector, however this isn't particularly distinct. The feature has been retained as potential archaeology based on review of the images of the original tag and its dimensions. The feature was not identified in most recent geophysical data, which may indicate burial of the feature by mobile sediments	7170 (WA 60077)
71167	Magnetic	389676	5686557	A2	-	-	-	53	Magnetic Anomaly identified in previous WA report 60077. Feature was not identified in the most recent geophysical magnetometer data, however this may reflect a difference in positions of the lines run. As such the feature has been retained as potential archaeology.	7223 (WA 60077)
71168	Dark reflector	392360	5687011	A2	6	3.4	0	-	Feature identified in WA report 60070 as an isolated dark reflector. On review of original screen grabs from the 2006 WA study (WA report 60070), the feature appears to be a small, slightly rounded dark reflector. Though the feature is not particularly distinct, it has been retained as potential archaeology based on review of the images of the original tag. The feature was not identified in most recent geophysical data, which may indicate burial of the feature by mobile sediments.	6071 (WA 60070)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
71169	Dark reflector	398946	5688227	A2	4.7	1.9	0	-	Feature identified in WA report 60077 as a dark reflector. On review of original screen grabs from the 2008 WA study (WA report 60077), the feature appears to be a faint, poorly defined dark reflector the curves outwardly at one end. The feature has been retained as potential archaeology based on review of the images of the original tag and its dimensions. The feature was not identified in most recent geophysical data, which may indicate burial of the feature by mobile sediments	7152 (WA 60077)
71170	Magnetic	388495	5686707	A2	-	-	-	14.6	Magnetic Anomaly identified in previous WA report 60077. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7275 (WA 60077)
71171	Magnetic	388443	5686811	A2	-	-	-	47.75	Magnetic Anomaly identified in previous WA report 60077. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7230 (WA 60077)
71172	Magnetic	388526	5686892	A2	-	-	-	22	Magnetic Anomaly identified in previous WA report 60077. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7232 (WA 60077)
71173	Magnetic	388444	5686982	A2	-	-	-	26.24	Magnetic Anomaly identified in previous WA report 60077. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7233 (WA 60077)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
71174	Dark reflector	388408	5686796	A2	1.4	1	0	-	Dark reflector identified in WA report 70077. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7173 (WA 60077)
71175	Magnetic	388390	5686772	A2	-	-	-	11.28	Magnetic Anomaly identified in previous WA report 60077. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7273 (WA 60077)
71176	Magnetic	388284	5686687	A2	-	-	-	12.28	Magnetic Anomaly identified in previous WA report 60077. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7243 (WA 60077)
71177	Magnetic	388254	5686892	A2	-	-	-	10.24	Magnetic Anomaly identified in previous WA report 60077. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7277 (WA 60077)
71178	Debris	388131	5686943	A2	2.9	1.7	0	7.21	Dark reflector with magnetic signal identified in WA report 70077. Feature was not covered by the most recent geophysical data and therefore was not observed, however, based on the description and associated magnetic anomaly, feature has been reclassified as an item of debris. Feature has been retained as potential archaeology based on previous interpretation.	7139 (WA 60077)
71179	Magnetic	387975	5686801	A2	-	-	-	7.91	Magnetic Anomaly identified in previous WA report 60077. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7239 (WA 60077)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
71180	Magnetic	388046	5686910	A2	-	-	-	9.38	Magnetic Anomaly identified in previous WA report 60077. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7240 (WA 60077)
71181	Magnetic	388059	5686999	A2	-	-	-	133.77	Magnetic Anomaly identified in previous WA report 60077. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7241 (WA 60077)
71182	Magnetic	388024	5686752	A2	-	-	-	39.59	Magnetic Anomaly identified in previous WA report 60077. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7235 (WA 60077)
71183	Magnetic	387945	5686891	A2	-	-	-	16.16	Magnetic Anomaly identified in previous WA report 60077. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7236 (WA 60077)
71184	Magnetic	388016	5686710	A2	-	-	-	12.68	Magnetic Anomaly identified in previous WA report 60077. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7237 (WA 60077)
71185	Magnetic	387836	5686831	A2	-	-	-	8.82	Magnetic Anomaly identified in previous WA report 60077. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7238 (WA 60077)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
71186	Magnetic	387684	5686836	A2	-	-	-	16.65	Magnetic Anomaly identified in previous WA report 60077. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7138 (WA 60077)
71187	Magnetic	387789	5686997	A2	-	-	-	7.41	Magnetic Anomaly identified in previous WA report 60077. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7271 (WA 60077)
71188	Magnetic	387844	5687037	A2	-	-	-	44.71	Magnetic Anomaly identified in previous WA report 60077. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7234 (WA 60077)
71189	Recorded Obstruction	387685	5686970	A3					Obstruction/foul ground recorded in 2000 from aerial photography. Confirmed in 2005. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7321 (WA 60077), 7283 (WA73390)
71190	Rope/chain	387659	5687084	A2	60.7	0.1	0	-	Dark reflector identified in WA report 70070. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	6110 (WA 60070)
71191	Magnetic	387554	5687032	A2	-	-	-	10.24	Magnetic Anomaly identified in previous WA report 60077. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7272 (WA 60077)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
71192	Dark reflector	387613	5686896	A2	1.6	1.3	0	-	Dark reflector identified in WA report 70077. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7169 (WA 60077)
71193	Magnetic	387409	5686947	A2	-	-	-	60.91	Magnetic Anomaly identified in previous WA report 60077. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7212 (WA 60077)
71194	Magnetic	387384	5687127	A2	-	-	-	34.68	Magnetic Anomaly identified in previous WA report 60077. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7270 (WA 60077)
71195	Magnetic	387354	5686837	A2	-	-	-	9.33	Magnetic Anomaly identified in previous WA report 60077. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7274 (WA 60077)
71196	Magnetic	387534	5686862	A2	-	-	-	45.63	Magnetic Anomaly identified in previous WA report 60077. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7242 (WA 60077)
71197	Magnetic	387334	5686887	A2	-	-	-	39.79	Magnetic Anomaly identified in previous WA report 60077. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7244 (WA 60077)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
71198	Rope/chain	387178	5687010	A2	93.4	0.1	0	-	Linear dark reflector identified in WA report 70070. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	6106 (WA 60070)
71199	Dark reflector	388266	5686802	A2	2.4	1.5	0	-	Dark reflector identified in WA report 70077. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7168 (WA 60077)
71200	Recorded Obstruction	387205	5686978	A3	-	-	-	-	Obstruction / foul ground identified in UKHO record. Recorded in 2000 from aerial photography. Confirmed in 2005. Feature was not identified in the previous WA investigation (WA report 60077), nor covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on UKHO record.	7323 (WA 60077), 7280 (WA73390) 59034 (UKHO)
71201	Recorded Obstruction	386227	5686380	A3	-	-	-	-	Obstruction identified in the UKHO record. Surveyed by the UKHO in 2012, it was described as jagged metal, possibly a former beacon support. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on UKHO record.	2179 (WA, 2017B), 79215 (UKHO)
71202	Recorded Obstruction	386056	5686169	A3	-	-	-	-	Obstruction identified in the UKHO record. Surveyed by the UKHO in 2012, it was described as jagged metal, possibly a former beacon support. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on UKHO record.	2180 (WA, 2017B), 79216 (UKHO)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
71203	Recorded Obstruction	386421	5686279	A3	-	-	-	-	Obstruction identified in the UKHO record. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on UKHO record.	2186 (WA, 2017B), 77033 (UKHO)
71204	Recorded Obstruction	386394	5686245	A3	-	-	-	-	Obstruction identified in the UKHO record. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on UKHO record.	2187 (WA, 2017B), 77034 (UKHO)
71205	Recorded Obstruction	386027	5686117	A3	-	-	-	-	Obstruction identified in the UKHO record. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on UKHO record.	2188 (WA, 2017B), 77035 (UKHO)
71209	Recorded Wreck	387338	5686282	A3	-	-	-	-	B-17G 42-31243. 1943 wreck of a B-17G Flying Fortress, which ditched at Pegwell Bay, Kent after running out of fuel. The remains of the aircraft were discovered in the 1990s in marshland at Sandwich Flats, near Pegwell Bay. The wreckage was handed over to the British Breznetz Aeronautical Museum. However the site was clearly visible at low tide in 2016, so considerable wreckage remains in the intertidal zone. The positional data for this site is quite vague, and the NRHE position comprises a circular polygon 1 km in diameter. The position recorded to the right is the centre point of that circle, not the exact location of the site. Another position for the aircraft, approximately 1.5 km to the south has recently been provided by Elliott Smock (pers. comm.) who was involved in the recovery of material in the 1990s. This location would place the aircraft crash site well outside the Cable Corridor and Study Area. Feature was not covered by the most recent geophysical data and therefore was not observed, however the NRHE position has been retained as a precautionary measure.	2101 (WA, 2017B), 1602379 (NRHE)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
71210	Magnetic	387232	5686828	A2	-	-	-	16	Small but well-defined magnetic anomaly without any associated sidescan sonar or multibeam bathymetry anomaly identified in WA NEMO report 73390. Could be natural or indicative of a piece of buried ferrous debris. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7000 (WA73390, NEMO)
71211	Magnetic	387640.9	5686670	A2	-	-	-	14	Small but well-defined magnetic anomaly without any associated sidescan sonar or multibeam bathymetry anomaly identified in WA NEMO report 73390. Could be natural or indicative of a piece of buried ferrous debris. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7001 (WA73390, NEMO)
71212	Magnetic	388057.9	5686468	A2	-	-	-	87	Medium well-defined magnetic anomaly without any associated sidescan sonar or multibeam bathymetry anomaly identified in WA NEMO report 73390. Could be natural or indicative of a piece of buried ferrous debris. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7002 (WA73390, NEMO)
71213	Magnetic	388086.9	5686618	A2	-	-	-	12	Small but well-defined magnetic anomaly without any associated sidescan sonar or multibeam bathymetry anomaly identified in WA NEMO report 73390. Could be natural or indicative of a piece of buried ferrous debris. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7003 (WA73390, NEMO)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
71214	Magnetic	388255.9	5686219	A2	-	-	-	140	Large well-defined magnetic anomaly without any associated sidescan sonar or multibeam bathymetry anomaly identified in WA NEMO report 73390. Could be natural or indicative of a piece of buried ferrous debris. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7004 (WA73390, NEMO)
71215	Magnetic	388229.9	5686392	A2	-	-	-	16	Small but well-defined magnetic anomaly without any associated sidescan sonar or multibeam bathymetry anomaly identified in WA NEMO report 73390. Could be natural or indicative of a piece of buried ferrous debris. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7005 (WA73390, NEMO)
71216	Magnetic	388317.9	5686372	A2	-	-	-	21	Small but well-defined magnetic anomaly without any associated sidescan sonar or multibeam bathymetry anomaly identified in WA NEMO report 73390. Could be natural or indicative of a piece of buried ferrous debris. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7006 (WA73390, NEMO)
71217	Magnetic	388535.9	5686262	A2	-	-	-	10	Small but well-defined magnetic anomaly without any associated sidescan sonar or multibeam bathymetry anomaly identified in WA NEMO report 73390. Could be natural or indicative of a piece of buried ferrous debris. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7007 (WA73390, NEMO)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
71218	Magnetic	388527.9	5686325	A2	-	-	-	11	Small but well-defined magnetic anomaly without any associated sidescan sonar or multibeam bathymetry anomaly identified in WA NEMO report 73390. Could be natural or indicative of a piece of buried ferrous debris. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7008 (WA73390, NEMO)
71219	Debris	388624	5686195	A2	3.1	1.2	0.7	-	Angular dark reflector with shadow but no associated magnetic anomaly identified in WA NEMO report 73390. Feature was not identified in the most recent geophysical data which may indicate burial by mobile sediments, however the feature has been retained as potential archaeology based on previous interpretation.	7010 (WA73390, NEMO)
71220	Magnetic	388962.8	5685893	A2	-	-	-	49	Medium well-defined magnetic anomaly without any associated sidescan sonar or multibeam bathymetry anomaly identified in WA NEMO report 73390. Could be natural or indicative of a piece of buried ferrous debris. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7014 (WA73390, NEMO)
71221	Debris	389174.3	5685947.14	A2	4.3	0.8	0.2	-	Short linear dark reflector with shadow but without an associated magnetic anomaly identified in WA NEMO report 73390. Feature was not identified in the most recent geophysical data which may indicate burial by mobile sediments, however the feature has been retained as potential archaeology based on previous interpretation.	7016 (WA73390, NEMO)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
71222	Magnetic	389685.8	5685873	A2	-	-	-	6	Small but well-defined magnetic anomaly without any associated sidescan sonar or multibeam bathymetry anomaly identified in WA NEMO report 73390. Feature was not identified in the most recent magnetometer data, which may reflect differences in line positioning and spacing.	7020 (WA73390, NEMO)
71223	Dark reflector	389658	5685681	A2	4.6	1.4	0.3	-	Indistinct dark reflector with shadow but without an associated magnetic anomaly identified in WA NEMO report 73390. Feature was not identified in the most recent geophysical data which may indicate burial by mobile sediments, however the feature has been retained as potential archaeology based on previous interpretation.	7021 (WA73390, NEMO)
71224	Debris	391445.4	5685052.77	A2	8.1	0.7	0	-	Short linear dark reflector with no shadow or associated magnetic anomaly identified in WA NEMO report 73390. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7029 (WA73390, NEMO)
71225	Debris	391669	5684906	A2	9.4	0.1	0.2	-	Linear alignment of numerous dark reflectors with large shadows but no associated magnetic anomaly identified in WA NEMO report 73390. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7031 (WA73390, NEMO)
71226	Magnetic	392015	5684828	A2	-	-	-	8	Small but well-defined magnetic anomaly without any associated sidescan sonar or multibeam bathymetry anomaly identified in WA NEMO report 73390. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7032 (WA73390, NEMO)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
71227	Magnetic	391836	5685008	A2	-	-	-	36	Small but well-defined magnetic anomaly without any associated sidescan sonar or multibeam bathymetry anomaly identified in WA NEMO report 73390. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7033 (WA73390, NEMO)
71228	Debris	392435	5684935	A2	16.5	2.2	0.4	-	Two adjacent dark reflectors with shadows but no associated magnetic anomaly identified in WA NEMO report 73390. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7034 (WA73390, NEMO)
71229	Magnetic	392916	5685167	A2	-	-	-	13	Small but well-defined magnetic anomaly without any associated sidescan sonar or multibeam bathymetry anomaly identified in WA NEMO report 73390. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7036 (WA73390, NEMO)
71230	Dark reflector	392912	5685102	A2	1.7	0.3	0.3	-	Elongate dark reflector with a shadow but without an associated magnetic anomaly identified in WA NEMO report 73390. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7037 (WA73390, NEMO)
71231	Debris	393045	5685032	A2	10.7	3.1	0.0	52	Small area of disturbed seabed associated with a medium magnetic anomaly identified in WA NEMO report 73390. Possible area of ferrous debris. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7038 (WA73390, NEMO)



WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
71232	Magnetic	393180	5685073	A2	-	-	-	8	Small but well-defined magnetic anomaly without any associated sidescan sonar or multibeam bathymetry anomaly identified in WA NEMO report 73390. Could be natural or indicative of a piece of buried ferrous debris. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7039 (WA73390, NEMO)
71233	Magnetic	393315	5684950	A2	-	-	-	51	Medium well-defined magnetic anomaly without any associated sidescan sonar or multibeam bathymetry anomaly identified in WA NEMO report 73390. Probably indicative of a piece of buried ferrous debris. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7040 (WA73390, NEMO)
71234	Debris	393445	5685057	A2	3.3	0.2	0.6	-	Short linear dark reflector with shadow but no associated magnetic anomaly identified in WA NEMO report 73390. Possible piece of linear non-ferrous debris. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7041 (WA73390, NEMO)
71235	Dark reflector	393368	5685144	A2	0.9	0.4	0.7	-	Isolated dark reflector with shadow but without an associated magnetic anomaly identified in WA NEMO report 73390. Could be natural or a piece of non-ferrous debris. Feature was not covered by the most recent geophysical data and therefore was not observed. Feature has been retained as potential archaeology based on previous interpretation.	7042 (WA73390, NEMO)












WA ID	Classification	Easting	Northing	Archaeological Discrimination	Length (m)	Width (m)	Height (m)	Magnetic Amplitude (nT)	Description	External Reference
71236	Recorded Wreck	395549	5687040	A3	-	-	-	-	POLA wreck site, named by ADU. No further information provided and nothing identified on the geophysical data at this location.	2168 (WA 2016), MKE89658 (KHER)
71237	Recorded Obstruction	393120	5684335	A3	-	-	-	-	Obstruction recorded in the UKHO database as a contact, measuring 25 x 12 x 1.5 m, thought to be a natural feature. The feature was not identified on the most recent geophysical data.	2199 (WA 2016), 14820 (UKHO)

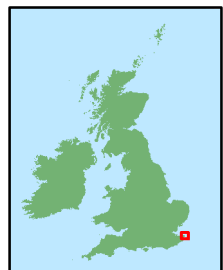
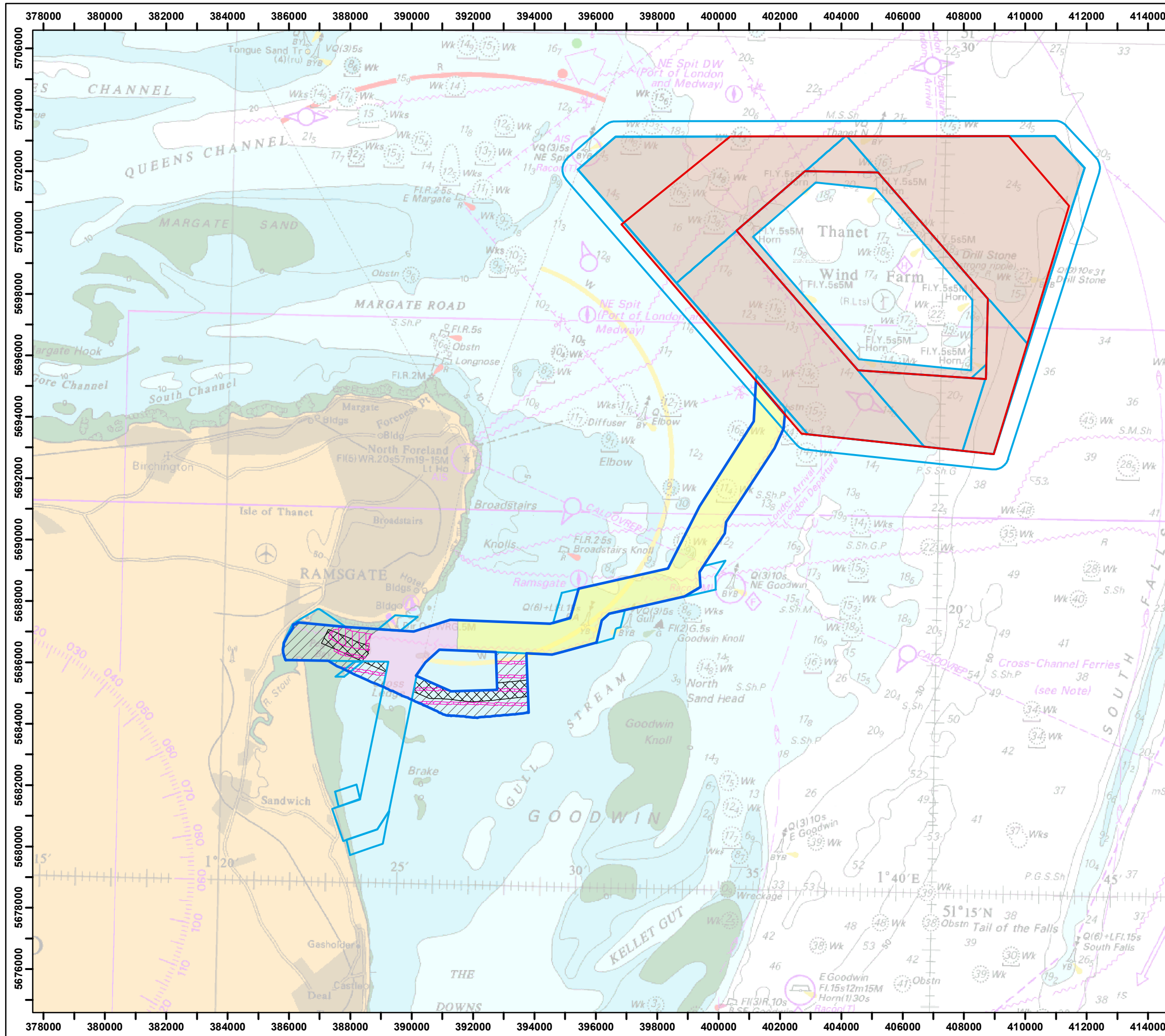
1. Co-ordinates are in ETRS 89 UTM31 N
2. Positional accuracy estimated ± 10 m

THANET EXTENSION OFFSHORE WIND FARM

Figure 1
Location of Thanet Wind
Farm Extension


Legend

-  Offshore Site Boundary
 -  Cable Route Offshore
 -  Site Investigation Boundary
 -  Covered by 2005 Thanet data
 -  Covered by 73390 NEMO data
 -  No 2016 Coverage
- Survey vessel**
-  MV Fugro Pioneer
 -  RV Discovery
 -  Valkyrie



Layout:
Projection: ETRS 1989 UTM Zone 31N

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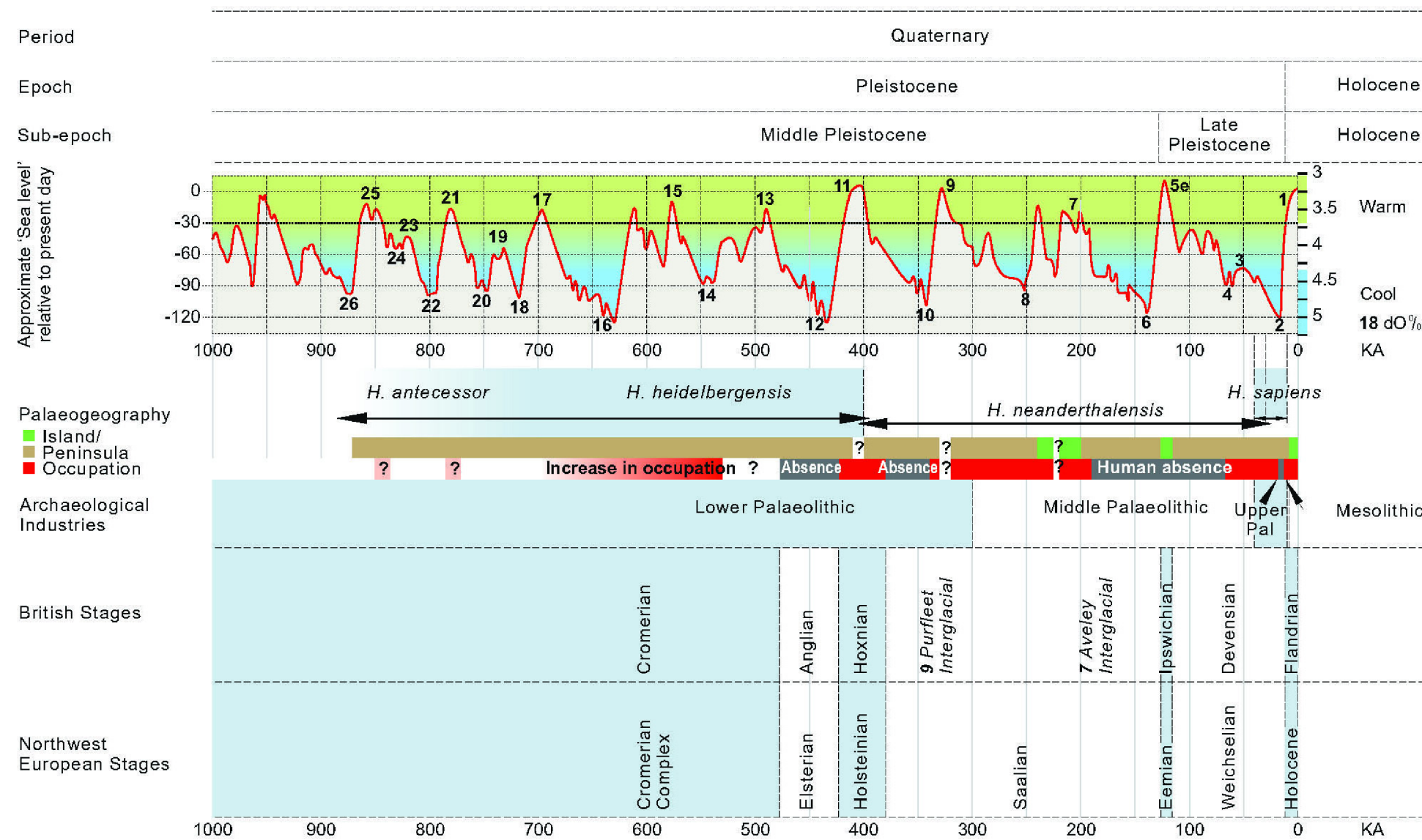
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Scale: 1:125,000

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Drg No	116080_geo_Fig01				

THANET EXTENSION
OFFSHORE WIND FARM

Figure 2
Sea level curve and chronology of the southern North Sea landscape



The figure presents information derived from several references: the global sea level curve is from Lisiecki and Raymo (2005) and Jelgersma (1979). Details on the geology and archaeology were provided by Dix and Westley (2004); Funnel (1995); Gibbard and van Kolfschoten (2004); Kukla *et al.* (2002); Lee *et al.* (2006); Lowe and Walker (1997) and Wymer (1999).

Layout:
Projection: n/a

Rev	0	By	KL	Date	09/02/2018
Drg No	116080_geo_Fig02				

THANET EXTENSION OFFSHORE WIND FARM

Figure 3
Phase 1 palaeogeographic features of archaeological potential (wind farm site)

Legend

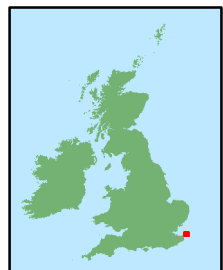
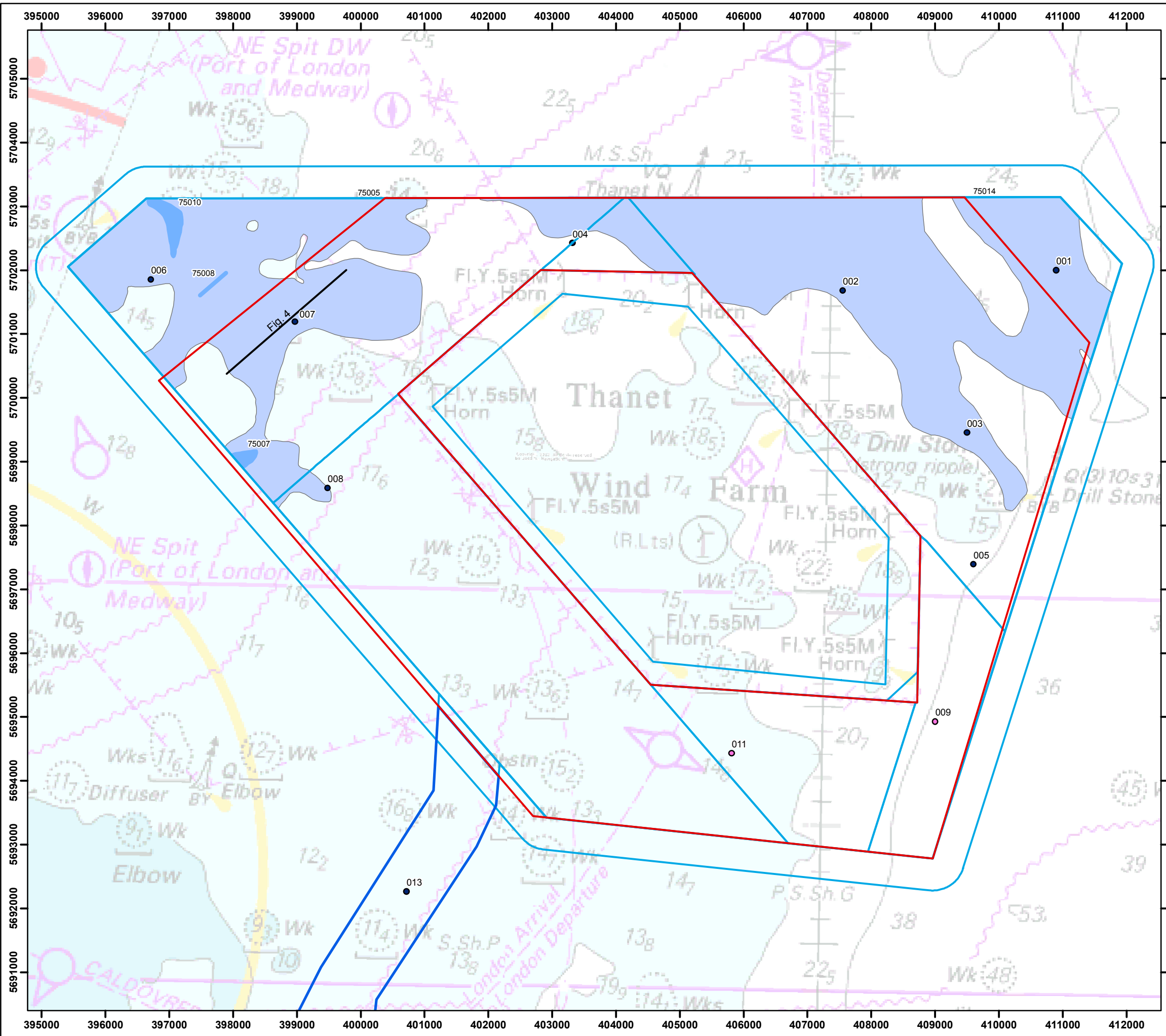
- Offshore Site Boundary
- Cable Route Offshore
- Site Investigation Boundary

Phase 1 Channels

- Acoustic Blanking
- Channel
- Data example location

Geotechnical sample locations (Fugro 2016)

- CPT
- CPT and Vibrocore



Layout:
Projection: ETRS 1989 UTM Zone 31N

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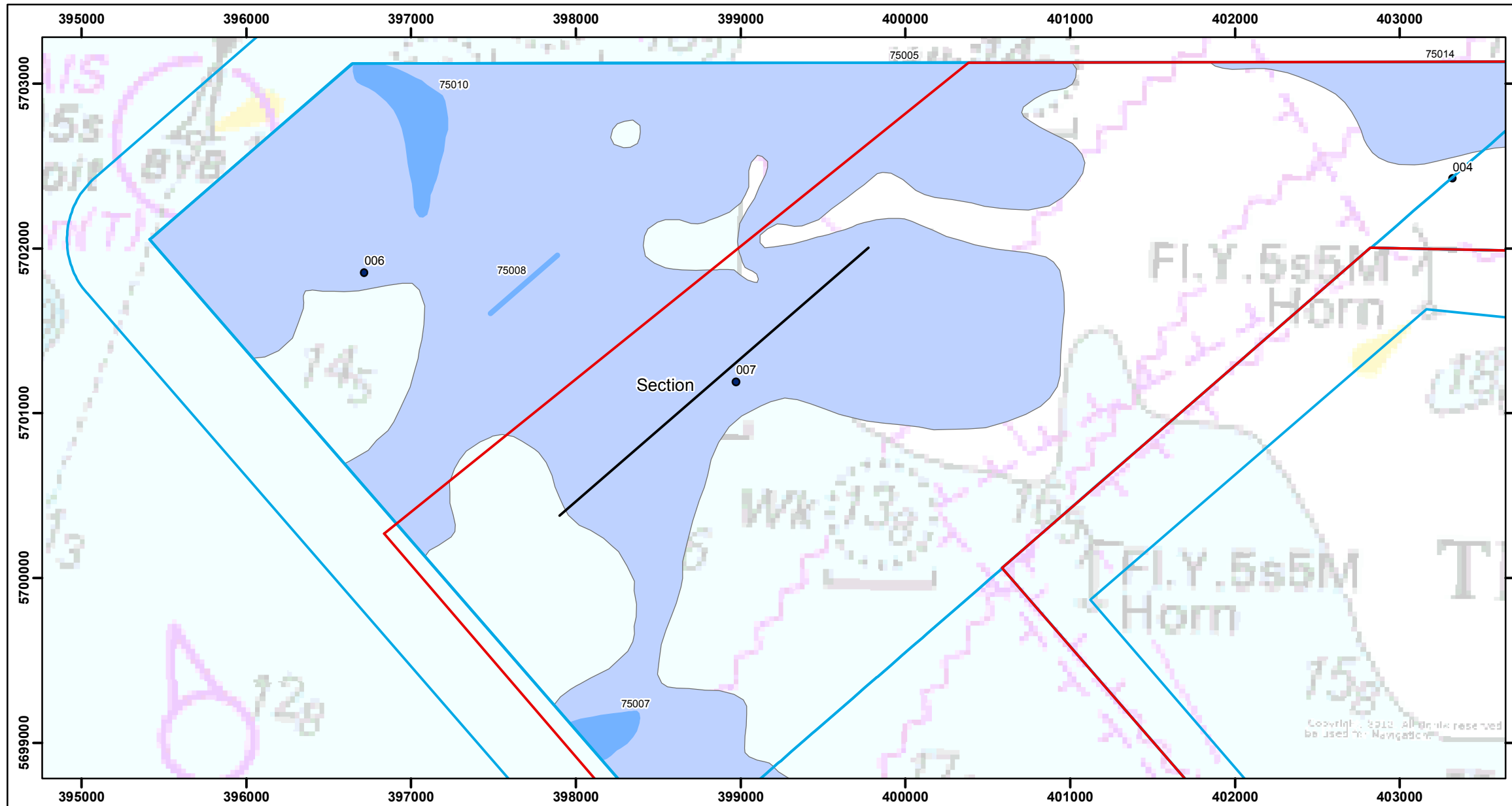
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

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Drg No	116080_geo_Fig03				

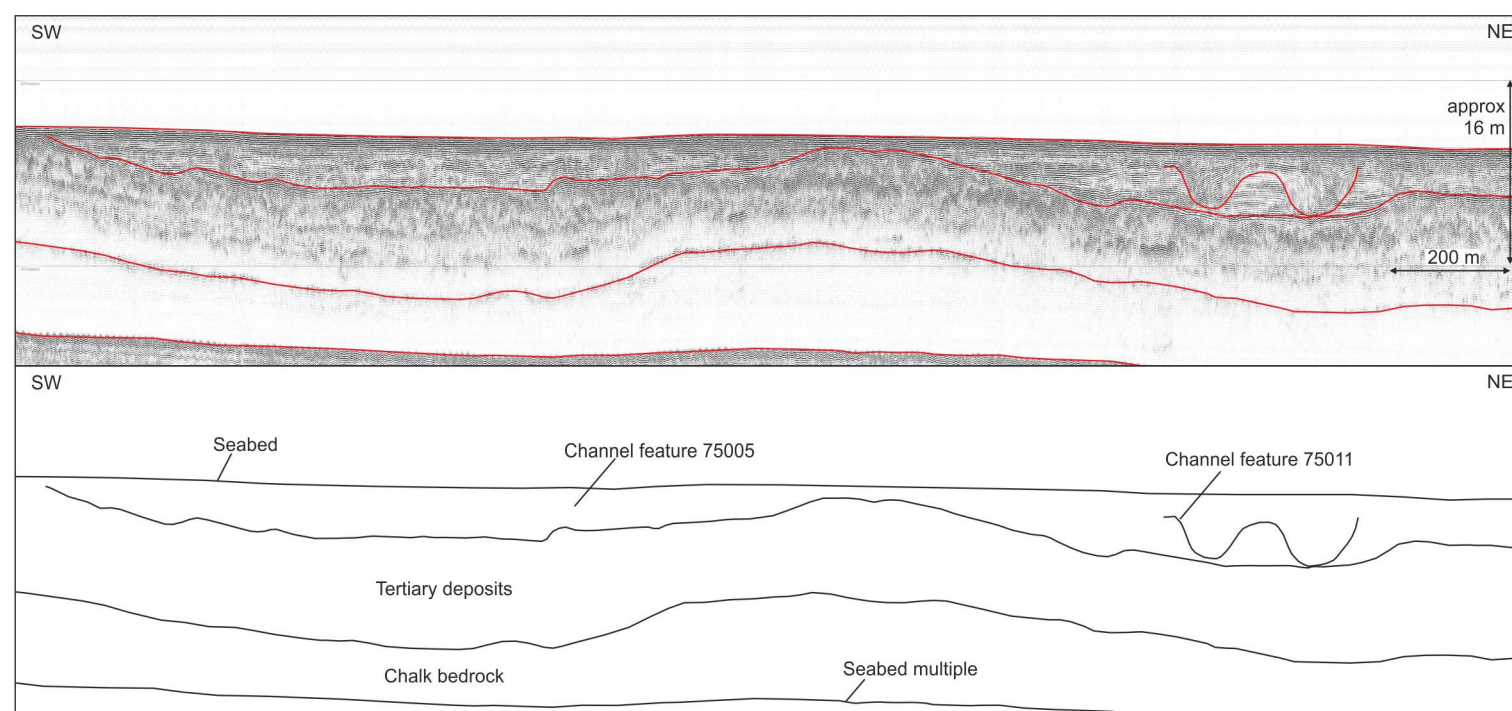
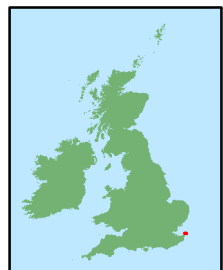
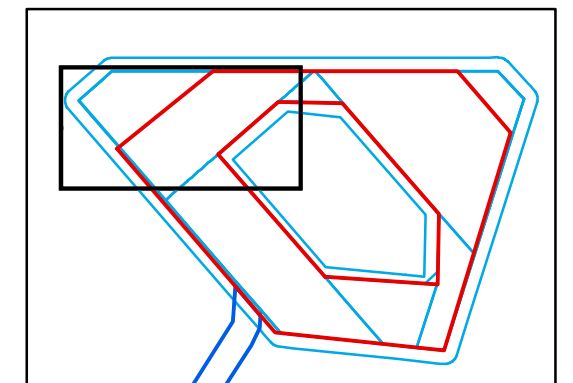
**THANET EXTENSION
OFFSHORE WIND FARM**

Figure 4
Phase 1 palaeogeographic feature data example – 75005



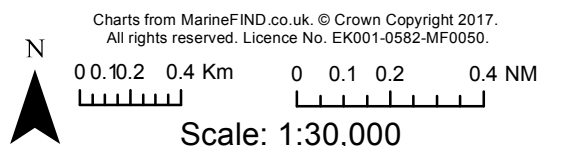
Legend

-  Offshore Site Boundary
-  Site Investigation Boundary
- Phase 1 Channels**
-  Acoustic Blanking
-  Channel
-  Data example location
- Geotechnical sample locations (Fugro 2016)**
-  CPT and Vibrocore



Section: Phase 1 palaeogeographic feature data example – 75005

Layout:
Projection: ETRS 1989 UTM Zone 31N



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





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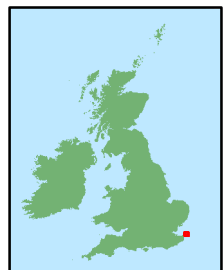
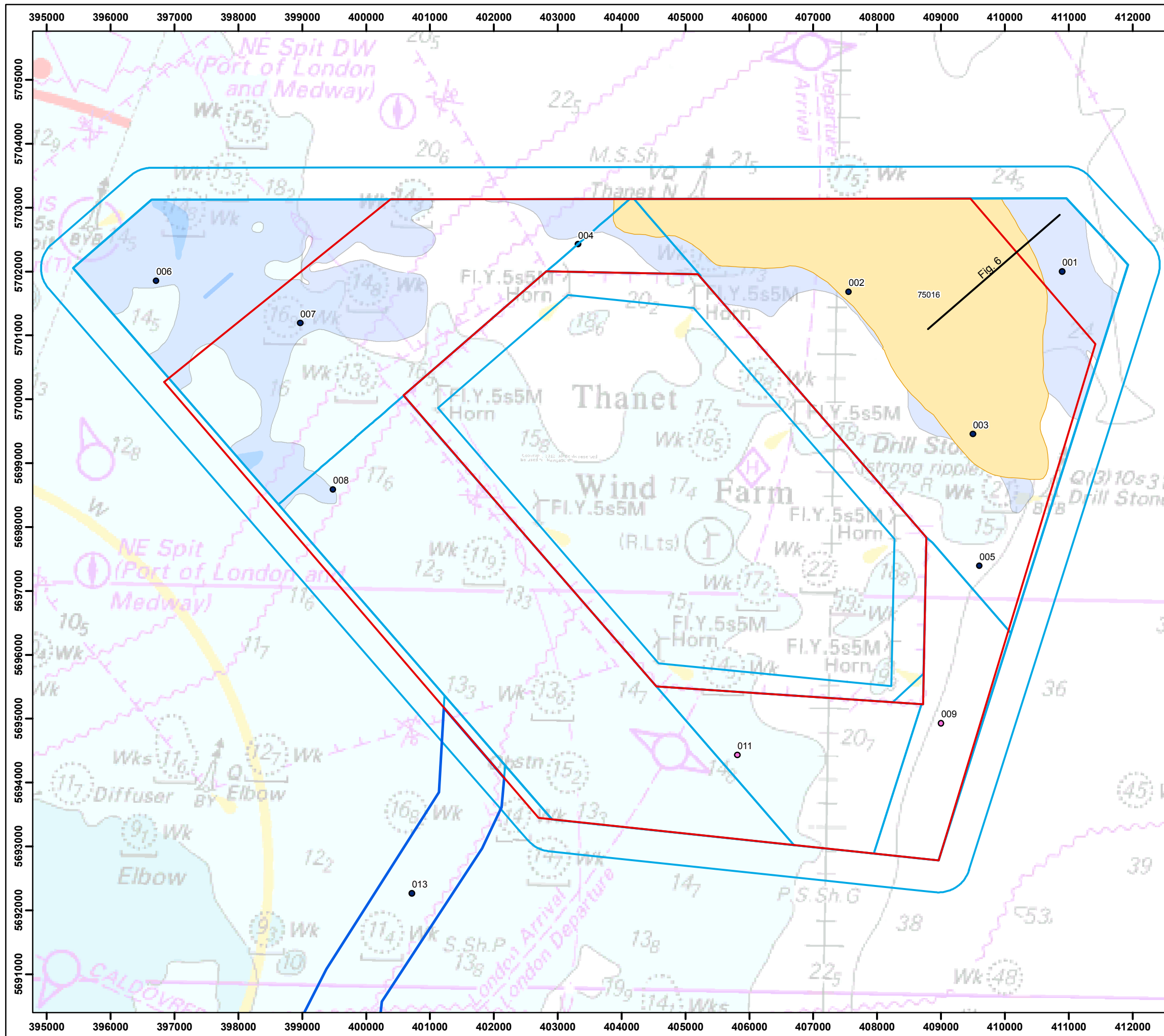
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Drg No	116080_geo_Fig04				

THANET EXTENSION OFFSHORE WIND FARM

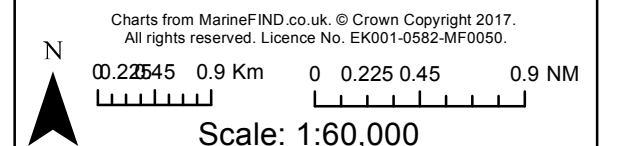
Figure 5
Phase 2 palaeogeographic features of archaeological potential (wind farm site)

Legend

-  Offshore Site Boundary
-  Cable Route Offshore
-  Site Investigation Boundary
- Phase 2 Channels**
-  Channel
- Phase 1 Channels**
-  Acoustic Blanking
-  Channel
-  Data example location
- Geotechnical sample locations (Fugro 2016)**
-  CPT
-  CPT and Vibrocore



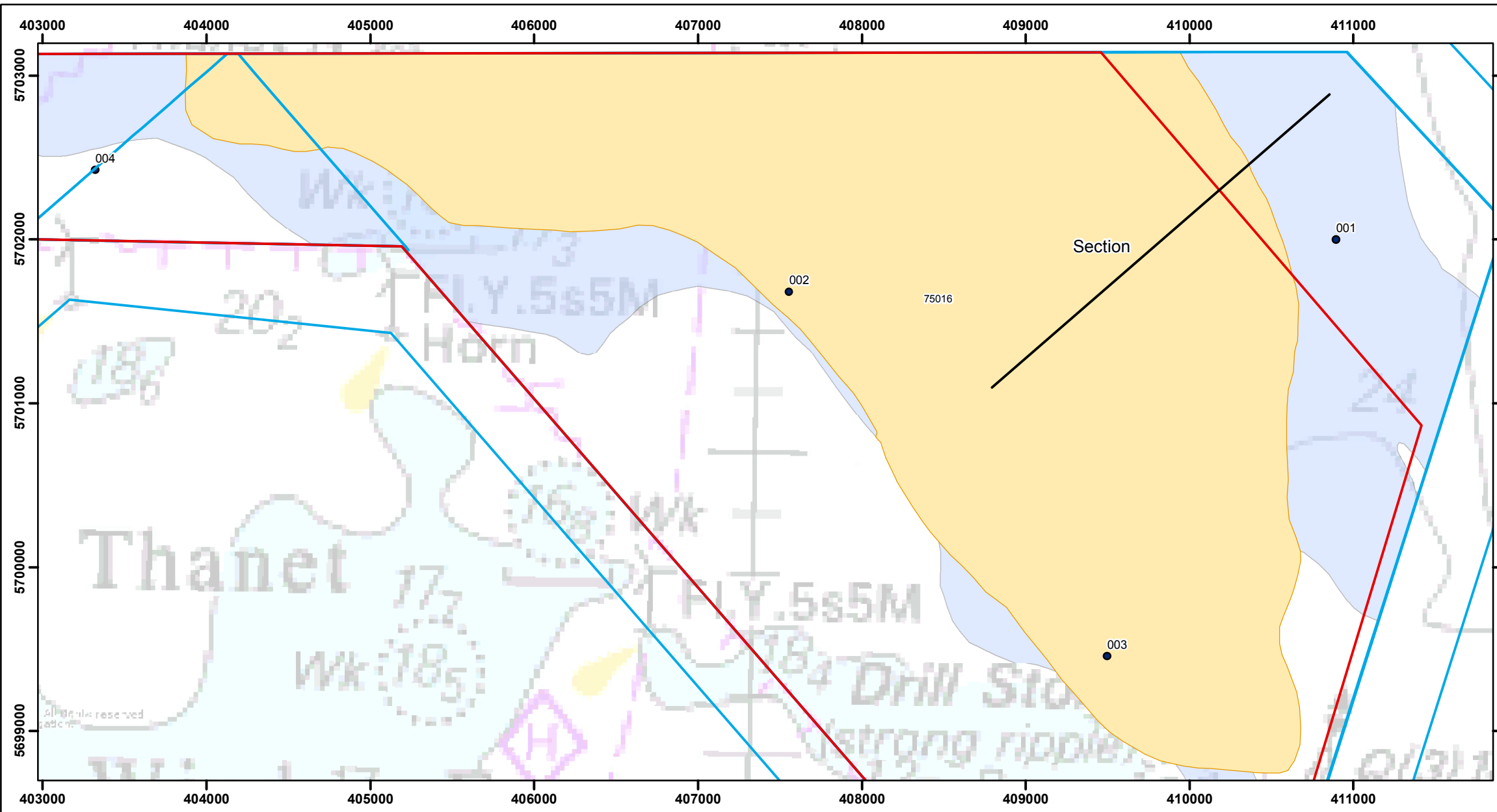
Layout:
Projection: ETRS 1989 UTM Zone 31N



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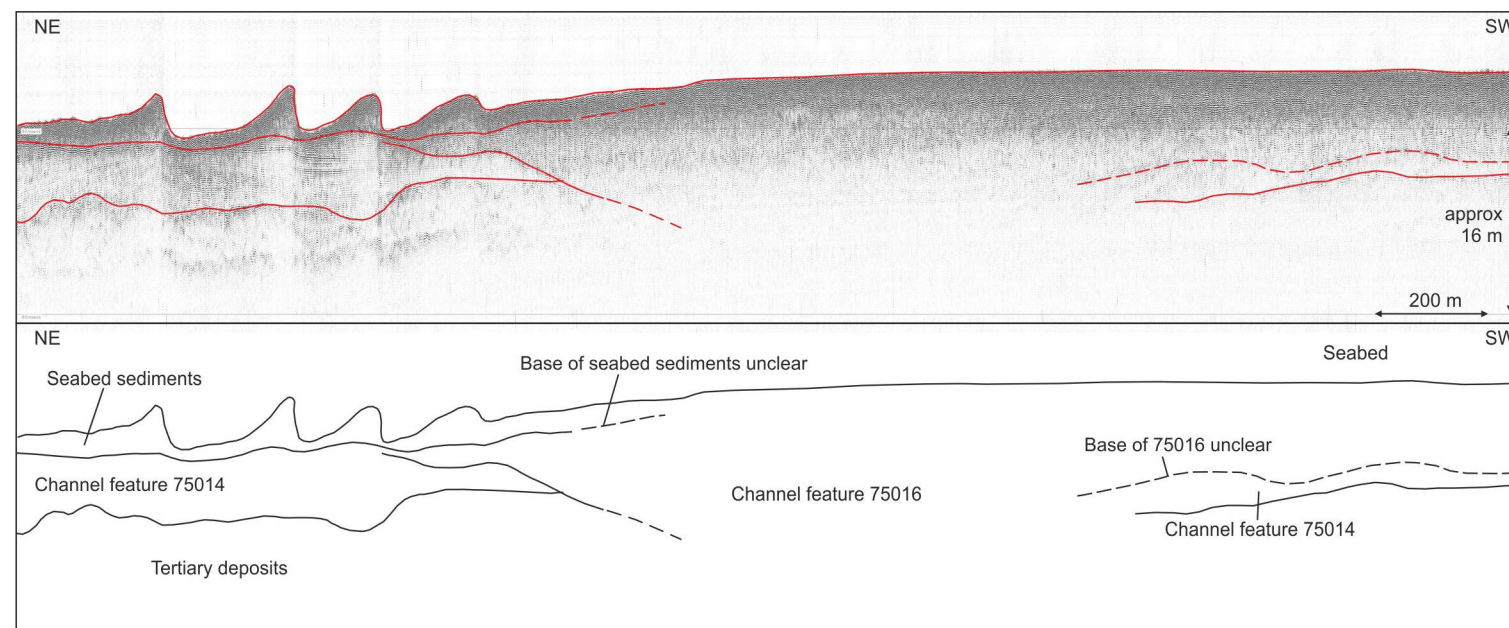
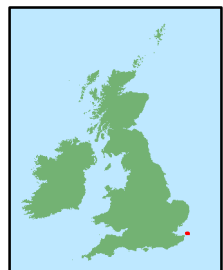
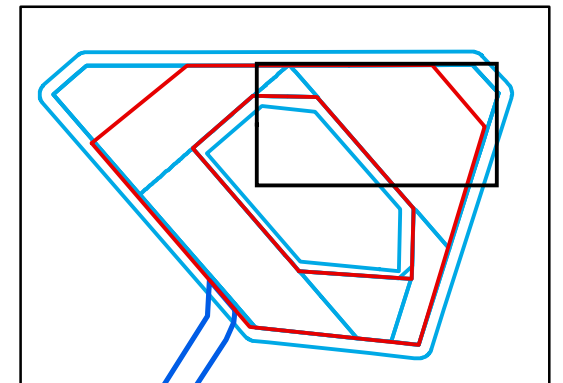
**THANET EXTENSION
OFFSHORE WIND FARM**

Figure 6
Phase 2 palaeogeographic feature data example – 75016



Legend

- Data example location
- Offshore Site Boundary
- Site Investigation Boundary
- Phase 2 Channels**
- Channel
- Phase 1 Channels**
- Channel
- Geotechnical sample locations (Fugro 2016)**
- CPT and Vibrocore



Section: Phase 2 palaeogeographic feature data example – 75016

Layout:
Projection: ETRS 1989 UTM Zone 31N















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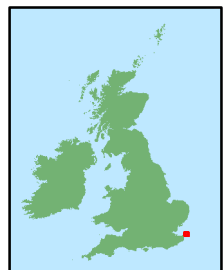
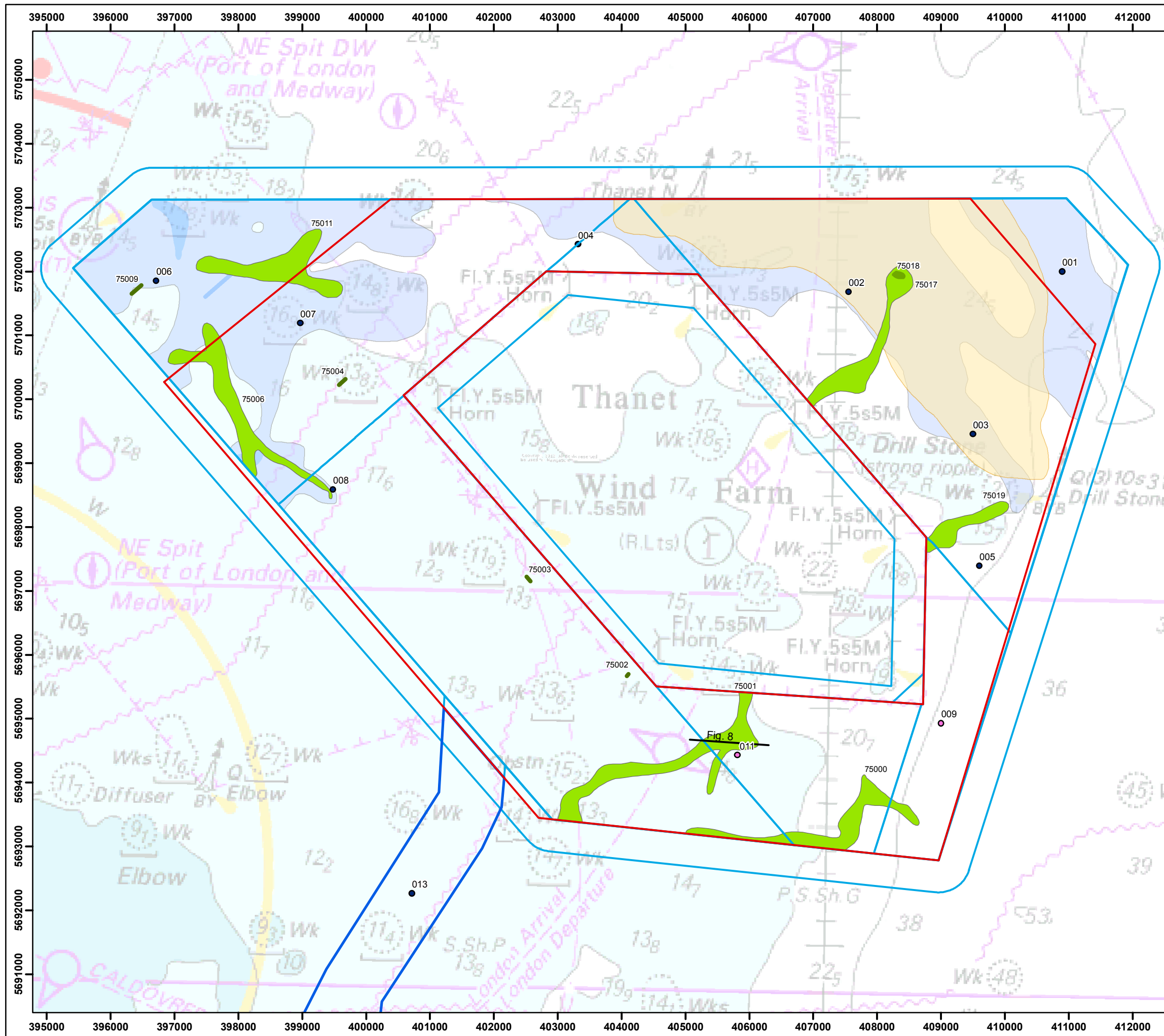
Rev	0	By	KL	Date	12/02/2018
Drg No	116080_geo_Fig06				

THANET EXTENSION OFFSHORE WIND FARM

Figure 7
Phase 3 palaeogeographic features of archaeological potential (wind farm site)

Legend

-  Offshore Site Boundary
-  Cable Route Offshore
-  Site Investigation Boundary
- Phase 3 Channels**
-  Simple Cut and Fill
-  Acoustic Blanking
-  Channel
- Phase 2 Channels**
-  Channel
- Phase 1 Channels**
-  Acoustic Blanking
-  Channel
-  Data example location
- Geotechnical sample locations (Fugro 2016)**
-  CPT
-  CPT and Vibrocore



Layout:
Projection: ETRS 1989 UTM Zone 31N

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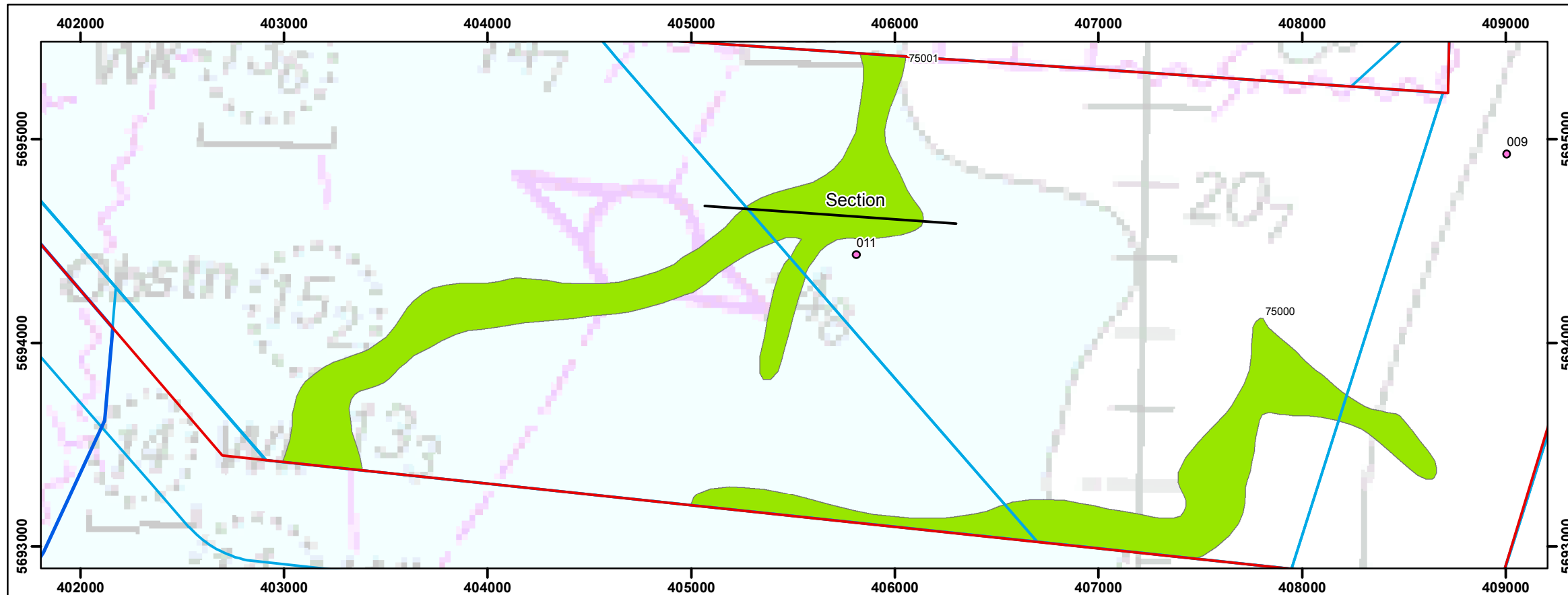
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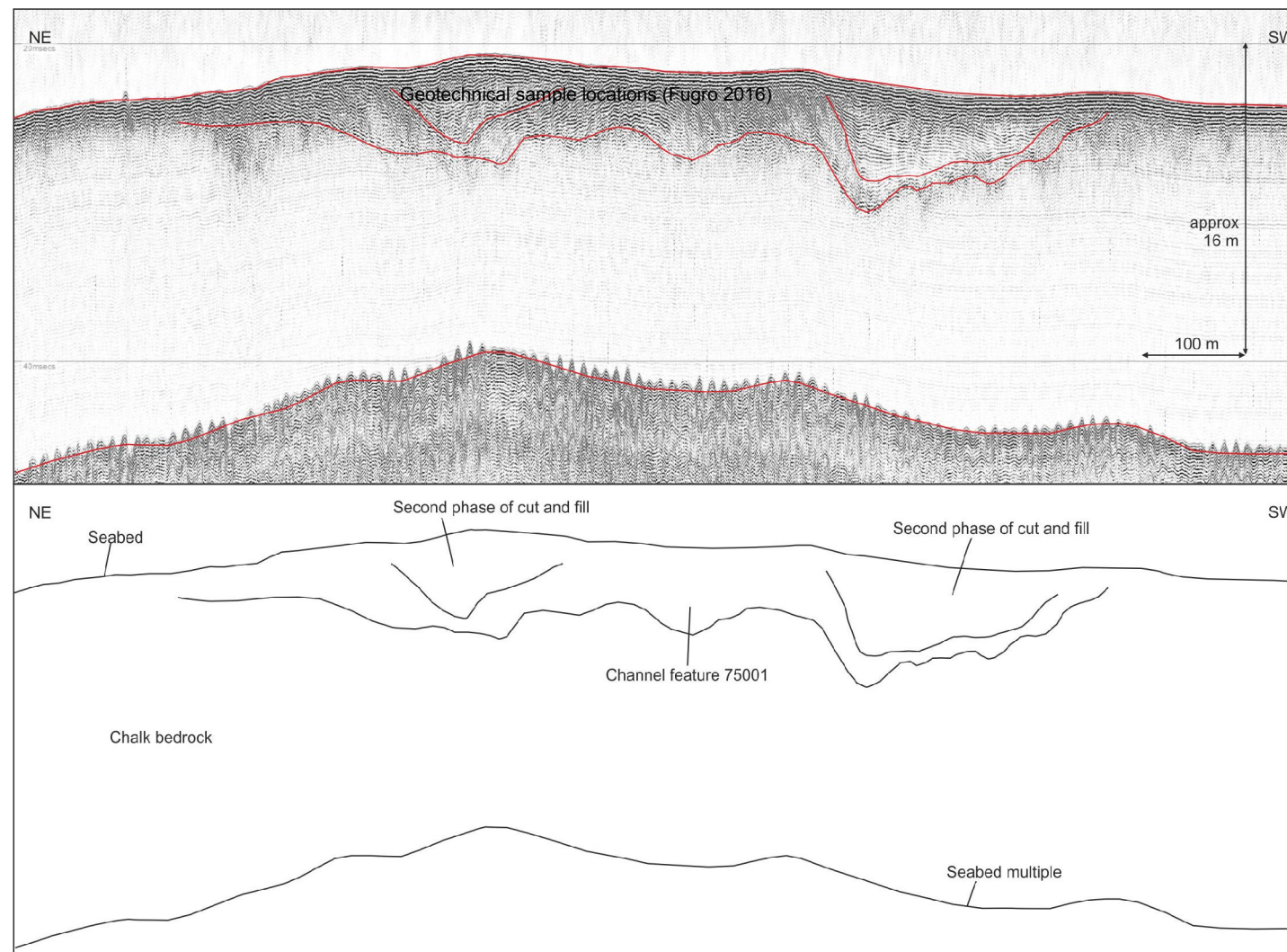
**THANET EXTENSION
OFFSHORE WIND FARM**

Figure 8
Phase 3 palaeogeographic feature
data example – 75001

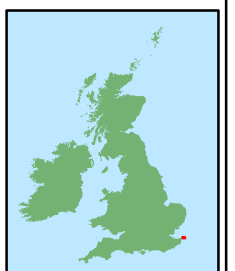
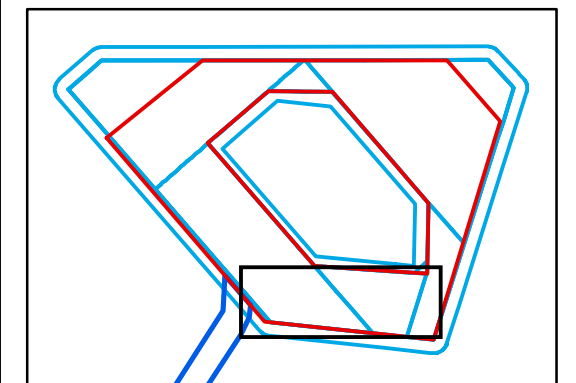


Legend

-  Offshore Site Boundary
-  Cable Route Offshore
-  Site Investigation Boundary
- Phase 3 Channels**
-  Channel
-  Data example location
- Geotechnical sample locations (Fugro 2016)**
-  CPT



Section: Phase 3 palaeogeographic feature data example – 75001



Layout:
Projection: ETRS 1989 UTM Zone 31N



Scale: 1:25,000

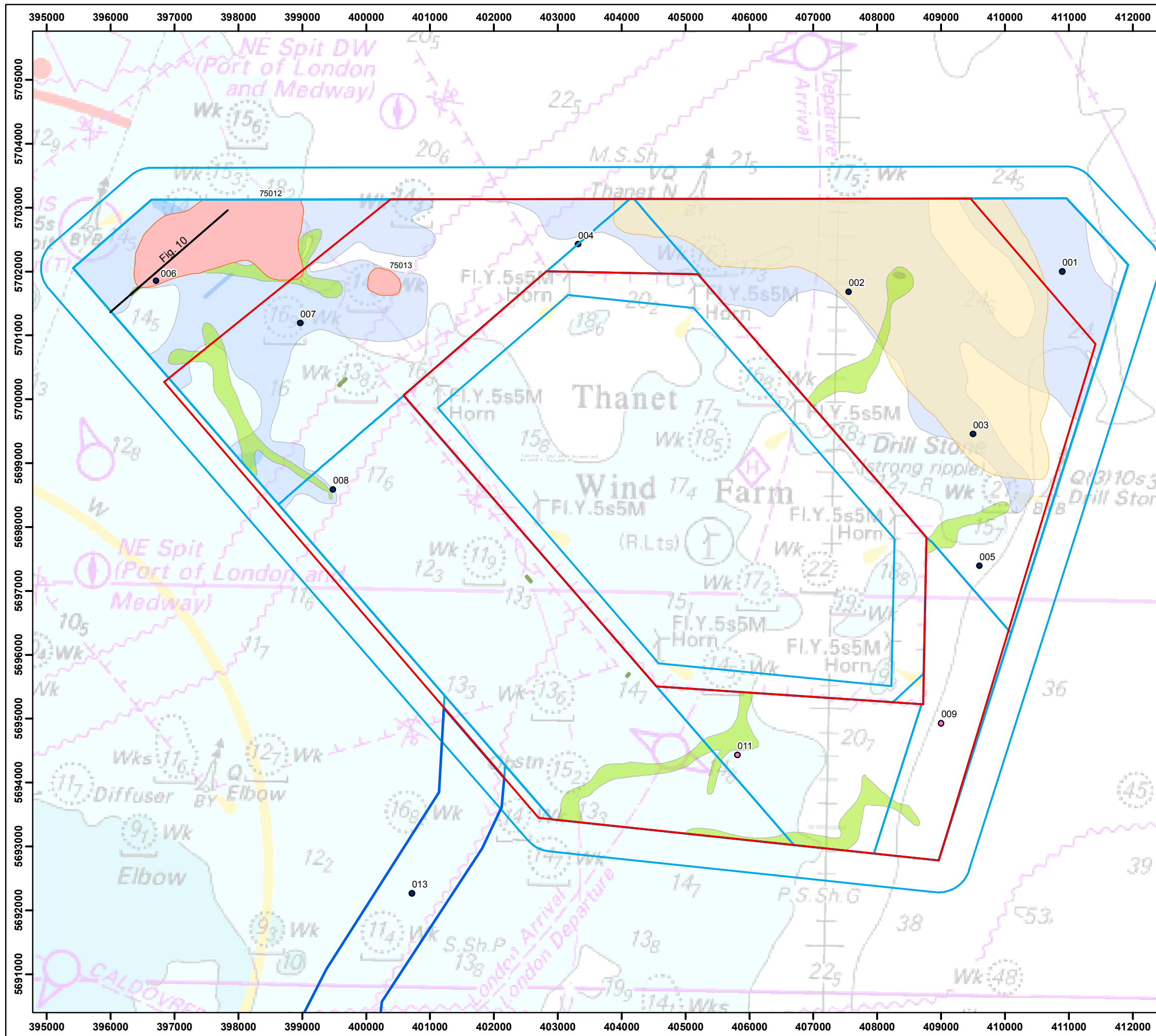
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THANET EXTENSION OFFSHORE WIND FARM

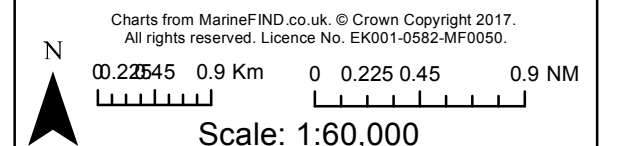
Figure 9
Phase 4 palaeogeographic features of archaeological potential (wind farm site)

Legend

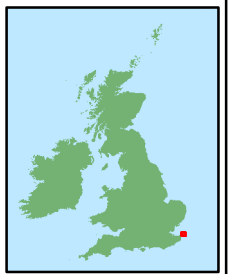
- Offshore Site Boundary
- Cable Route Offshore
- Site Investigation Boundary
- Phase 4 Erosion Surfaces**
- Erosion Surface
- Phase 3 Channels**
- Simple Cut and Fill
- Acoustic Blanking
- Channel
- Phase 2 Channels**
- Channel
- Phase 1 Channels**
- Acoustic Blanking
- Channel
- Data example location
- Geotechnical sample locations (Fugro 2016)**
- CPT
- CPT and Vibrocore



Layout:
Projection: ETRS 1989 UTM Zone 31N

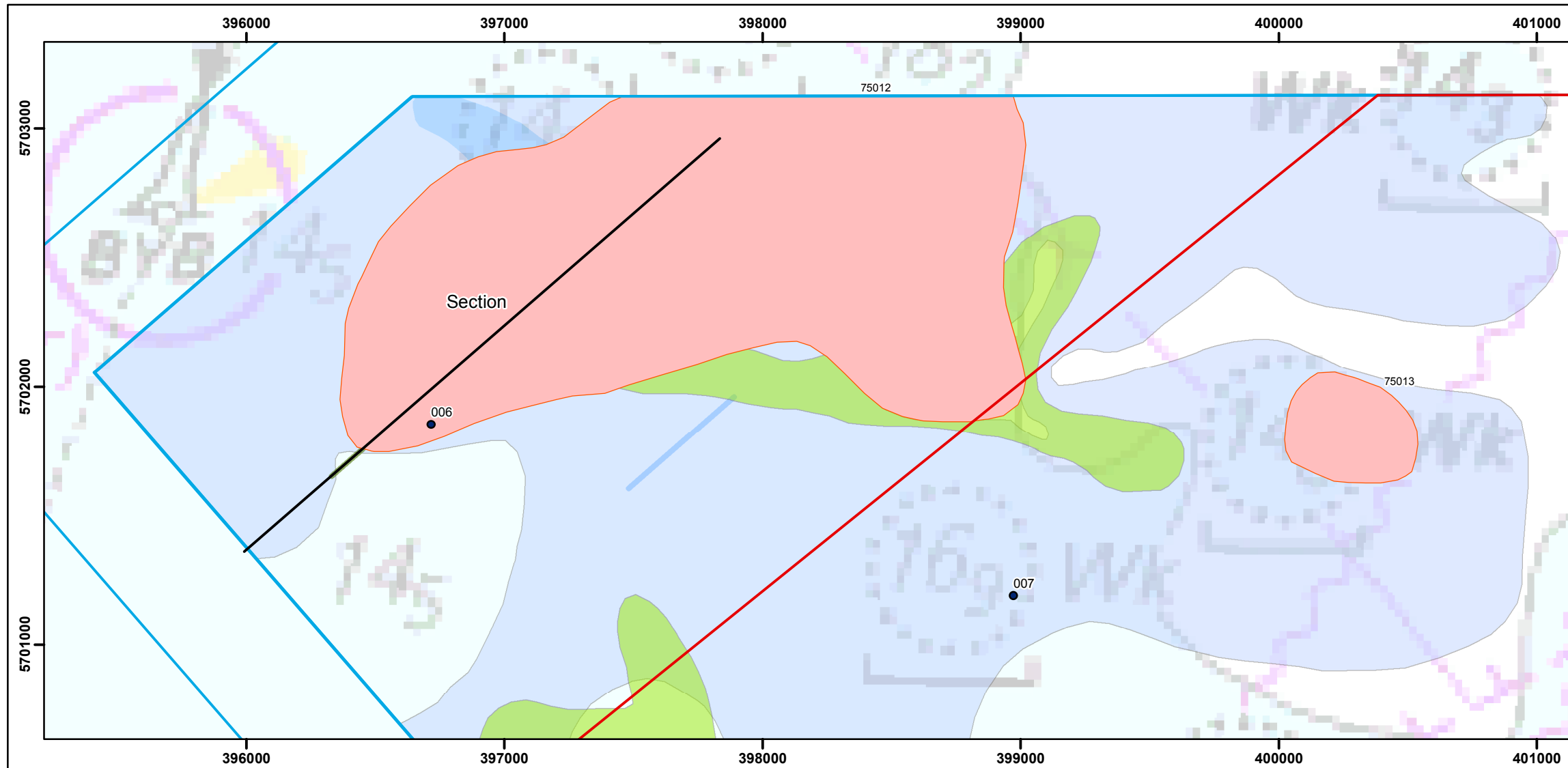


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Drg No	116080_geo_Fig09				



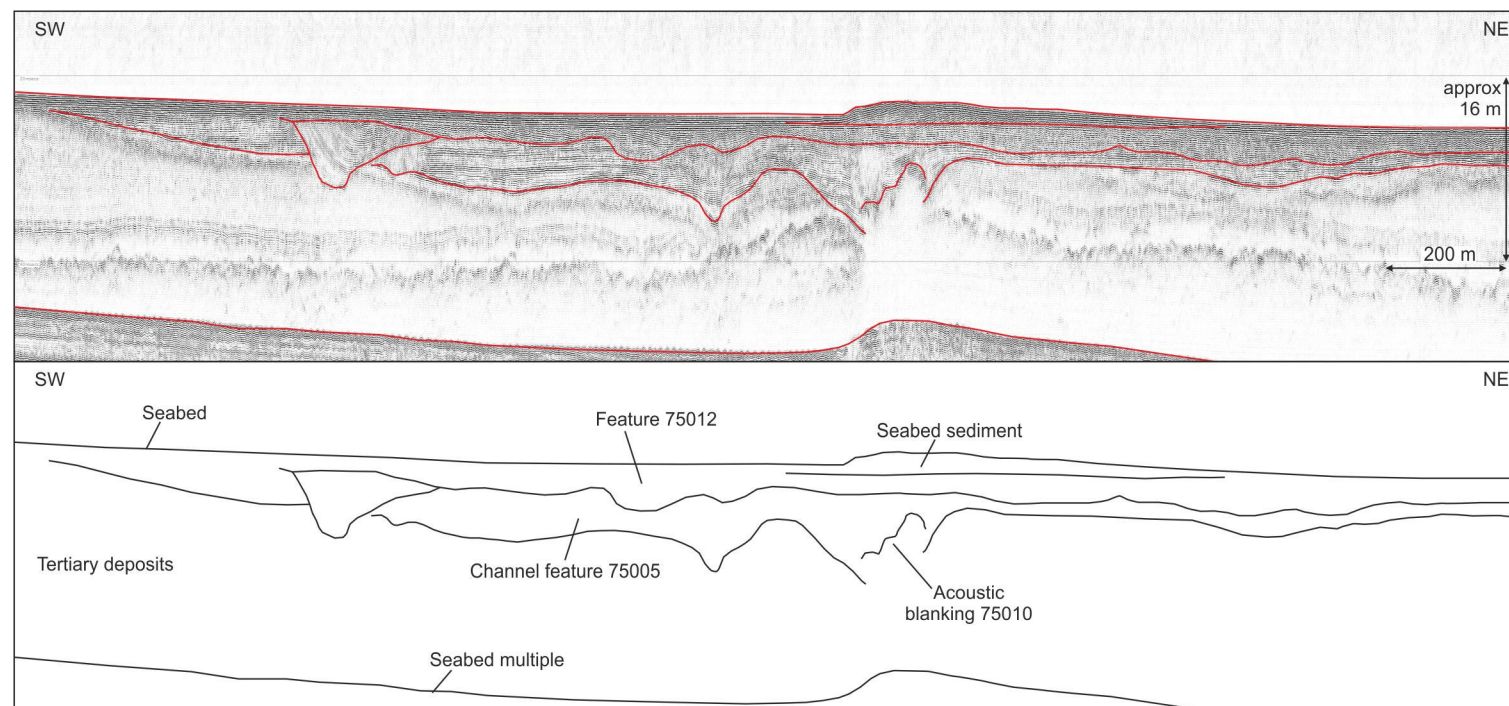
**THANET EXTENSION
OFFSHORE WIND FARM**

Figure 10
Phase 4 palaeogeographic feature data example – 75012

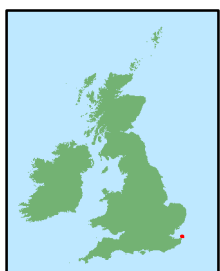
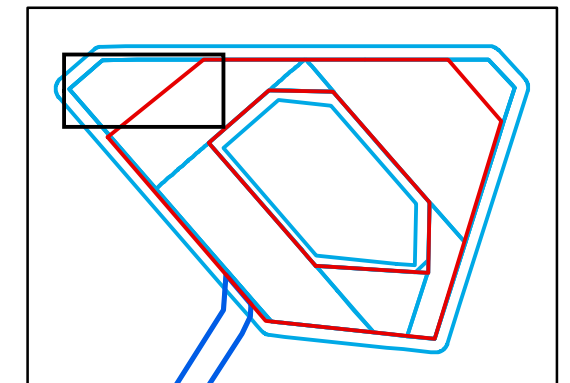


Legend

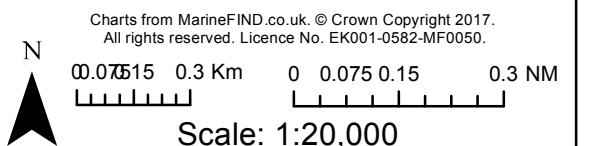
- Data example location
- Offshore Site Boundary
- Cable Route Offshore
- Site Investigation Boundary
- Phase 4 Erosion Surfaces**
- Erosion Surface
- Phase 3 Channels**
- Simple Cut and Fill
- Channel
- Phase 1 Channels**
- Acoustic Blanking
- Channel
- Geotechnical sample locations (Fugro 2016)**
- CPT
- CPT and Vibrocore



Section: Phase 4 palaeogeographic feature data example – 75012



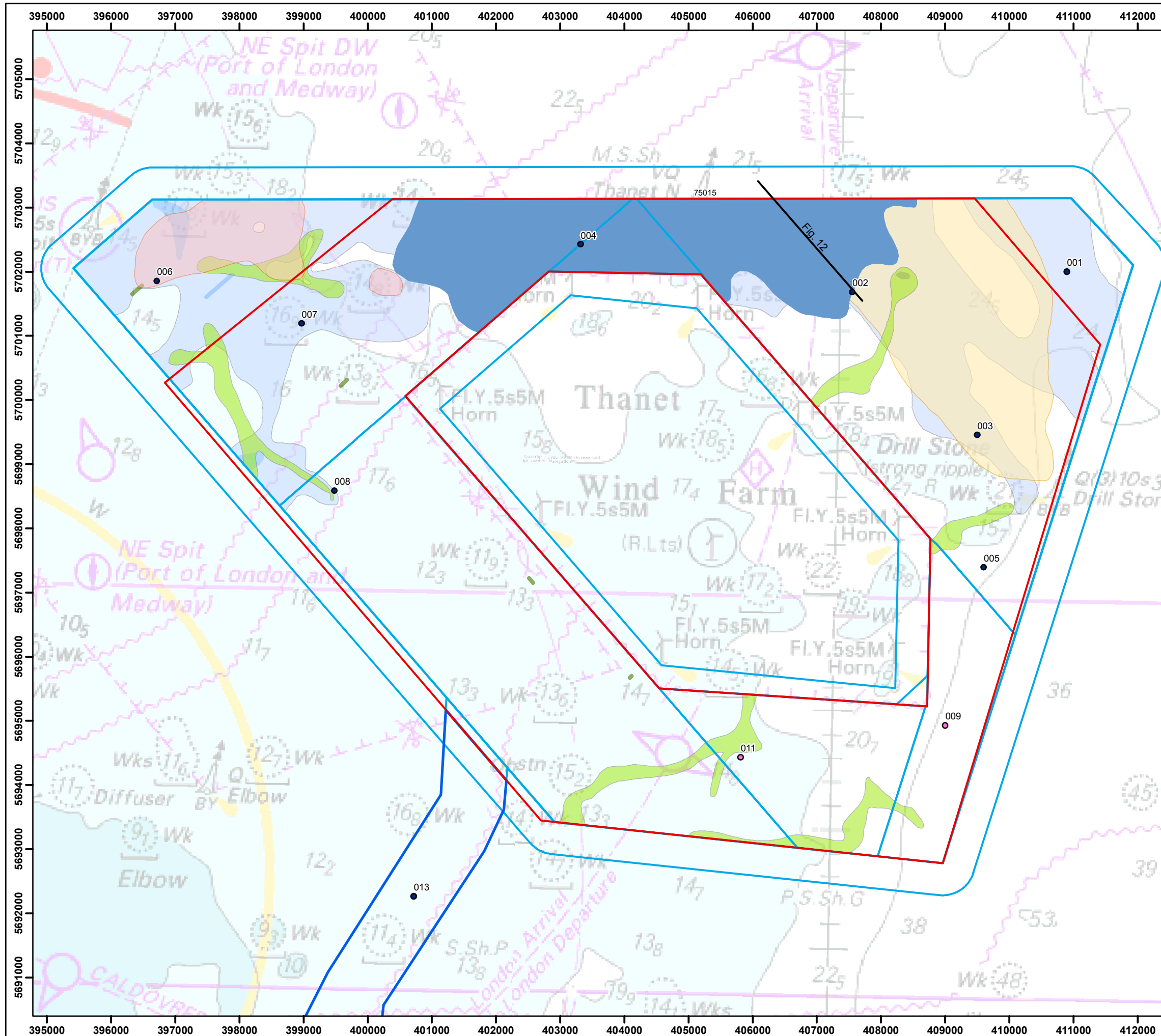
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




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Drg No	116080_geo_Fig10				

THANET EXTENSION OFFSHORE WIND FARM

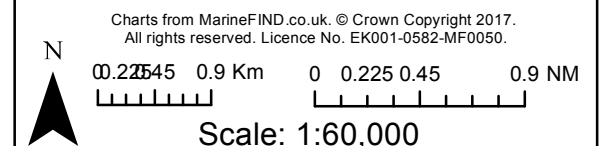
Figure 11
Phase 5 palaeogeographic features of archaeological potential (wind farm site)



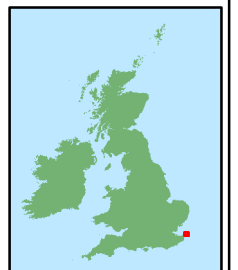
Legend

-  Offshore Site Boundary
-  Cable Route Offshore
-  Site Investigation Boundary
- Phase 5 Channel Complex**
-  Channel Complex
- Phase 4 Erosion Surfaces**
-  Erosion Surface
- Phase 3 Channels**
-  Simple Cut and Fill
-  Acoustic Blanking
-  Channel
- Phase 2 Channels**
-  Channel
- Phase 1 Channels**
-  Acoustic Blanking
-  Channel
-  Data example location
- Geotechnical sample locations (Fugro 2016)**
-  CPT
-  CPT and Vibrocore

Layout:
Projection: ETRS 1989 UTM Zone 31N

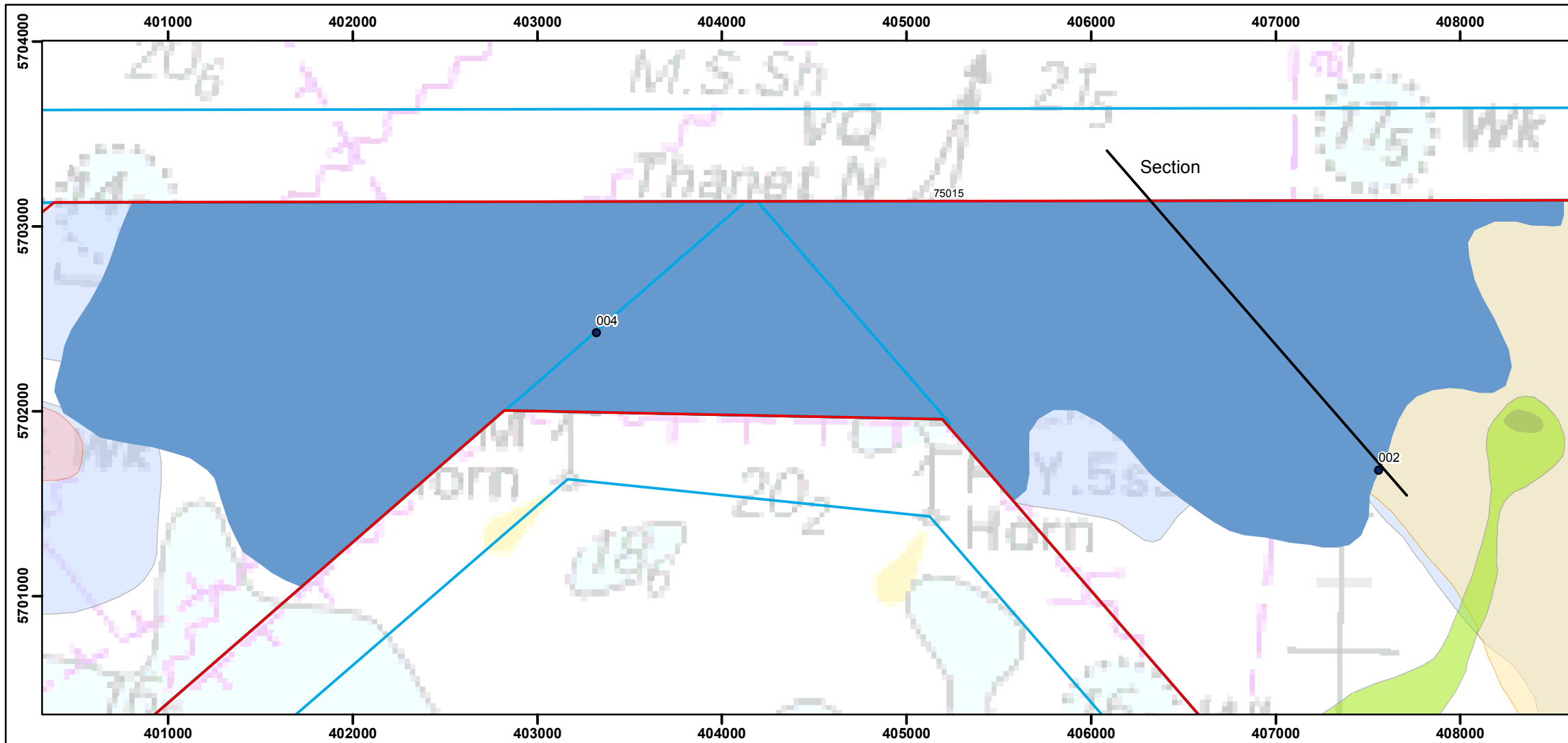


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









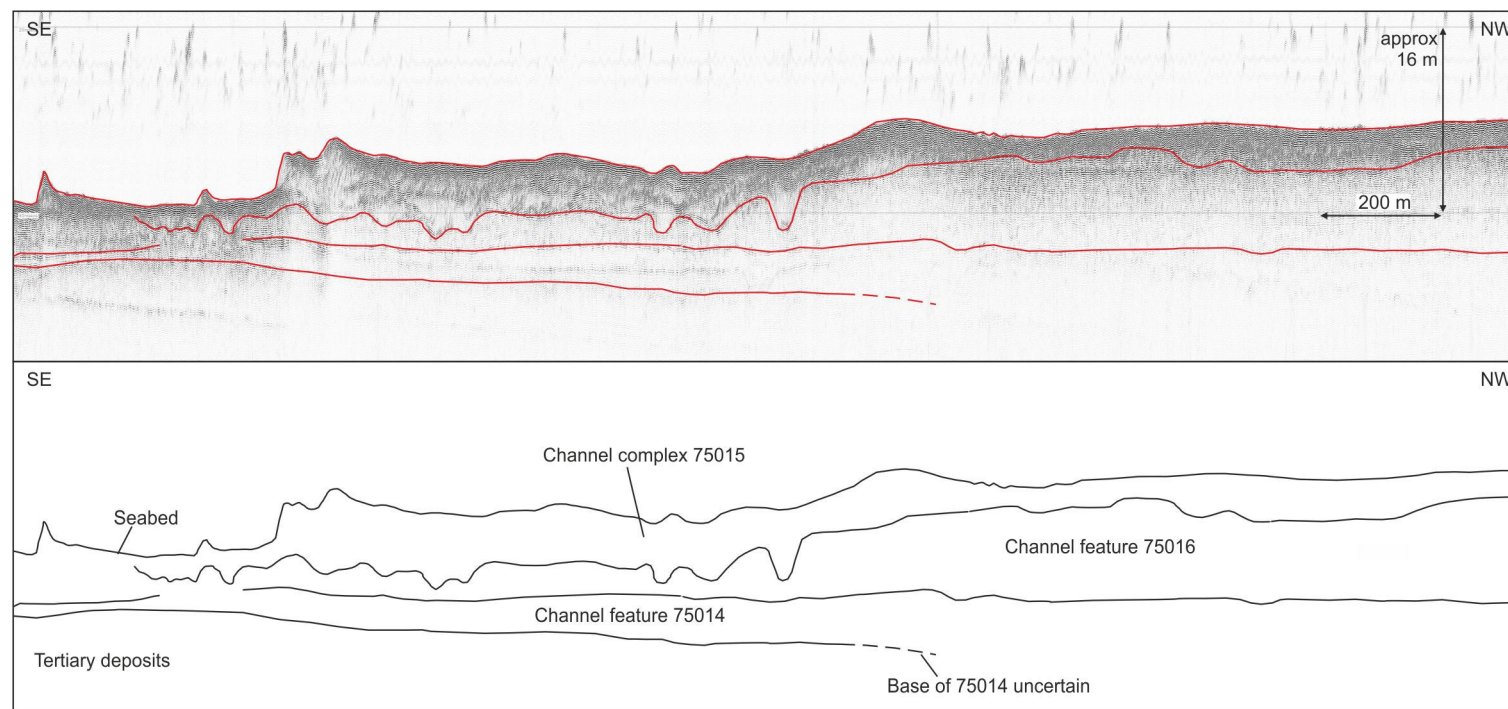
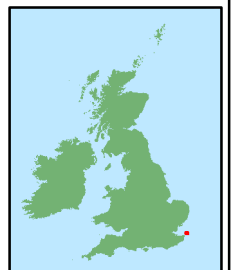
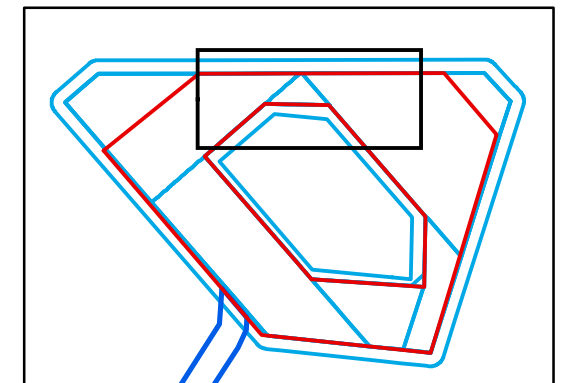
**THANET EXTENSION
OFFSHORE WIND FARM**

Figure 12
Phase 5 palaeogeographic feature data example – 75015



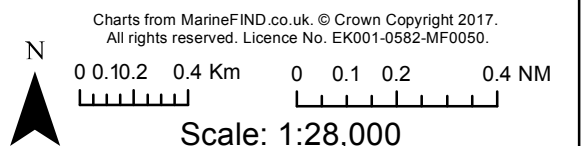
Legend

-  Offshore Site Boundary
-  Cable Route Offshore
-  Site Investigation Boundary
- Phase 5 Channel Complex**
-  Channel Complex
- Phase 4 Erosion Surfaces**
-  Erosion Surface
- Phase 3 Channels**
-  Acoustic Blanking
-  Channel
- Phase 2 Channels**
-  Channel
- Phase 1 Channels**
-  Channel
-  Data example location
- Geotechnical sample locations (Fugro 2016)**
-  CPT
-  CPT and Vibrocore



Section: Phase 5 palaeogeographic feature data example – 75015

Layout:
Projection: ETRS 1989 UTM Zone 31N



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**THANET EXTENSION
OFFSHORE WIND FARM**

Figure 13a
Seabed Features of Archaeological
Potential in TEOWF Site Area

Legend











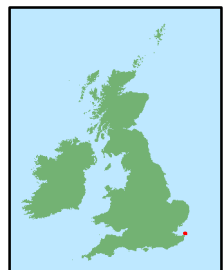
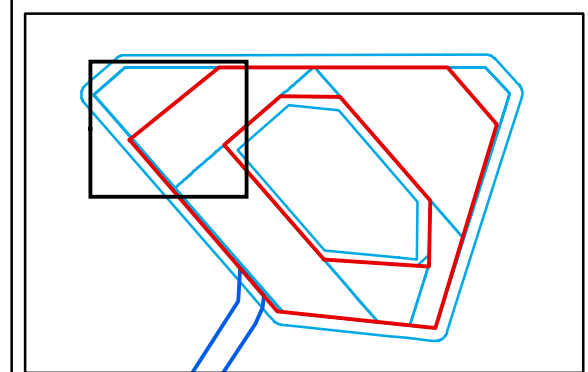
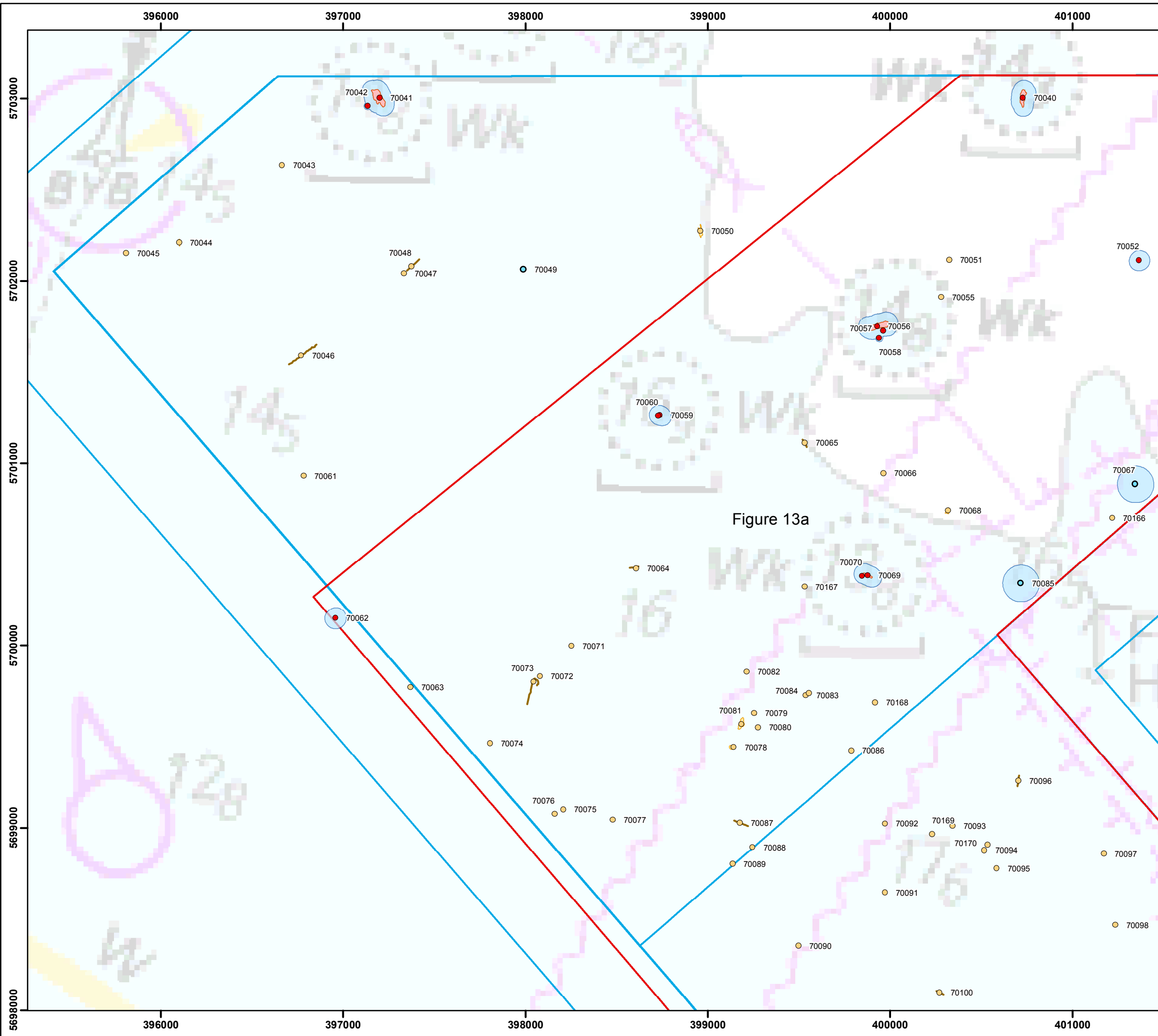
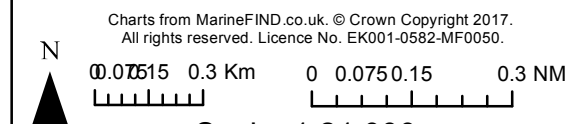
-  Cable Route Offshore
-  Offshore Site Boundary
-  Site Investigation Boundary
-  Linear features
-  A1 – Anthropogenic origin of archaeological interest
-  A2 – Uncertain origin of possible archaeological interest
-  A3 – Historic record of possible archaeological interest with no corresponding geophysical anomaly
-  A1 anomaly extents
-  A2 anomaly extents
-  Recommended archaeological exclusion zone

Figure 13a



Layout:
Projection: ETRS 1989 UTM Zone 31N








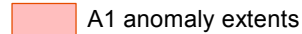
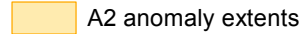
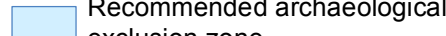


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Drg No	116080_geo_Fig13a-e				

**THANET EXTENSION
OFFSHORE WIND FARM**

Figure 13b
Seabed Features of Archaeological
Potential in TEOWF Site Area

- Legend**
-  Cable Route Offshore
 -  Offshore Site Boundary
 -  Site Investigation Boundary
 -  Linear features
 -  A1 – Anthropogenic origin of archaeological interest
 -  A2 – Uncertain origin of possible archaeological interest
 -  A3 – Historic record of possible archaeological interest with no corresponding geophysical anomaly
 -  A1 anomaly extents
 -  A2 anomaly extents
 -  Recommended archaeological exclusion zone

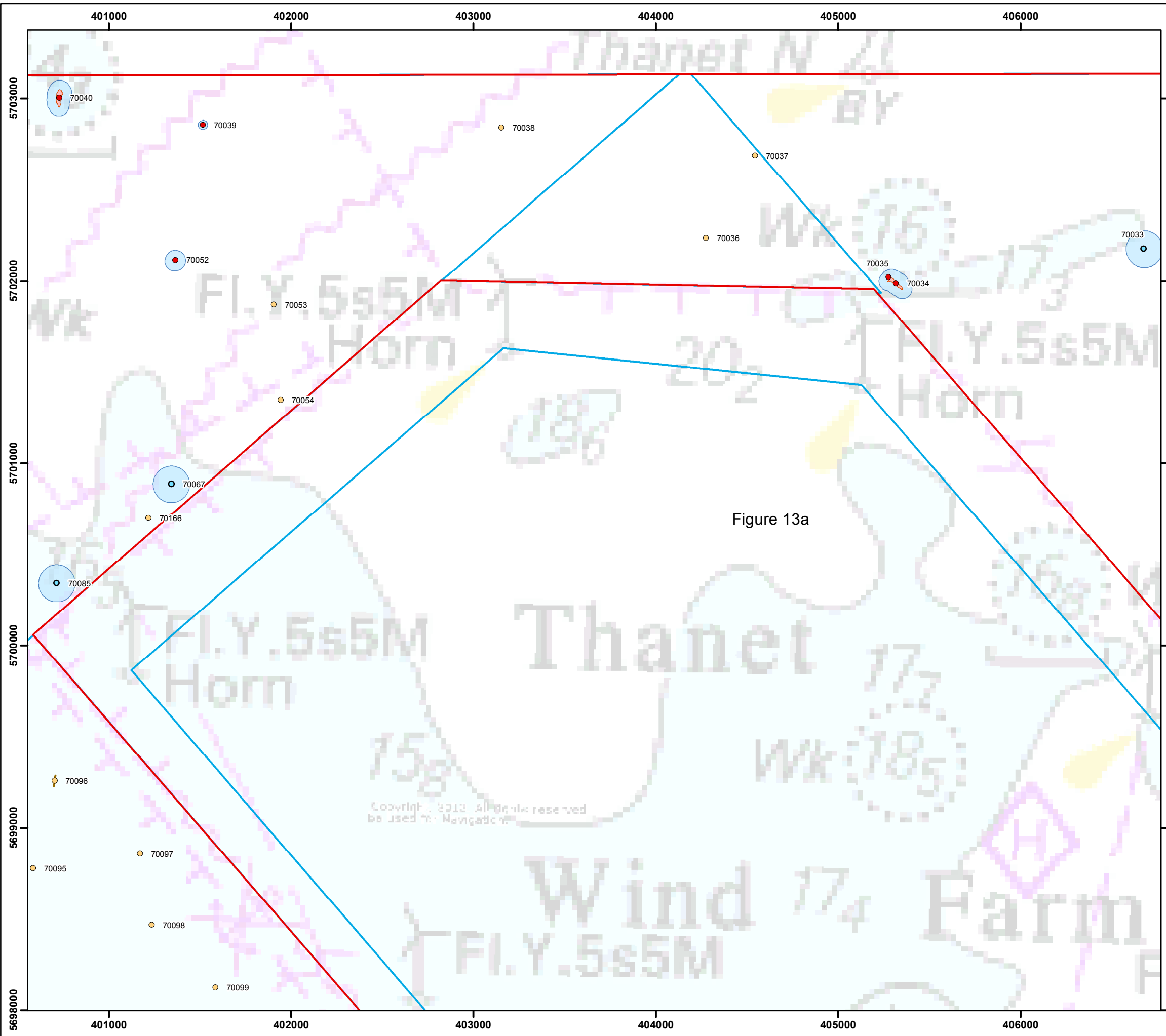
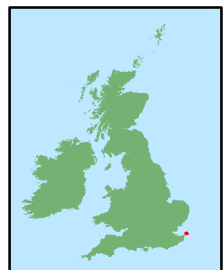
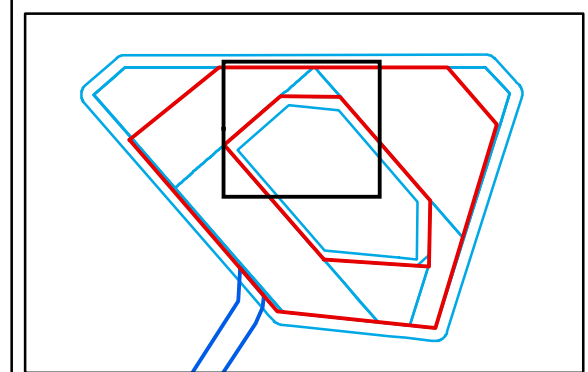


Figure 13a



Layout:
Projection: ETRS 1989 UTM Zone 31N

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0 0.075 0.15 0.3 Km 0 0.075 0.15 0.3 NM

Scale: 1:21,000

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Drg No	116080_geo_Fig13a-e				

**THANET EXTENSION
OFFSHORE WIND FARM**

Figure 13c
Seabed Features of Archaeological
Potential in TEOWF Site Area

Legend











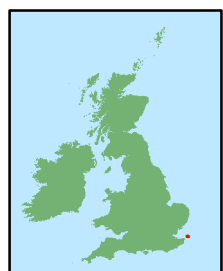
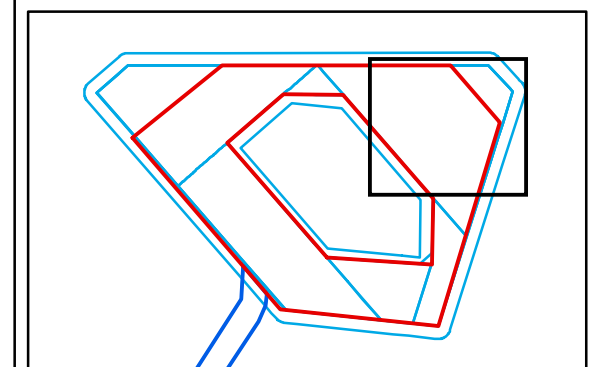
-  Cable Route Offshore
-  Offshore Site Boundary
-  Site Investigation Boundary
-  Linear features
-  A1 – Anthropogenic origin of archaeological interest
-  A2 – Uncertain origin of possible archaeological interest
-  A3 – Historic record of possible archaeological interest with no corresponding geophysical anomaly
-  A1 anomaly extents
-  A2 anomaly extents
-  Recommended archaeological exclusion zone

Figure 13a



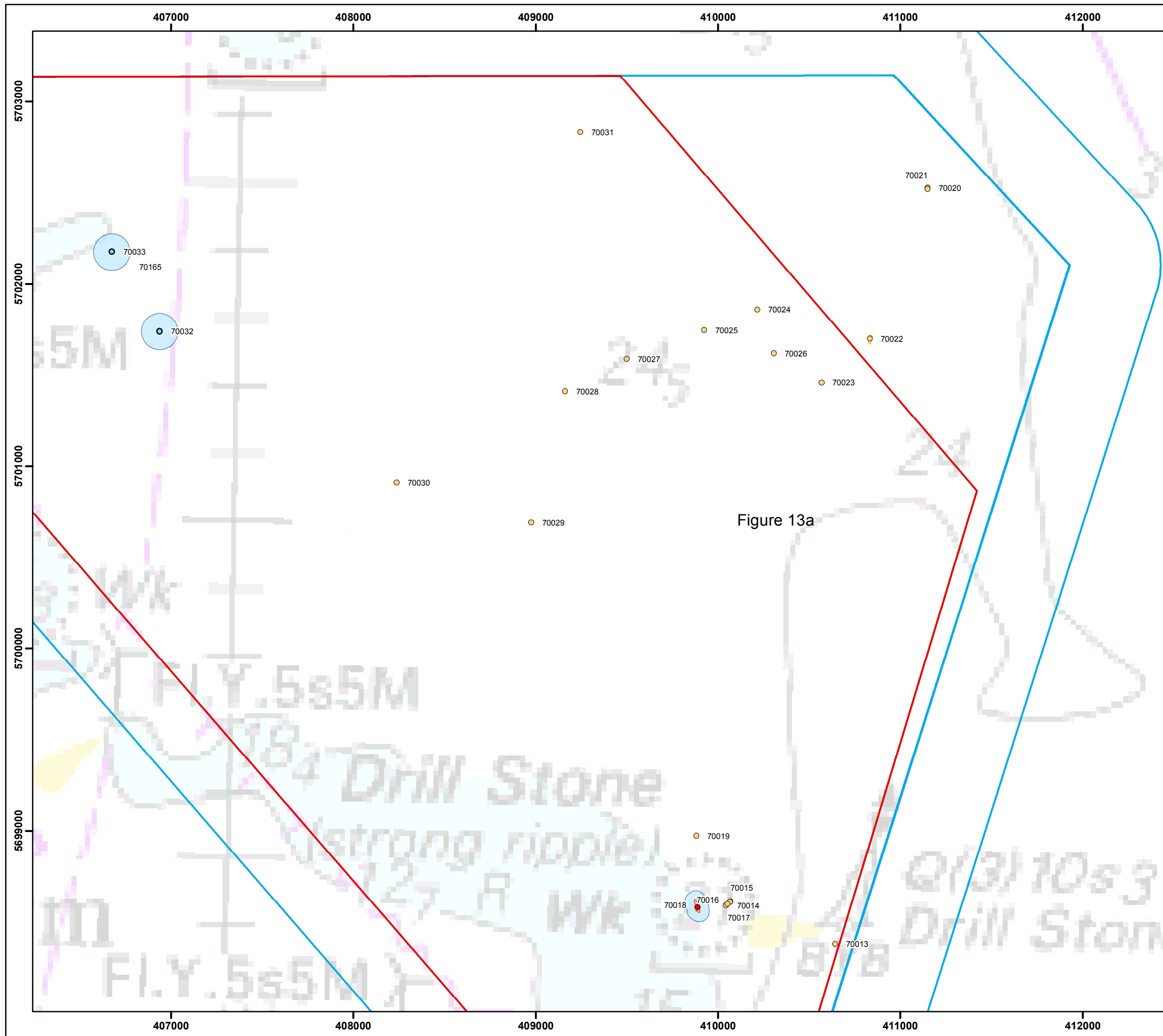
Layout:
Projection: ETRS 1989 UTM Zone 31N

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Scale: 1:21,000











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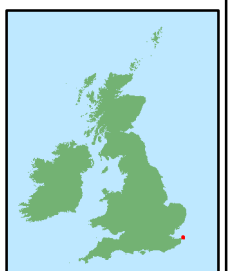
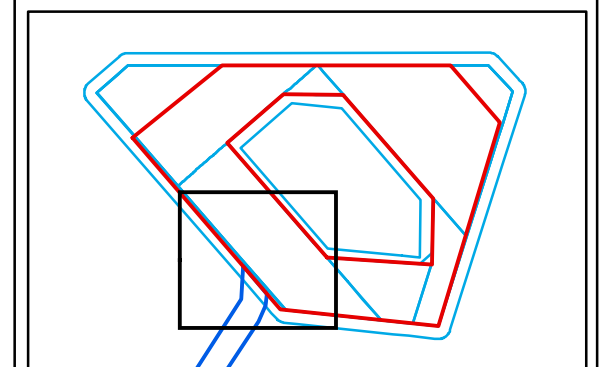


**THANET EXTENSION
OFFSHORE WIND FARM**

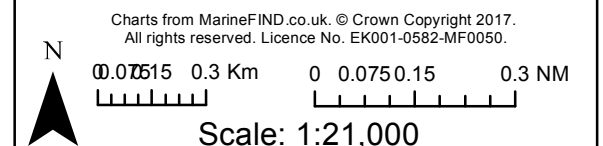
Figure 13d
Seabed Features of Archaeological
Potential in TEOWF Site Area

Legend

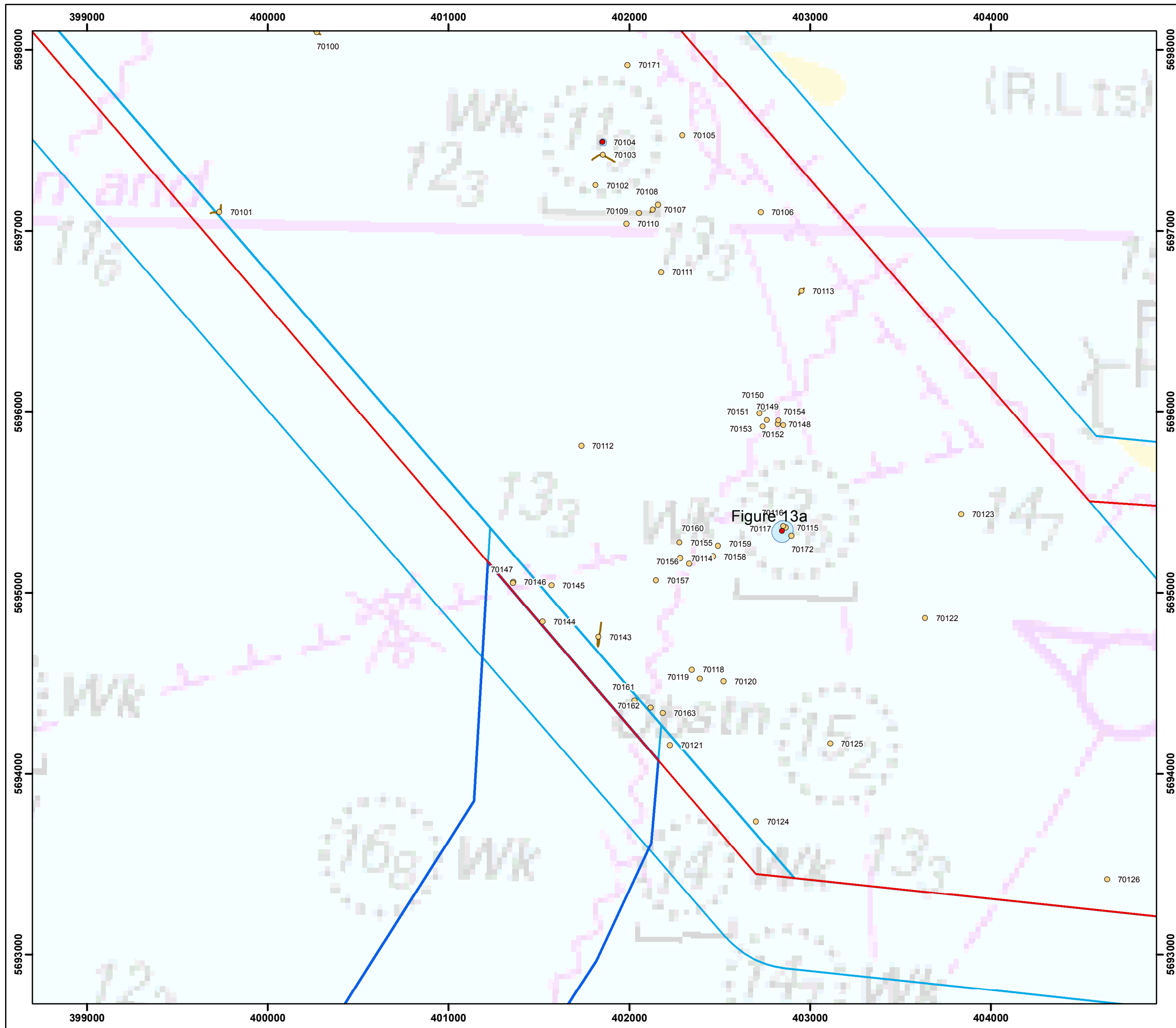
-  Cable Route Offshore
-  Offshore Site Boundary
-  Site Investigation Boundary
-  Linear features
-  A1 – Anthropogenic origin of archaeological interest
-  A2 – Uncertain origin of possible archaeological interest
-  A3 – Historic record of possible archaeological interest with no corresponding geophysical anomaly
-  A1 anomaly extents
-  A2 anomaly extents
-  Recommended archaeological exclusion zone



Layout:
Projection: ETRS 1989 UTM Zone 31N













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**THANET EXTENSION
OFFSHORE WIND FARM**

Figure 13e
Seabed Features of Archaeological
Potential in TEOWF Site Area

Legend

-  Cable Route Offshore
-  Offshore Site Boundary
-  Site Investigation Boundary
-  Linear features
-  A1 – Anthropogenic origin of archaeological interest
-  A2 – Uncertain origin of possible archaeological interest
-  A3 – Historic record of possible archaeological interest with no corresponding geophysical anomaly
-  A1 anomaly extents
-  A2 anomaly extents
-  Recommended archaeological exclusion zone

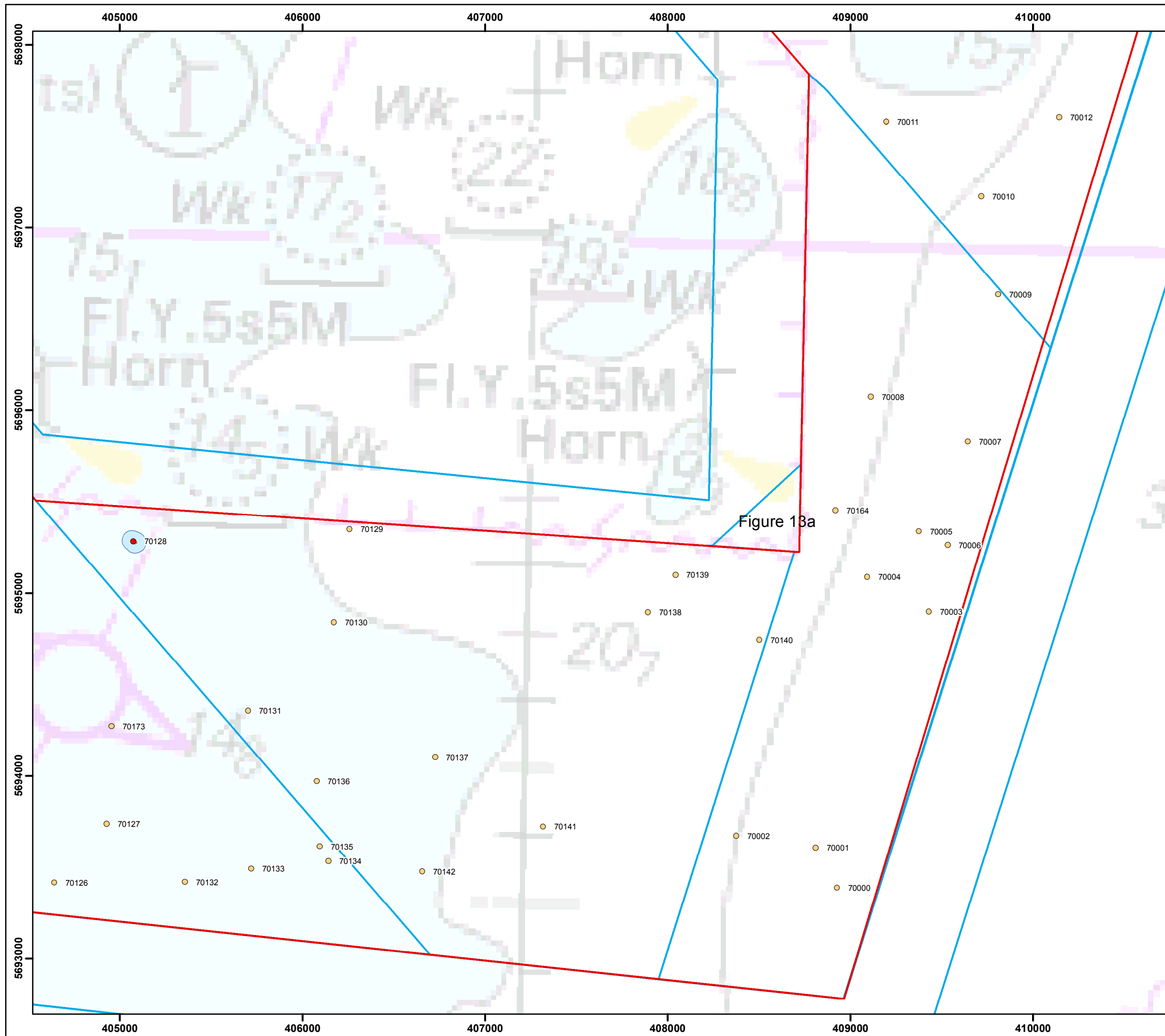
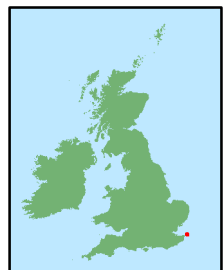
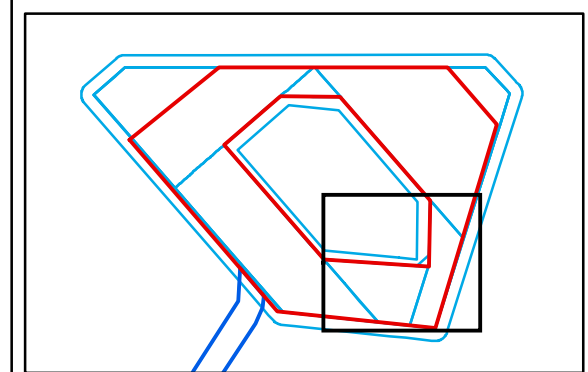


Figure 13a



Layout:
Projection: ETRS 1989 UTM Zone 31N







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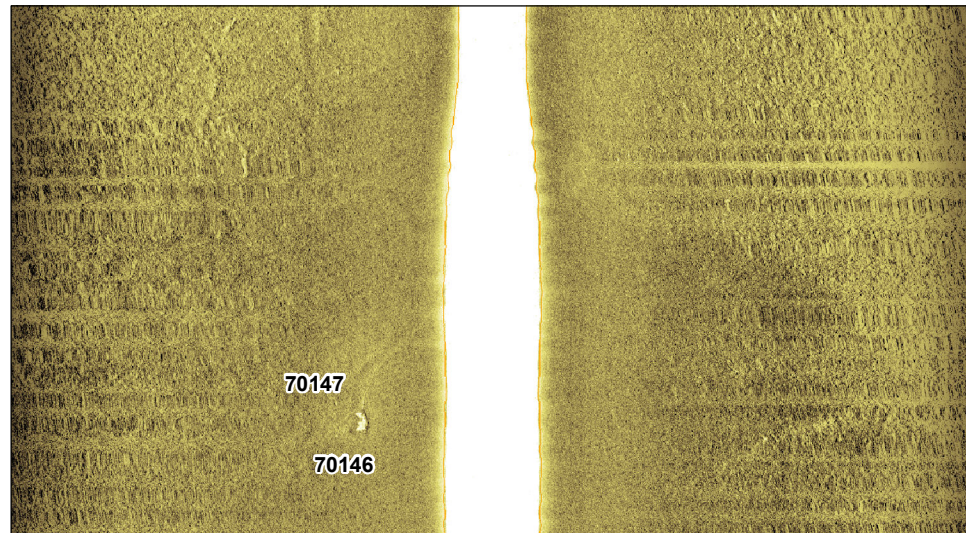
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**THANET EXTENSION
OFFSHORE WIND FARM**

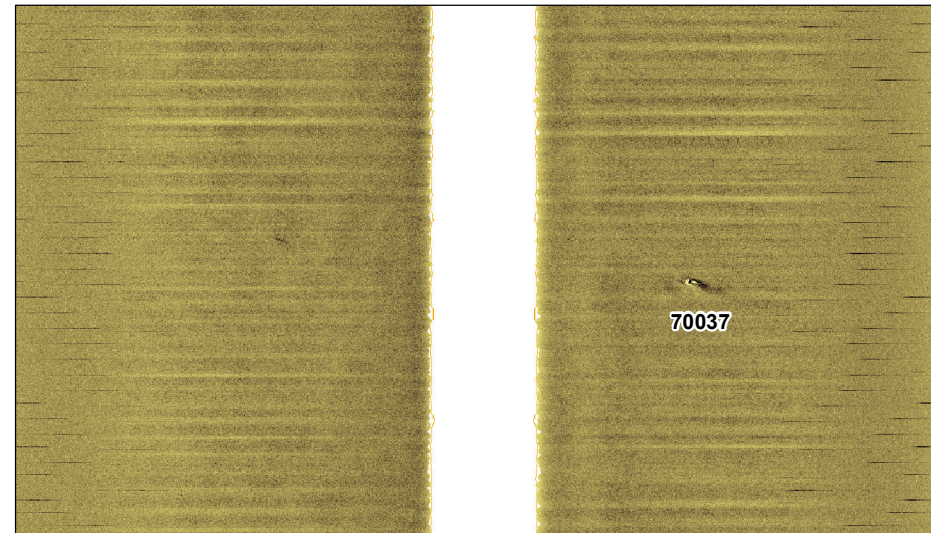
Figure 14
Data Examples of Seabed Anomalies
in TEOWF Site Area

Legend

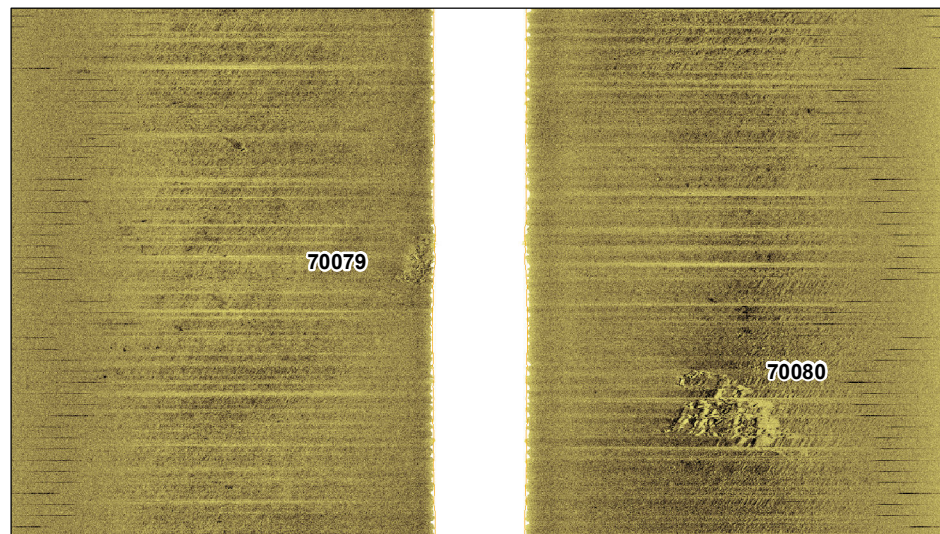
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-  Cable Route Offshore
-  Site Investigation Boundary
-  Feature



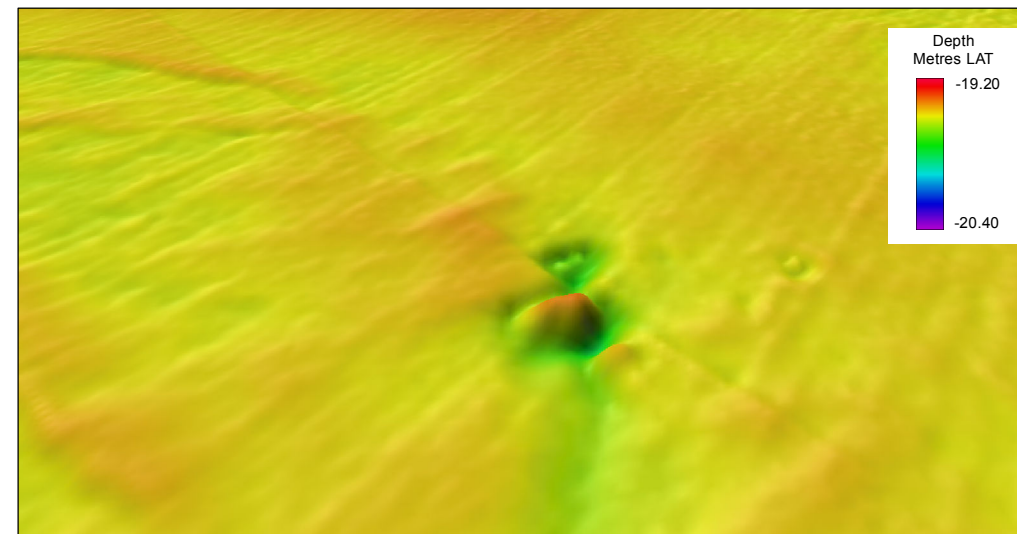
Sidescan sonar image (125 m range) of dark reflector, 70146, 6.5 x 1.8 x 0.6 m and associated rope/chain, 70147, 12.2 x 0.2 x 0.2 m



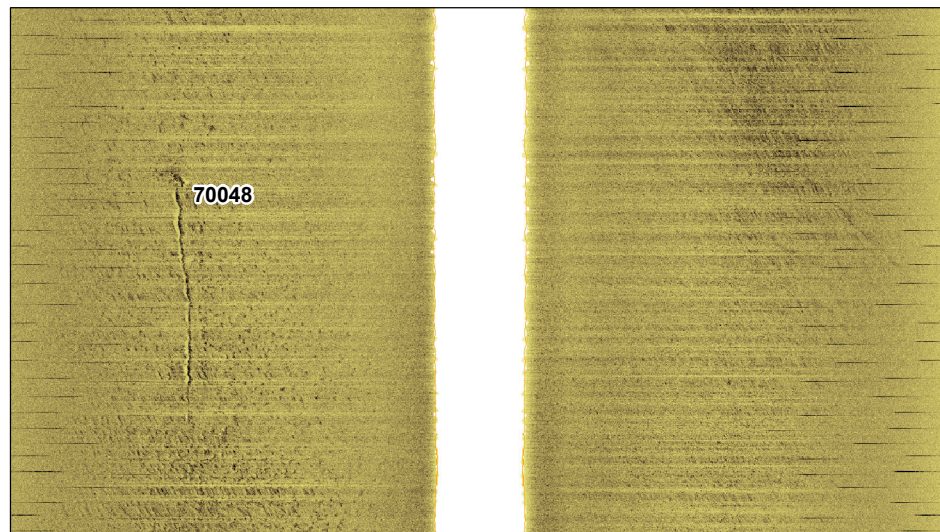
Sidescan sonar image (125 m range) of dark reflector, 70037, 2.5 x 1.1 x 0.6 m



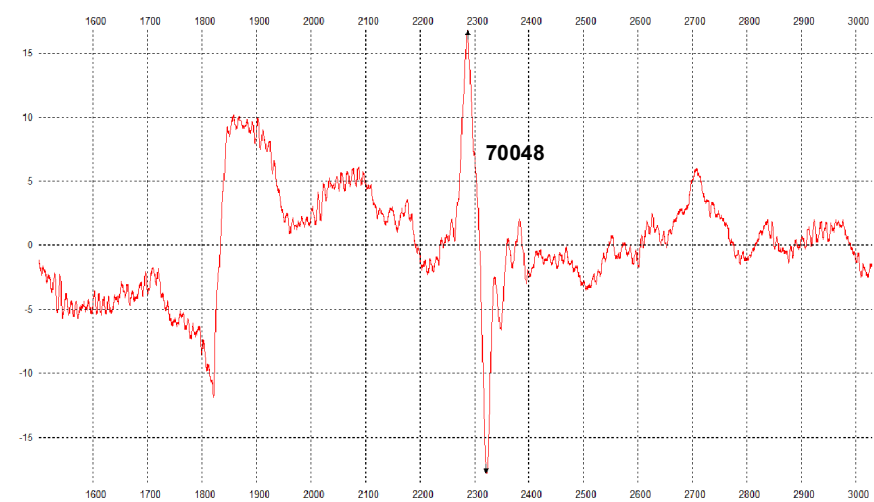
Sidescan sonar image (125 m range) of seafloor disturbance, 70079, 26.6 x 14.3 x 1 m and 70080, 17.5 x 14.3 x 0.3 m



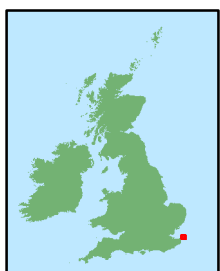
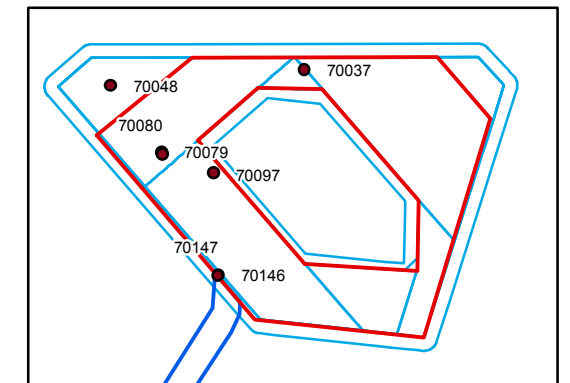
Multibeam bathymetry image, looking north, of mound 70097, 8.8 x 4 x 0.4 m



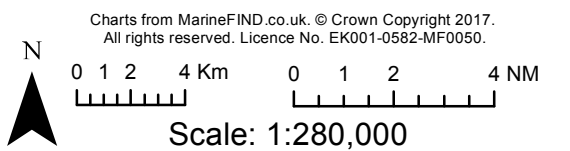
Sidescan sonar image (125 m range) of ferrous rope/chain, 70048, 113.9 x 0.6 x 0.3 m



Magnetic profile of ferrous rope/chain, 70048, measuring 35 nT



Layout:
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





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Drp No	116080_geo_Fig14				

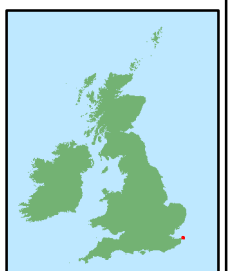
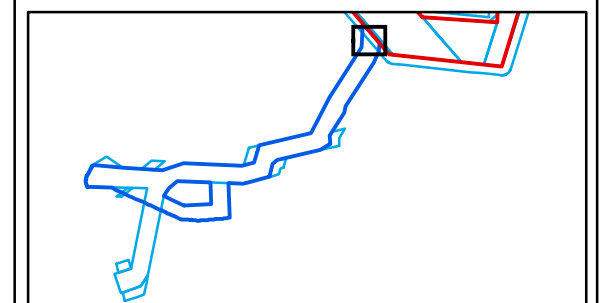
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**THANET EXTENSION
OFFSHORE WIND FARM**

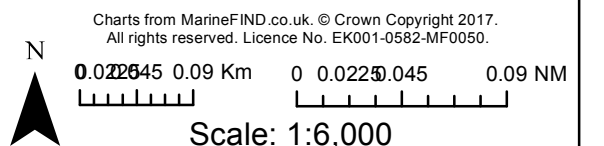
Figure 15a
Seabed Features of Archaeological
Potential in TEOWF Cable Corridor

Legend

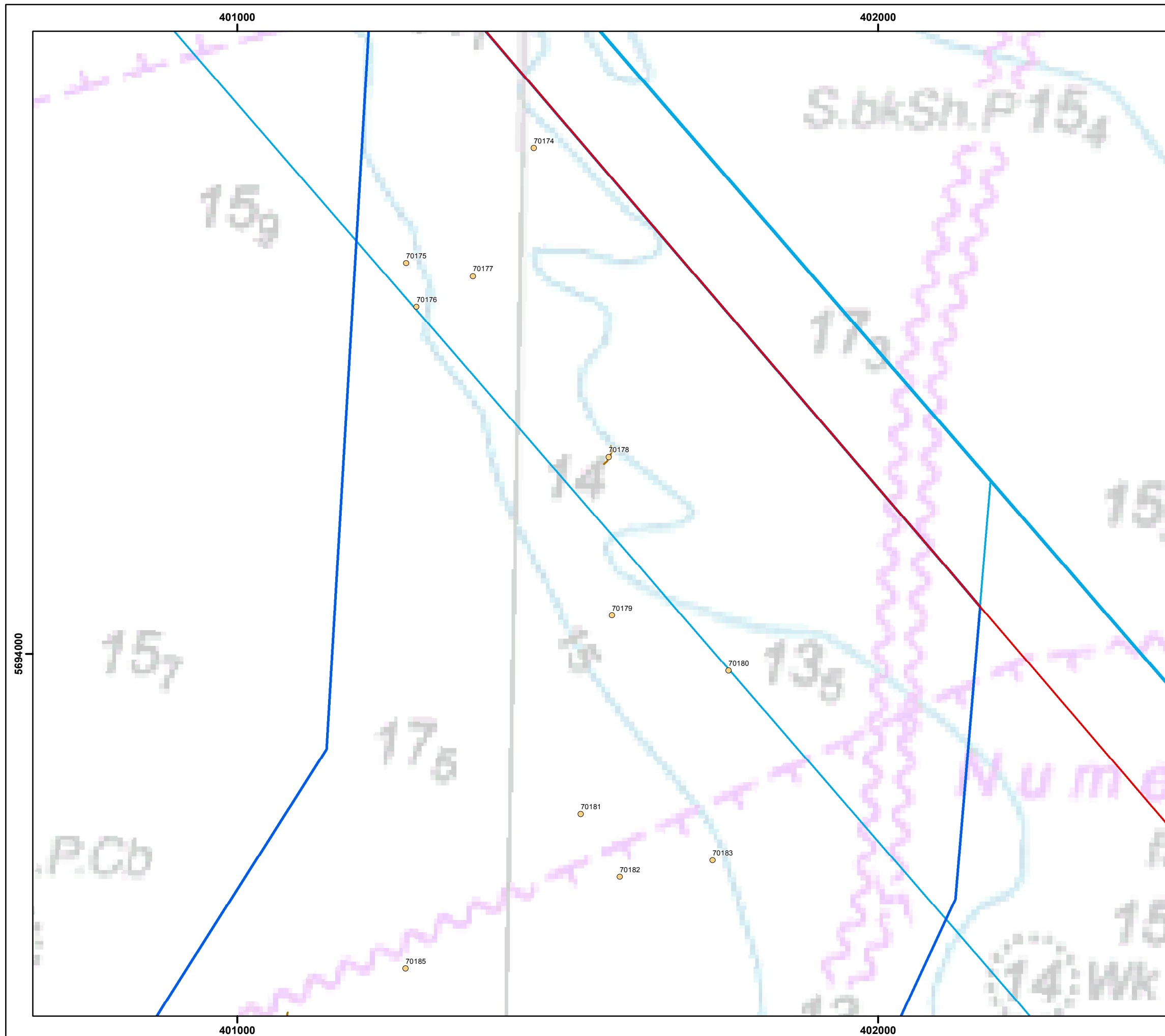
-  Offshore Site Boundary
-  Cable Route Offshore
-  Site Investigation Boundary
-  NRHE supplied 1km buffer for aircraft 71209
-  Linear features
-  A1 – Anthropogenic origin of archaeological interest
-  A2 – Uncertain origin of possible archaeological interest
-  A3 – Historic record of possible archaeological interest with no corresponding geophysical anomaly
-  A1 anomaly extents
-  A2 anomaly extents
-  Recommended archaeological exclusion zone
-  Covered by 2005 Thanet data
-  Covered by 73390 NEMO data
-  No 2016 Coverage



Layout:
Projection: ETRS 1989 UTM Zone 31N
















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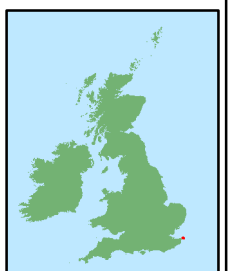
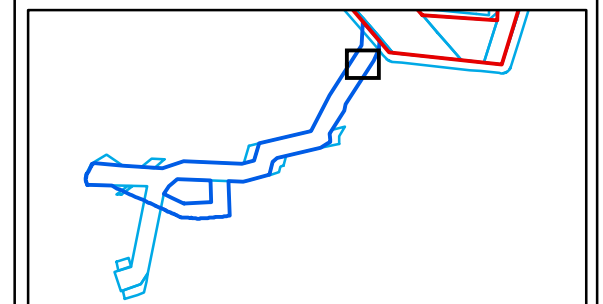


**THANET EXTENSION
OFFSHORE WIND FARM**

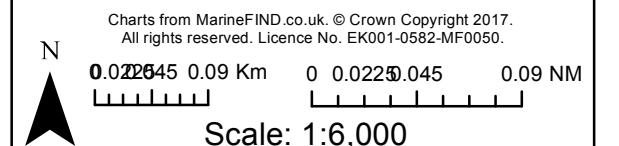
Figure 15b
Seabed Features of Archaeological
Potential in TEOWF Cable Corridor

Legend

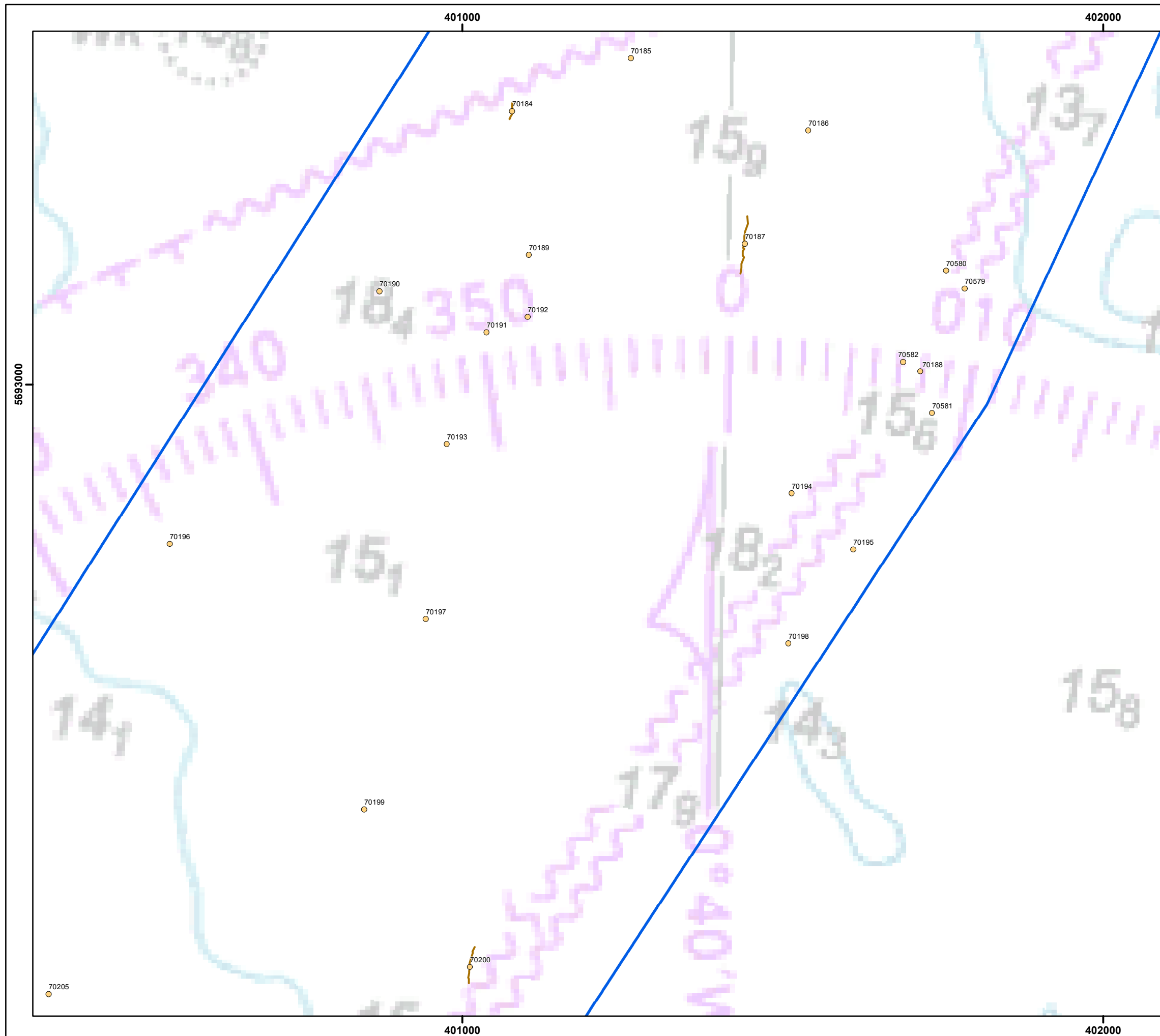
-  Offshore Site Boundary
-  Cable Route Offshore
-  Site Investigation Boundary
-  NRHE supplied 1km buffer for aircraft 71209
-  Linear features
-  A1 – Anthropogenic origin of archaeological interest
-  A2 – Uncertain origin of possible archaeological interest
-  A3 – Historic record of possible archaeological interest with no corresponding geophysical anomaly
-  A1 anomaly extents
-  A2 anomaly extents
-  Recommended archaeological exclusion zone
-  Covered by 2005 Thanet data
-  Covered by 73390 NEMO data
-  No 2016 Coverage



Layout:
Projection: ETRS 1989 UTM Zone 31N

















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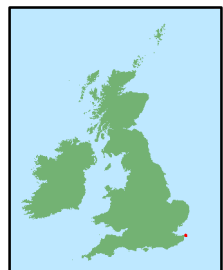
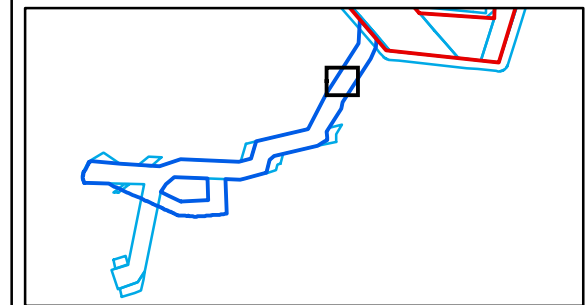


**THANET EXTENSION
OFFSHORE WIND FARM**

Figure 15c
Seabed Features of Archaeological
Potential in TEOWF Cable Corridor


Legend

-  Offshore Site Boundary
-  Cable Route Offshore
-  Site Investigation Boundary
-  NRHE supplied 1km buffer for aircraft 71209
-  Linear features
-  A1 – Anthropogenic origin of archaeological interest
-  A2 – Uncertain origin of possible archaeological interest
-  A3 – Historic record of possible archaeological interest with no corresponding geophysical anomaly
-  A1 anomaly extents
-  A2 anomaly extents
-  Recommended archaeological exclusion zone
-  Covered by 2005 Thanet data
-  Covered by 73390 NEMO data
-  No 2016 Coverage



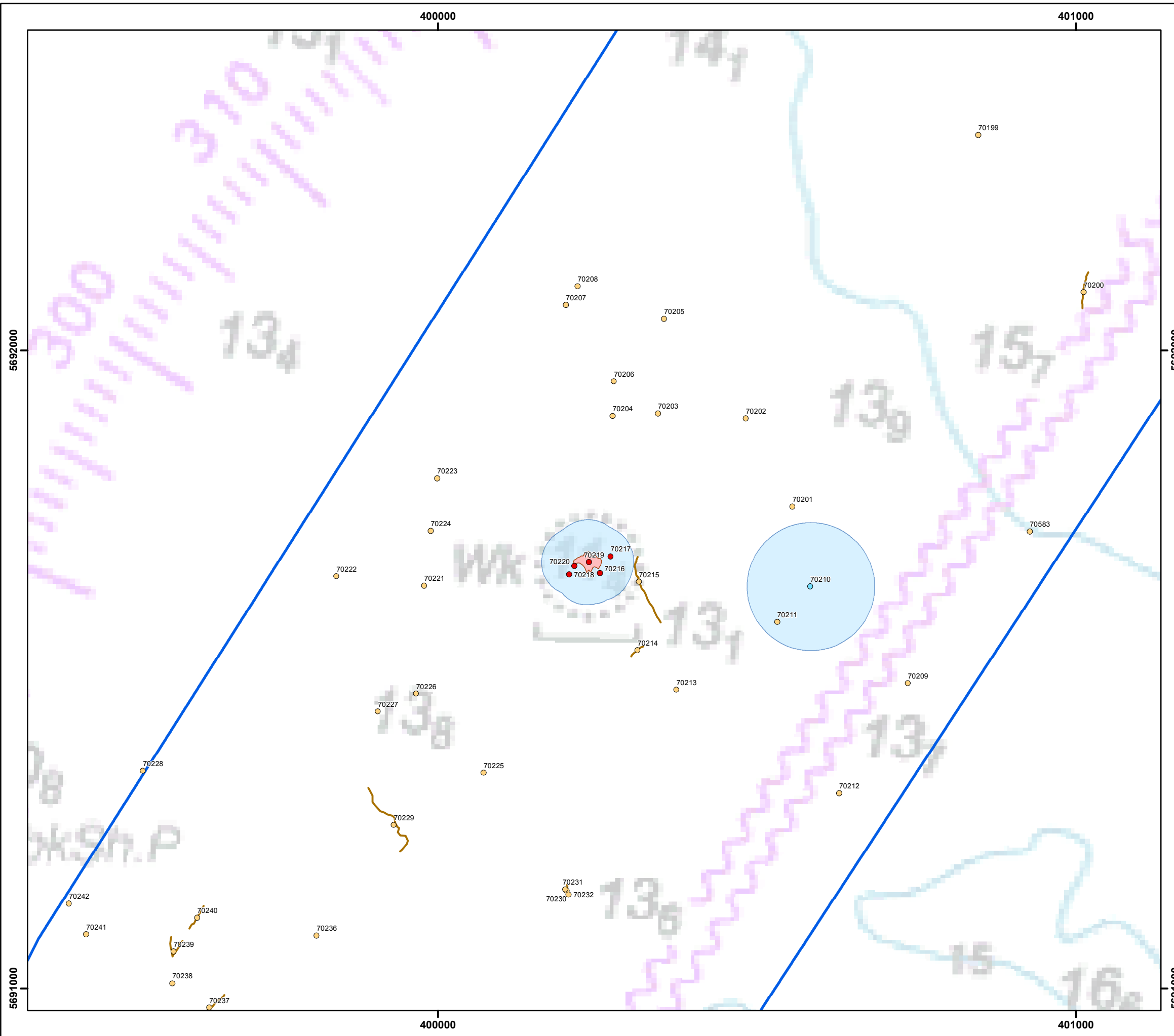
Layout:
Projection: ETRS 1989 UTM Zone 31N

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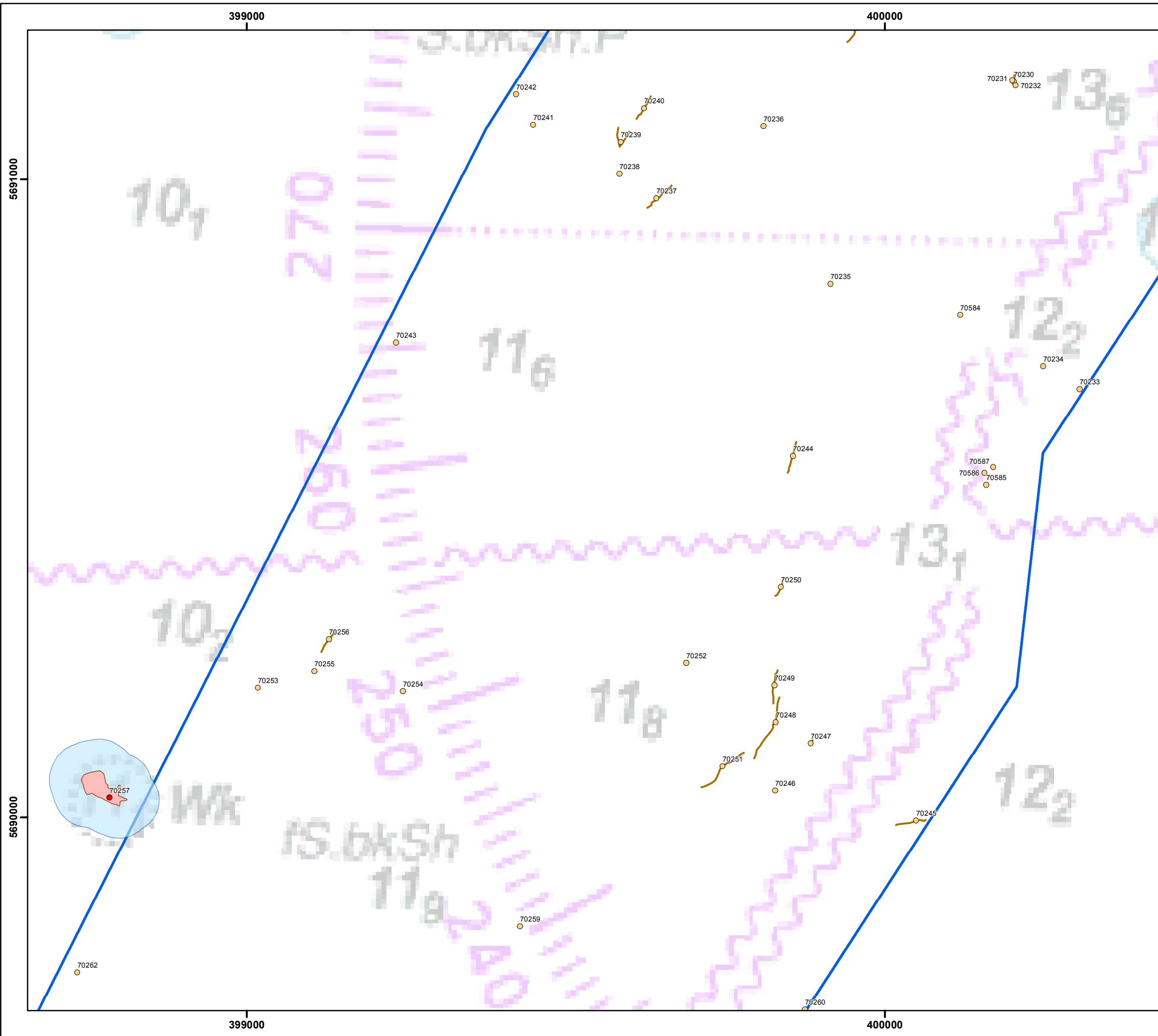
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Rev	0	By	KL	Date	09/02/2018
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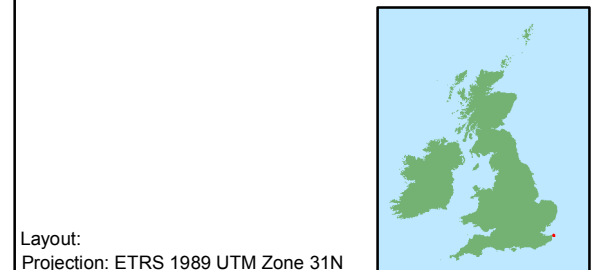
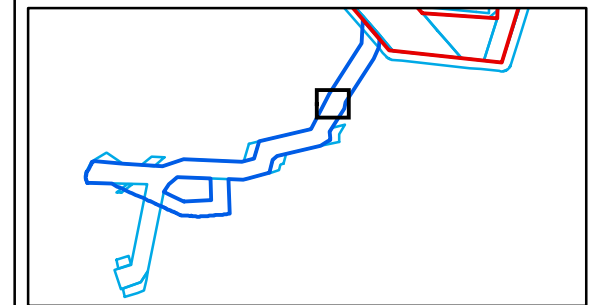
THANET EXTENSION OFFSHORE WIND FARM

Figure 15d
Seabed Features of Archaeological
Potential in TEOWF Cable Corridor



Legend

-  Offshore Site Boundary
-  Cable Route Offshore
-  Site Investigation Boundary
-  NRHE supplied 1km buffer for aircraft 71209
-  Linear features
-  A1 – Anthropogenic origin of archaeological interest
-  A2 – Uncertain origin of possible archaeological interest
-  A3 – Historic record of possible archaeological interest with no corresponding geophysical anomaly
-  A1 anomaly extents
-  A2 anomaly extents
-  Recommended archaeological exclusion zone
-  Covered by 2005 Thanet data
-  Covered by 73390 NEMO data
-  No 2016 Coverage



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Projection: ETRS 1989 UTM Zone 31N

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





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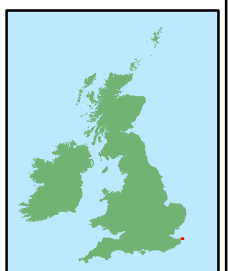
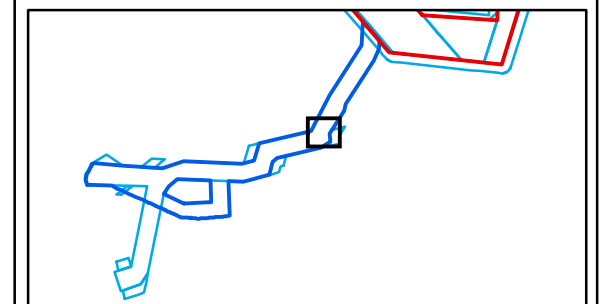
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**THANET EXTENSION
OFFSHORE WIND FARM**

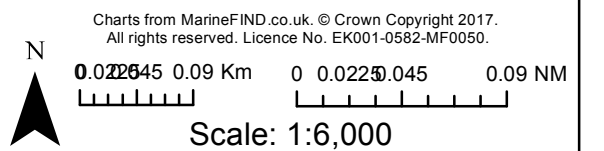
Figure 15e
Seabed Features of Archaeological
Potential in TEOWF Cable Corridor

Legend

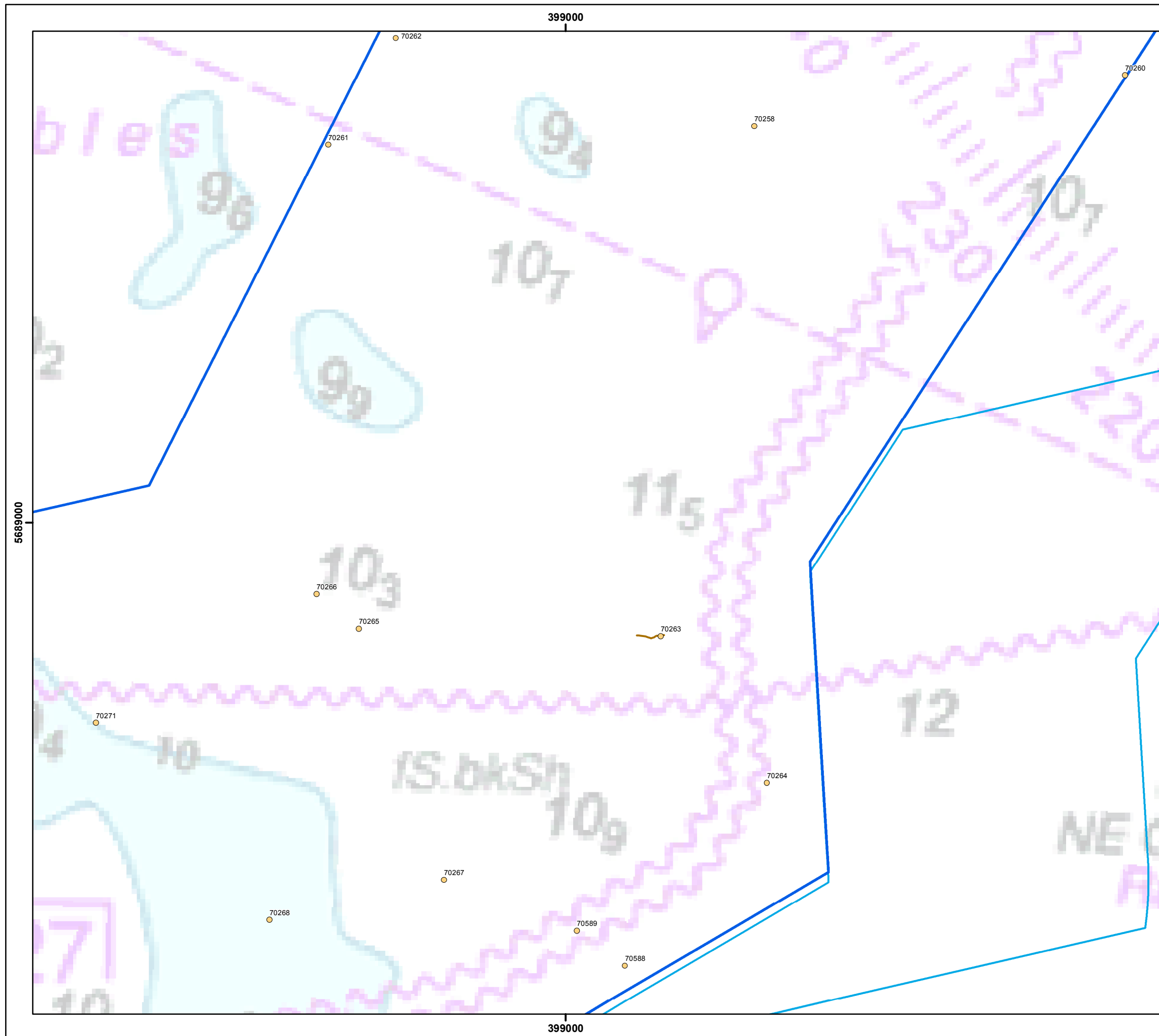
-  Offshore Site Boundary
-  Cable Route Offshore
-  Site Investigation Boundary
-  NRHE supplied 1km buffer for aircraft 71209
-  Linear features
-  A1 – Anthropogenic origin of archaeological interest
-  A2 – Uncertain origin of possible archaeological interest
-  A3 – Historic record of possible archaeological interest with no corresponding geophysical anomaly
-  A1 anomaly extents
-  A2 anomaly extents
-  Recommended archaeological exclusion zone
-  Covered by 2005 Thanet data
-  Covered by 73390 NEMO data
-  No 2016 Coverage



Layout:
Projection: ETRS 1989 UTM Zone 31N

















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Drg No	116080_geo_Fig15a-s				

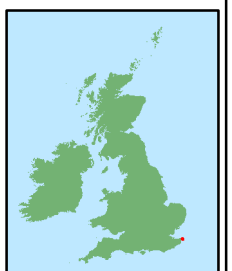
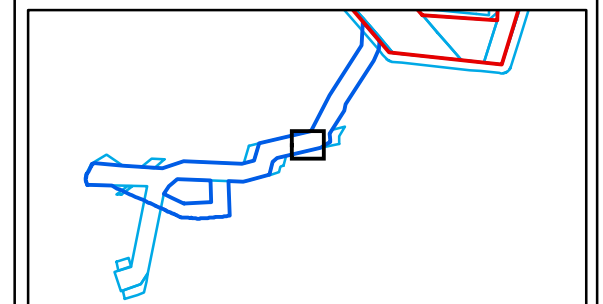


**THANET EXTENSION
OFFSHORE WIND FARM**

Figure 15f
Seabed Features of Archaeological
Potential in TEOWF Cable Corridor

Legend

-  Offshore Site Boundary
-  Cable Route Offshore
-  Site Investigation Boundary
-  NRHE supplied 1km buffer for aircraft 71209
-  Linear features
-  A1 – Anthropogenic origin of archaeological interest
-  A2 – Uncertain origin of possible archaeological interest
-  A3 – Historic record of possible archaeological interest with no corresponding geophysical anomaly
-  A1 anomaly extents
-  A2 anomaly extents
-  Recommended archaeological exclusion zone
-  Covered by 2005 Thanet data
-  Covered by 73390 NEMO data
-  No 2016 Coverage



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Projection: ETRS 1989 UTM Zone 31N

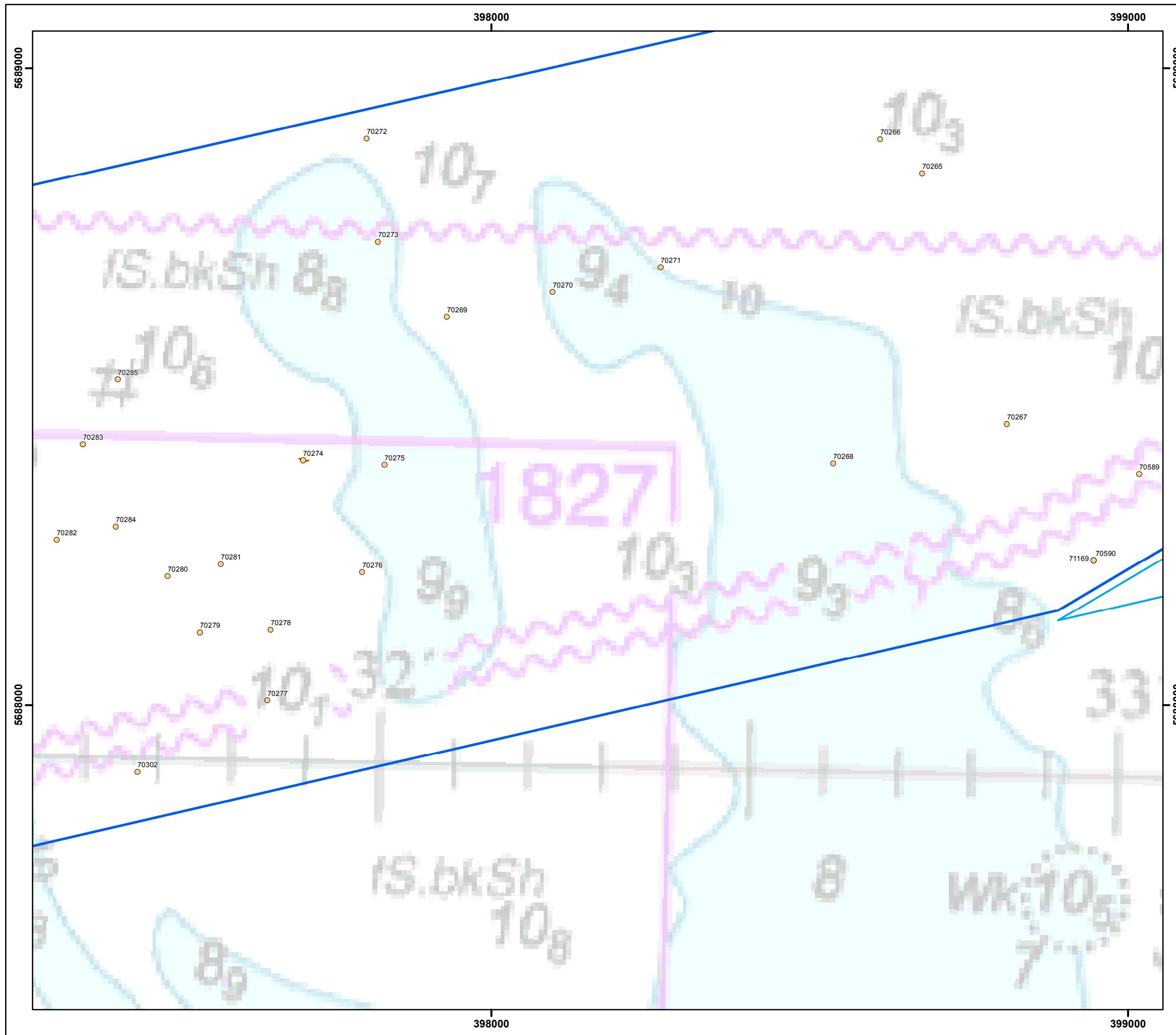
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







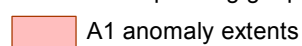
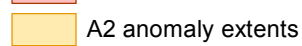
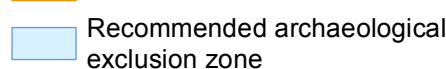
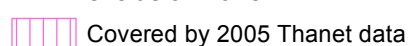
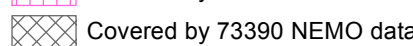
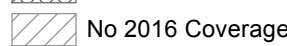
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Drg No	116080_geo_Fig15a-s				

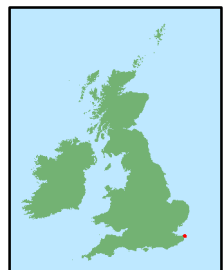
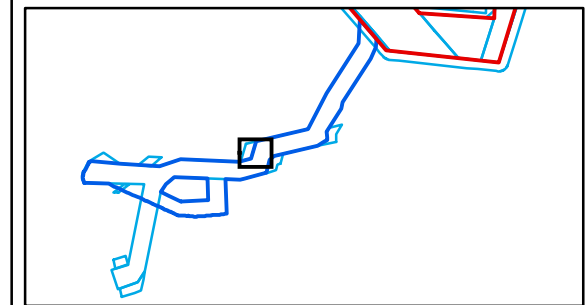


THANET EXTENSION OFFSHORE WIND FARM

Figure 15h
Seabed Features of Archaeological
Potential in TEOWF Cable Corridor


Legend

-  Offshore Site Boundary
-  Cable Route Offshore
-  Site Investigation Boundary
-  NRHE supplied 1km buffer for aircraft 71209
-  Linear features
-  A1 – Anthropogenic origin of archaeological interest
-  A2 – Uncertain origin of possible archaeological interest
-  A3 – Historic record of possible archaeological interest with no corresponding geophysical anomaly
-  A1 anomaly extents
-  A2 anomaly extents
-  Recommended archaeological exclusion zone
-  Covered by 2005 Thanet data
-  Covered by 73390 NEMO data
-  No 2016 Coverage



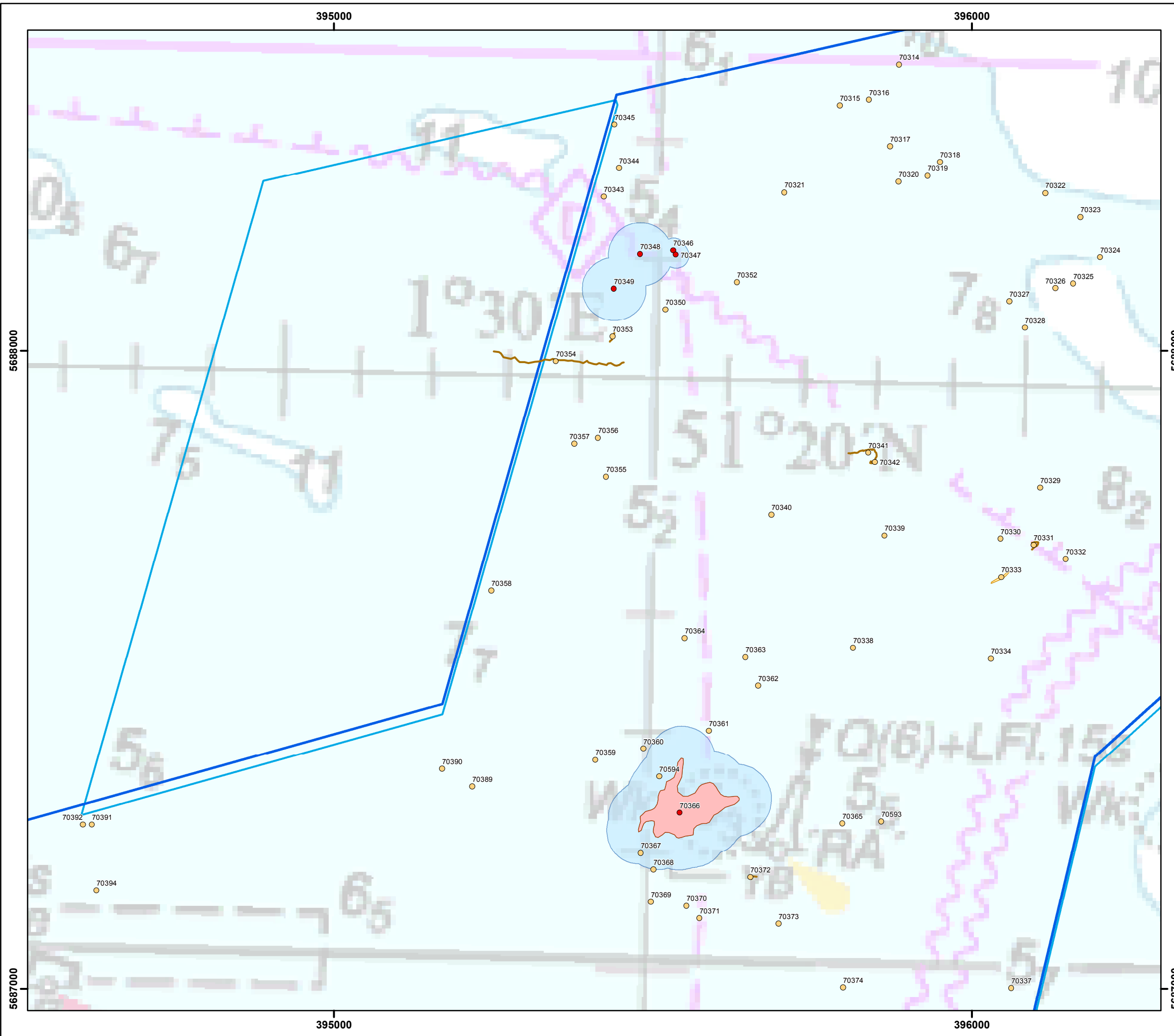
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Projection: ETRS 1989 UTM Zone 31N

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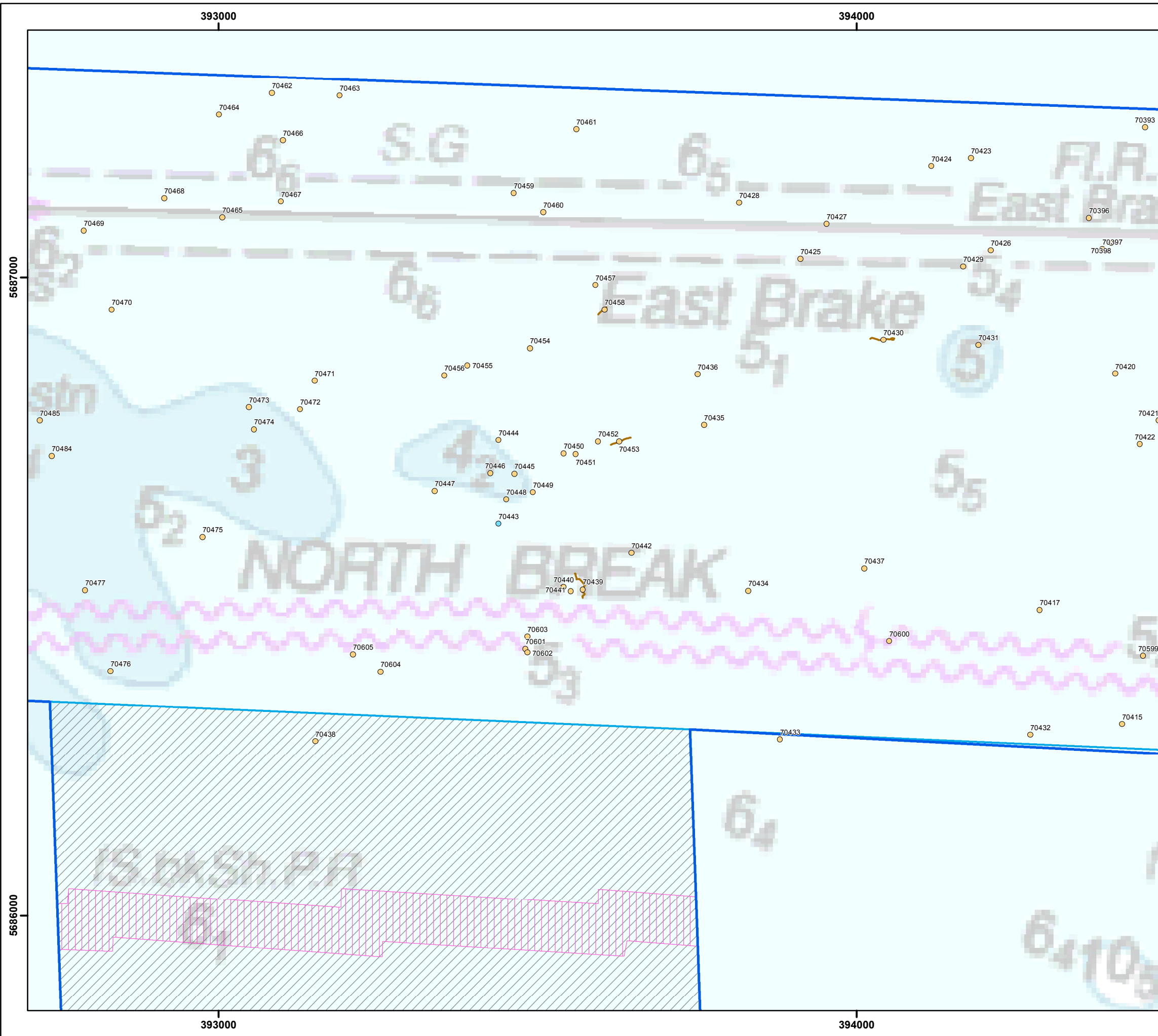
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


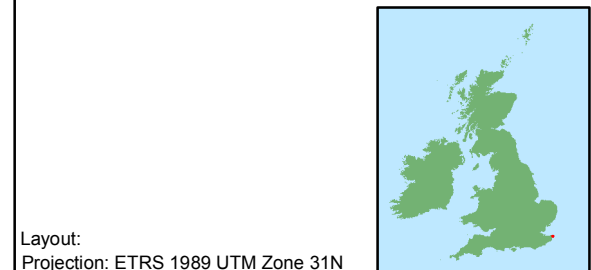
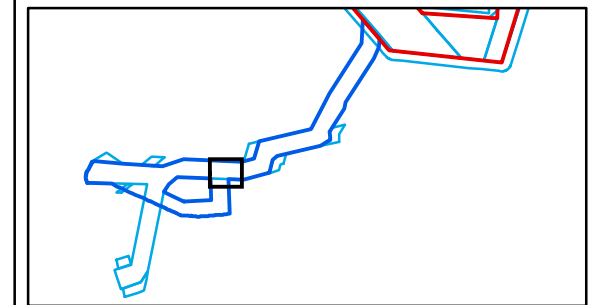
THANET EXTENSION OFFSHORE WIND FARM

Figure 15j
Seabed Features of Archaeological
Potential in TEOWF Cable Corridor




Legend

-  Offshore Site Boundary
-  Cable Route Offshore
-  Site Investigation Boundary
-  NRHE supplied 1km buffer for aircraft 71209
-  Linear features
-  A1 – Anthropogenic origin of archaeological interest
-  A2 – Uncertain origin of possible archaeological interest
-  A3 – Historic record of possible archaeological interest with no corresponding geophysical anomaly
-  A1 anomaly extents
-  A2 anomaly extents
-  Recommended archaeological exclusion zone
-  Covered by 2005 Thanet data
-  Covered by 73390 NEMO data
-  No 2016 Coverage



Layout:
Projection: ETRS 1989 UTM Zone 31N

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



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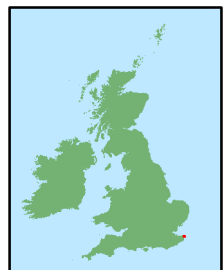
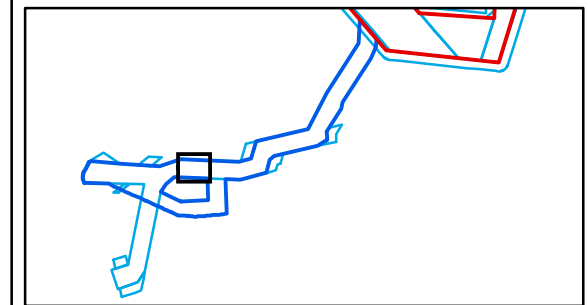
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Drg No	116080_geo_Fig15a-s				

THANET EXTENSION OFFSHORE WIND FARM

Figure 15k
Seabed Features of Archaeological
Potential in TEOWF Cable Corridor

- Legend**
-  Offshore Site Boundary
 -  Cable Route Offshore
 -  Site Investigation Boundary
 -  NRHE supplied 1km buffer for aircraft 71209
 -  Linear features
 -  A1 – Anthropogenic origin of archaeological interest
 -  A2 – Uncertain origin of possible archaeological interest
 -  A3 – Historic record of possible archaeological interest with no corresponding geophysical anomaly
 -  A1 anomaly extents
 -  A2 anomaly extents
 -  Recommended archaeological exclusion zone
 -  Covered by 2005 Thanet data
 -  Covered by 73390 NEMO data
 -  No 2016 Coverage



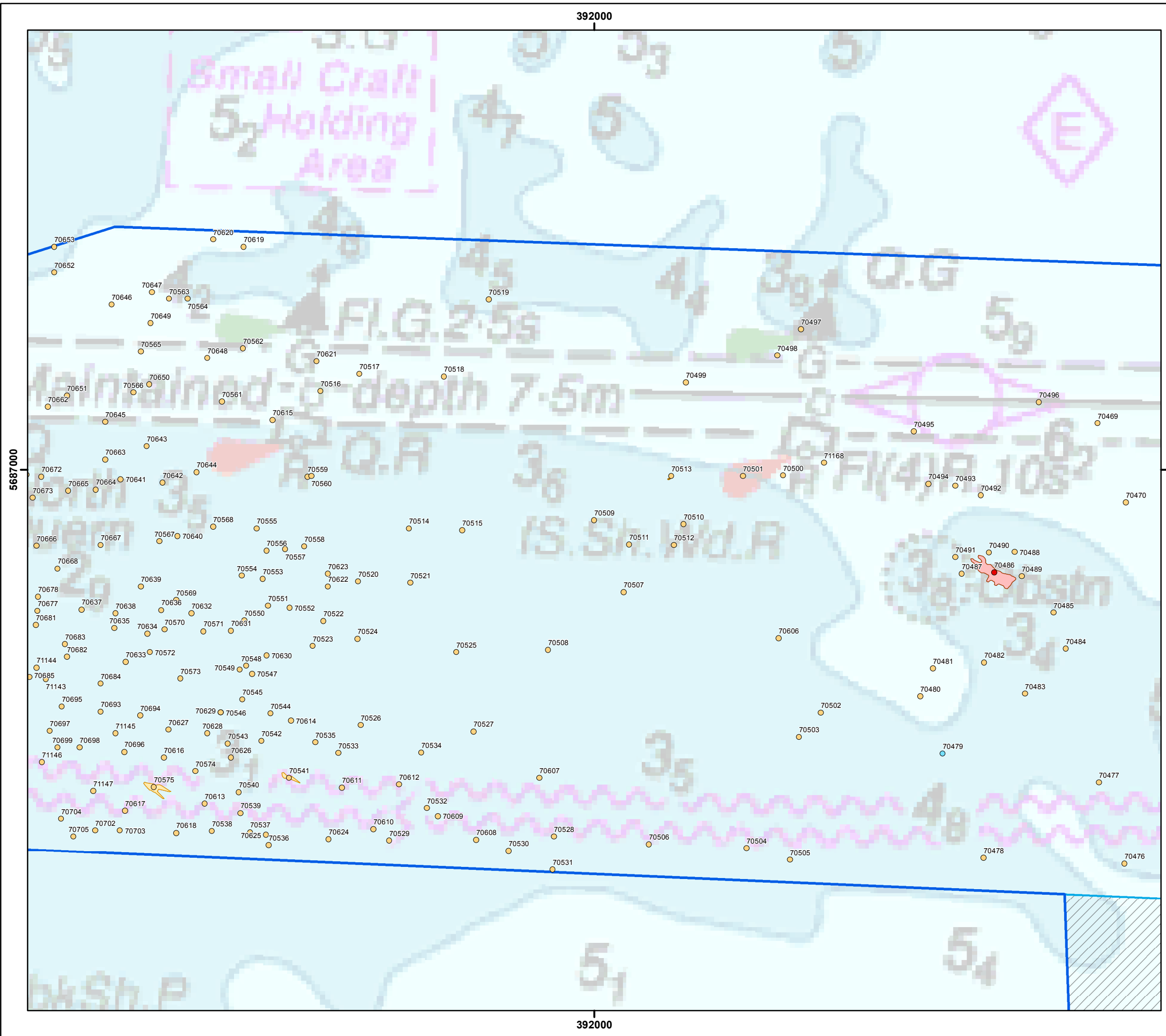
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Projection: ETRS 1989 UTM Zone 31N

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













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Drg No	116080_geo_Fig15a-s				

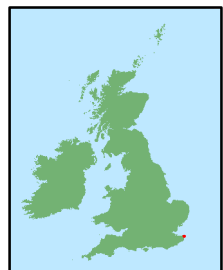
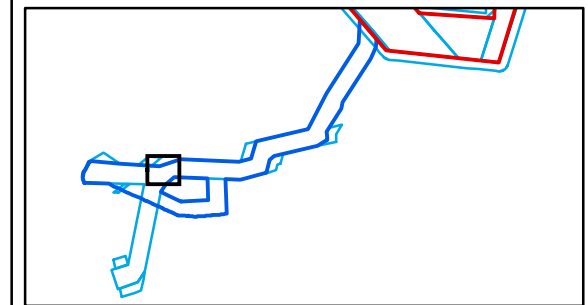


THANET EXTENSION OFFSHORE WIND FARM

Figure 151
Seabed Features of Archaeological
Potential in TEOWF Cable Corridor


Legend

-  Offshore Site Boundary
-  Cable Route Offshore
-  Site Investigation Boundary
-  NRHE supplied 1km buffer for aircraft 71209
-  Linear features
-  A1 – Anthropogenic origin of archaeological interest
-  A2 – Uncertain origin of possible archaeological interest
-  A3 – Historic record of possible archaeological interest with no corresponding geophysical anomaly
-  A1 anomaly extents
-  A2 anomaly extents
-  Recommended archaeological exclusion zone
-  Covered by 2005 Thanet data
-  Covered by 73390 NEMO data
-  No 2016 Coverage



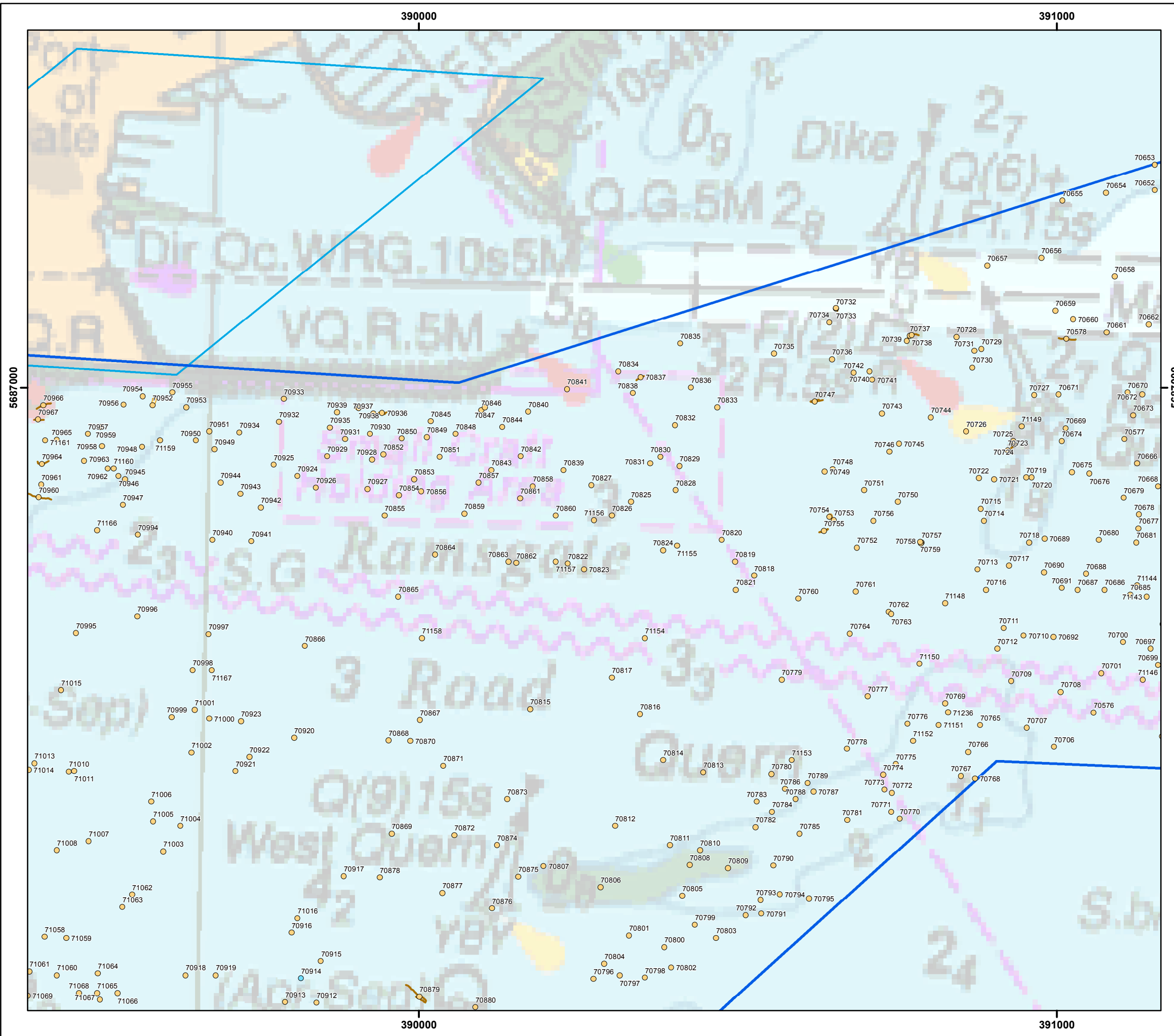
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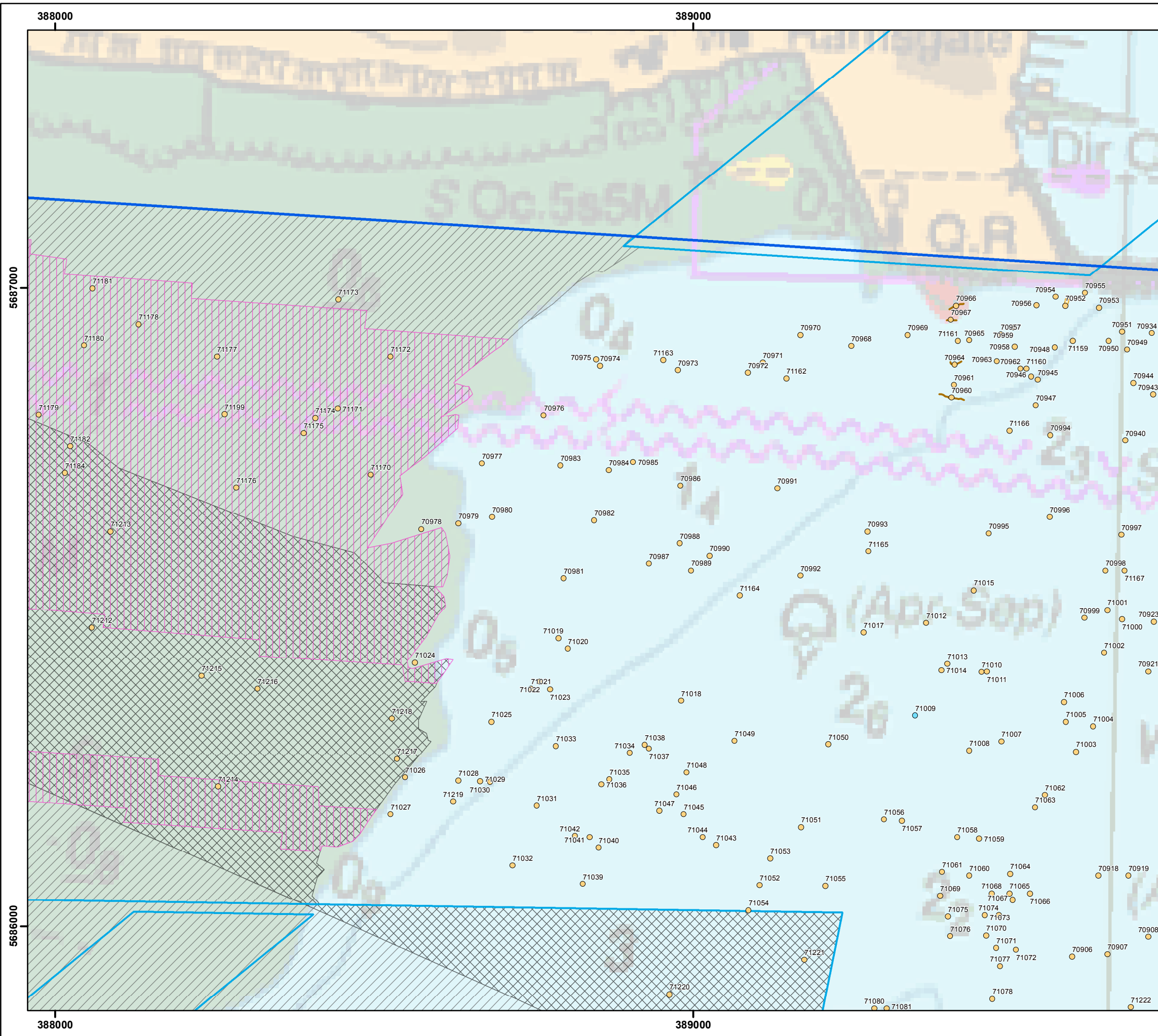
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







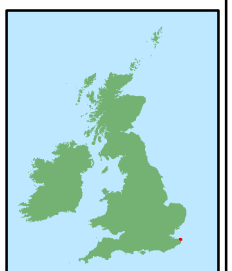
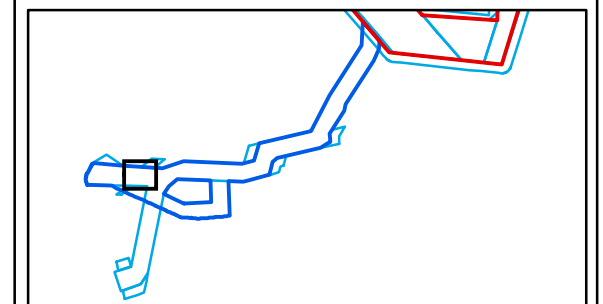
THANET EXTENSION OFFSHORE WIND FARM

Figure 15m
Seabed Features of Archaeological
Potential in TEOWF Cable Corridor




Legend

-  Offshore Site Boundary
-  Cable Route Offshore
-  Site Investigation Boundary
-  NRHE supplied 1km buffer for aircraft 71209
-  Linear features
-  A1 – Anthropogenic origin of archaeological interest
-  A2 – Uncertain origin of possible archaeological interest
-  A3 – Historic record of possible archaeological interest with no corresponding geophysical anomaly
-  A1 anomaly extents
-  A2 anomaly extents
-  Recommended archaeological exclusion zone
-  Covered by 2005 Thanet data
-  Covered by 73390 NEMO data
-  No 2016 Coverage



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Projection: ETRS 1989 UTM Zone 31N

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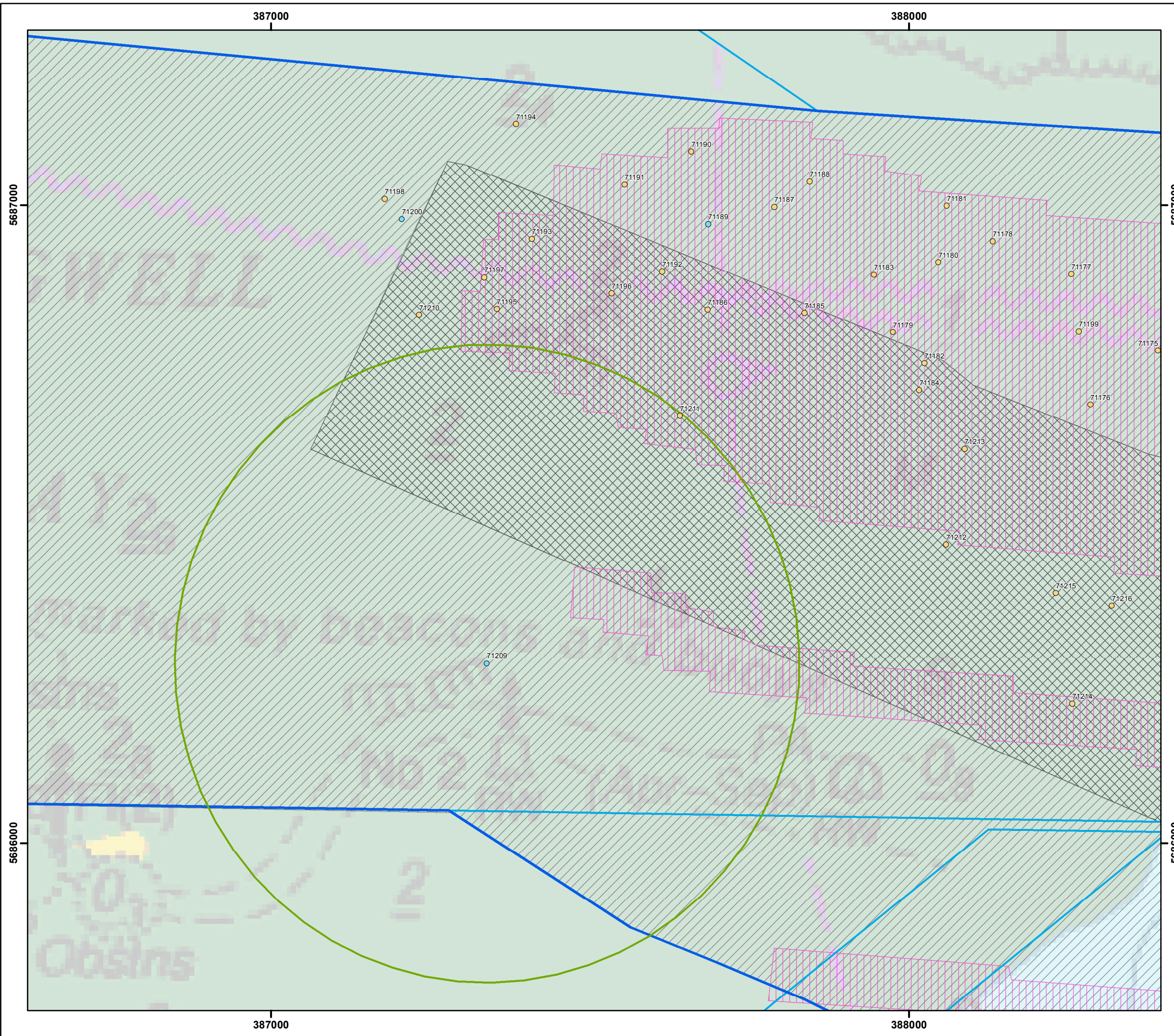
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













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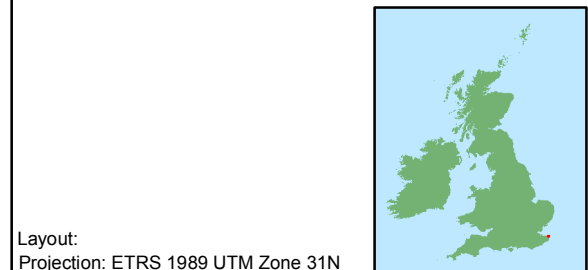
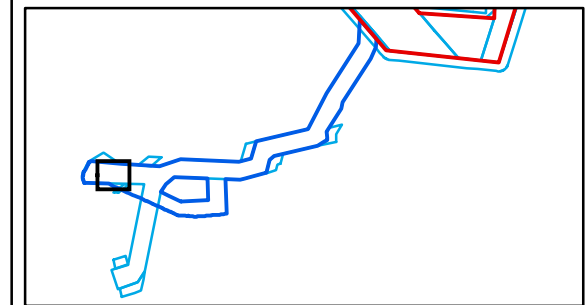
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Drg No	116080_geo_Fig15a-s				

**THANET EXTENSION
OFFSHORE WIND FARM**

Figure 15n
Seabed Features of Archaeological
Potential in TEOWF Cable Corridor



- Legend**
-  Offshore Site Boundary
 -  Cable Route Offshore
 -  Site Investigation Boundary
 -  NRHE supplied 1km buffer for aircraft 71209
 -  Linear features
 -  A1 – Anthropogenic origin of archaeological interest
 -  A2 – Uncertain origin of possible archaeological interest
 -  A3 – Historic record of possible archaeological interest with no corresponding geophysical anomaly
 -  A1 anomaly extents
 -  A2 anomaly extents
 -  Recommended archaeological exclusion zone
 -  Covered by 2005 Thanet data
 -  Covered by 73390 NEMO data
 -  No 2016 Coverage



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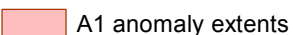
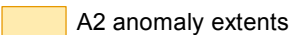
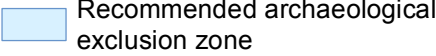
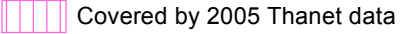
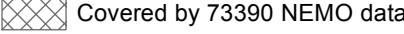
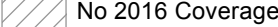
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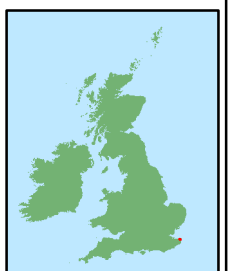
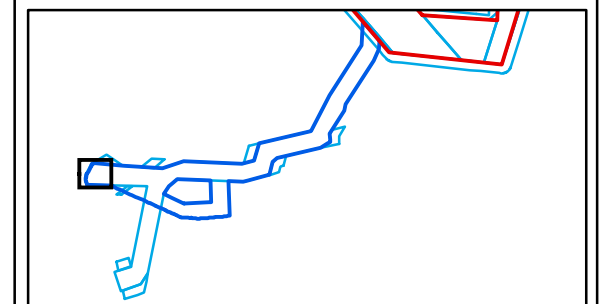
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Drg No	116080_geo_Fig15a-s				

THANET EXTENSION OFFSHORE WIND FARM

Figure 15o
Seabed Features of Archaeological
Potential in TEOWF Cable Corridor

Legend

-  Offshore Site Boundary
-  Cable Route Offshore
-  Site Investigation Boundary
-  NRHE supplied 1km buffer for aircraft 71209
-  Linear features
-  A1 – Anthropogenic origin of archaeological interest
-  A2 – Uncertain origin of possible archaeological interest
-  A3 – Historic record of possible archaeological interest with no corresponding geophysical anomaly
-  A1 anomaly extents
-  A2 anomaly extents
-  Recommended archaeological exclusion zone
-  Covered by 2005 Thanet data
-  Covered by 73390 NEMO data
-  No 2016 Coverage



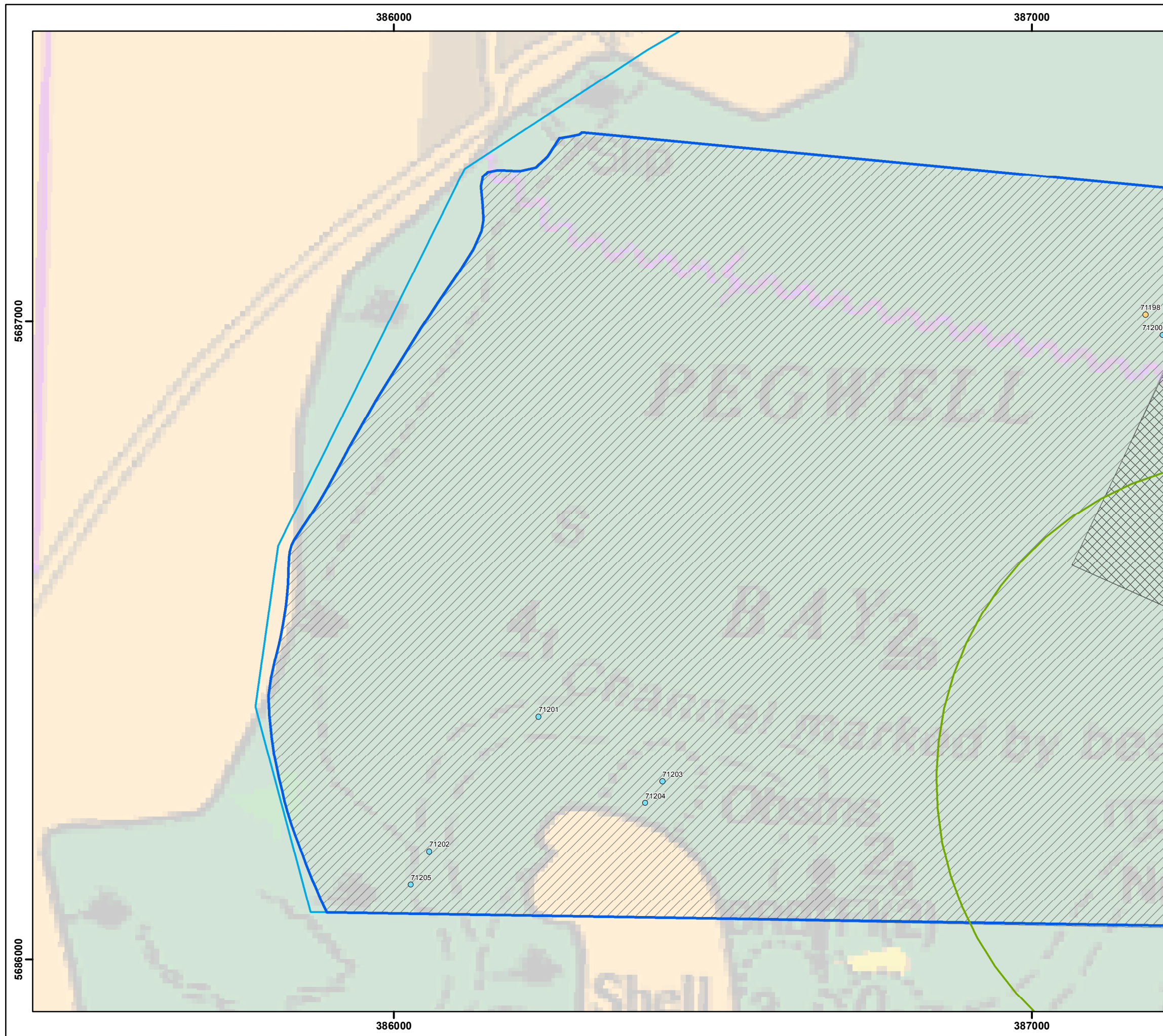
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












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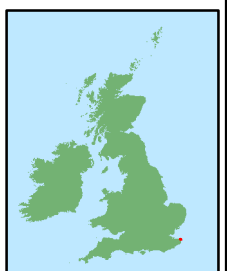
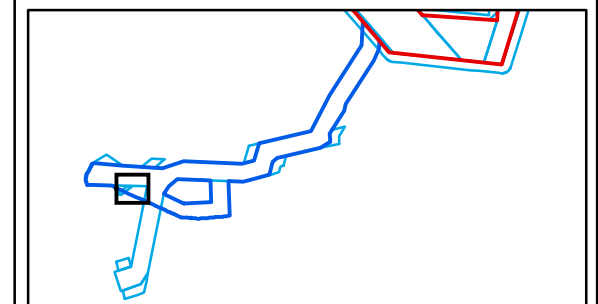


THANET EXTENSION OFFSHORE WIND FARM

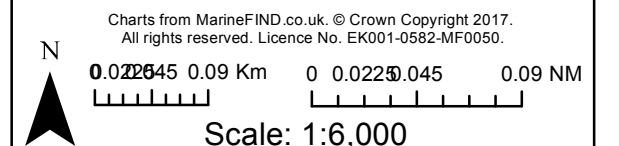
Figure 15p
Seabed Features of Archaeological
Potential in TEOWF Cable Corridor

Legend

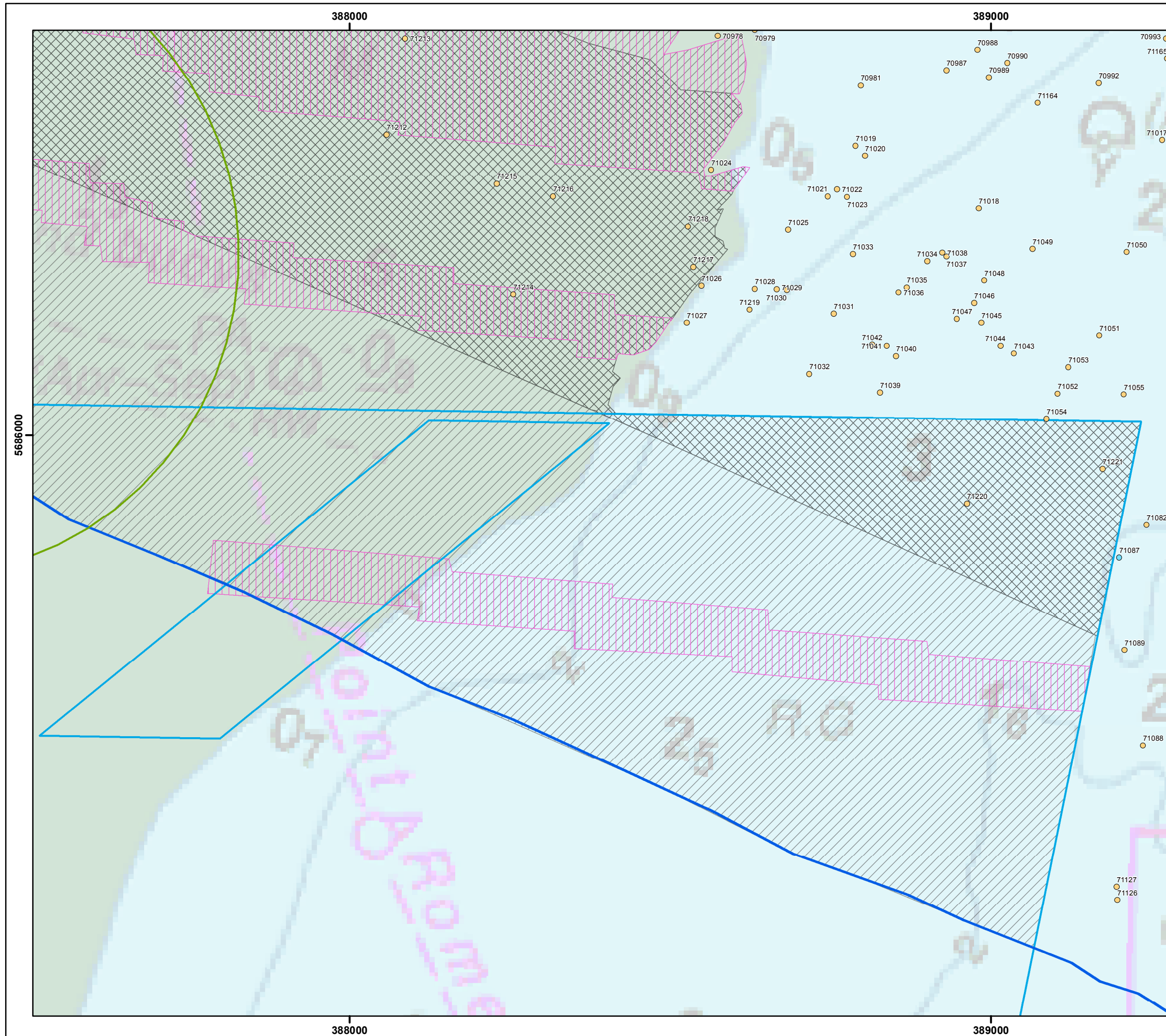
-  Offshore Site Boundary
-  Cable Route Offshore
-  Site Investigation Boundary
-  NRHE supplied 1km buffer for aircraft 71209
-  Linear features
-  A1 – Anthropogenic origin of archaeological interest
-  A2 – Uncertain origin of possible archaeological interest
-  A3 – Historic record of possible archaeological interest with no corresponding geophysical anomaly
-  A1 anomaly extents
-  A2 anomaly extents
-  Recommended archaeological exclusion zone
-  Covered by 2005 Thanet data
-  Covered by 73390 NEMO data
-  No 2016 Coverage



Layout:
Projection: ETRS 1989 UTM Zone 31N











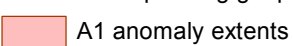
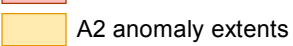
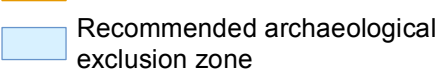
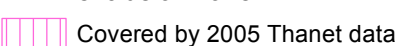
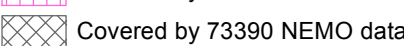
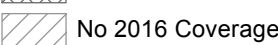
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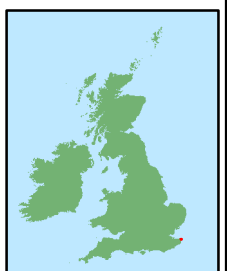
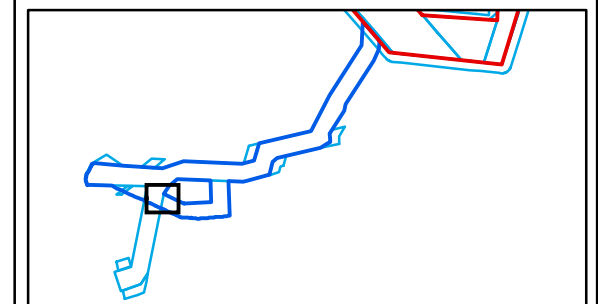


THANET EXTENSION OFFSHORE WIND FARM

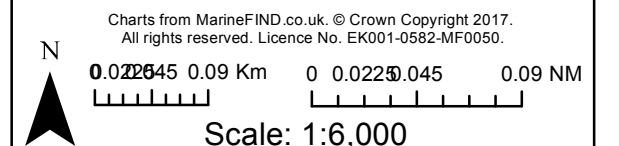
Figure 15q
Seabed Features of Archaeological
Potential in TEOWF Cable Corridor

Legend

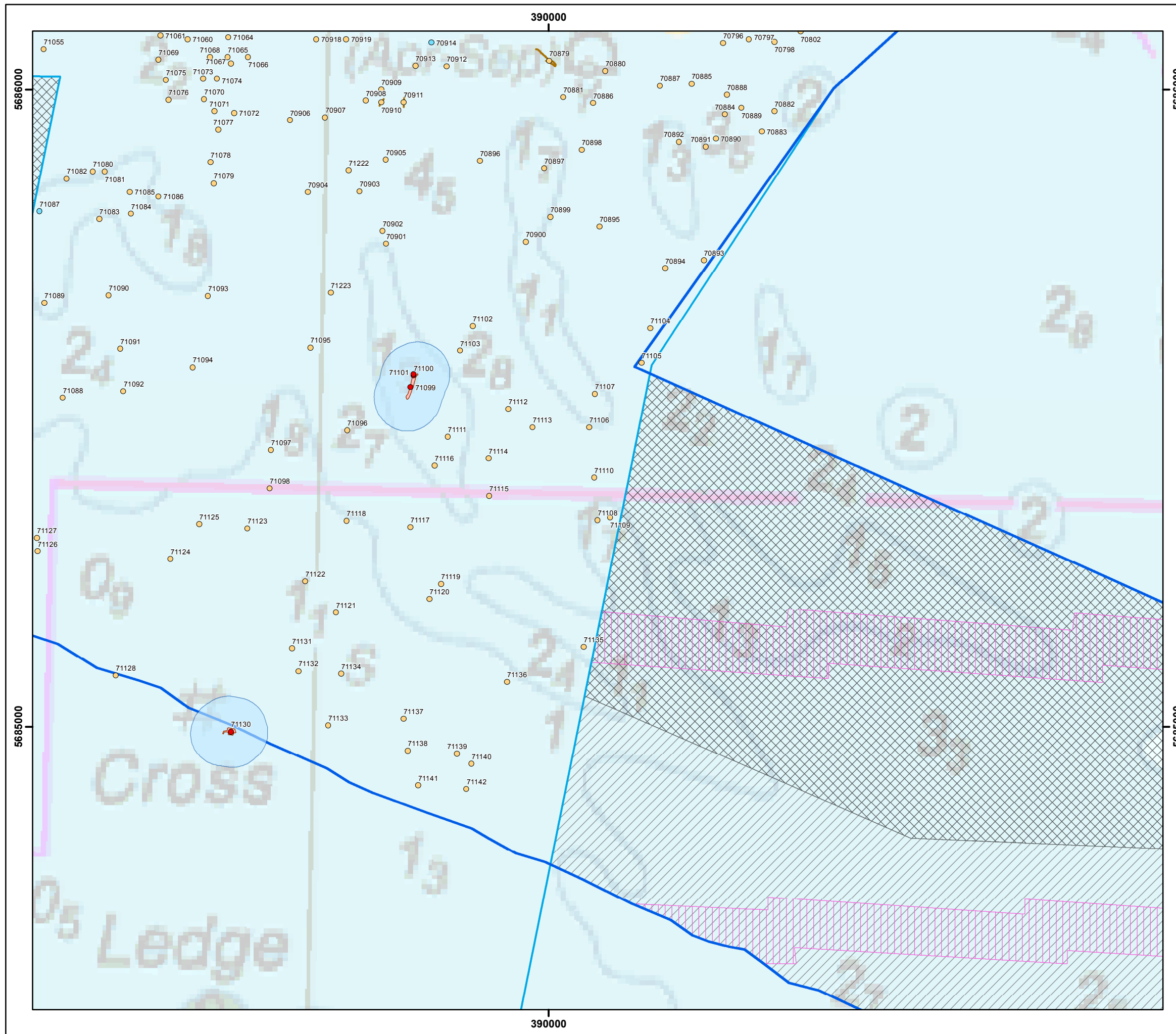
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-  Cable Route Offshore
-  Site Investigation Boundary
-  NRHE supplied 1km buffer for aircraft 71209
-  Linear features
-  A1 – Anthropogenic origin of archaeological interest
-  A2 – Uncertain origin of possible archaeological interest
-  A3 – Historic record of possible archaeological interest with no corresponding geophysical anomaly
-  A1 anomaly extents
-  A2 anomaly extents
-  Recommended archaeological exclusion zone
-  Covered by 2005 Thanet data
-  Covered by 73390 NEMO data
-  No 2016 Coverage



Layout:
Projection: ETRS 1989 UTM Zone 31N
















Rev	0	By	KL	Date	09/02/2018
Drg No	116080_geo_Fig15a-s				

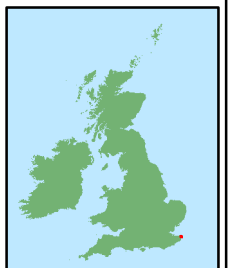
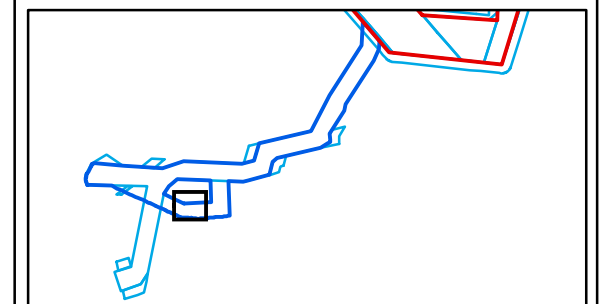


**THANET EXTENSION
OFFSHORE WIND FARM**

Figure 15r
Seabed Features of Archaeological
Potential in TEOWF Cable Corridor

Legend

-  Offshore Site Boundary
-  Cable Route Offshore
-  Site Investigation Boundary
-  NRHE supplied 1km buffer for aircraft 71209
-  Linear features
-  A1 – Anthropogenic origin of archaeological interest
-  A2 – Uncertain origin of possible archaeological interest
-  A3 – Historic record of possible archaeological interest with no corresponding geophysical anomaly
-  A1 anomaly extents
-  A2 anomaly extents
-  Recommended archaeological exclusion zone
-  Covered by 2005 Thanet data
-  Covered by 73390 NEMO data
-  No 2016 Coverage



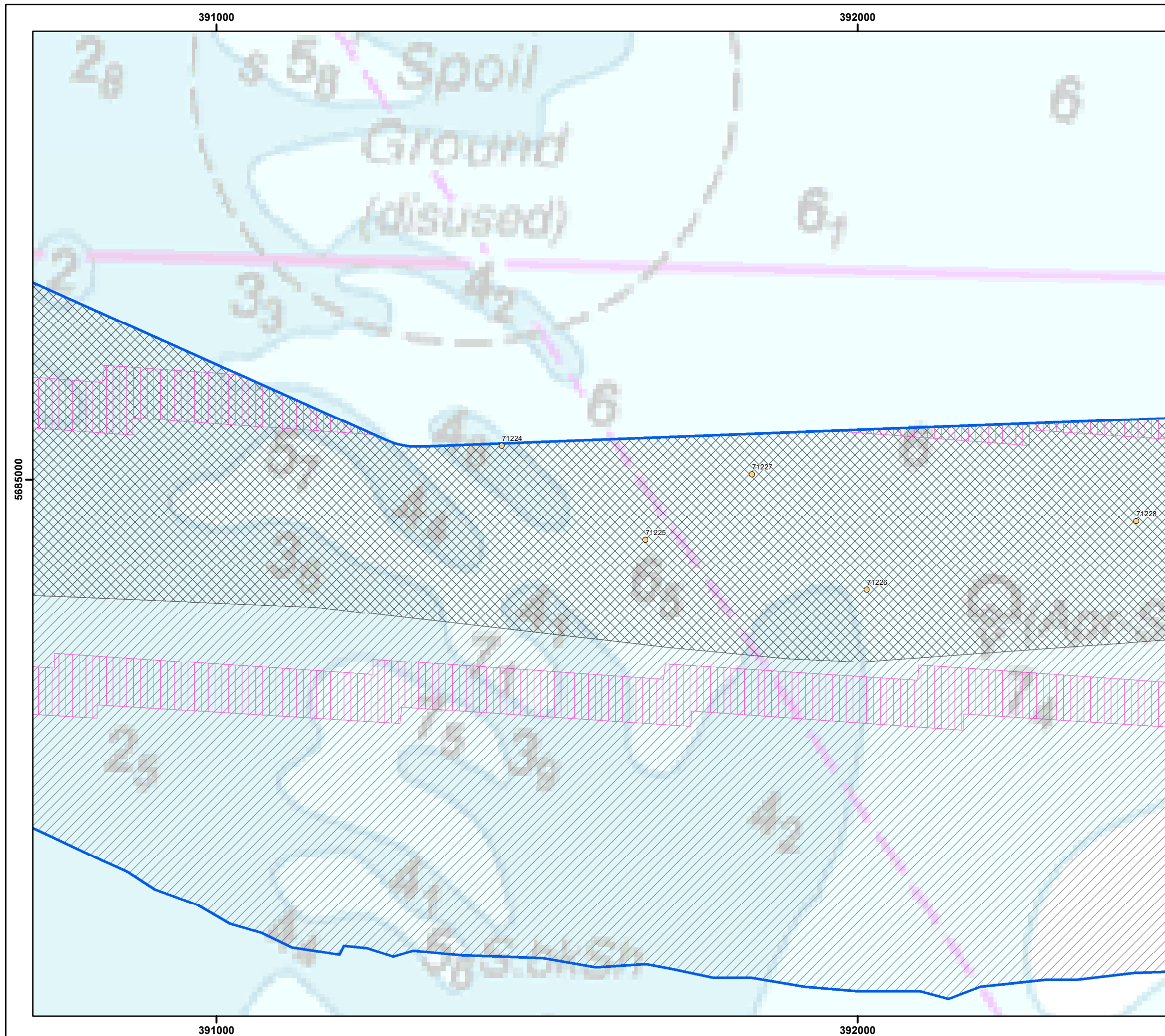
Layout:
Projection: ETRS 1989 UTM Zone 31N

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0 0.0225 0.045 0.09 Km 0 0.0225 0.045 0.09 NM

Scale: 1:6,000















Rev	0	By	KL	Date	09/02/2018
Drg No	116080_geo_Fig15a-s				

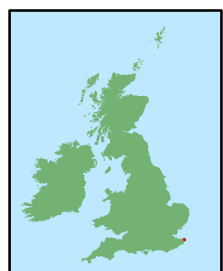
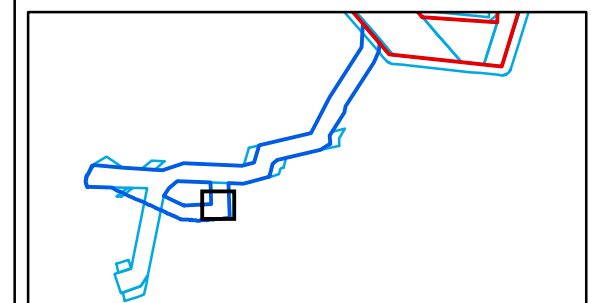


**THANET EXTENSION
OFFSHORE WIND FARM**

Figure 15s
Seabed Features of Archaeological
Potential in TEOWF Cable Corridor

Legend

-  Offshore Site Boundary
-  Cable Route Offshore
-  Site Investigation Boundary
-  NRHE supplied 1km buffer for aircraft 71209
-  Linear features
-  A1 – Anthropogenic origin of archaeological interest
-  A2 – Uncertain origin of possible archaeological interest
-  A3 – Historic record of possible archaeological interest with no corresponding geophysical anomaly
-  A1 anomaly extents
-  A2 anomaly extents
-  Recommended archaeological exclusion zone
-  Covered by 2005 Thanet data
-  Covered by 73390 NEMO data
-  No 2016 Coverage



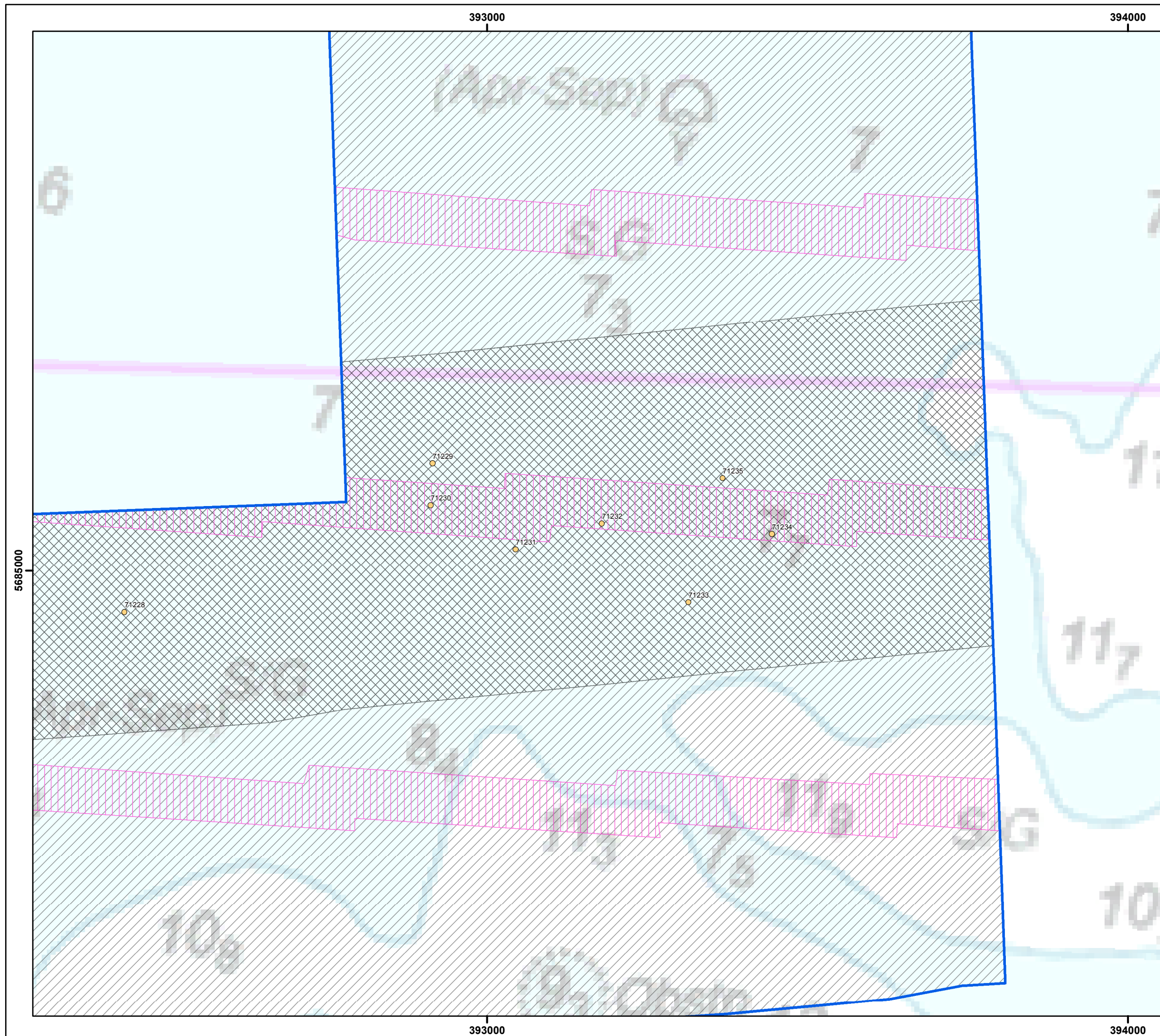
Layout:
Projection: ETRS 1989 UTM Zone 31N

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0 0.0225 0.045 0.09 Km 0 0.0225 0.045 0.09 NM

Scale: 1:6,000





Rev	0	By	KL	Date	09/02/2018
Drg No	116080_geo_Fig15a-s				

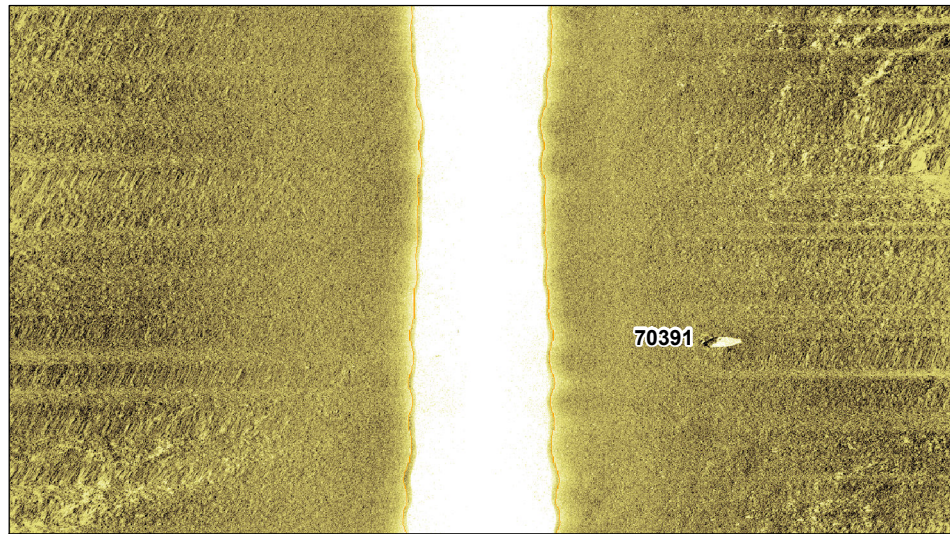


THANET EXTENSION OFFSHORE WIND FARM

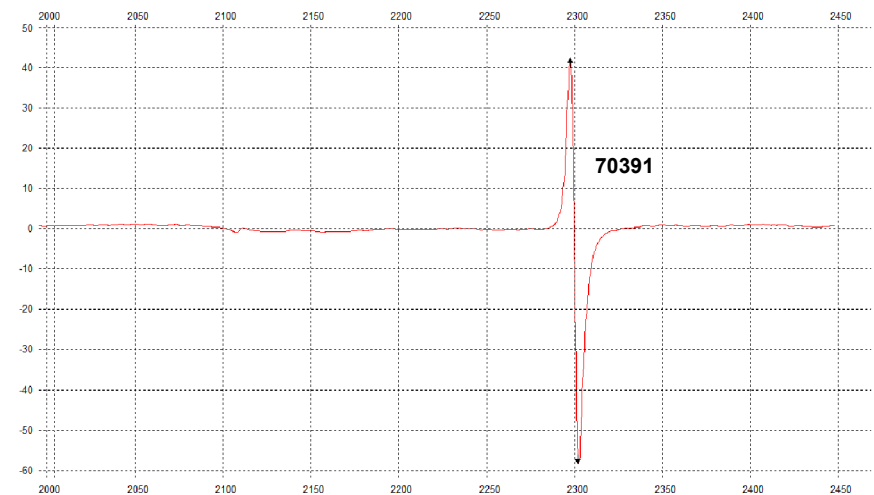
Figure 16
Data Examples of Seabed Anomalies in
TEOWF Cable Corridor

Legend

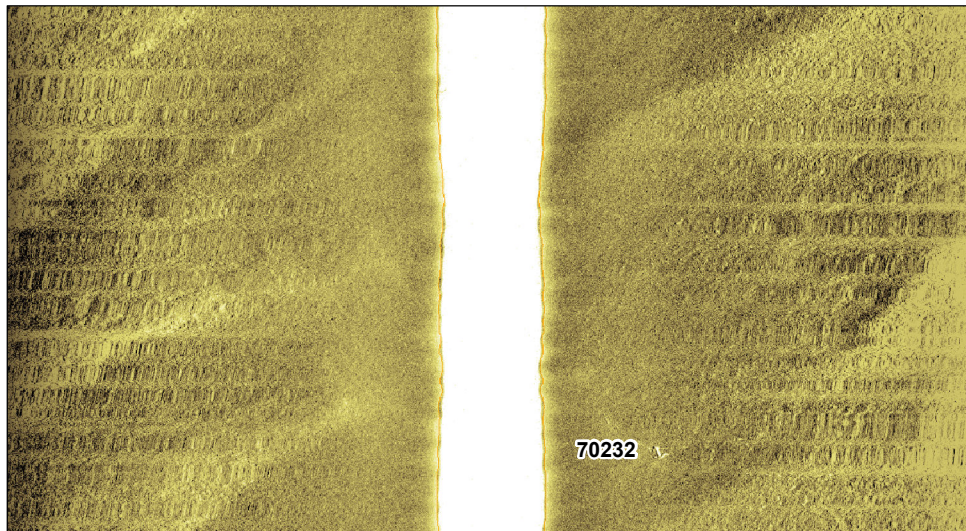
-  Offshore Site Boundary
-  Cable Route Offshore
-  Site Investigation Boundary
-  Feature



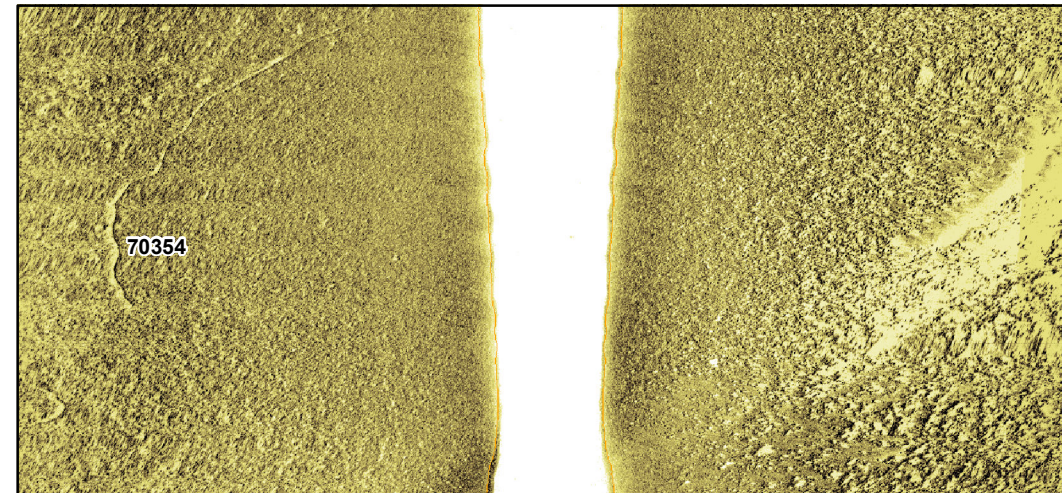
Sidescan sonar image (50m range) of ferrous debris, 70391, 1.6 x 0.7 x 0.7 m



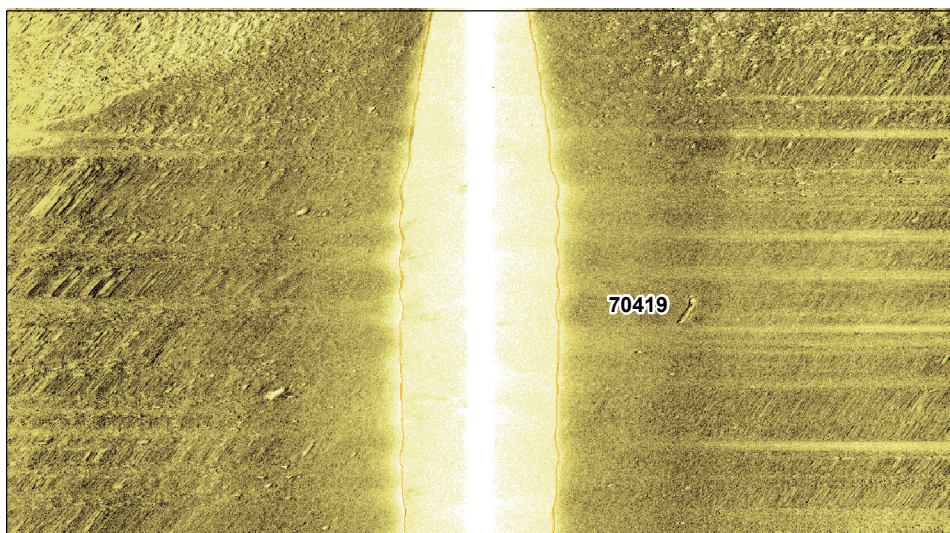
Magnetic profile of ferrous debris, 70391, measuring 102 nT



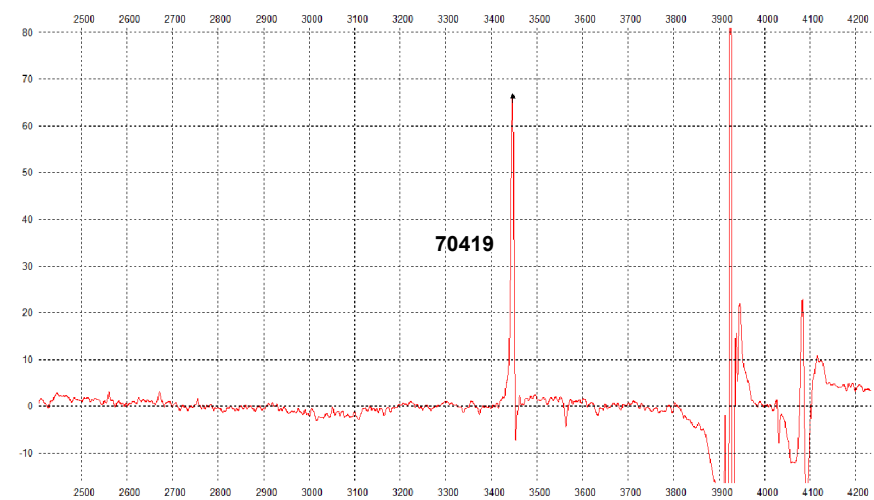
Sidescan sonar image (75 m range) of possible anchor, 70232, 2.8 x 0.5 x 0.3 m



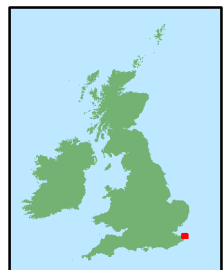
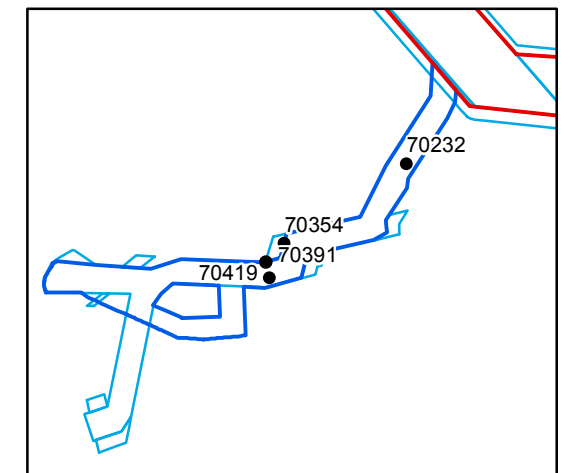
Sidescan sonar image (75 m range) of a rope/chain, 70354, 189.1 x 0.9 x 0.3 m



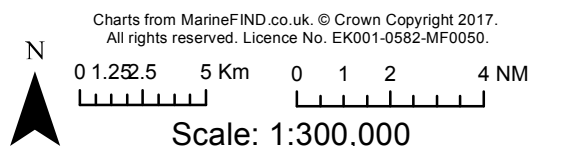
Sidescan sonar image (50 m range) of ferrous debris, 70419, 1.9 x 0.4 x 0.3 m



Magnetic profile of ferrous debris, 70419, measuring 99 nT



Layout:
Projection: ETRS 1989 UTM Zone 31N








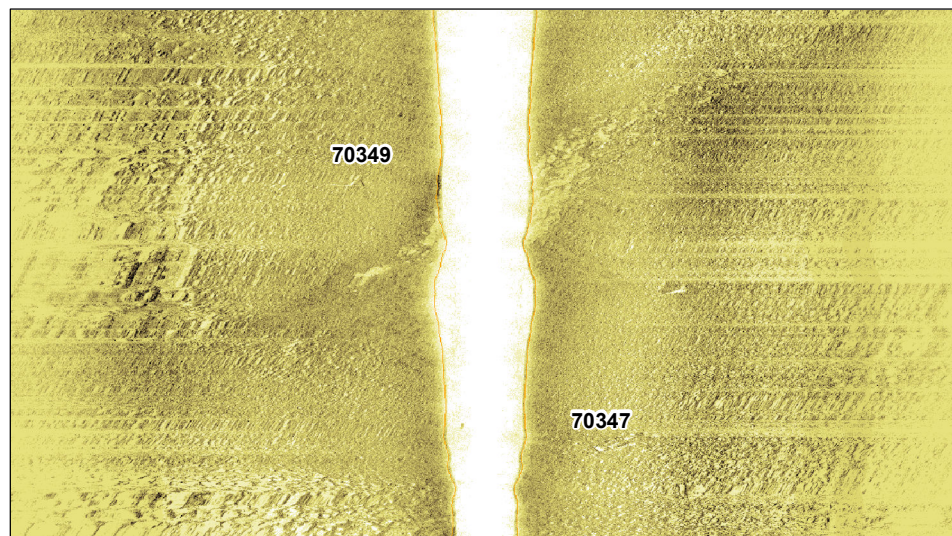
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Drg No	116080_geo_Fig16				

THANET EXTENSION OFFSHORE WIND FARM

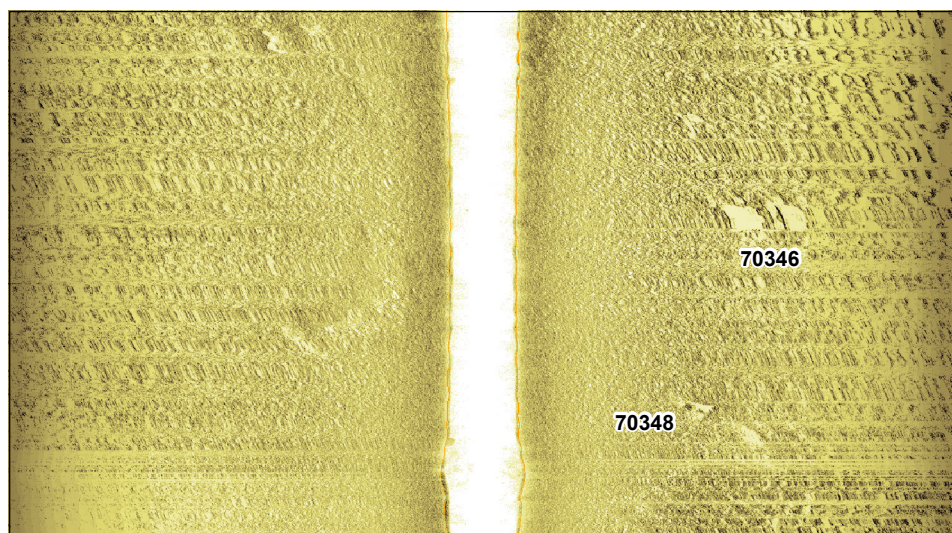
Figure 17
Data Examples of Significant Seabed
Anomalies in TEOWF Cable Corridor

Legend

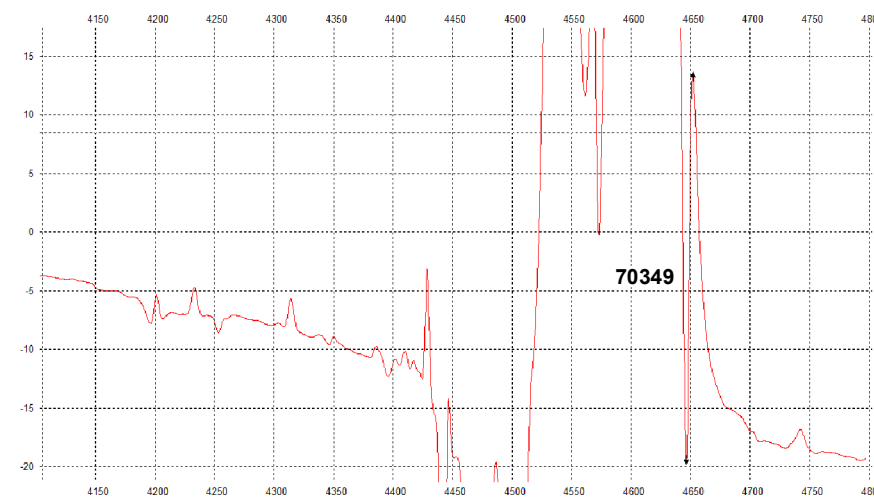
-  Offshore Site Boundary
-  Cable Route Offshore
-  Site Investigation Boundary
-  Feature
-  Recommended archaeological exclusion zone



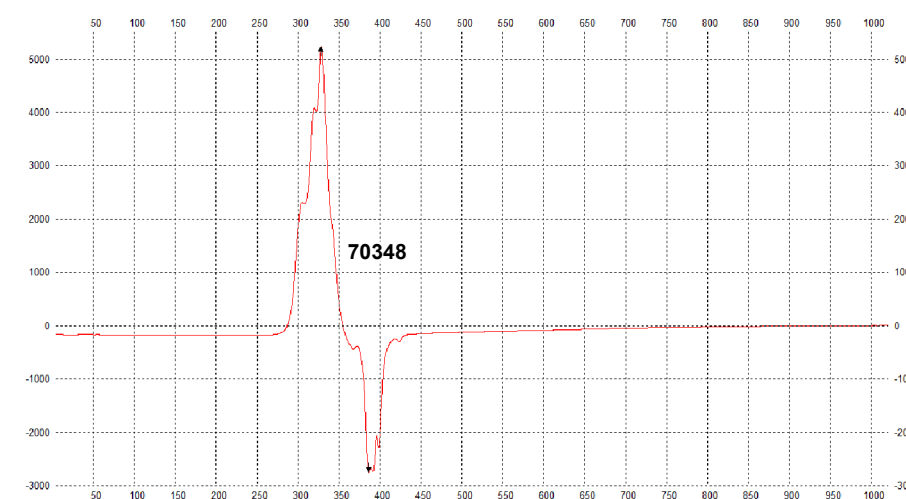
Sidescan sonar image (75 m range) of debris item 70349, 2.5 x 1.5 x 1.5 m, possibly related to wreck of American B-24 Liberator bomber and 70347, 1.9 x 1.1 x 0.5 m, possibly related to German submarine UB12



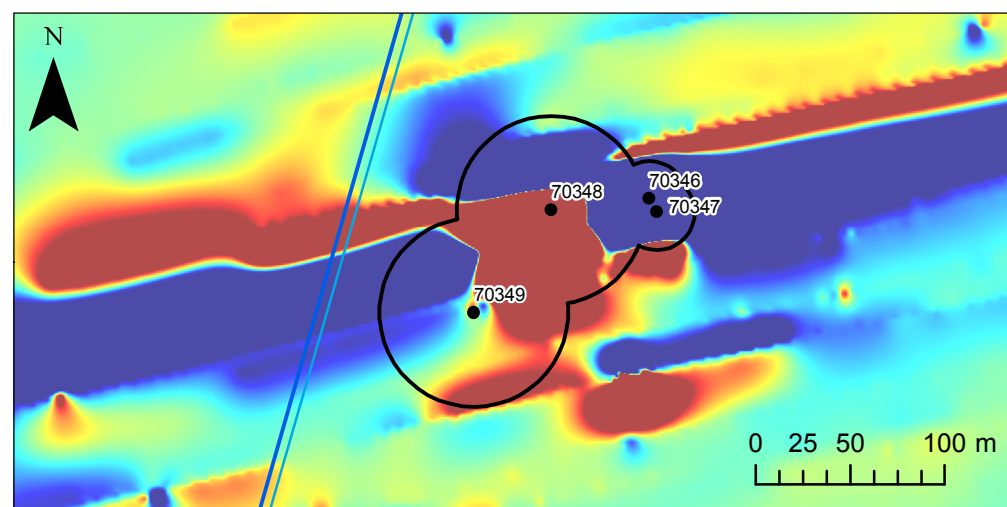
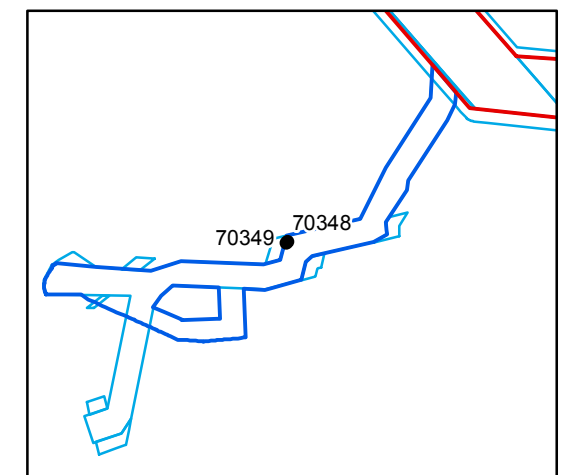
Sidescan sonar image (75 m range) of debris items 70346, 2.5 x 0.7 x 0.7 m and 70348, 1 x 0.8 x 0.5 m, both possibly related to German submarine UB12



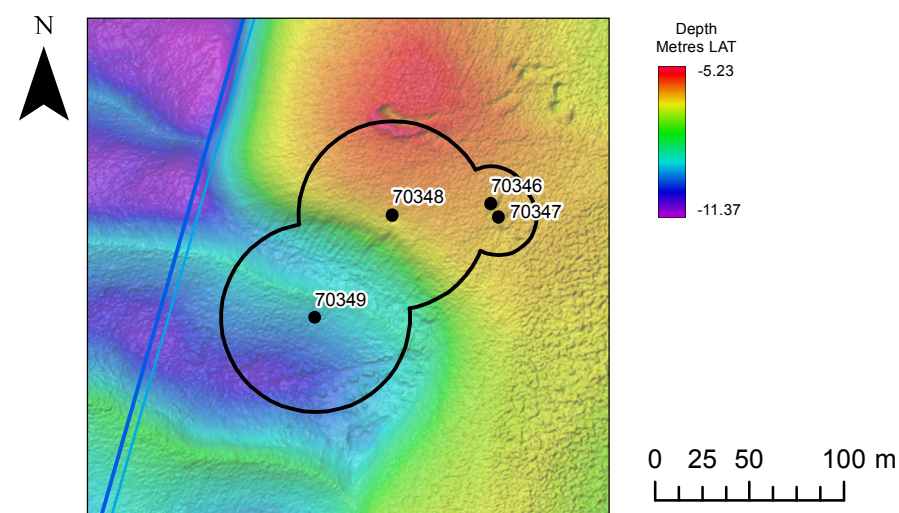
Magnetic profile of ferrous debris, 70349, measuring 34 nT



Magnetic profile of ferrous debris, 70348, measuring 7974 nT



Magnetic grid of ferrous debris, 70348 and 70349







Multibeam bathymetry image of 70348 and 70349

THANET EXTENSION OFFSHORE WIND FARM

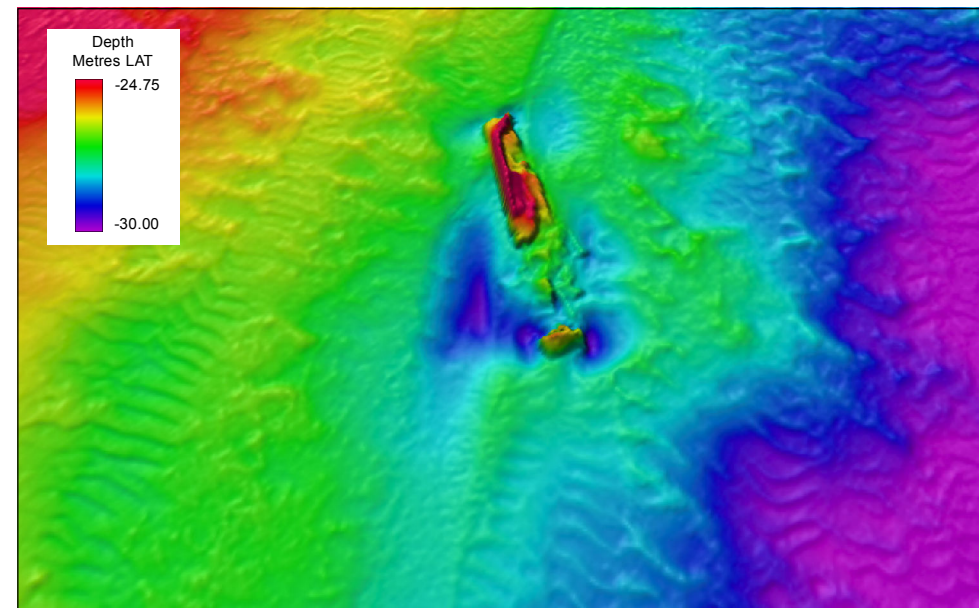
Sheet 1

WA ID **70018** – Unknown

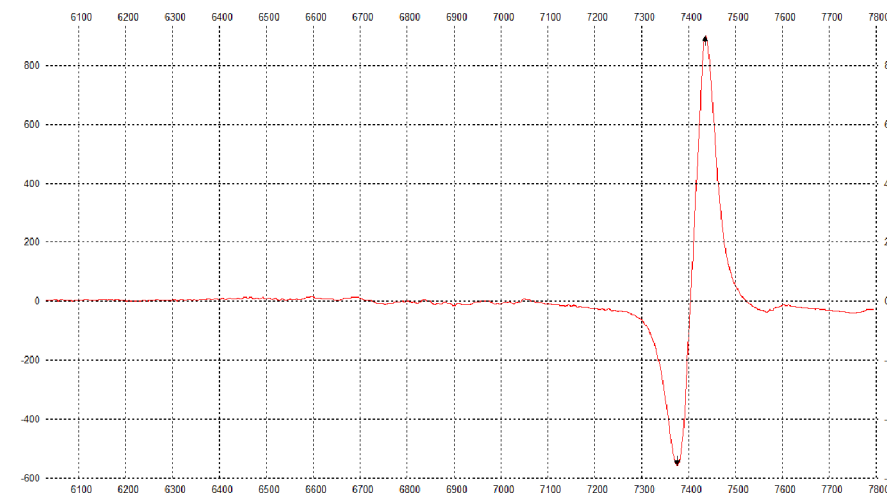
Legend

-  Offshore Site Boundary
-  Cable Route Offshore
-  Site Investigation Boundary
-  Wreck

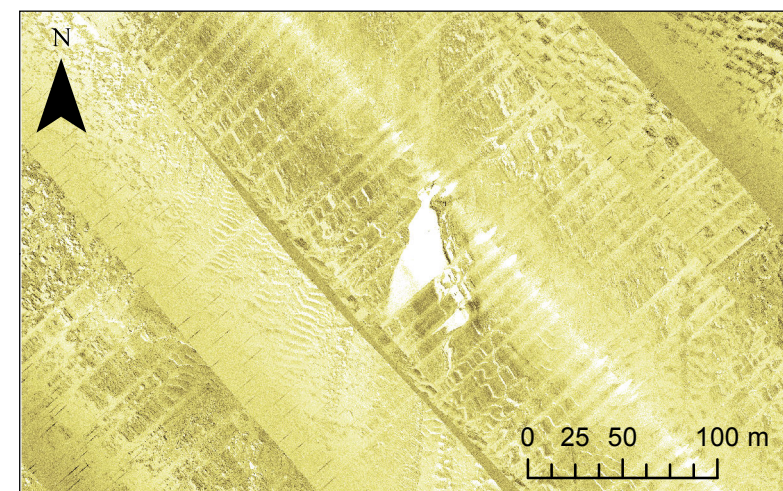
Location	409887E 5698588N	Area	Site
Archaeological Importance	High		
Geophysical survey dimensions and notes	<p>Wreck 70018 is recorded in the UKHO data (13939) as an unknown wreck. From the sidescan sonar data it appears as though the wreck is relatively intact with dimensions of 74.8 x 22.0 x 8.3 m, consisting of several dark reflectors and associated large shadow in an area of mobile sediments. It has a large magnetic anomaly of 1459 nT associated with the wreck, suggesting the presence of ferrous material.</p> <p>The wreck appears in the bathymetry data to be listing on its side with an area of debris to the south of the wreck. This piece of debris is most likely one end of the wreck as the middle of the wreck appears to be buried under debris and sediments. There is an area of scour to the south-east and south-west of the wreck.</p> <p>The UKHO record (13939) associated with this wreck is of an unknown vessel last observed in 1996, with recorded dimensions of 79 x 14 x 6.4 m. The wreck is further recorded as being intact with the SE end broken down.</p>		
Build	Type	Unknown	
	Construction	Unknown	
	Dimensions	Unknown	
	Shipyard	Unknown	
Loss	Cause	Unknown	
Extent of Survival	<p>The wreck appears to be significantly more exposed than when it was identified as a dark reflector in the 2006 WA report (60070). Being situated in an area of mobile sediments this could account for the wreck being more exposed. The wreck appears to be intact, agreeing with the UKHO record.</p>		



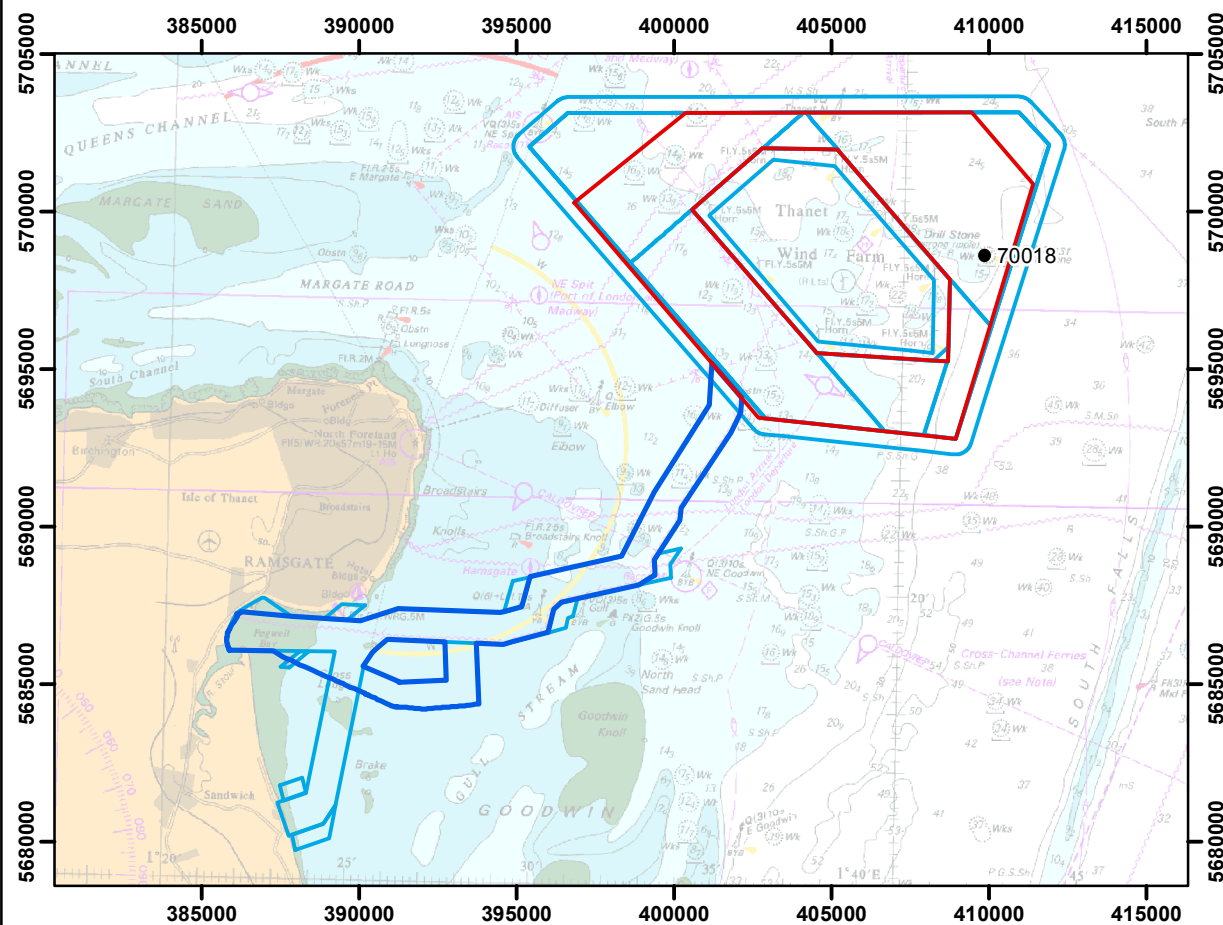
Multibeam bathymetry image of **70018** looking north (x1 vertical exaggeration)



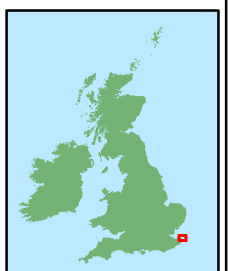
Magnetic profile of **70018** measuring 1459 nT



Sidescan sonar image **70018**, 74.8 x 22.0 x 8.3 m



Layout:
Projection: ETRS 1989 UTM Zone 31N



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0 1 2 4 Km 0 0.75 1.5 3 NM

Scale: 1:240,000





Rev	0	By	KL	Date	09/02/2018
Drg No	116080_geo_wrsh_01				

THANET EXTENSION OFFSHORE WIND FARM

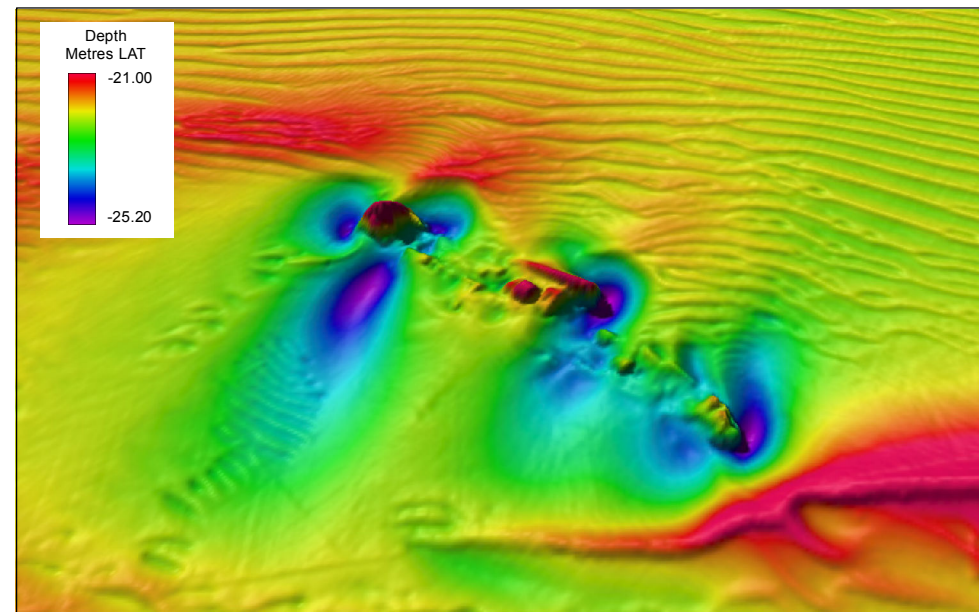
Sheet 2

WA ID **70034** – Unknown

Legend

-  Offshore Site Boundary
-  Cable Route Offshore
-  Site Investigation Boundary
-  Wreck

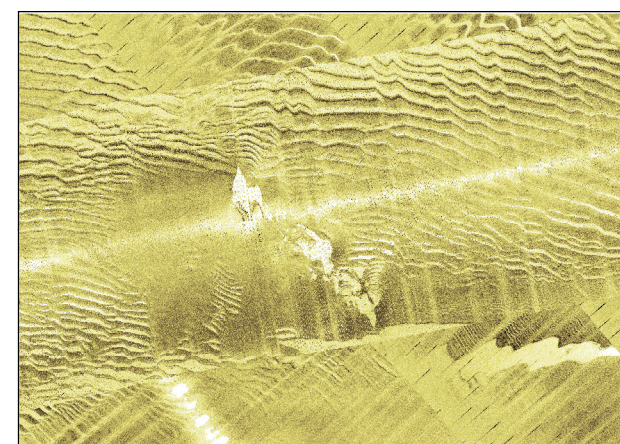
Location	405318E 5701987N	Area	Site
Archaeological Importance	High		
Geophysical survey dimensions and notes	Wreck 70034 is recorded in the UKHO database (13976) as an unknown wreck. Identified in the sidescan sonar data is the irregular outline of an elliptical wreck measuring 89.7 x 27 x 6.8 m, possibly upright and partially buried with some standing structure still visible. At the north-west end and centre of the wreck there are two distinct areas of structure visible these have been identified from the bright shadow in the data.		
	The wreck lies upright mostly buried and broken amongst an area of sand waves, and the mobile sediments have resulted in some surrounding scour visible in the bathymetry. The wreck has a corresponding large magnetic anomaly of 12655 nT indicating the ferrous nature of the wreck material.		
Build	Type	Unknown	
	Construction	Unknown	
	Dimensions	Unknown	
	Shipyard	Unknown	
Loss	Cause	Unknown	
Extent of Survival	The wreck was observed in the 2006 WA report (60070) as a partially buried wreck. This is congruent with how the wreck is seen in current geophysical data.		



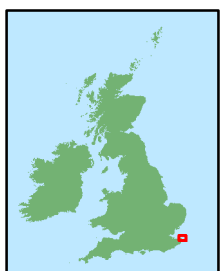
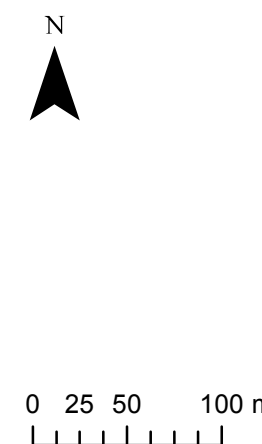
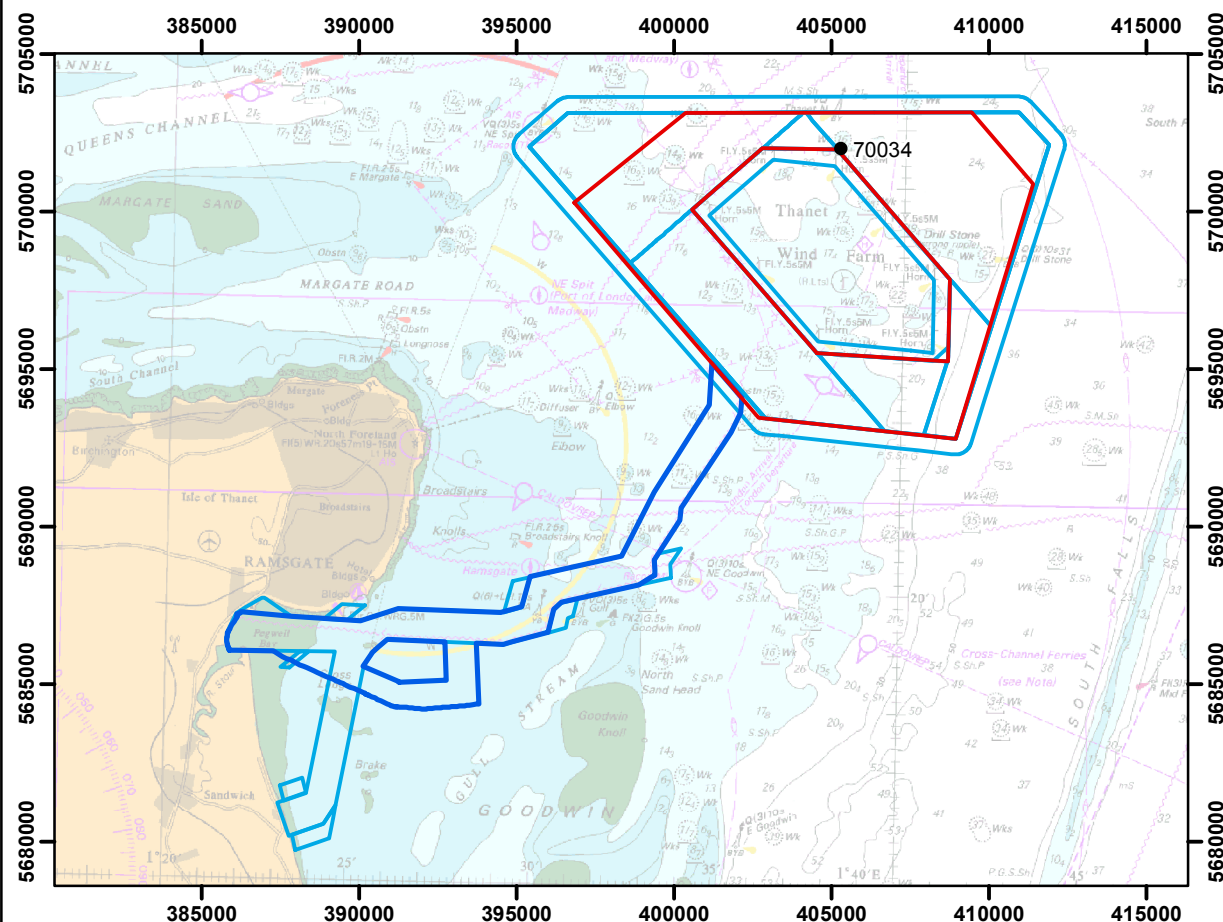
Multibeam bathymetry image of **70034** looking north (x1 vertical exaggeration)



Magnetic profile of **70034** measuring 12655 nT



Sidescan sonar image of **70034**, 89.7 x 27 x 6.8 m



Layout:
Projection: ETRS 1989 UTM Zone 31N

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0 1 2 4 Km 0 0.75 1.5 3 NM

Scale: 1:240,000





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Drg No	116080_geo_wrsh_02				

THANET EXTENSION OFFSHORE WIND FARM

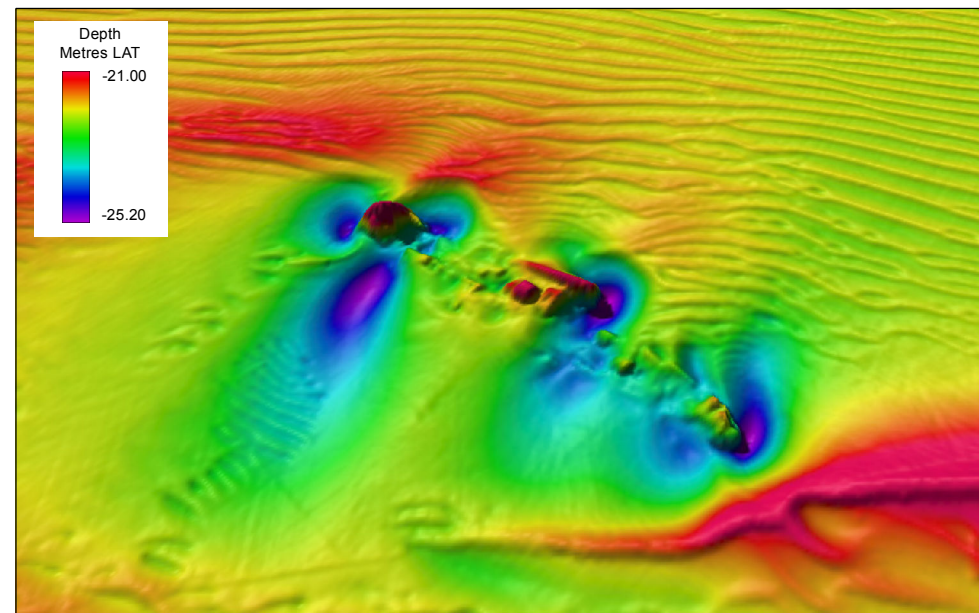
Sheet 3

WA ID 70040 – SS *Menapier*

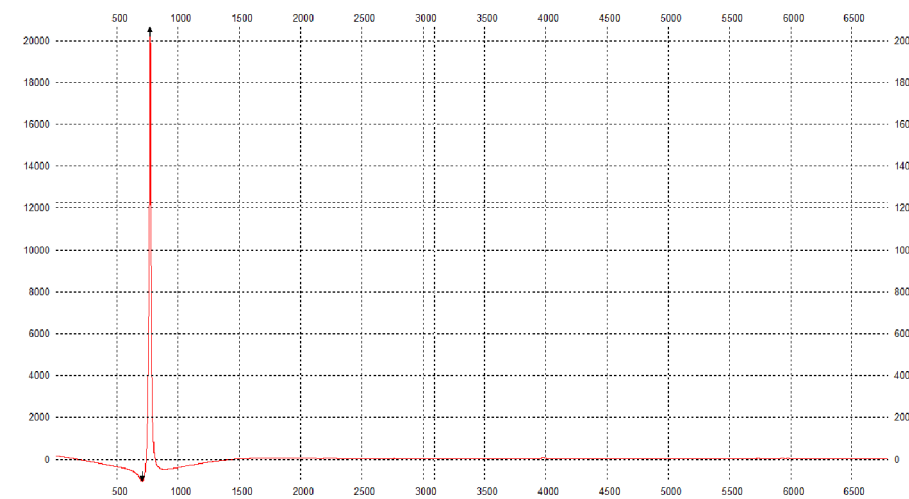
Legend

-  Offshore Site Boundary
-  Cable Route Offshore
-  Site Investigation Boundary
-  Wreck

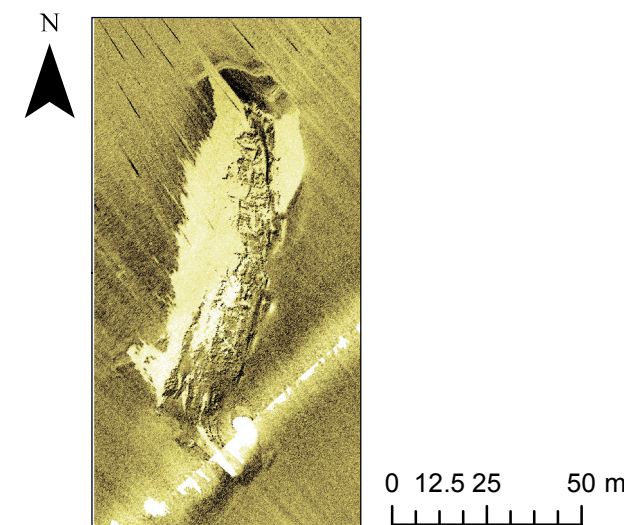
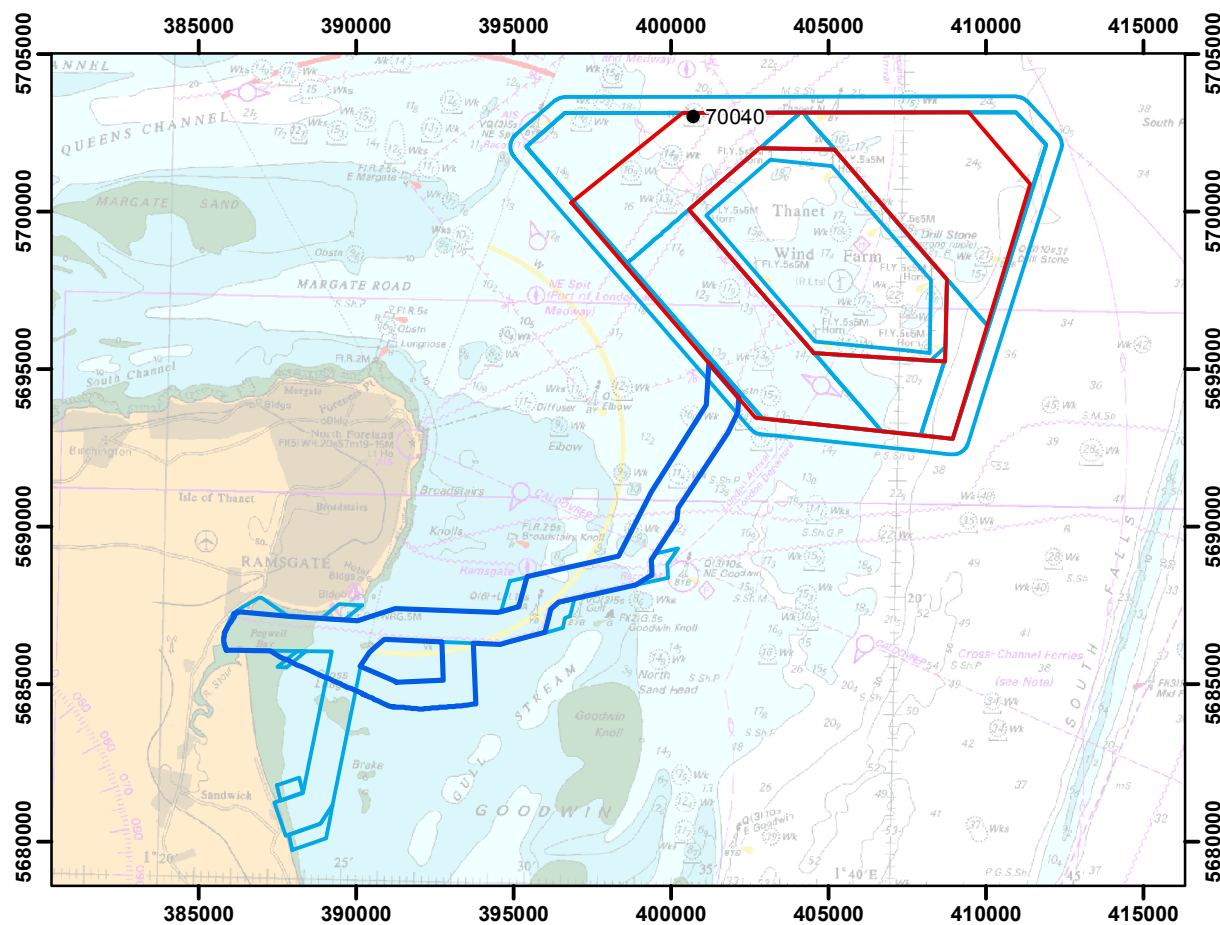
Location	400729E 5703004N	Area	Site
Archaeological Importance	High		
Geophysical survey dimensions and notes	Wreck 70040 is identified by the UKHO data (13993) as the SS <i>Menapier</i> . In the sidescan sonar data the wreck appears as a compact upright target measuring 97.2 x 32.7 x 7.4 m with some debris most likely associated with it to the south. The wreck lies isolated on the seabed with some internal structure visible in the sidescan seen as numerous dark reflectors and shadows.		
	In the bathymetry data the wreck is visibly upright with the centre of the wreck forming its highest point. There is sediment accumulation to the east and slight scour to the west. There is a deep area of scour to the north of the wreck and large area of scour to the south. The wreck appears to be broken to the south-west. The wreck has a large associated magnetic anomaly of 19574 nT indicating ferrous construction.		
	The wreck is associated with the UKHO record (13993) of the Belgian vessel the SS <i>Menapier</i> , which was torpedoed and sunk by German submarine UB-10 on the 6 th June 1915. The UKHO record the wreck as broken up, and was measured as 95 x 20 x 4.3 m during a survey in 1996, with a corresponding large magnetic anomaly of 504 nT.		
Build	Type	Steamship	
	Construction	Metal (possibly)	
	Dimensions	85.6 x 12.5 x 5.5 m	
	Shipyard	Short Brothers of Sunderland	
Loss	Cause	Torpedoed and sunk by the UB-10.	
Extent of Survival		The wreck appears to be broken up although it produces a distinct target across all geophysical survey methods undertaken. Generally featureless seabed suggests that it is unlikely to be covered by sand on a regular basis, although the presence of scour implies some mobile sediments.	



Multibeam bathymetry image of 70040 looking north (x3 vertical exaggeration)

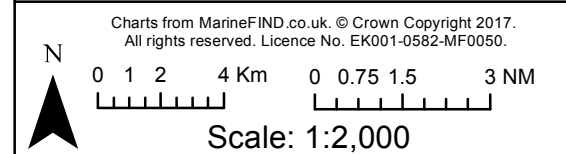


Magnetic profile of 70040 measuring 19574nT

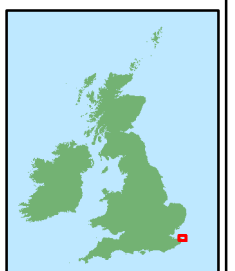


Sidescan sonar image of 70040, 97.2 x 32.7 x 7.4 m

Layout:
Projection: ETRS 1989 UTM Zone 31N

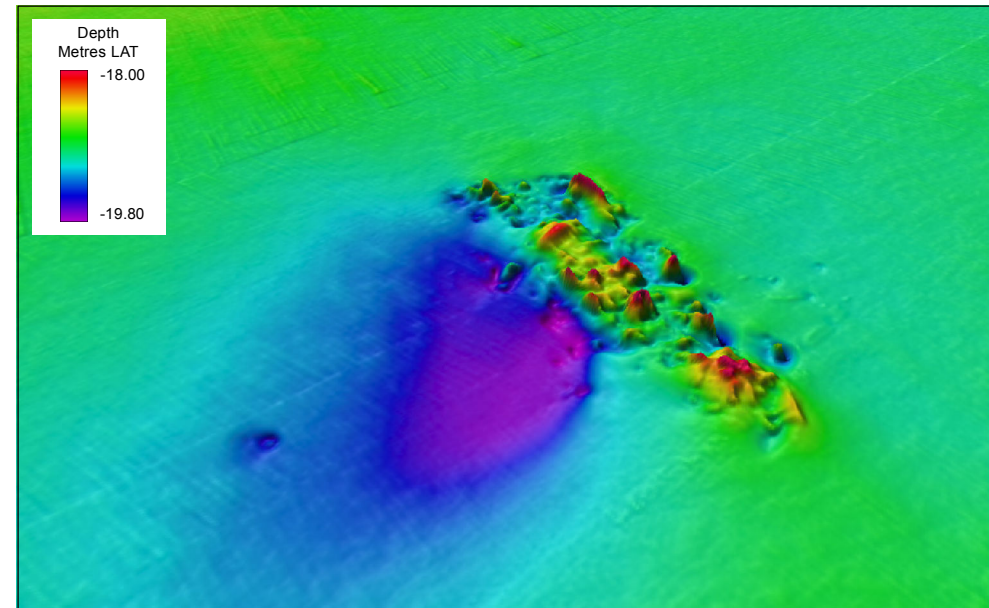


Rev	0	By	KL	Date	09/02/2018
Drg No	116080_geo_wrsh_03				

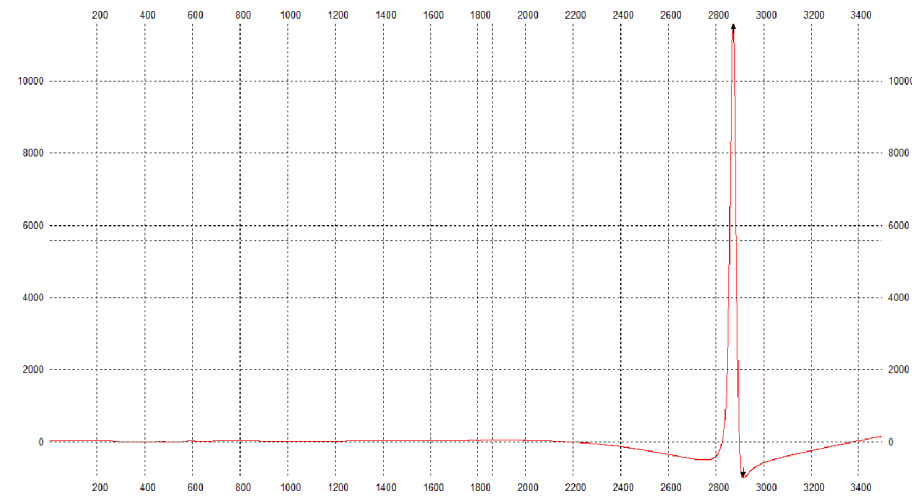


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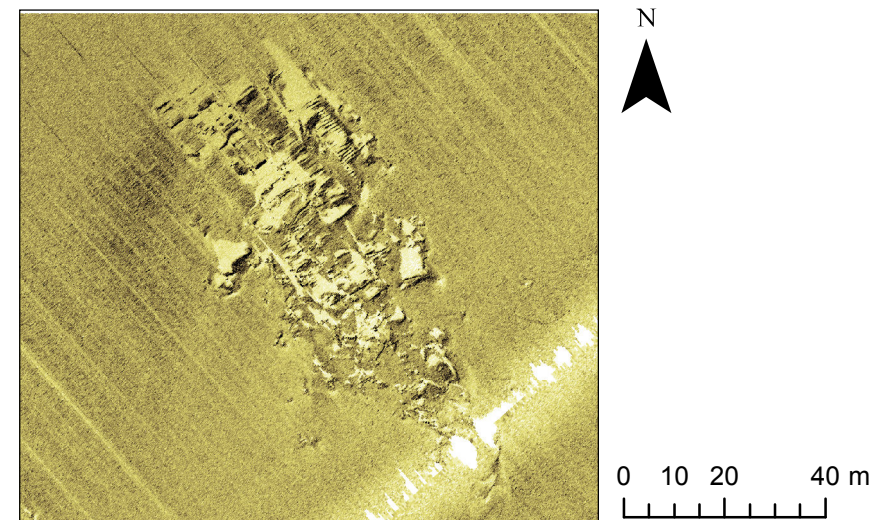
Location	397200E 5703004N	Area	Site
Archaeological Importance	High		
Geophysical survey dimensions and notes	70041 is recorded as the wreck <i>Woodtown (Possibly)</i> by the UKHO database (13992). In the sidescan sonar data this is visible as a compact irregular area of debris measuring 113.1 x 47.7 x 2.7 m with numerous dark reflectors and bright shadows. The presence of ferrous material and likely ferrous construction is indicated from the large magnetic anomaly of 13283 nT associated with the wreck.		
	From the bathymetry data the wreck appears to be well broken-up and mostly buried with numerous upstanding features protruding from the seabed forming no coherent structure. There appears to be an outlying piece of debris lying just beyond the large area of scour to the south-west most likely associated with the wreck.		
Build	Type	Steamship	
	Construction	Unknown	
	Dimensions	56.7 x 8.8 x 3.7 m	
	Shipyard	R Williamson & Son	
Loss	Cause	Mined	
Extent of Survival	This wreck appears to be rather broken up and mostly buried in the geophysical data with an outlying piece of debris visible to the south-west. The original build dimensions are significantly smaller than observed in the data, suggesting the wreck has been well dispersed into its current state.		



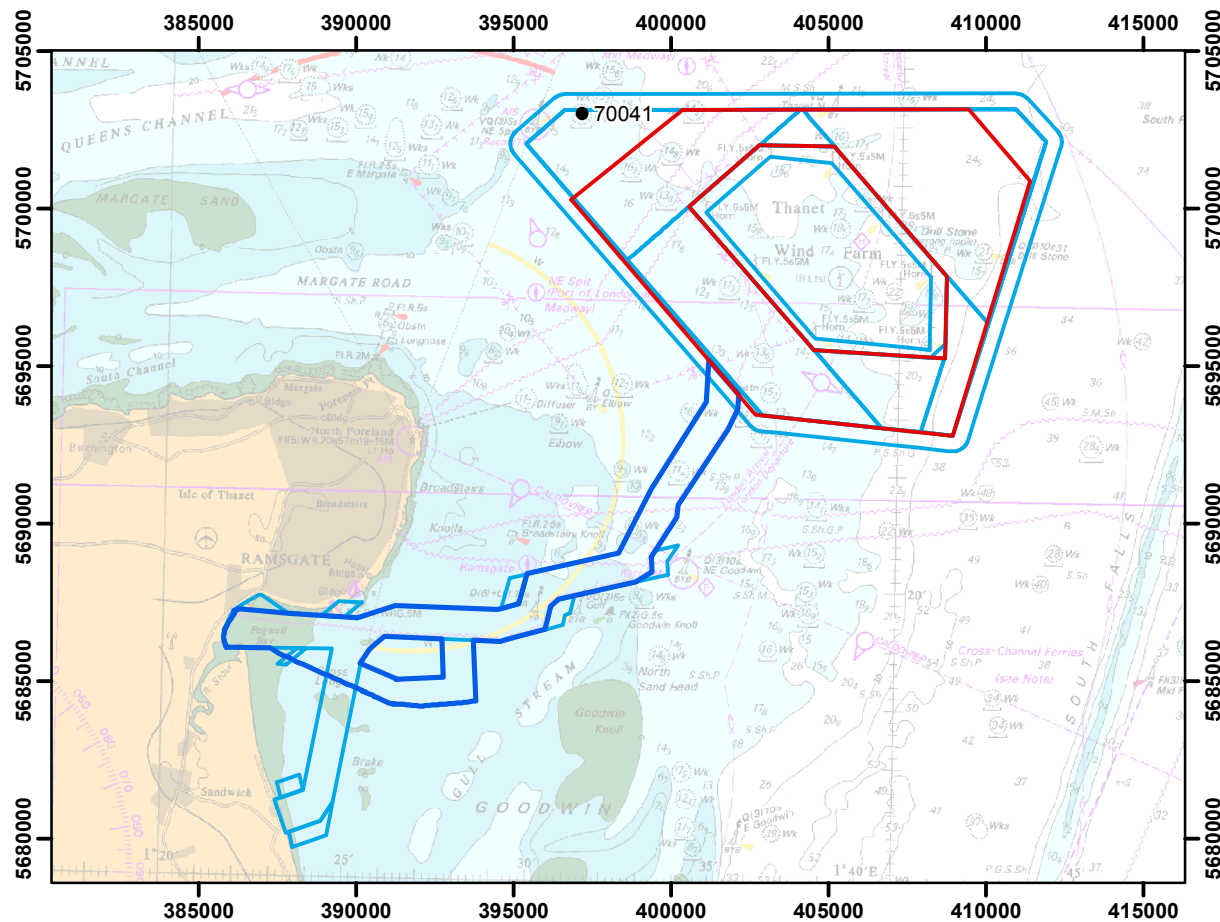
Multibeam bathymetry image of **70041** looking north (x3 vertical exaggeration)



Magnetic profile of **70041** measuring 13283 nT



Sidescan sonar image of **70041**, 113.1 x 47.7 x 2.7 m



**THANET EXTENSION
OFFSHORE WIND FARM**

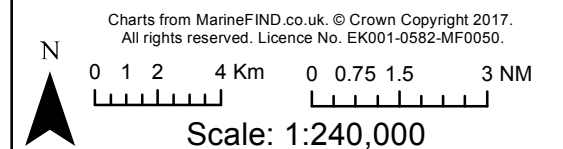
Sheet 4

WA ID **70041** – SS *Woodtown (Possibly)*

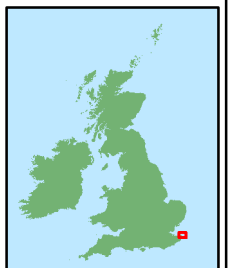
Legend

- Offshore Site Boundary
- Cable Route Offshore
- Site Investigation Boundary
- Wreck

Layout:
Projection: ETRS 1989 UTM Zone 31N



Rev	0	By	KL	Date	09/02/2018
Drg No	116080_geo_wrsh_04				



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Scale: 1:240,000

**THANET EXTENSION
OFFSHORE WIND FARM**

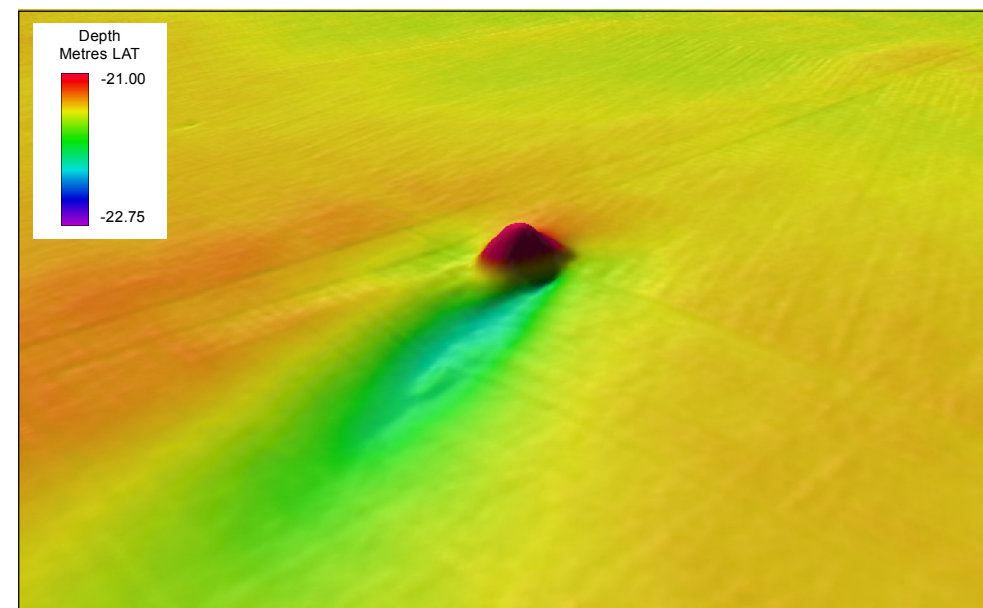
Sheet 5

WA ID **70052** – Unknown

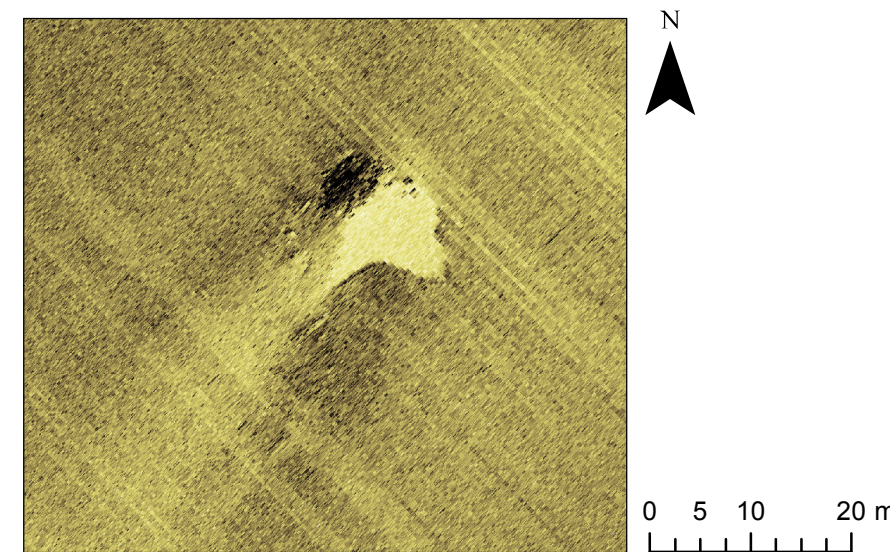
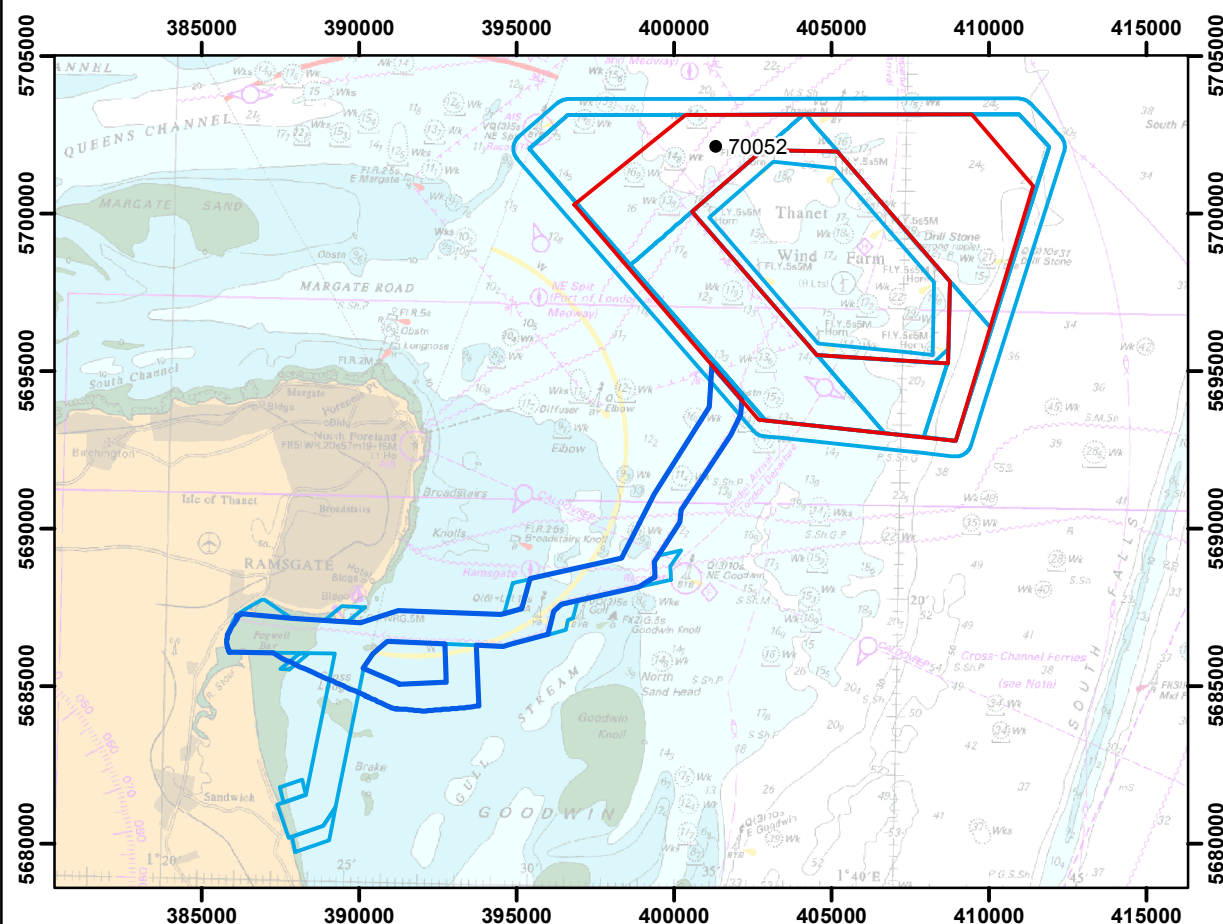
Legend

-  Offshore Site Boundary
-  Cable Route Offshore
-  Site Investigation Boundary
-  Wreck

Location	401365E 5702114N	Area	Site
Archaeological Importance	High		
Geophysical survey dimensions and notes	The wreck 70052 is visible in the sidescan sonar data as an elongated rounded object with irregular bright shadow measuring 14.2 x 9.7 x 1.9 m. There is no associated magnetic anomaly identified for this feature, perhaps due to the spacing of the lines of magnetometer data.		
	In the bathymetry data the wreck is identified as a distinct mound with scour located to the south of the feature.		
	In the UKHO record (13975), the wreck reported as a small wreck in 1982, but was reclassified as a foul ground after not being relocated during a survey in 1996.		
Build	Type	Unknown	
	Construction	Unknown	
	Dimensions	Unknown	
	Shipyard	Unknown	
Loss	Cause	Unknown	
Extent of Survival	The identified feature is likely to be the recorded wreck, but no identifiable structure is visible, the full extent of the wreck may be buried by sands.		



Multibeam bathymetry image of **70052** looking north (x3 vertical exaggeration)



Sidescan sonar image of **70052**, 14.2 x 9.7 x 1.9 m



Layout:
Projection: ETRS 1989 UTM Zone 31N

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0 1 2 4 Km 0 0.75 1.5 3 NM

Scale: 1:240,000





Rev	0	By	KL	Date	09/02/2018
Drg No	116080_geo_wrsh_05				

**THANET EXTENSION
OFFSHORE WIND FARM**

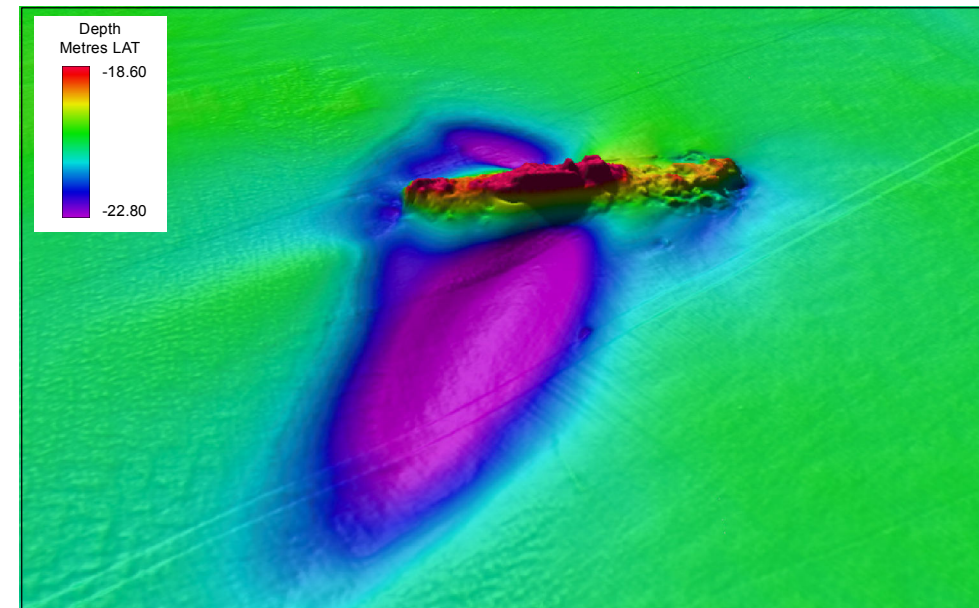
Sheet 6

WA ID **70056** – SS *Saidieh*

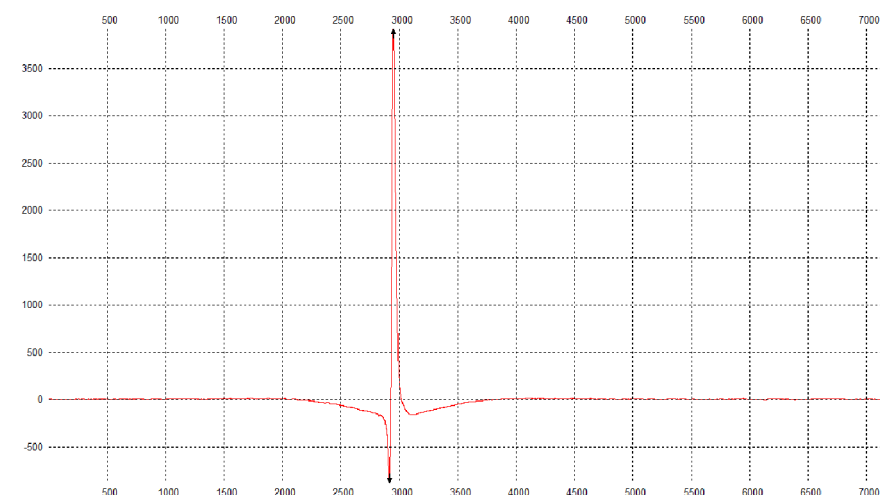
Legend

-  Offshore Site Boundary
-  Cable Route Offshore
-  Site Investigation Boundary
-  Wreck

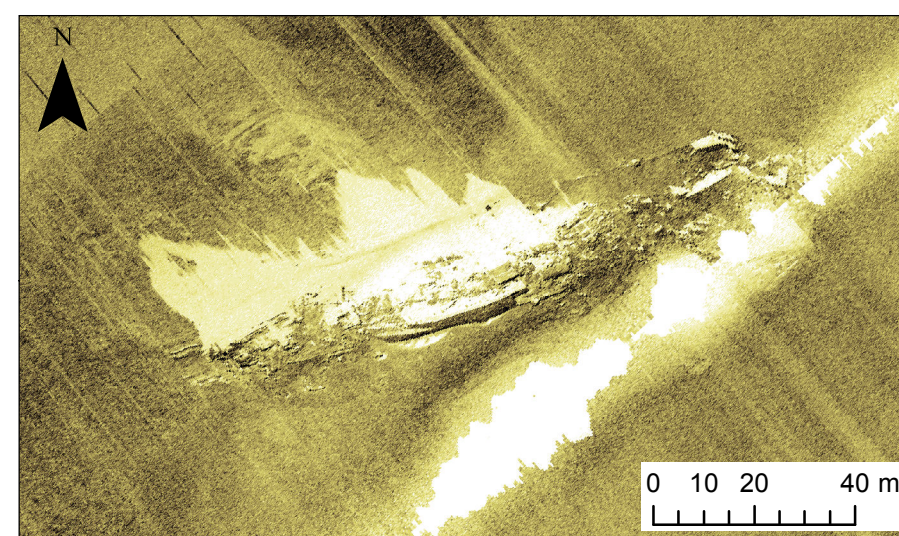
Location	399929E 5701751N	Area	Site
Archaeological Importance	High		
Geophysical survey dimensions and notes	70056 is recorded as the wreck SS <i>Saidieh</i> by the UKHO database (13968). In the sidescan sonar data the wreck is visible as a distinct isolated wreck with a clear outline of the vessel measuring 117.9 x 33.9 x 6.6 m. It appears to be well broken up with some remaining structure evident from the large shadows visible in the sidescan.		
	In the bathymetry data numerous protruding features are visible towards the centre of the vessel, which appear to correlate to the remaining structure visible in the sidescan. There are large areas of scour to the north and south of the wreck in an area of flat seabed. The wreck has a large magnetic anomaly of 4797 nT associated with it suggesting a ferrous construction.		
Build	Type	Steamship	
	Construction	Metal (Possibly)	
	Dimensions	106.7 x 12.2 x 7 m	
	Shipyard	William Denny & Brothers	
Loss	Cause	Torpedoed and sunk by UB-6	
Extent of Survival	The wreck was originally seen in 2006 WA report 60070 as a seafloor disturbance, but is now significantly more exposed and is visible in the geophysics as a distinct isolated wreck.		



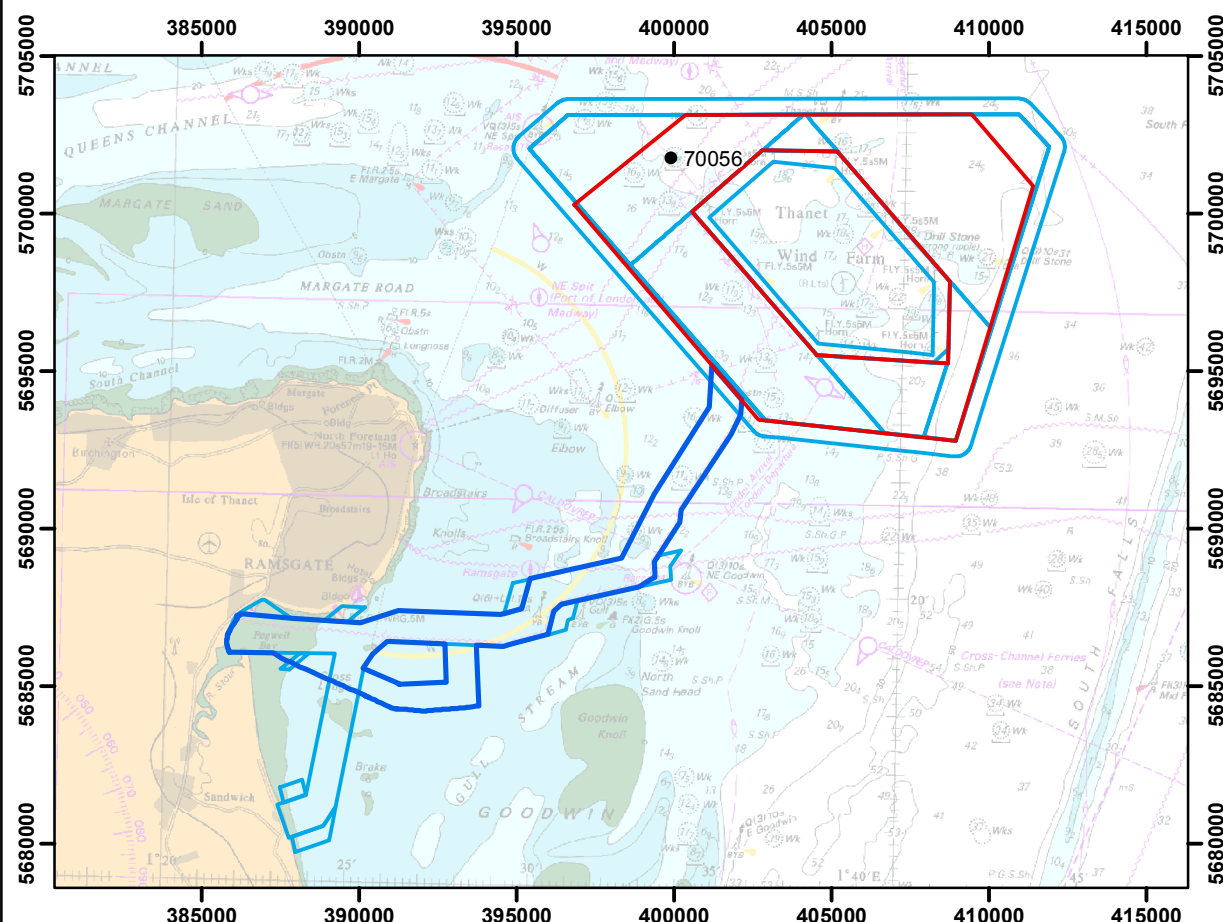
Multibeam bathymetry image of **70056** looking north (x2 vertical exaggeration)



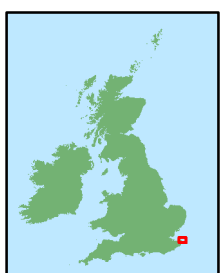
Magnetic profile of **70056** measuring 4797 nT



Sidescan sonar image of **70056**, 117.9 x 33.9 x 6.6 m



Layout:
Projection: ETRS 1989 UTM Zone 31N



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0 1 2 4 Km 0 0.75 1.5 3 NM

Scale: 1:240,000





Rev	0	By	KL	Date	09/02/2018
Drg No	116080_geo_wrsh_06				

THANET EXTENSION OFFSHORE WIND FARM

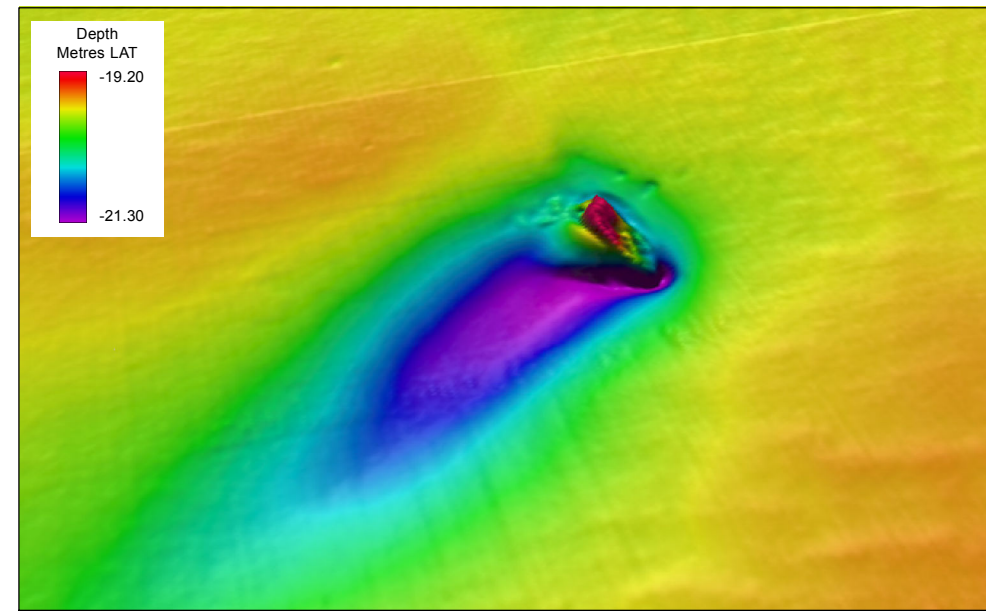
Sheet 7

WA ID **70059** – Unknown

Legend

-  Offshore Site Boundary
-  Cable Route Offshore
-  Site Investigation Boundary
-  Wreck

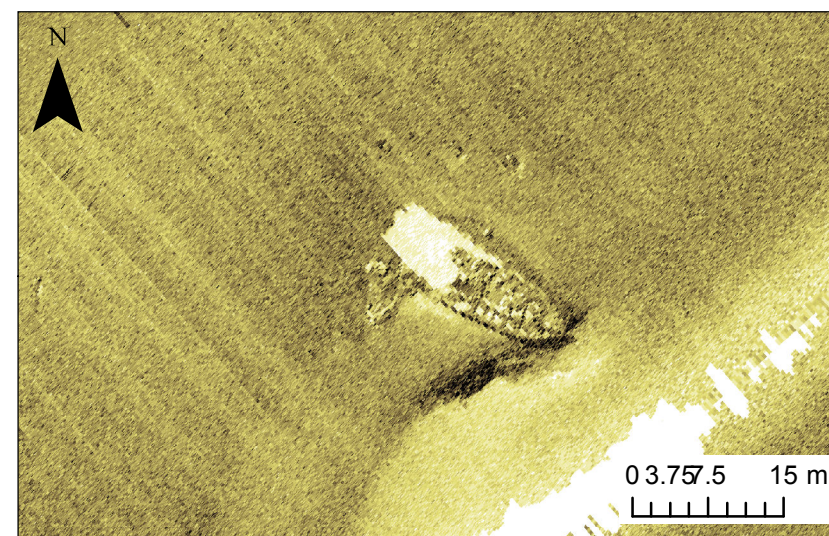
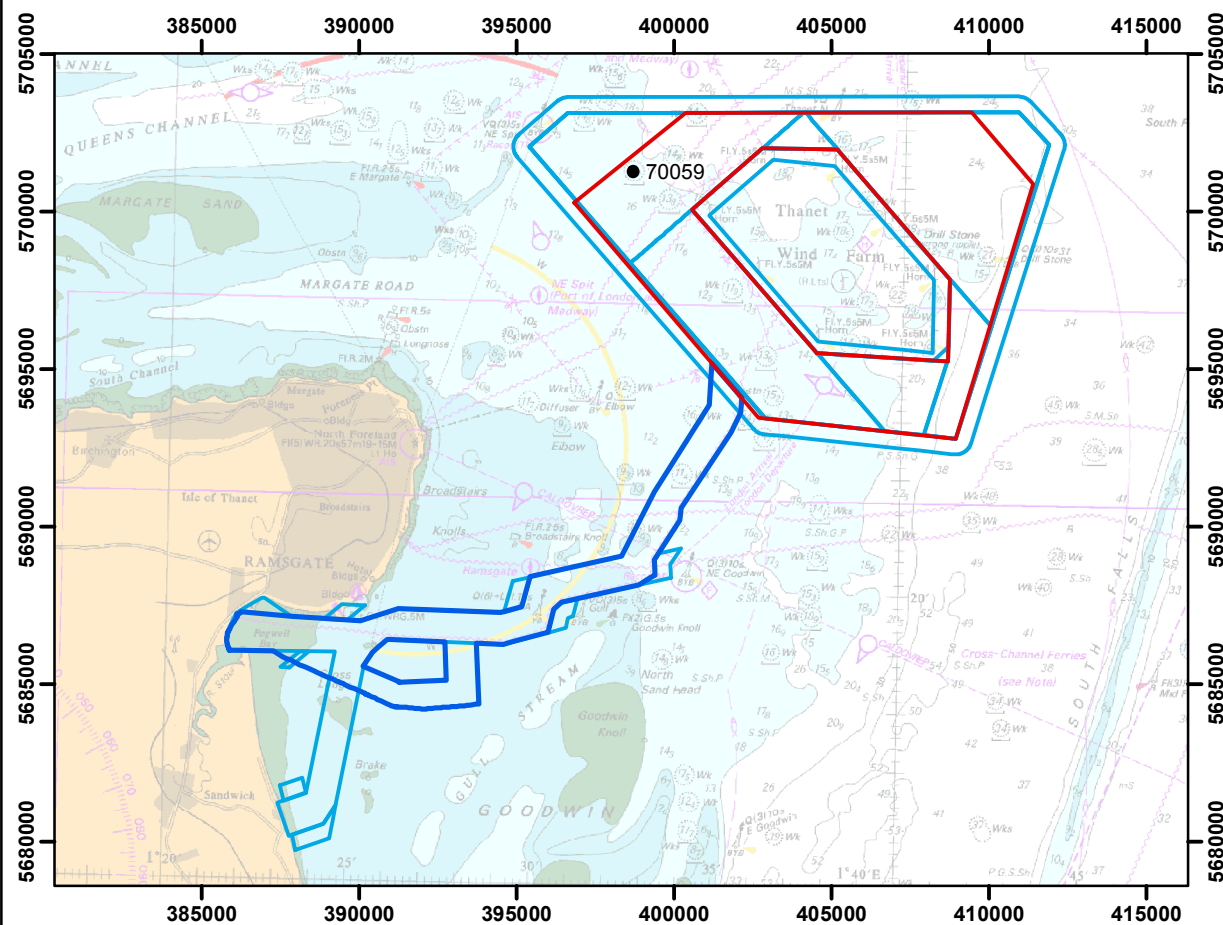
Location	398737E 5701263N	Area	Site
Archaeological Importance	High		
Geophysical survey dimensions and notes	The UKHO record 13964 corresponds with wreck 70059, although the identity of the wreck remains unknown. In the sidescan sonar data the wreck is identifiable from the outline of a small compact structure with some height shadow. The wreck measures 23.9 x 8.6 x 4.3 m, and appears to show the hull with limited internal deck structure surrounded by debris.		
	In the bathymetry the wreck appears as an irregular smooth mound indicative of the wreck being hull upwards. There is a large area of scour to the south and east of the main structure. The associated magnetic anomaly of 93 nT suggests the presence of ferrous material.		
Build	Type	Unknown	
	Construction	Unknown	
	Dimensions	Unknown	
	Shipyard	Unknown	
Loss	Cause	Unknown	
Extent of Survival	The wreck appears to be a small compact wreck, visible in the geophysical datasets. The UKHO record (13964) echoes this.		



Multibeam bathymetry image of **70059** looking north-west (x1 vertical exaggeration)

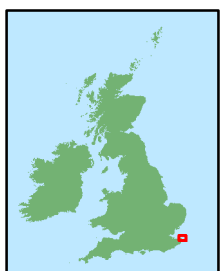


Magnetic profile of **70059** measuring 93 nT



Sidescan sonar image of **70059**, 23.9 x 8.6 x 4.3 m

Layout:
Projection: ETRS 1989 UTM Zone 31N



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0 1 2 4 Km 0 0.75 1.5 3 NM

Scale: 1:240,000





Rev	0	By	KL	Date	09/02/2018
Drg No	116080_geo_wrsh_07				

THANET EXTENSION OFFSHORE WIND FARM

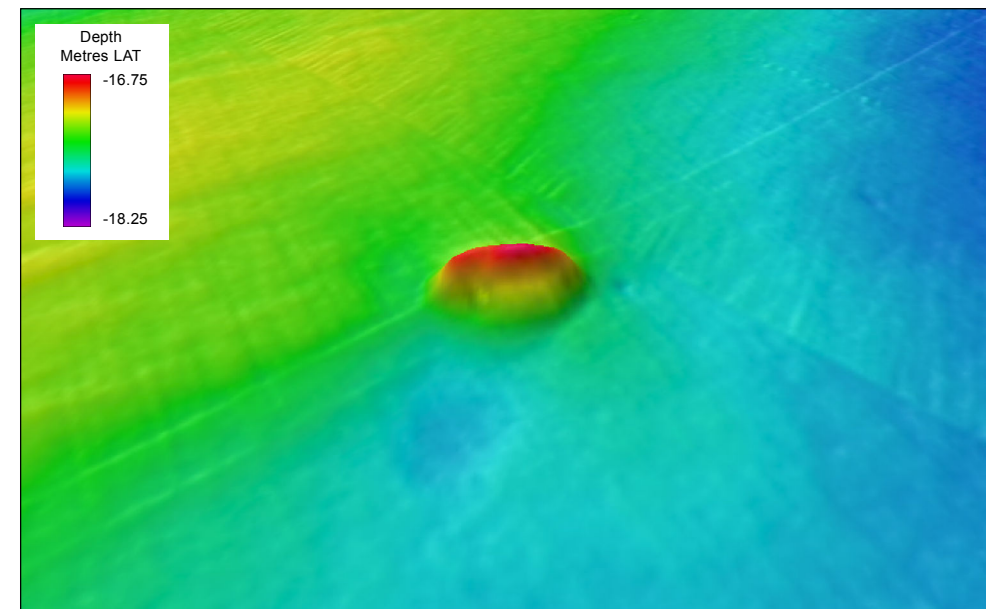
Sheet 8

WA ID **70062** – Unknown

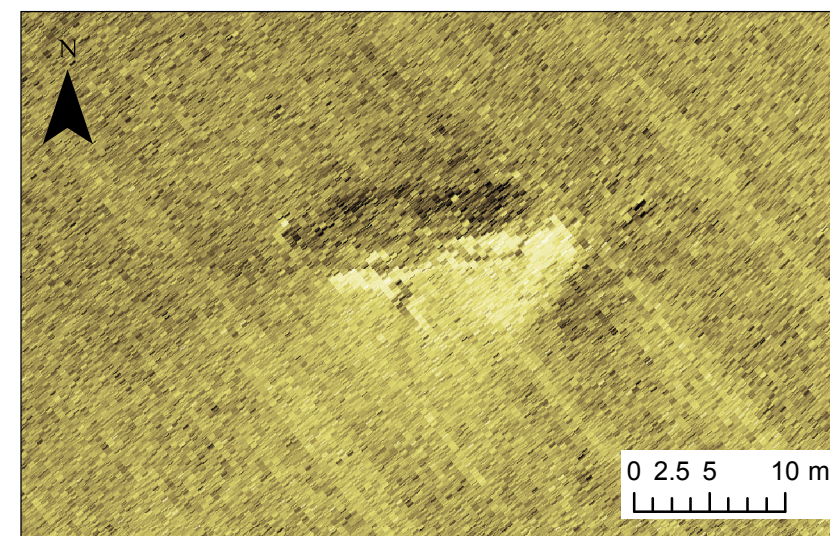
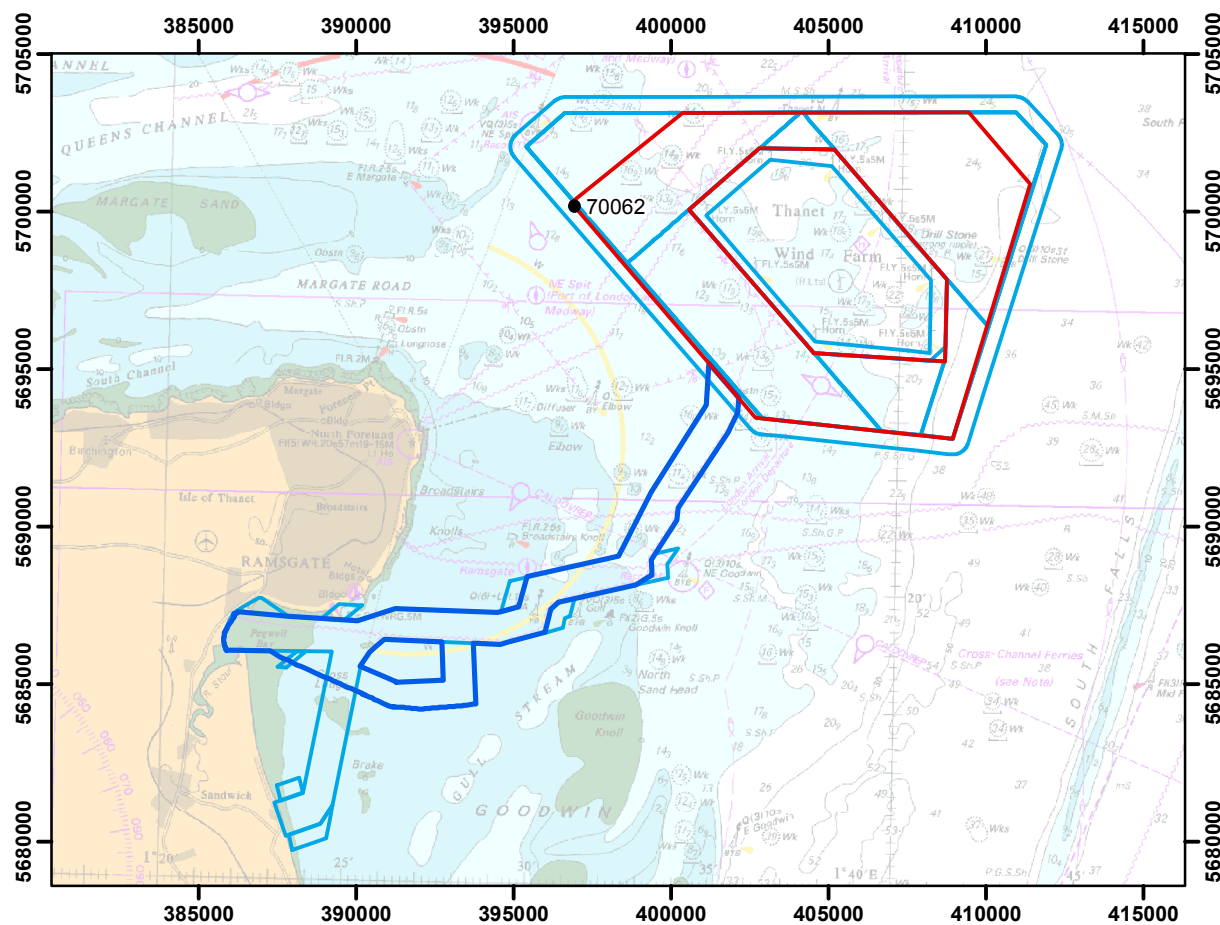
Legend

-  Offshore Site Boundary
-  Cable Route Offshore
-  Site Investigation Boundary
-  Wreck

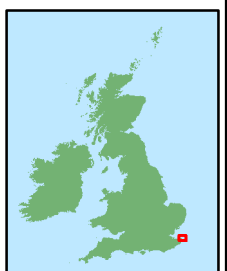
Location	396958E 5700153N	Area	Site
Archaeological Importance	High		
Geophysical survey dimensions and notes	Wreck 70062 is classified as an obstruction in the UKHO record (14946). It is identified in the most recent geophysical data as an elongated, poorly defined dark reflector with an irregular, bright shadow.		
	The wreck measures 18.1 x 17.1 x 2.5 m, and is identified as a small mound in the bathymetry data. The lack of an associated magnetic anomaly suggests the wreck may be wooden in construction.		
	The wreck recorded in the UKHO record (14946) was identified in a 1970 survey which suggested a possible wreck site. A 1985 survey identified a small object, approximately 10 m in length, orientated 100/280 degrees. The site was interpreted as an isolated rock pinnacle in 1985 and amended to 'dead' when it wasn't relocated in 1998.		
Build	Type	Unknown	
	Construction	Wooden (Possibly)	
	Dimensions	Unknown	
	Shipyard	Unknown	
Loss	Cause	Unknown	
Extent of Survival	The current geophysical data shows a dark reflector interpreted to be the wreck which UKHO record (14946) have classified as dead, suggesting mobile sediments at the wreck location have re-exposed the wreck.		



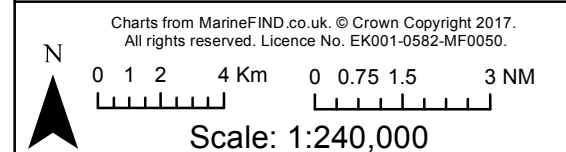
Multibeam bathymetry image of **70062** looking north (x6 vertical exaggeration)



Sidescan sonar image of wreck **70062**, 18.1 x 17.1 x 2.5 m



Layout:
Projection: ETRS 1989 UTM Zone 31N







Rev	0	By	KL	Date	09/02/2018
Drg No	116080_geo_wrsh_08				

THANET EXTENSION OFFSHORE WIND FARM

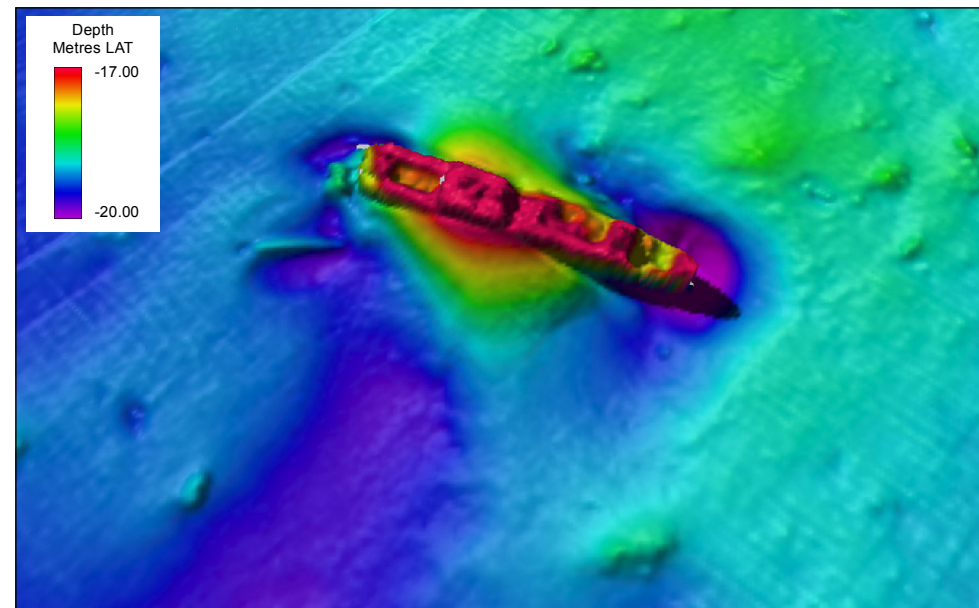
Sheet 9

WA ID **70069** – Unknown

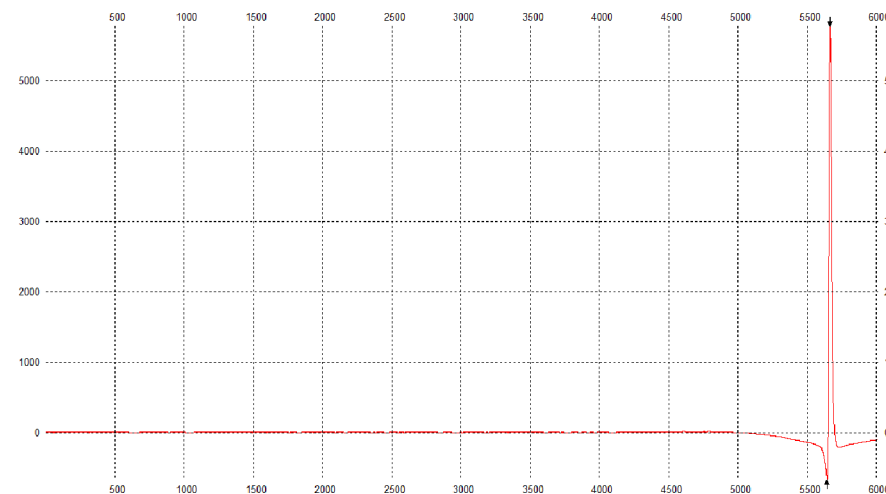
Legend

-  Offshore Site Boundary
-  Cable Route Offshore
-  Site Investigation Boundary
-  Wreck

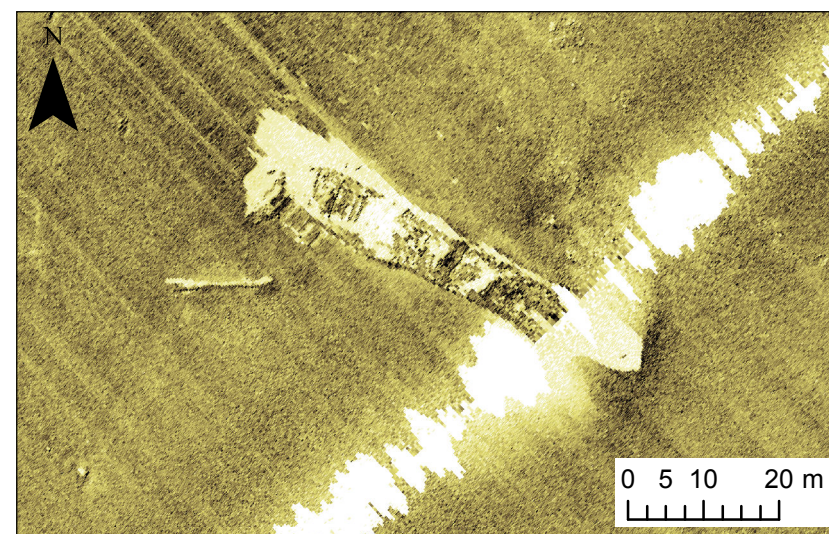
Location	399876E 5700385N	Area	Site
Archaeological Importance	High		
Geophysical survey dimensions and notes	Wreck 70069 is recorded as an Unknown wreck by the UKHO data (13958), and is described in the record as intact and upright measuring 45 m in length. In the sidescan sonar data the wreck appears as a distinct wreck with some structure visible, which is evident from the high shadows. There is also an item of debris clearly visible in the sidescan data, most likely associated with the wreck.		
	The wreck is clearly visible in the bathymetry data as an upright distinct wreck at the edge of a rock outcrop measuring 55.5 x 11.1 x 6.4 m. There is visible evidence of the vessels structure suggesting the wreck is in particularly good condition and intact. There is an area of scour to the north-east of the wreck. A large associated magnetic anomaly of 6453 nT is seen suggesting likely ferrous construction of the vessel.		
Build	Type	Unknown	
	Construction	Unknown	
	Dimensions	Unknown	
	Shipyard	Unknown	
Loss	Cause	Unknown	
Extent of Survival	The wreck appears to be upright and intact distinct amongst the current geophysical data, and as previously seen in the 2006 WA report 60070. The UKHO record echoes this.		



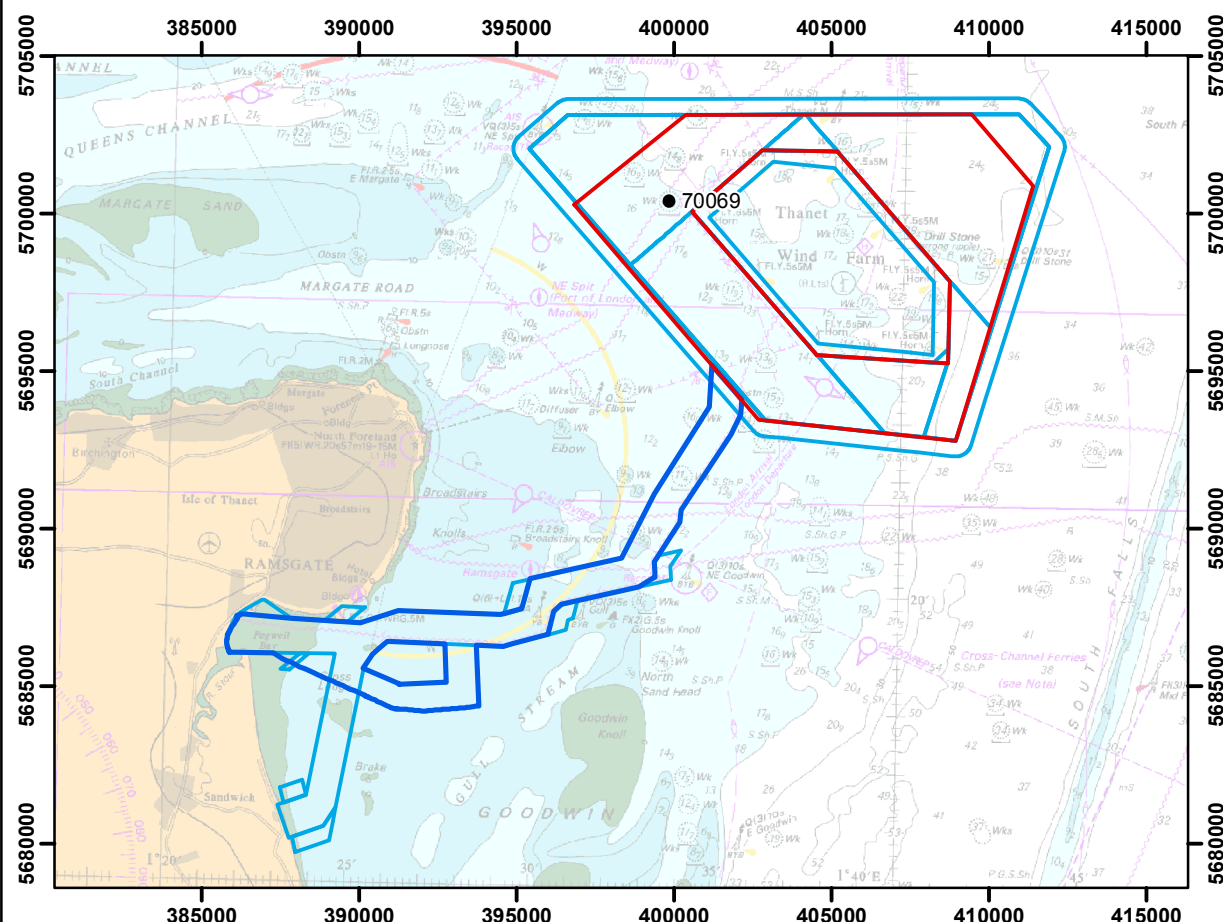
Multibeam bathymetry image of **70069** looking north (x1 vertical exaggeration)



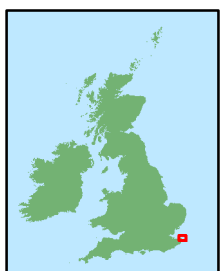
Magnetic profile of **70069** measuring 6453 nT



Sidescan sonar image of wreck **70069**, 55.5 x 11.1 x 6.4 m



Layout:
Projection: ETRS 1989 UTM Zone 31N



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0 1 2 4 Km 0 0.75 1.5 3 NM

Scale: 1:240,000

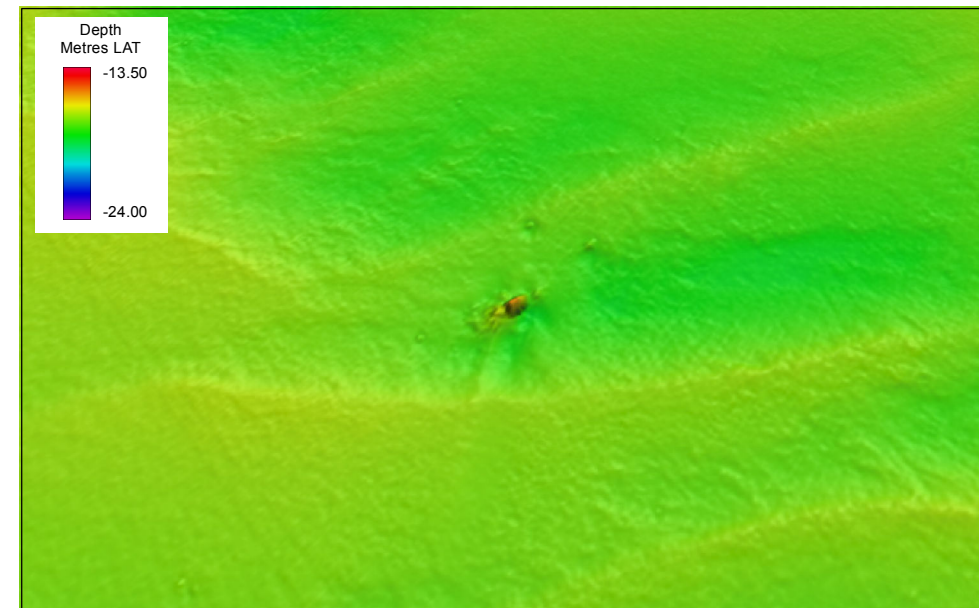
Rev	0	By	KL	Date	09/02/2018
Drg No	116080_geo_wrsh_09				

**THANET EXTENSION
OFFSHORE WIND FARM**

Sheet 10





WA ID 70117 – Unknown

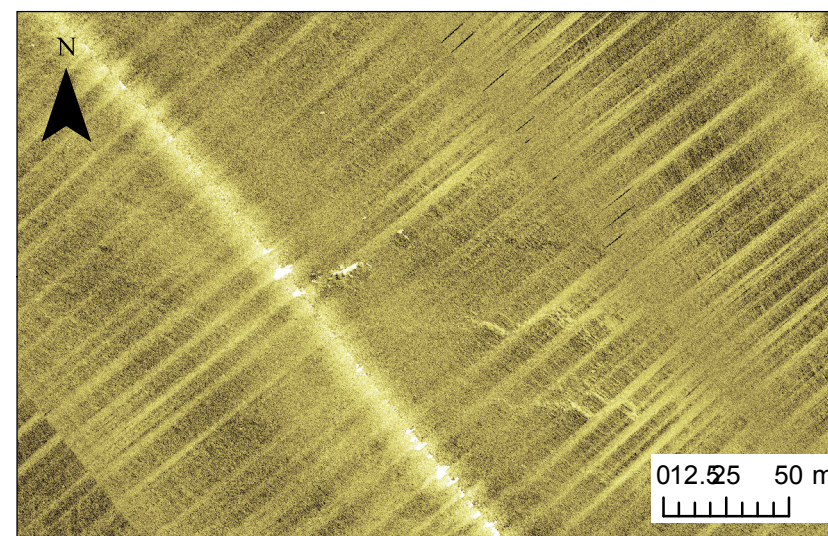
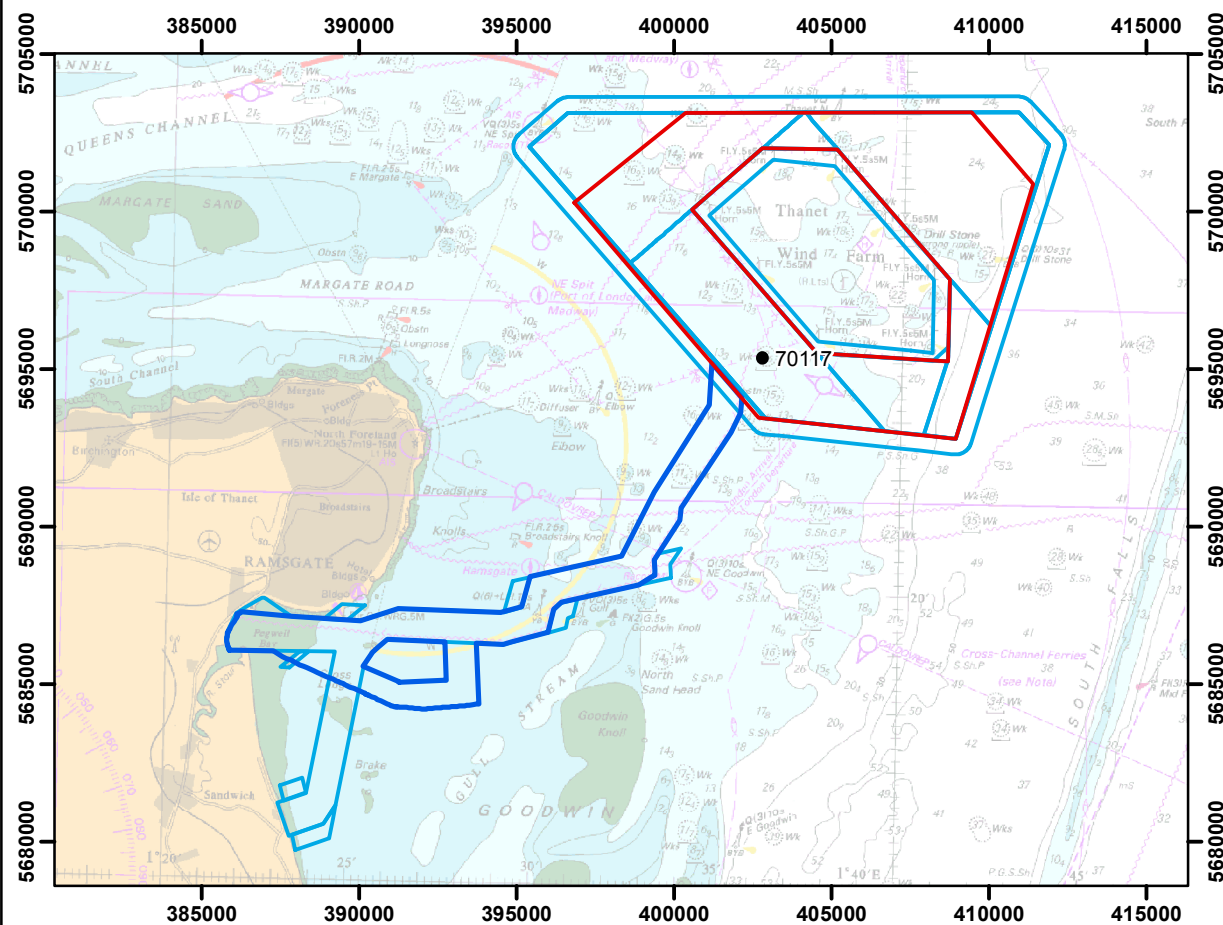
Location	402845E 5695341N	Area	Site
Archaeological Importance	High		
Geophysical survey dimensions and notes	The wreck 70117 is recorded in the UKHO record (13904) as an unknown wreck. In the sidescan sonar data this is seen as a small dark reflector with a large shadow measuring 22.6 x 10.2 x 3.2 m.		
	In the bathymetry data the wreck is evident as a tall elongated mound aligned NE to SW, and is situated amongst a region of megaripples. The wreck appears irregular and broken down at the south-west end, with several items of possible debris in its vicinity.		
Build	Type	Unknown	
	Construction	Unknown	
	Dimensions	Unknown	
	Shipyard	Unknown	
Loss	Cause	Unknown	
Extent of Survival	The remains of the wreck were described in the UKHO database (13904) as having a good magnetometer deflection, which was not identified in the current geophysical data. It is possible that the spacing of the magnetometer data has resulted in no observable anomaly in the vicinity of the.		



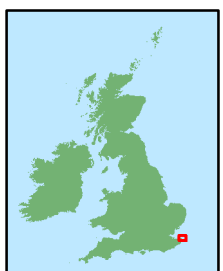
Multibeam bathymetry image of 70117 looking north (x1 vertical exaggeration)

Legend

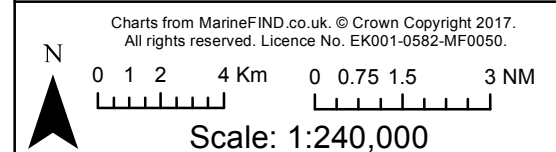
-  Offshore Site Boundary
-  Cable Route Offshore
-  Site Investigation Boundary
-  Wreck



Sidescan sonar image of wreck 70117, 22.6 x 10.2 x 3.2 m



Layout:
Projection: ETRS 1989 UTM Zone 31N







Rev	0	By	KL	Date	09/02/2018
Drg No	116080_geo_wrsh_10				

THANET EXTENSION OFFSHORE WIND FARM

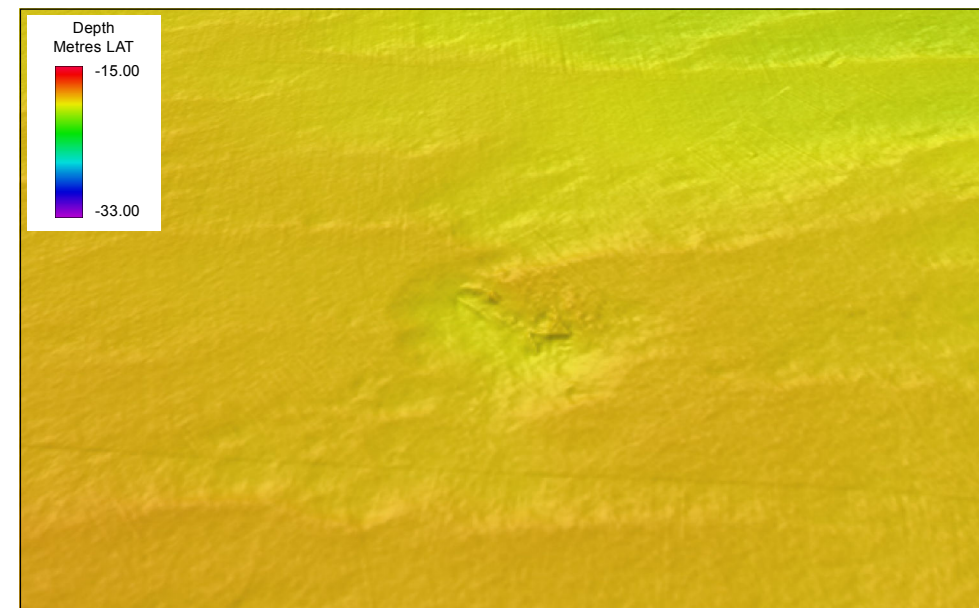
Sheet 11

WA ID **70128** - Unknown

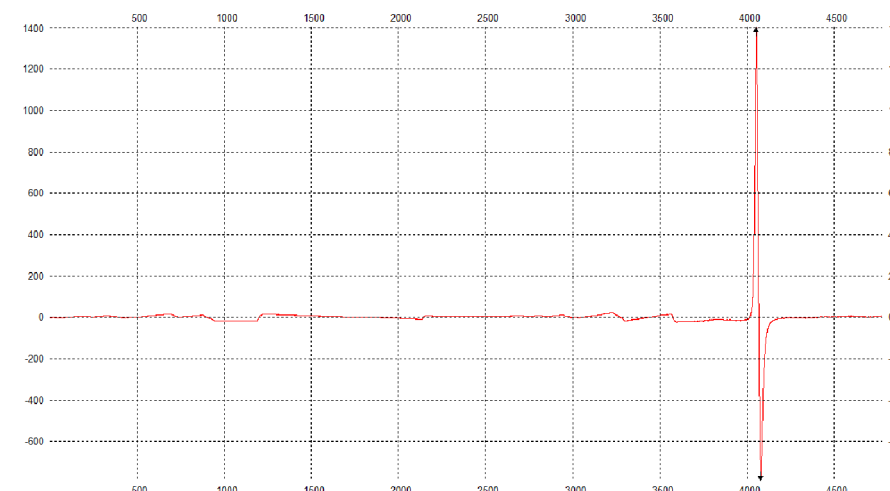
Legend

-  Offshore Site Boundary
-  Cable Route Offshore
-  Site Investigation Boundary
-  Wreck

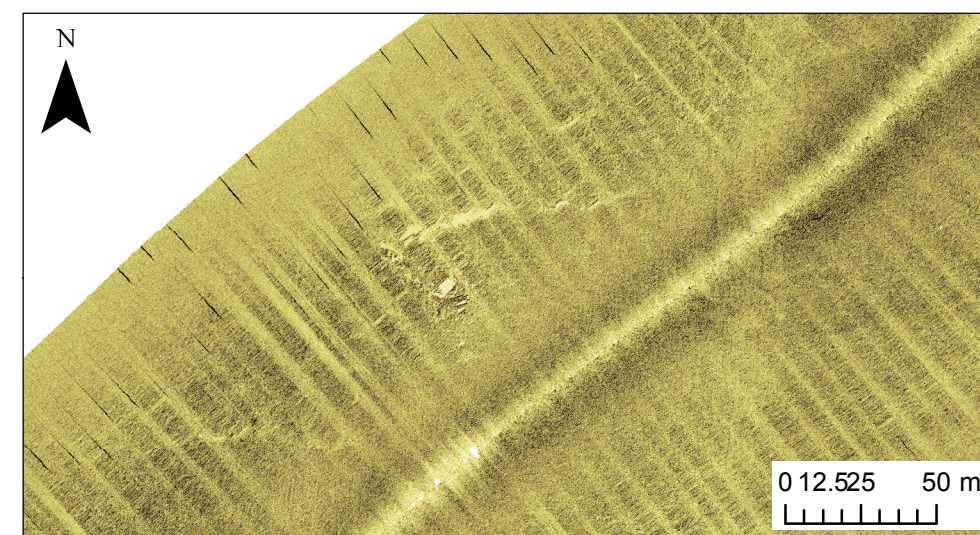
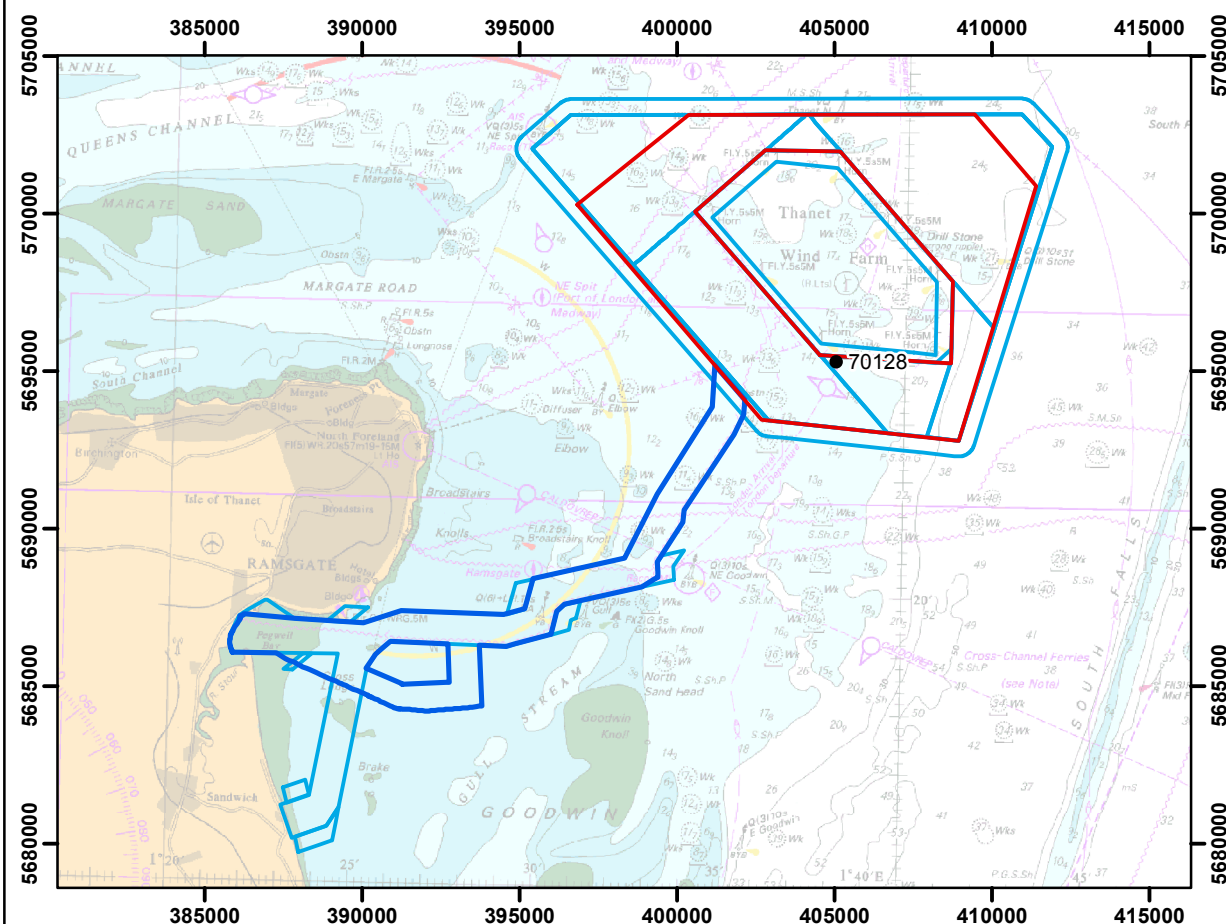
Location	405075E 5695283N	Area	Site
Archaeological Importance	High		
Geophysical survey dimensions and notes	Wreck 70128 is visible in the sidescan sonar data as an irregular area of brighter sediments, with a possible depression containing several dark reflectors with small shadows.		
	In the bathymetry data this wreck is observed as an angular, hull-shaped outline within a slight depression, measuring 33.4 x 15.4 x 0.8 m. No apparent upstanding structure is visible, although there is some partially buried debris to the south. There is a very large magnetic anomaly measuring 2196 nT associated with this wreck, indicating a substantial quantity of ferrous material.		
Build	Type	Unknown	
	Construction	Likely ferrous.	
	Dimensions	Unknown	
	Shipyard	Unknown	
Loss	Cause	Unknown	
Extent of Survival	The wreck, originally seen in 2006 WA report 60070 as an area of numerous small dark reflectors, is now identifiable as the outline of a wreck in the current geophysical data. The large magnetic anomaly echoes that of the UKHO record (15157).		



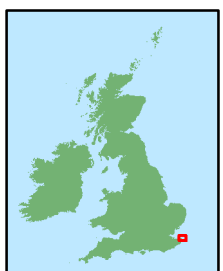
Multibeam bathymetry image of **70128** looking north (x1 vertical exaggeration)



Magnetic profile of **70128** measuring 2196 nT



Sidescan sonar image of wreck **70128**, 33.4 x 15.4 x 0.8 m



Layout:
Projection: ETRS 1989 UTM Zone 31N

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0 1 2 4 Km 0 0.75 1.5 3 NM

Scale: 1:240,000





Rev	0	By	KL	Date	09/02/2018
Drg No	116080_geo_wrsh_11				

**THANET EXTENSION
OFFSHORE WIND FARM**

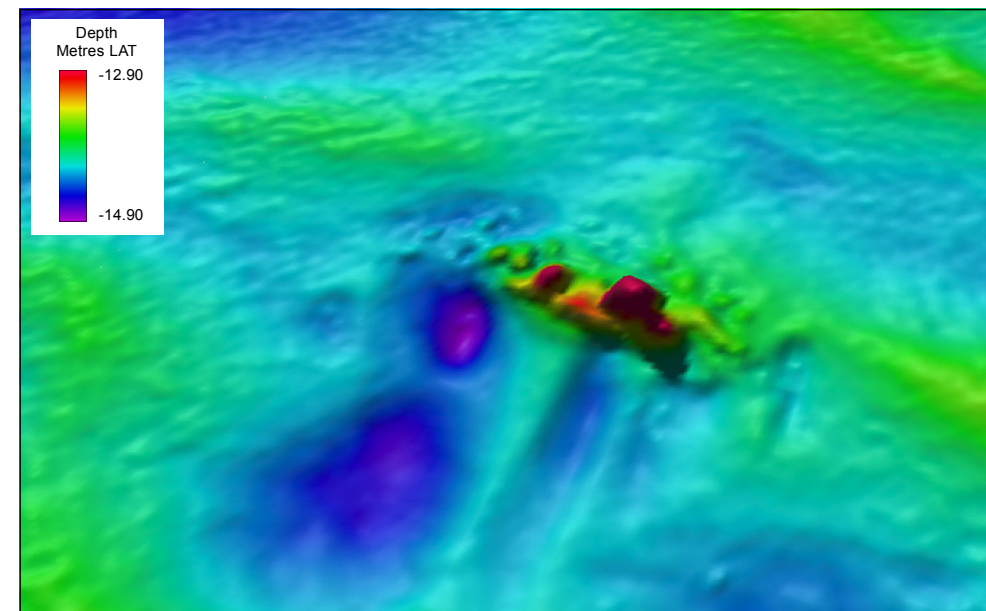
Sheet 12

WA ID 70219 – SS *Cathay* (Part of)

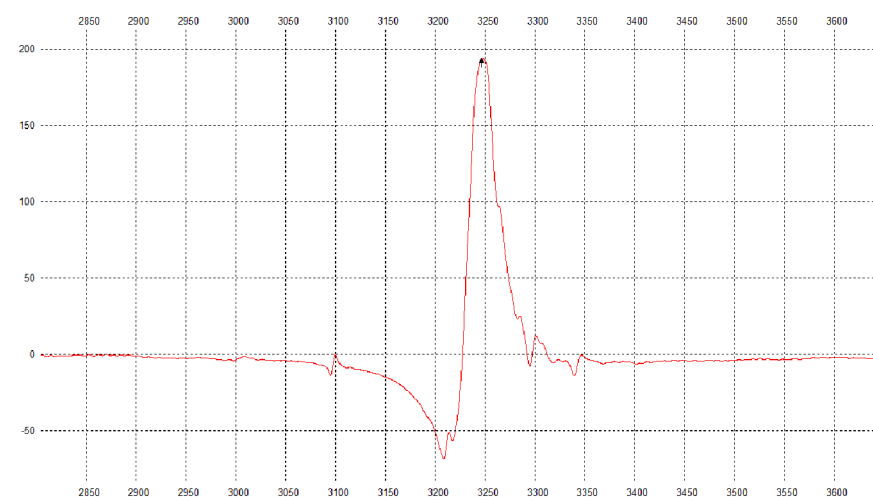
Legend

-  Offshore Site Boundary
-  Cable Route Offshore
-  Site Investigation Boundary
-  Wreck

Location	400237E 5691668N	Area	Cable corridor
Archaeological Importance	High		
Geophysical survey dimensions and notes	Wreck 70219 has been identified as the SS <i>Cathay</i> (Part of) in the UKHO data (13875). In the sidescan sonar data the wreck appears to be largely disintegrated and is comprised of numerous, mostly linear, dark reflectors with height.		
	In the bathymetry data the wreck has been identified as a partially buried feature with two distinct protruding features. The wreck has a distinct scour mark to the south-west, whilst there are two visible linear areas of sediment accumulation south of the two main protruding features of the wreck. Some outlying debris probably associated with the wreck is located mainly to the north-west.		
	The wreck has dimensions of 44.1 x 32.6 x 3.8 m and an associated medium magnetic anomaly of 339 nT, indicating ferrous material.		
Build	Type	Steam ship	
	Construction	Unknown	
	Dimensions	112.5 x 14.3 x 5.5 m	
Loss	Shipyard	Ramage & Ferguson Ltd	
	Cause	Mined	
Extent of Survival	The wreck appears to be significantly more exposed than when identified in the 2006 WA report 60070, where the wreck was tagged as a seafloor disturbance. In both the sidescan and the bathymetry data the wreck appears to be broken up with two protruding features identifiable in the bathymetry.		



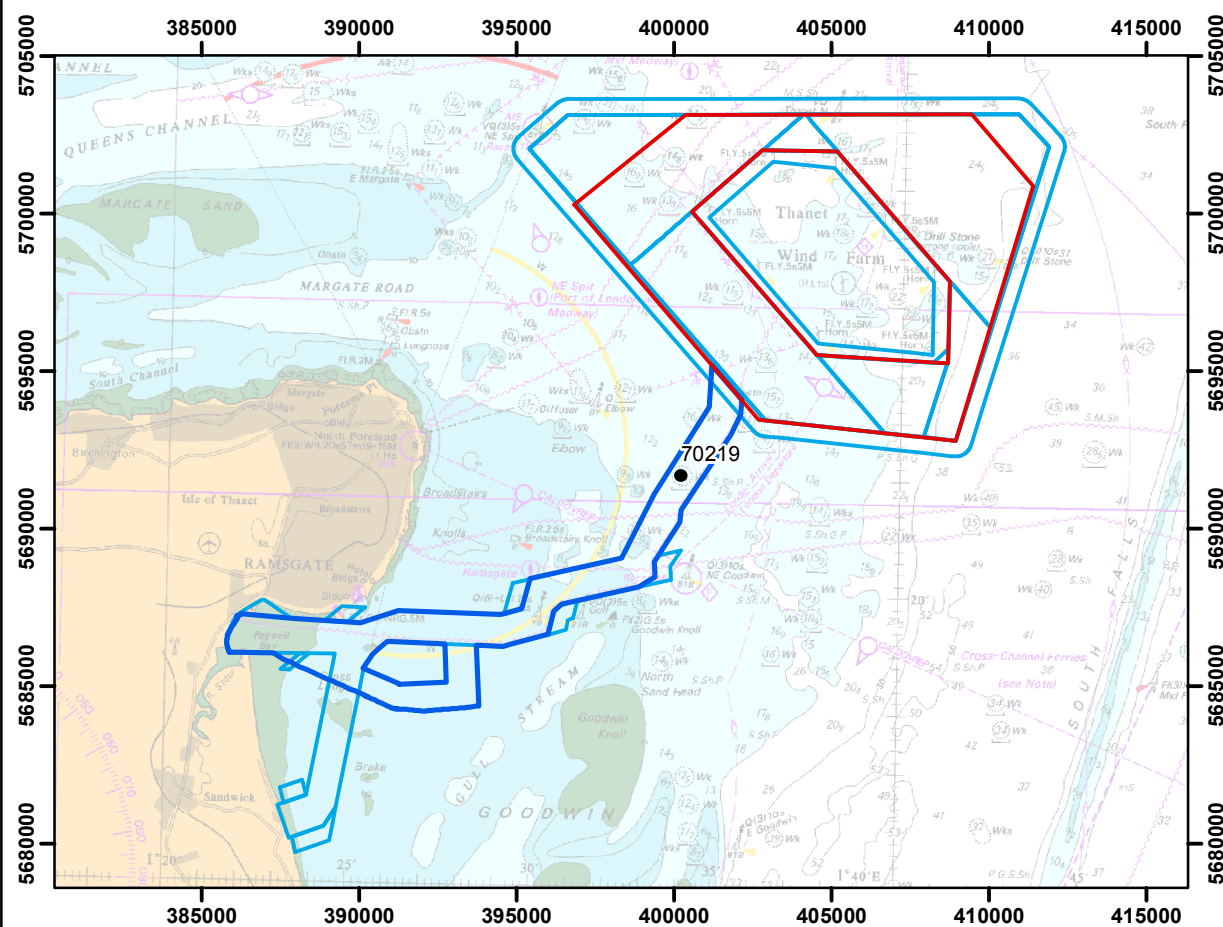
Multibeam bathymetry image of 70219 looking north-north-west (x1 vertical exaggeration)



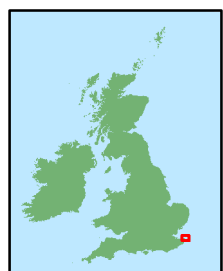
Magnetic profile of 70219 measuring 339 nT



Sidescan sonar image of wreck 70219, 44.1 x 32.6 x 3.8 m



Layout:
Projection: ETRS 1989 UTM Zone 31N



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0 1 2 4 Km 0 0.75 1.5 3 NM

Scale: 1:240,000

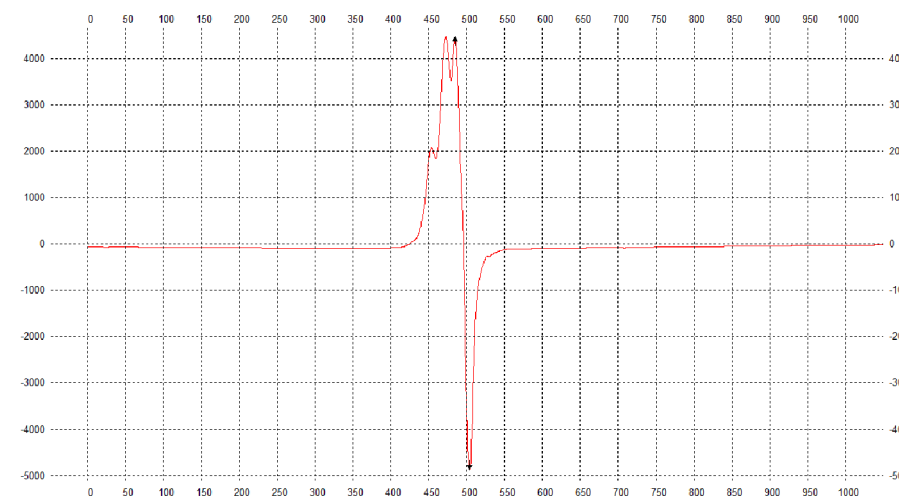
Rev	0	By	KL	Date	09/02/2018
Drg No	116080_geo_wrsh_12				

THANET EXTENSION OFFSHORE WIND FARM

Sheet 13

WA ID 70257 – SS *Klar*

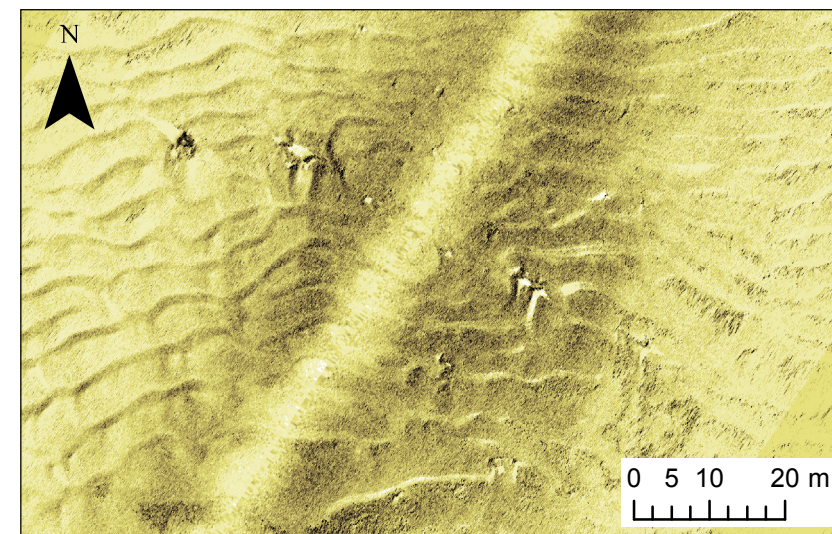
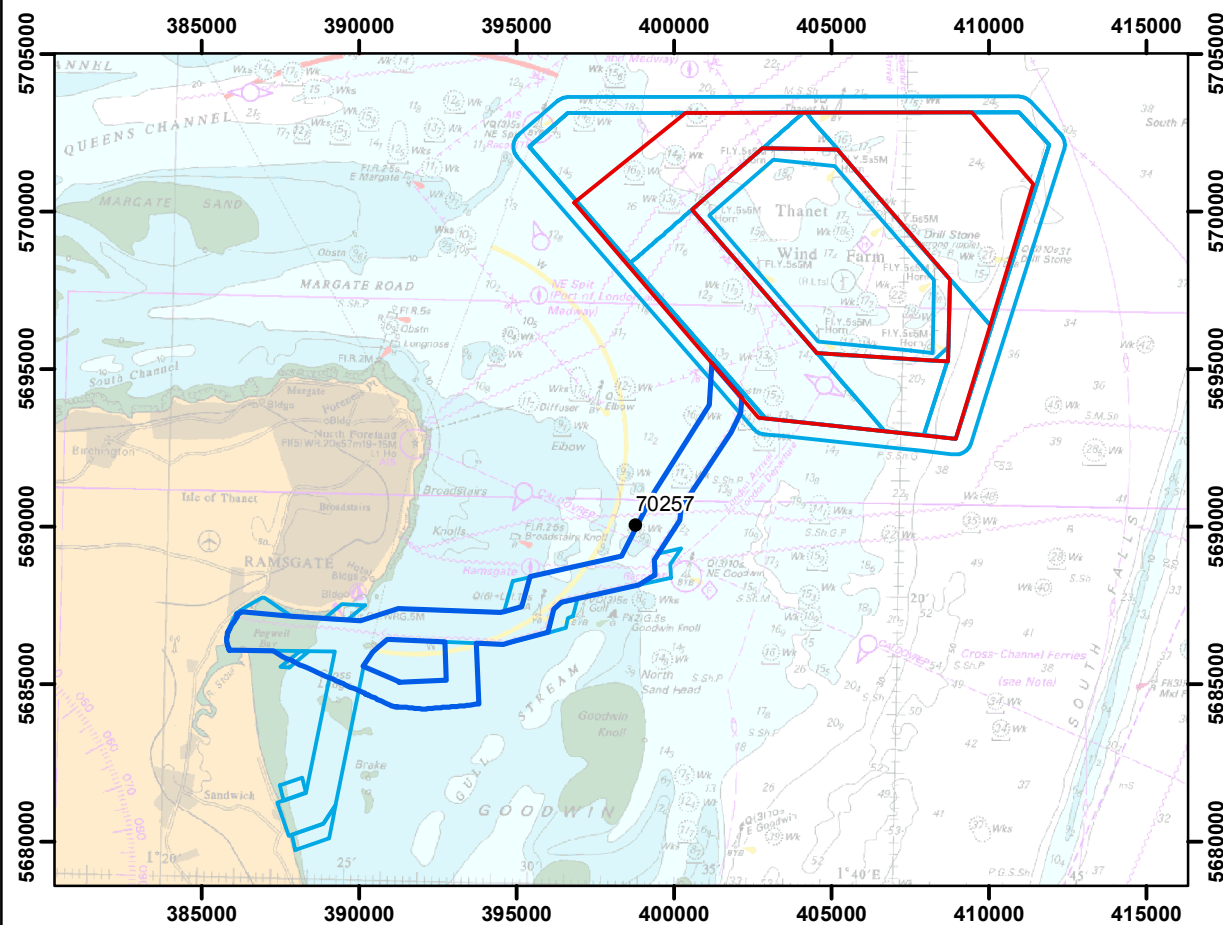
Location	398785E 5690031N	Area	Cable corridor
Archaeological Importance	High		
Geophysical survey dimensions and notes	Wreck 70257 has been identified as the SS <i>Klar</i> in the UKHO data (15175). There is no bathymetry data coverage of the wreck, however in the sidescan sonar data the wreck is visible as a large spread of dark reflectors with height identified in an area of megaripples, measuring 78.7 x 41.9 x 1.1 m.		
	The wreck has a large corresponding magnetic anomaly of 9368 nT which is indicative of a ferrous construction.		
Build	Type	Steamship	
	Construction	Metal (Probably)	
	Dimensions	45.7 x 7.6 x 5.2 m	
	Shipyard	Unknown	
Loss	Cause	Mined	
Extent of Survival	The wreck is most likely broken up and mostly buried, producing a large magnetic anomaly but only appearing as a spread of dark reflectors in the sidescan sonar data.		



Magnetic profile of 70257 measuring 9368 nT

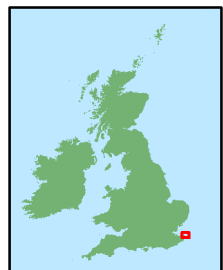
Legend

- Offshore Site Boundary
- Cable Route Offshore
- Site Investigation Boundary
- Wreck



Sidescan sonar image of wreck 70257, 78.7 x 41.9 x 1.1 m

Layout:
Projection: ETRS 1989 UTM Zone 31N



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0 1 2 4 Km 0 0.75 1.5 3 NM

Scale: 1:240,000





Rev	0	By	KL	Date	09/02/2018
Drg No	116080_geo_wrsh_13				

THANET EXTENSION OFFSHORE WIND FARM

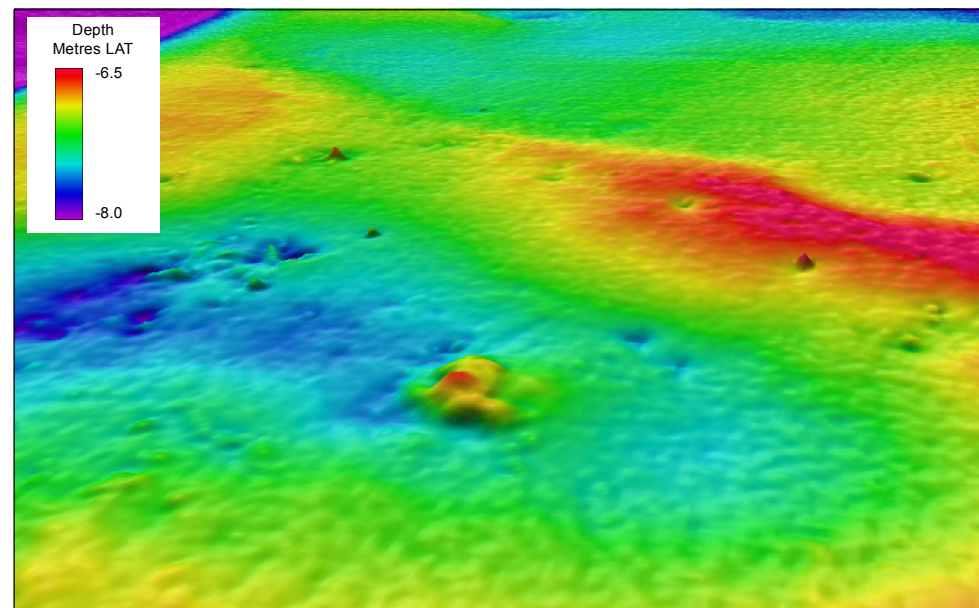
Sheet 14

WA ID **70366** – SS *Harcalo*

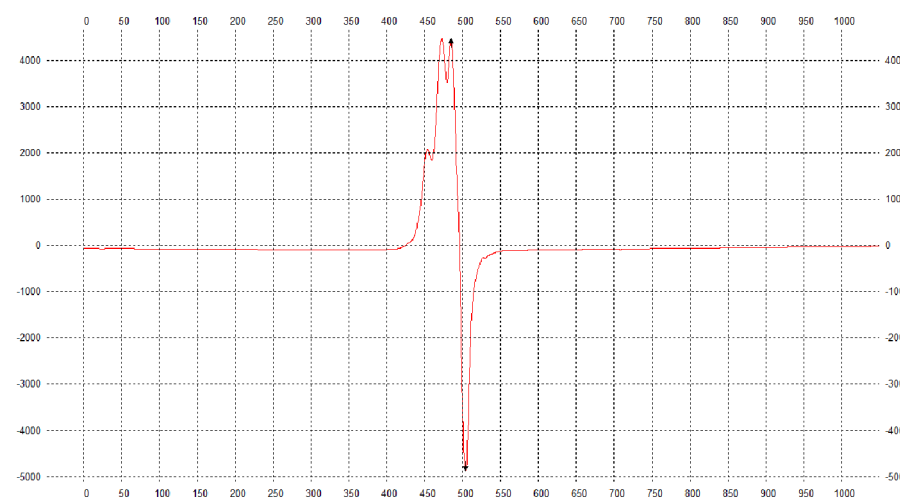
Legend

-  Offshore Site Boundary
-  Cable Route Offshore
-  Site Investigation Boundary
-  Wreck

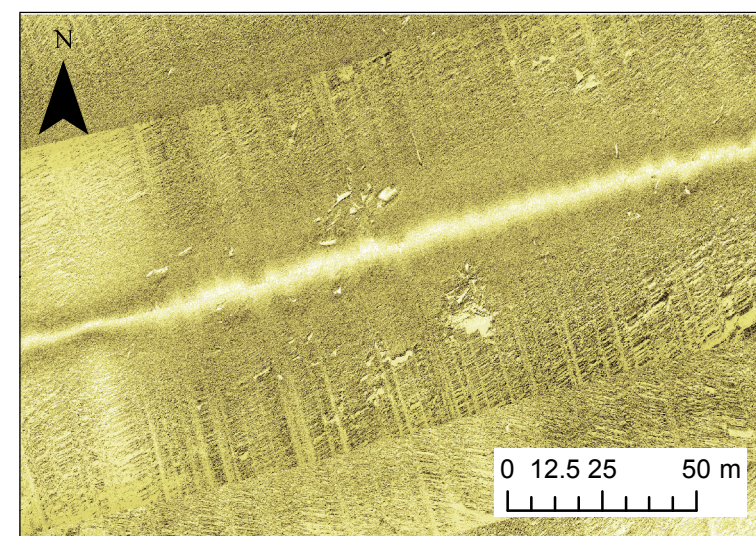
Location	395553E 5687292N	Area	Cable corridor
Archaeological Importance	High		
Geophysical survey dimensions and notes	Wreck 70366 has been identified as the SS <i>Harcalo</i> in the UKHO data (13852). In the sidescan sonar data the wreck appears as a broad area of dark reflectors with height, some of which are linear.		
	The wreck has dimensions of 166.1 x 109.7 x 1.8 m and appears as a mound in the bathymetry data. It has a corresponding large magnetic anomaly of 9387 nT, identified on several lines, possibly due to the cargo of iron ore noted in the UKHO record.		
	This wreck is associated with the UKHO record (13852) of the SS <i>Harcalo</i> a 5081-ton British steamship with original dimensions of 127.4 x 17.1 x 7.3 m. The vessel was sunk when it struck a mine on the 6 th of June 1940 whilst on passage from Benisaf to London, carrying a cargo of 7,500 tons of Iron ore. The wreck was later dispersed.		
Build	Type	Steamship	
	Construction	Unknown	
	Dimensions	127.4 x 17.1 x 7.3 m	
	Shipyard	Unknown	
Loss	Cause	Mined	
Extent of Survival	The wreck appears to be very broken up with several dark reflectors. The UKHO record agrees with this, stating that the wreck is dispersed and poorly defined with several more substantial items of debris in the vicinity.		



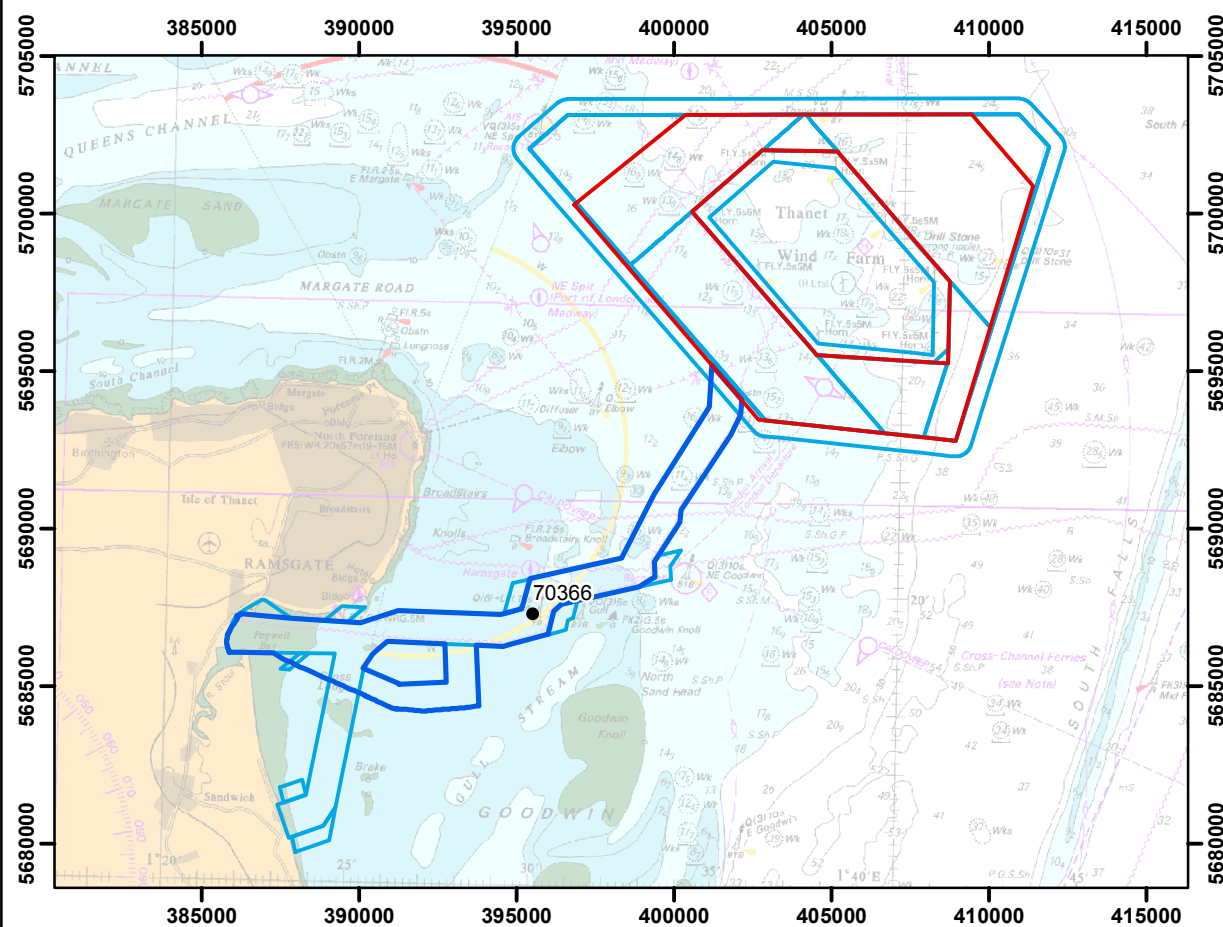
Multibeam bathymetry image of **70366** looking north (x3 vertical exaggeration)



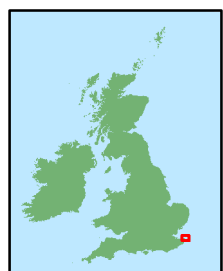
Magnetic profile of **70366** measuring 9387 nT



Sidescan sonar image of wreck **70366**, 166.1 x 109.7 x 1.8 m



Layout:
Projection: ETRS 1989 UTM Zone 31N



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0 1 2 4 Km 0 0.75 1.5 3 NM

Scale: 1:240,000





Rev	0	By	KL	Date	09/02/2018
Drg No	116080_geo_wrsh_14				

**THANET EXTENSION
OFFSHORE WIND FARM**

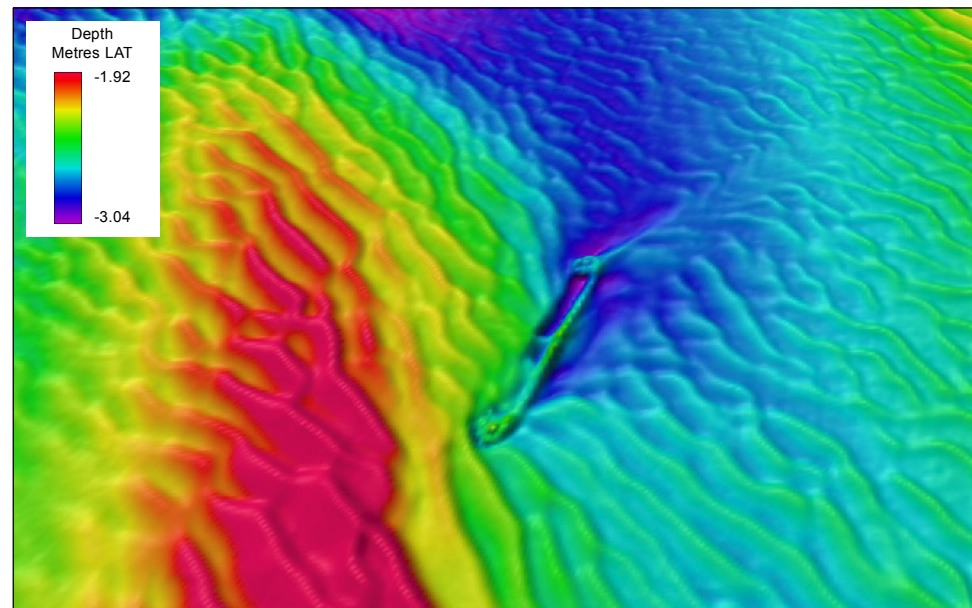
Sheet 15

WA ID 71099 – Unknown

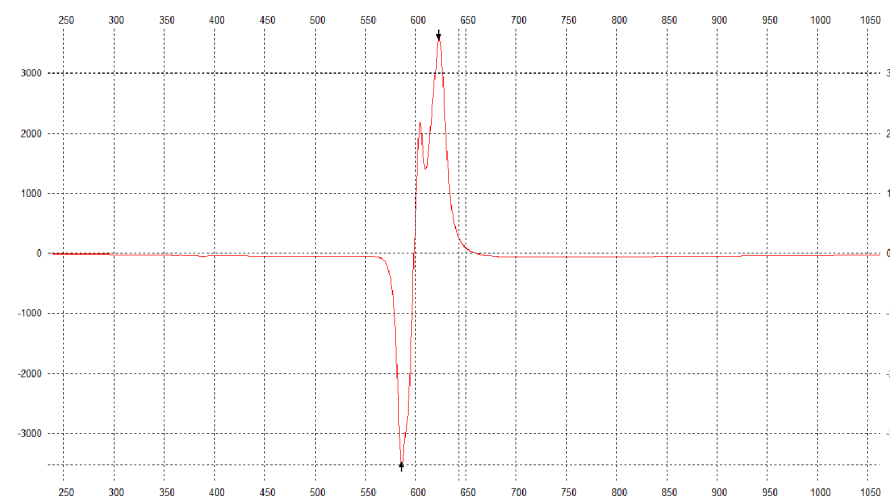
Legend

-  Offshore Site Boundary
-  Cable Route Offshore
-  Site Investigation Boundary
-  Wreck

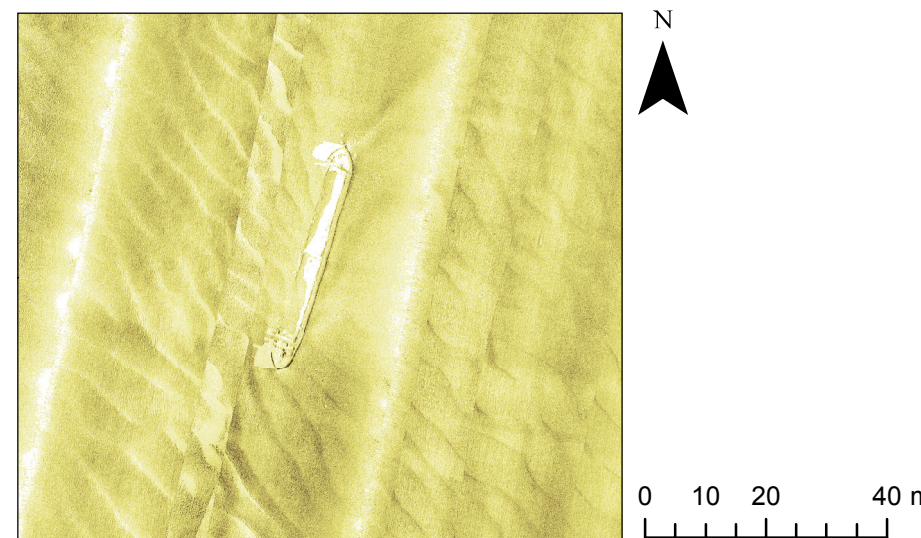
Location	389783E 5685533N	Area	Cable corridor
Archaeological Importance	High		
Geophysical survey dimensions and notes	Wreck 71099 corresponds to UKHO record (85569) for an unidentified wreck. From the sidescan sonar data and bathymetry data, a large, intact wreck can clearly be seen, possibly with its western side partially buried by sediment. This is congruent with the wreck being located amongst an area of sandwaves and mobile sediments.		
	The wreck measures 43 x 5.4 x 0.7 m, and appears to have two visible rectangular depressions in its main body. It has a large associated magnetic anomaly of 7116 nT indicating a probably ferrous construction.		
Build	Type	Likely a Barge	
	Construction	Probably Metal	
	Dimensions	Unknown	
	Shipyard	Unknown	
Loss	Cause	Unknown	
Extent of Survival	The wreck appears to be intact and upright, and is visible in all current geophysical datasets. It appears the wreck is well preserved, as the UKHO records the wreck as measuring 37.7 x 4.5 x 0.8 m which is very similar to the current extents measured.		



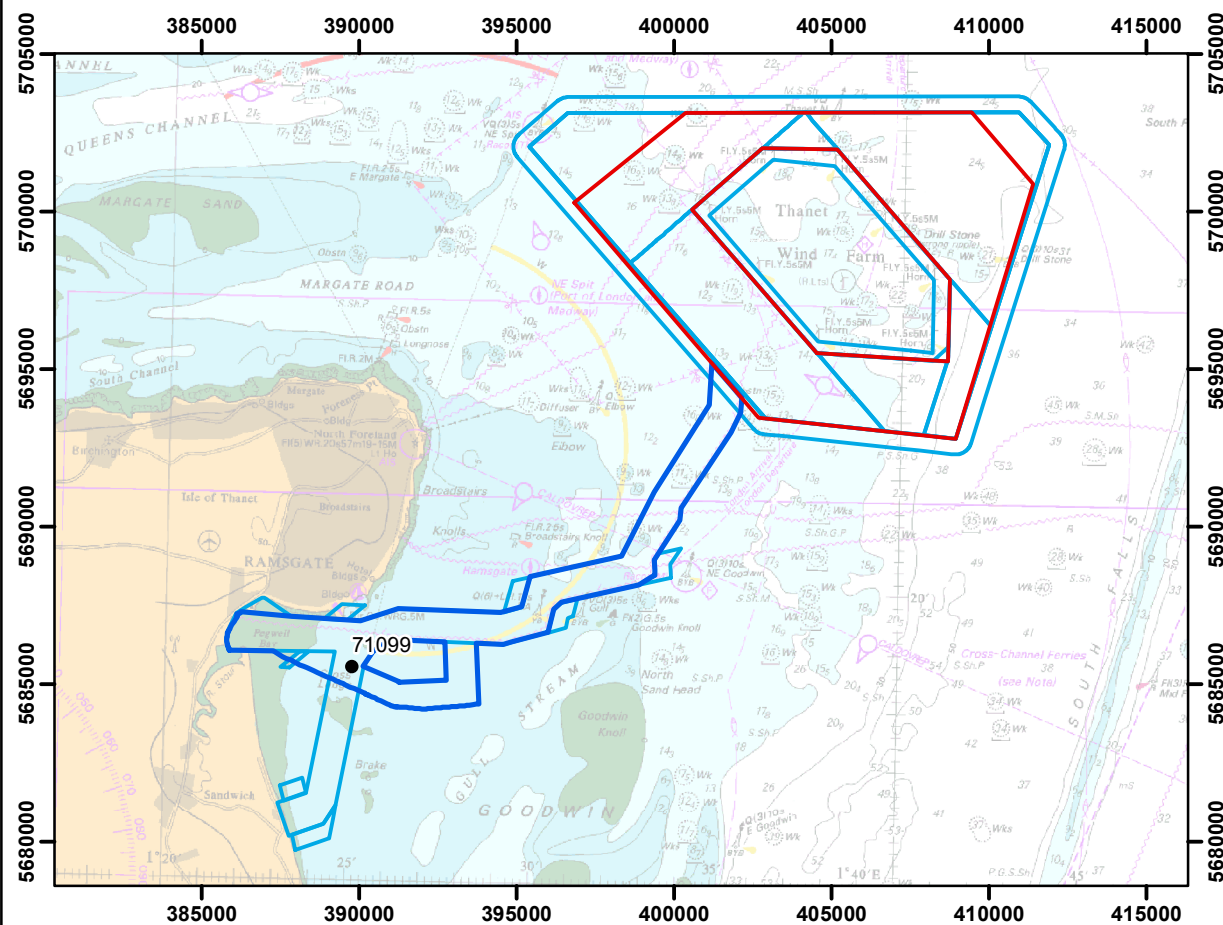
Multibeam bathymetry image of 71099 looking north (x3 vertical exaggeration)



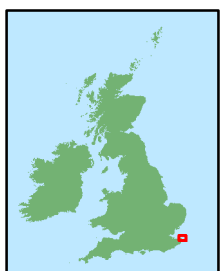
Magnetic profile of 71099 measuring 7116 nT



Sidescan sonar image of wreck 71099, 43 x 5.4 x 0.7 m



Layout:
Projection: ETRS 1989 UTM Zone 31N



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0 1 2 4 Km 0 0.75 1.5 3 NM

Scale: 1:240,000





Rev	0	By	KL	Date	09/02/2018
Drg No	116080_geo_wrsh_15				

**THANET EXTENSION
OFFSHORE WIND FARM**

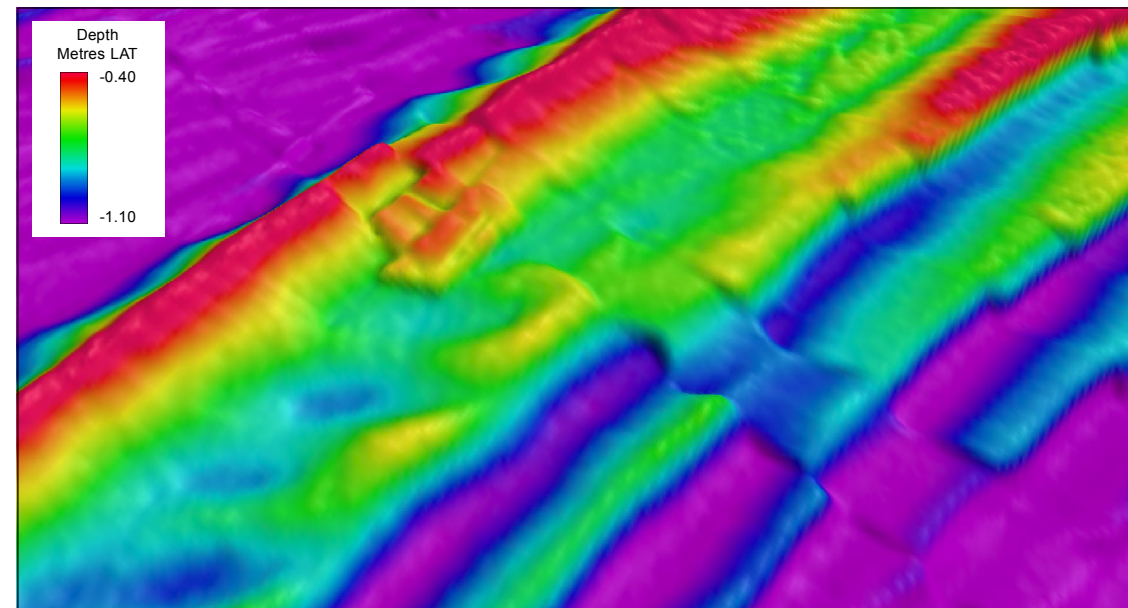
Sheet 16

WA ID 71130 – LCP 586

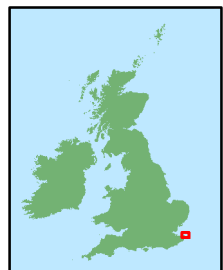
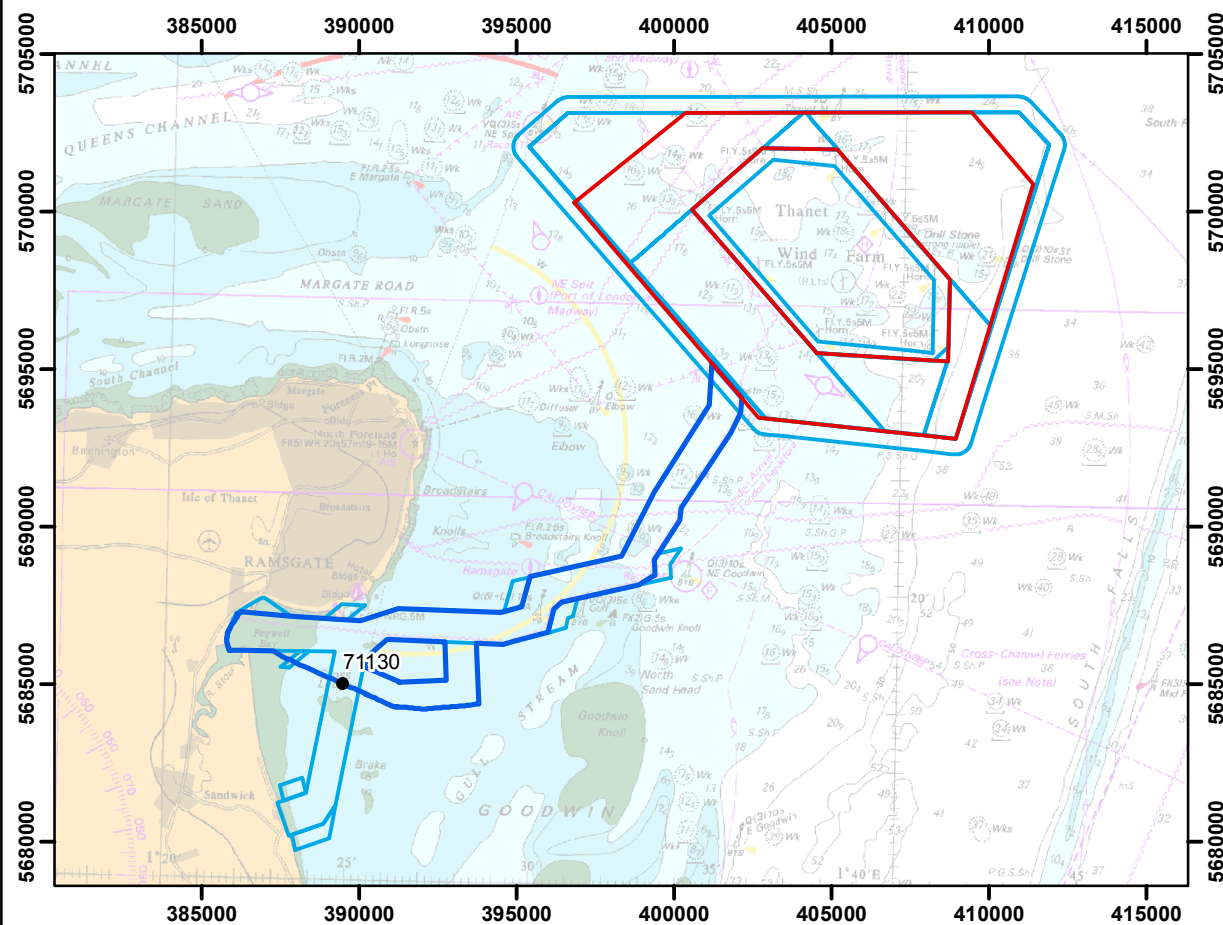
Legend

-  Offshore Site Boundary
-  Cable Route Offshore
-  Site Investigation Boundary
-  Wreck

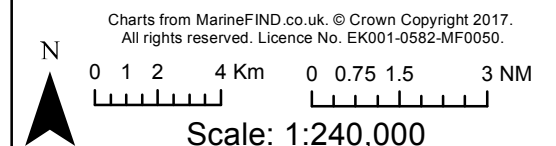
Location	389501E 5684992N	Area	Cable corridor
Archaeological Importance	High		
Geophysical survey dimensions and notes	Wreck 71130 corresponds with UKHO record (13835) for the landing craft LCP 586. From the sidescan sonar data there was no identifiable target.		
	In the multibeam bathymetry data the wreck is visible as a rectangular seafloor disturbance at the edge of a sand wave, measuring 20.9 x 10.3 x 0.4 m and located approximately 51 m south-east of the UKHO position for LCP 586. A British landing craft broke away from SS <i>Asa Lothrop</i> on 17 June 1946. In 1995, a small wreck was located in the vicinity of the position, although not investigated.		
Build	Type	Landing Craft	
	Construction	Wooden Hull	
	Dimensions	11 x 3 x 0.9 m	
	Shipyard	Unknown	
Loss	Cause	Broke away from alongside SS <i>ASA LOTHROP</i>	
Extent of Survival	The wreck is only seen in the current multibeam bathymetry data, where it is seen at the edge of a sand wave. This implies that the wreck is subjected to frequent burial and exposure by mobile sediments.		



Multibeam bathymetry image of 71130 looking South-west (x6 vertical exaggeration)



Layout:
Projection: ETRS 1989 UTM Zone 31N



Rev	0	By	KL	Date	09/02/2018
Drg No	116080_geo_wrsh_16				



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