



**codling**  
**wind park**



# Environmental Impact Assessment Report

## Volume 4

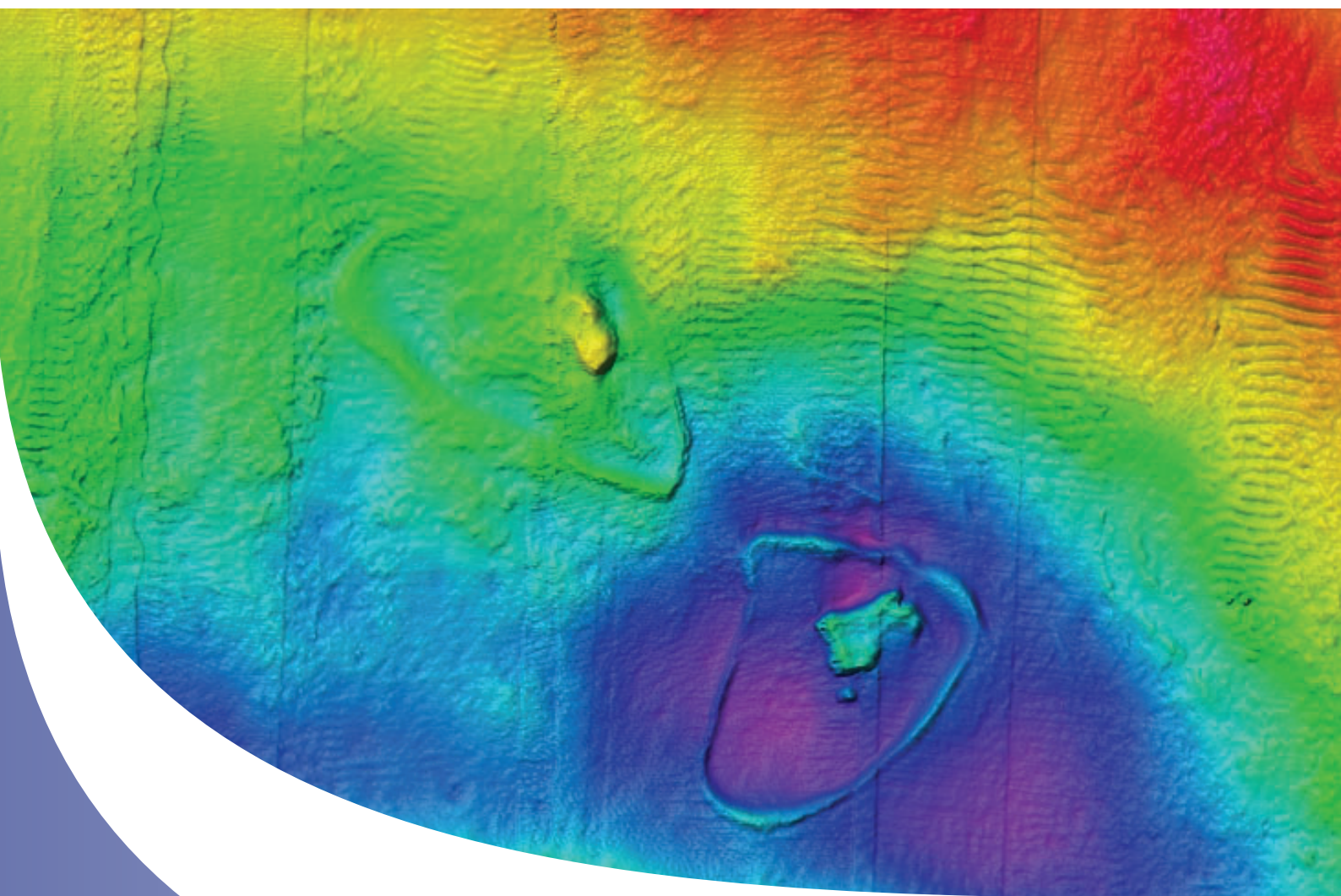
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Appendix 14.3 Marine  
Archaeological Technical  
Report



# Codling Wind Park

Marine Archaeological Technical Report



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## Contents

Summary .....	iii
Acknowledgements .....	iv
<b>1 INTRODUCTION .....</b>	<b>1</b>
1.1 Project Background .....	1
1.2 Development Proposal .....	1
1.3 Scope of Document .....	2
1.4 Aims .....	2
1.5 Copyright .....	3
<b>2 LEGISLATION, POLICY AND GUIDANCE .....</b>	<b>4</b>
2.1 Marine Legislation .....	4
2.2 Marine Policy .....	4
2.3 Marine Guidance .....	5
<b>3 METHODOLOGY .....</b>	<b>7</b>
3.1 Introduction .....	7
3.2 Study Area .....	7
3.3 Coordinate System .....	7
3.4 Walkover Survey Methodology .....	7
3.5 Archaeological Desk-based Assessment .....	7
3.6 Geophysical Methodology .....	9
3.7 Geoarchaeological Methodology .....	16
3.8 Assumptions and Limitations .....	16
<b>4 SEABED PREHISTORY BASELINE .....</b>	<b>18</b>
4.1 Geological baseline and archaeological potential .....	18
4.2 Palaeogeographic Assessment .....	21
<b>5 MARITIME AND AVIATION ARCHAEOLOGY BASELINE .....</b>	<b>32</b>
5.1 Introduction .....	32
5.2 Designated Maritime and Aviation Receptors .....	32
5.3 Geophysical seabed features assessment .....	32
5.4 Seabed features assessment results for the Array site .....	32
5.5 Seabed features assessment results for the OECC .....	37
5.6 Maritime Archaeological Potential .....	42
5.7 Aviation archaeological baseline and potential .....	50
<b>6 ARCHAEOLOGICAL ASSESSMENT: INTERTIDAL HERITAGE ASSETS .....</b>	<b>52</b>
6.1 Introduction .....	52
6.2 Data assessment .....	52
6.3 Archaeological Surveys .....	52
6.4 Overview of potential .....	53
<b>7 CONCLUSIONS .....</b>	<b>55</b>
7.1 Summary of results .....	55
<b>REFERENCES .....</b>	<b>57</b>
Bibliography .....	57
Websites .....	61
<b>APPENDICES .....</b>	<b>62</b>
Annex 1: Terminology .....	62
Annex 2: Legislation and Policy .....	65
Annex 3: Palaeogeographic features of archaeological potential within the Array site .....	68
Annex 4: Palaeogeographic features of archaeological potential within the CWP OECC .....	74



Annex 5: Location of boreholes.....	75
Annex 6: Stage 1 geotechnical review .....	76
Annex 7: Seabed features of archaeological potential within the array site .....	91
Annex 8: Seabed features of archaeological potential within the OECC.....	123
Annex 9: Maritime Recorded Losses .....	178
Annex 10: Intertidal Heritage Assets .....	235

## List of Figures

<b>Figure 1</b>	Site Location
<b>Figure 2</b>	Geophysical data coverage
<b>Figure 3a-c</b>	Palaeogeographic features of archaeological potential - CWP Array site
<b>Figure 4a-b</b>	Palaeogeographic features of archaeological potential - CWP OECC
<b>Figure 4c</b>	Palaeogeographic features of archaeological potential – Adjacent to proposed onshore substation site, south bank of the River Liffey
<b>Figure 5</b>	Palaeogeographic feature data example – 75014 – 75016
<b>Figure 6</b>	Palaeogeographic feature data example Interpreted SL2 member
<b>Figure 7a-f</b>	Anomalies of archaeological potential within CWP Array site
<b>Figure 8</b>	Data examples of seabed features for the Array site
<b>Figure 9a-f</b>	Anomalies of archaeological potential within CWP OECC
<b>Figure 10</b>	Data examples of seabed features for the CWP OECC
<b>Figure 11</b>	Intertidal heritage receptors
<b>Figure 12</b>	1001, looking NNW (source: De Faoite Archaeology)
<b>Figure 13</b>	1001, looking SSW (source: De Faoite Archaeology)
<b>Figure 14</b>	1002 (source: De Faoite Archaeology)
<b>Figure 15</b>	1003 (source: De Faoite Archaeology)
<b>Sheet 1</b>	ID 70366 – HMS <i>Guide Me II</i> – UKHO 6943

## List of Tables

<b>Table 1</b>	Summary of survey equipment
<b>Table 2</b>	Software used for geophysical assessment
<b>Table 3</b>	Criteria for assigning data quality rating
<b>Table 4</b>	Summary table assigning quality ratings to multiple datasets
<b>Table 5</b>	Criteria discriminating relevance of identified features to proposed scheme
<b>Table 6</b>	Shallow stratigraphy of the CWP study area
<b>Table 7</b>	Anomalies of archaeological potential within the Array site
<b>Table 8</b>	Types of anomalies identified within the Array site
<b>Table 9</b>	Anomalies of archaeological potential within the OECC
<b>Table 10</b>	Types of anomalies identified within the OECC
<b>Table 11</b>	Recorded Losses – summary by date
<b>Table 12</b>	Recorded Losses pre-1800 – summary by type
<b>Table 13</b>	Recorded Losses 1800-1899 – summary by type
<b>Table 14</b>	Recorded Losses 1900-present – summary by type
<b>Table 15</b>	Summary of key periods of maritime potential
<b>Table 16</b>	Recorded losses of aircraft
<b>Table 17</b>	Summary of key periods of aviation potential
<b>Table 18</b>	Sandymount topographical files.



## Summary

Codling Wind Park Limited is proposing to develop the Codling Wind Park Project, which is located in the Irish Sea approximately 13 – 22 km off the east coast of Ireland, at County Wicklow.

Wessex Archaeology was commissioned by Codling Wind Park Limited to prepare a marine archaeological technical report for the Offshore Export Cable Corridor and Array site of Codling Wind Park. The technical report will inform the offshore cultural heritage chapter of an Environmental Impact Assessment Report.

The archaeological technical report will assess the baseline marine historic environment of Codling Wind Park and consider potential impacts associated with activity to the seaward side of the High Water Mark. The development area is located within Irish territorial waters and the Irish Exclusive Economic Zone.

The assessment of the geophysical data consisted of an assessment of data acquired by MMT over the proposed Array site, and an assessment of geophysical data acquired by G-tec over the proposed Offshore Export Cable Corridor. The geophysical data comprise sidescan sonar, multibeam echosounder, marine magnetometer and sub-bottom profiler data sets. These were used to assess the presence of seabed and sub-seabed (palaeogeographic) features of archaeological potential within the study areas.

The palaeogeographic assessment of the geophysical data resulted in the identification of a total of 32 features of palaeogeographic interest. These are summarised as follows:

- a total of six channels and one fine-grained deposit were assigned a P1 archaeological rating, which is defined as a feature of probable archaeological interest, either because of its palaeogeography or likelihood for producing palaeoenvironmental material; and
- a total of 25 cut and fills were assigned a P2 archaeological rating, which are features of possible archaeological interest.

The seabed features assessment of the geophysical data resulted in a total of 454 seabed anomalies identified as being of possible archaeological interest. These are summarised as follows:

- two anomalies were assigned an A1 archaeological rating; anthropogenic origin of archaeological interest;
- a total of 145 anomalies were assigned an A2\_h archaeological rating; anomaly of likely anthropogenic origin but of unknown date; may be of archaeological interest or a modern feature;
- a total of 305 anomalies were assigned an A2\_l archaeological rating; anomaly of possible anthropogenic origin but interpretation is uncertain; may be anthropogenic or a natural feature; and
- a total of 2 records were assigned an A3 archaeological rating; historic record of possible archaeological interest with no corresponding geophysical anomaly.

Within the intertidal zone (up to MHWS) six records relating to archaeological sites, artefacts, material and standing remains were identified.



## Acknowledgements

This project was commissioned by Codling Wind Park Ltd and the assistance of Callum Draper, Sean Leake, Erlend Christiansen and the Codling Wind Park project team throughout the project is gratefully acknowledged in this regard.

Data was provided by the United Kingdom Hydrographic Office, the National Monument Service and the National Museum of Ireland. Wessex Archaeology is grateful to the staff of all the above organisations for their assistance during the project. The 2021 data over the proposed Array site were acquired by MMT, and the 2021 data over the Offshore Export Cable Corridor were acquired by G-tec. These were provided to Wessex Archaeology by Callum Draper.

The report was researched and compiled by Dr Robert MacKintosh and Stephanie Said, with illustrations prepared by Kitty Foster. The geophysical assessment was undertaken by Laura Andrews, the paleogeographic assessment was undertaken by Megan Metcalfe, and the geotechnical assessment was undertaken by Hayley Hawkins. Dr Andrew Bicket managed the project on behalf of Wessex Archaeology.



# Codling Wind Park

## Marine Archaeological Technical Report

### 1 INTRODUCTION

#### 1.1 Project Background

- 1.1.1 Codling Wind Park Limited (CWPL) is proposing to develop the Codling Wind Park (CWP) Project, which is located in the Irish Sea approximately 13 – 22 km off the east coast of Ireland, at County Wicklow.
- 1.1.2 Wessex Archaeology was commissioned by CWPL to prepare a marine archaeological technical report for the and Offshore Export Cable Corridor (OECC) and Array site of CWP (**Figure 1** and **Figure 2**). The technical report will inform the offshore cultural heritage chapter of an Environmental Impact Assessment Report (EIAR).
- 1.1.3 The archaeological technical report will assess the baseline marine historic environment of CWP and consider potential impacts associated with activity to the seaward side of the High Water Mark (HWM). The development area is located within Irish territorial waters (up to 12 nautical miles (nm)) and the Irish Exclusive Economic Zone (EEZ).

#### 1.2 Development Proposal

- 1.2.1 The CWP Project consists of a single Array site, with associated Offshore Transmission Infrastructure (OfTI) and Onshore Transmission Infrastructure (OTI) with a maximum expected capacity (MEC) of up to 1450 MW. The offshore export cables will make landfall at Poolbeg with onshore export cables routed north, approximately 0.7 km across the Poolbeg Peninsula, to an onshore substation located on the south bank of the River Liffey.
- 1.2.2 The offshore components of CWP include:
- the Generating Station, which comprises the wind turbine generators (WTGs) and inter array cables (IACs);
  - the OfTI which comprises the offshore substation structures (OSSs), interconnector cables and offshore export cables; and
  - the landfall, which describes the point at which the offshore export cables are brought onshore.
- 1.2.3 The key components of the Generating Station include:
- 75 (Option A) or 60 (Option B) WTGs comprising tower structures, nacelles and rotors with associated access arrangements;
  - 75 (Option A) or 60 (Option B) WTG monopile foundations;
  - scour protection at 75 WTG locations (Option A) or 60 WTG locations (Option B);
  - IACs linking the WTGs to the OSSs; and

- cable protection for the IACs.

1.2.4 The key components of the OfTI include:

- three OSSs, comprising monopile foundations, OSS topside components and associated structures;
- scour protection at each OSS foundation;
- interconnector cables to connect the OSSs to each other;
- three offshore export cables, with an average length of 48.6 km; and
- cable protection for the interconnector cable and the offshore export cables (including cable crossings for the latter).

1.2.5 The planning application boundary for the CWP Project and the development components are shown in **Figure 1**. This includes the entire footprint of the Generating Station and OfTI, and the associated temporary works for which planning consent is being sought.

### 1.3 Scope of Document

1.3.1 This report summarises, as far as is possible from available information, the nature, extent, and significance of the known and potential marine archaeological resource between HWM at the landfall and the Array site (**Figure 2**).

1.3.2 This report consists of a desk-based assessment, a palaeogeographic assessment, and two separate assessments of the geophysical survey data, over the Array site and OECC, comprising sub-bottom profiler (SBP), sidescan sonar (SSS), magnetometer (Mag.) and multibeam echosounder (MBES) data sets.

1.3.3 The 2021 geophysical data were acquired separately; the geophysical data over the Array site were acquired by MMT (now Ocean Infinity) and the geophysical data over the OECC were acquired by G-tec s.a. (G-tec).

1.3.4 Where Mag. data were not acquired in the north-west extents of the Array site, the results of a 2013 assessment undertaken by Osiris Surveys Ltd. (Osiris) were provided and amalgamated with the results of the 2021 SSS and MBES data in that area.

### 1.4 Aims

1.4.1 The aim of the marine archaeological technical assessment is to summarise the known and potential archaeological baseline within the CWP Project area to subsequently inform the EAIR and the impact assessment and mitigation strategies therein.

1.4.2 The specific objectives of this assessment are to:

- provide details of relevant legislation, national and local planning policy, and best practice guidance;
- outline the known and potential marine heritage assets within the CWP Project area based on a review of existing information;



- assess the significance of known and potential heritage assets through weighted consideration of their valued components; and
- provide recommendations for archaeological mitigation.

1.4.3 The specific objectives of the geophysical assessment are:

- identify any buried palaeolandscape features of possible archaeological potential;
- confirm the presence of known or previously located marine sites of archaeological potential and to comment on their apparent character;
- identify, locate and characterise hitherto unrecorded marine sites of archaeological potential; and
- compare the results with known records (e.g. from the United Kingdom Hydrographic Office (UKHO) and the National Monuments Service (NMS).

## **1.5 Copyright**

1.5.1 This report may contain material that is non-Wessex Archaeology copyright (e.g. Ordnance Survey, British Geological Survey, Crown Copyright), or the intellectual property of third parties, which Wessex Archaeology are able to provide for limited reproduction under the terms of our own copyright licenses, but for which copyright itself is non-transferable by Wessex Archaeology. Users remain bound by the conditions of the Copyright, Designs and Patents Act 1988 with regard to multiple copying and electronic dissemination of the report.

## 2 LEGISLATION, POLICY AND GUIDANCE

### 2.1 Marine Legislation

*The National Monuments Act 1930 and the National Monuments (Amendments) Acts 1954 to 2014.*

- 2.1.1 These acts provide a specific legislative basis for the protection of archaeological monuments and areas and archaeological objects. The Minister of Arts, Heritage, Gaeltacht and the Islands is required to establish and maintain both a 'Register of Monuments and Places' and 'Record of Historic Monuments' under the terms of the 1987 and 1994 Amendments Acts respectively. Section 1 of the same 1987 Act states that all monuments dating to before AD 1700 and any monument meeting specific criteria of interest are automatically defined as 'historic monuments'. Section 3 of the same 1987 Act states that wrecks greater than 100 years old and archaeological objects found underwater are protected. The Act also allows the imposition of an Underwater Heritage Order to protect sites of historical, archaeological or artistic importance. This can include wrecks less than 100 years old.

*Monuments and Archaeological Heritage Bill 2023*

- 2.1.2 The Monuments and Archaeological Heritage Act, when it comes into force, will repeal and replace the National Monuments Acts. The Bill seeks to introduce new measures to protect archaeological structures and sites, including the establishment of a single Register of Monuments, a statutory reporting scheme for newly discovered monuments and provisions to prevent the illicit import and possession of stolen cultural property. This Bill will incorporate historic wrecks and underwater cultural archaeological objects into the new scheme for monument protection.

*Maritime Area Planning Act 2021*

- 2.1.3 The MAP Act 2021 regulates the maritime area, by means of a National Marine Planning Framework, maritime area consents for the occupation of the maritime area for the purposes of maritime usages that will be undertaken for undefined or relatively long periods of time (including any such usages which also require development permission under the Planning and Development Act 2000 ) and licences for the occupation of the maritime area for maritime usages that are minor or that will be undertaken for relatively short periods of time. The MAP Act also creates a new regulatory authority, and a regime for designating protected marine areas.

*Merchant Shipping (Salvage and Wreck) Act 1993*

- 2.1.4 If any person takes possession of wreck within Irish waters they must deliver it to the Receiver of Wreck of the district concerned. The Director of the National Museum of Ireland (NMI) is notified by the Receiver of unclaimed wreck and may decide to retain it on behalf of the State if it is of archaeological interest. 'Wreck' includes jetsam, flotsam, lagan and derelict found in or on the shores of the sea or any tidal water or harbour.

### 2.2 Marine Policy

*National Marine Planning Framework (NMPF) 2021*

- 2.2.1 Heritage Assets Policy 1 provides:

- proposals that demonstrate they will contribute to enhancing the significance of heritage assets will be supported, subject to the outcome of statutory environmental assessment processes and subsequent decision by the competent authority, and where they contribute to the policies and objectives of this NMPF.

- proposals unable to contribute to enhancing the significance of heritage assets will only be supported if they demonstrate that they will, in order of preference:
  - a) avoid,
  - b) minimise, or
  - c) mitigate harm to the significance of heritage assets, and
  - d) if it is not possible, to mitigate harm, then the public benefits for proceeding with the proposal must outweigh the harm to the significance of the heritage assets.

## 2.3 Marine Guidance

2.3.1 This assessment was carried out in a manner consistent with available guidance as described below in chronological order of issue. Any future archaeological work will be undertaken in accordance with this guidance:

- Framework and Principles for the Protection of the Archaeological Heritage (Department of Arts, Heritage, Gaeltacht and the Islands, 1999);
- Identifying and Protecting Palaeolithic Remains: Archaeological Guidance for Planning Authorities and Developers (English Heritage (now Historic England), 1998);
- Managing Lithic Scatters: Archaeological Guidance for planning authorities and developers (English Heritage (now Historic England), 2000);
- Military Aircraft Crash Sites: Guidance on their significance and future management (English Heritage (now Historic England), 2002);
- Conserving Ireland's Maritime Heritage, Proposing Policies and Priorities for the National Heritage (The Heritage Council, 2006);
- The Code of Practice for Seabed Developers (Joint Nautical Archaeology Policy Committee and The Crown Estate, 2006);
- Historic Environment Guidance for the Offshore Renewable Energy Sector (Wessex Archaeology 2007);
- Conservation Principles, Policies and Guidance for the Sustainable Management of the Historic Environment (English Heritage (now Historic England), 2008);
- Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation (second edition) (English Heritage (now Historic England), 2011);
- Offshore Geotechnical Investigations and Historic Environment Analysis: Guidance for the Renewable Energy Sector (Gribble & Leather, 2011);
- Ships and Boats: Prehistory to Present: Designation Selection Guide (English Heritage (now Historic England), 2012);



- Standard and Guidance for Historic Environment Desk-based Assessment (Chartered Institute for Archaeologists, 2014, updated 2017);
- Marine Geophysics Data Acquisition, Processing and Interpretation Guidance Notes (English Heritage (now Historic England), 2013); and
- Geoarchaeology: Using Earth Sciences to Understand the Archaeological Record (Historic England, 2015).

2.3.2 Further information on legislation, policy and guidance is available in **Annex 2**.

### 3 METHODOLOGY

#### 3.1 Introduction

- 3.1.1 The methodology follows the best practice professional guidance outlined by the Chartered Institute for Archaeologists' (CIfA) Standard and guidance for historic environment desk-based assessment (2014, updated 2020).

#### 3.2 Study Area

- 3.2.1 The study area for the marine cultural heritage assessment has been defined on the basis of the area over which potential direct and indirect effects of the CWP Project are predicted to occur on marine heritage receptors during construction and operation. This comprises the red line boundary of CWP, encompassing the Array site and OECC including the intertidal area to the HWM.
- 3.2.2 An additional 500 m buffer zone was added for the purposes of data searches, to identify relevant proximate heritage assets (**Figure 1**).
- 3.2.3 The geophysical study area is defined as the red line boundary of the proposed CWP Project surrounding the Array site and the OECC extents as provided to Wessex Archaeology by CWPL (**Figure 2**).

#### 3.3 Coordinate System

- 3.3.1 The SSS, SBP, and MBES survey data acquired by MMT were acquired in World Geodetic System (WGS) 1984 Universal Transverse Mercator (UTM) 30N and the data were converted to European Terrestrial Reference System (ETRS) 1989 UTM30N before being provided to Wessex Archaeology.
- 3.3.2 The Mag. data acquired by MMT were acquired in ETRS89 UTM30N and were provided in this coordinate system.
- 3.3.3 The results of both assessments are presented in ETRS89 UTM30N coordinate system.

#### 3.4 Walkover Survey Methodology

- 3.4.1 In order to provide site specific and up to date information on which to base this archaeological technical report, an intertidal walkover survey was conducted in South Dublin Bay on 30 August 2021 by De Faoite Archaeology. This survey has been used to inform the baseline presented in this document. The gazetteer from this survey is presented in **Annex 10**.
- 3.4.2 A metal detection survey was also undertaken in advance of geotechnical works in South Dublin Bay and was reported on separately (Wessex Archaeology 2022).

#### 3.5 Archaeological Desk-based Assessment

##### *Key themes*

- 3.5.1 The marine themes relevant to marine archaeological baseline as assessed in this report are:
- seabed prehistory (for example, palaeochannels and other features that contain prehistoric sediment, and derived Palaeolithic artefacts e.g. handaxes);

- seabed features, including maritime sites (such as shipwrecks and associated material including cargo, obstructions and fishermen's fasteners) and aviation sites (aircraft crash sites and associated debris); and
- intertidal heritage assets.

#### *Data sources*

3.5.2 Database searches of the following sources were completed to establish a baseline to HWM at both landfalls and across the entire marine element of the CWP Project covered by the study area.

3.5.3 The sources consulted were:

- the Wrecks and Obstructions database held by the United Kingdom Hydrographic Office (UKHO);
- the Wreck Inventory of Ireland Database (WIID) held by the National Monuments Service (NMS);
- the Sites and Monuments Record (SMR) held by the NMS;
- topographical files held by the NMI;
- historical maps and Ordnance Survey maps;
- Admiralty Charts; and,
- relevant primary and secondary sources in Wessex Archaeology's own library and those available through the Archaeology Data Service and other websites. Both published and unpublished archaeological reports relating to excavations and observations in the area around the study area were reviewed.

#### *Data structure*

3.5.4 In order to compile the marine archaeological baseline as presented in this report, where possible, the data were incorporated into a project Geographic Information System (GIS) using ArcGIS 10.8.1, enabling the data to be spatially analysed. The data were subsequently compiled into gazetteers of maritime and aviation resources within the study area; these were used to inform the archaeological assessment of geophysical data that is presented in **Section 5**.

3.5.5 The UKHO and WIID records have been discriminated between records for which there is known material on the seabed and 'recorded losses' (vessels that are known to have been lost, but do not, except by chance, have material on the seabed at their recorded loss location). A list of recorded losses within the study area is provided in **Annex 9**.

3.5.6 Information relating to the archaeological and cultural heritage that did not include location or positional information were also used to inform the marine archaeological baseline assessment where relevant.

3.5.7 For archaeological sites that were recorded in the WIID as well as the UKHO database, the co-ordinates from the UKHO are the ones used. As these relate to surveyed co-ordinates and supporting survey metadata, they are judged likely to be more accurate (unless other verifiable spatial data is available).

### *Chronology*

- 3.5.8 Archaeological material is generally studied within a framework of ‘periods’ or ‘ages’ that reflect the activities and cultural changes taking place over time. All dates are referred to as BCE (Before Common Era), BP (Before Present) or AD (Anno Domini) within the text. BCE refers to calibrated radiocarbon chronology that can be considered equivalent to calendar years. BP dates are used for periods of time older than circa 5,000 years ago.
- 3.5.9 A list of the main archaeological periods of Ireland referred to in the text, along with their broadly defined dates, are presented in **Annex 1**.

### *Seabed prehistory*

- 3.5.10 The baseline summary for seabed prehistory was based on a review of geophysical and geotechnical datasets. This assessment was further supported by examination of geological mapping of seabed sediments, solid geology and bathymetry from published sources.

### *Seabed features: maritime and aviation sites*

- 3.5.11 Maritime archaeological sites can be considered to comprise two broad categories; the remains of vessels that have been lost as a result of stranding, foundering, collision, enemy action and other causes, and those sites that consist of vessel-related material. Wreck related debris includes (but is not limited to) equipment lost overboard or deliberately jettisoned such as fishing gear, ammunition and anchors or the only surviving remains of a vessel such as its cargo or a ballast mound. Shipwrecks on the seabed provide an insight on the types of vessels used in the past, the nature of shipping activity in the wider area and the changing usage of the marine environment through different periods. Such remains are considered more likely in sediments which promote the preservation of wreck sites (e.g. finer grained sediments that are not subject to high levels of mobility), particularly where such sediments have seen limited, recent disturbance.
- 3.5.12 Marine aviation archaeology receptors comprise the remains or associated remains of military and civilian aircraft that have been lost at sea. Evidence is divided into three primary time periods based on major technological advances in aircraft design: Pre-1939; 1939–1945; and post-1945.
- 3.5.13 The baseline summary for maritime and aviation archaeology was assessed by means of accessing any records of sites, find spots, wrecks, casualties, and seabed features obtained from the UKHO and WIID within the study area. The baseline assessment of maritime and aviation archaeology was further supplemented by a review of relevant primary and secondary source material to provide an indication on the nature of maritime and aviation activity across the region. As well as summarising the known archaeological resource, the baseline assessment underlines the potential for encountering unknown shipwreck and aviation material within the study area.
- 3.5.14 The data obtained were reviewed and those located within the study area were extracted and compiled to form a gazetteer as part of the known baseline. These were added to the project GIS and used to inform the geophysical assessment.

## **3.6 Geophysical Methodology**

### *Data sources*

- 3.6.1 A number of data sources were consulted during this assessment, including:
- geophysical survey datasets acquired by MMT in 2021 (MMT 2021a–c), comprising SBP, SSS, MBES and Mag. data;

- geophysical survey datasets acquired by GTEC in 2021 (G-tec 2021a–c), comprising SBP, SSS, MBES and Mag. data;
- the results of an assessment of 2013 magnetometer data undertaken by Osiris (provided by CWPL);
- recorded wreck and obstruction data acquired via the United Kingdom Hydrographic Office (UKHO);
- relevant background mapping from the area (British Geological Survey (BGS) 1989, admiralty charts received from UKHO); and
- supplied survey reports (MMT 2021a–c and G-tec 2021a–c).

#### *Geophysical data - technical specifications*

- 3.6.2 The Array site geophysical data were acquired by MMT on board survey vessels *MV Relume* between June and July 2021, and *MV Roman Rebel* in August 2021.
- 3.6.3 The OECC geophysical data were acquired by G-tec on board survey vessels *Arctic Ocean* and *Fastnet Pelican* between 29 April and 14 June 2021.
- 3.6.4 Further details on the equipment used is in **Table 1**.

**Table 1** Summary of survey equipment

Survey Company	Survey Vessel	Data Type	Equipment	Data Format
MMT	<i>Roman Rebel</i>	SBP	Innomar Medium 100	.SES3
		MBES	Teledyne Seabat T50-R (400 kHz)	.xyz
		SSS	Edgetech 4205 (300 / 900 kHz, 65m range)	.jsf
		Mag.	Not acquired due to shallow depth	N/A
		Positioning	Sonardyne Mini Ranger 2 USBL	N/A
		Positioning	Hydrins INS with C-NAV 350 and C-NAV C2	N/A
	<i>Relume</i>	SBP	Innomar Medium 100	.SES3
		MBES	Kongsberg EM2040D (200-400 kHz)	.xyz
		SSS	Edgetech 2200 (300 / 600 kHz, 65m range)	.jsf
		Mag.	Geometrics G-882 towed 8 m from the ROTV	.txt
		Positioning	Applanix POS MV with C-Nav 350 and C-Nav C2	N/A
G-tec	<i>Arctic Ocean</i>	SBP	Applied Acoustics AA301 surface towed boomer	.sgy
			Edgetech 3100-P SBP chirp system	.sgy
		MBES	Norbit iWBMSH-Dual head Turnkey MBES system (200-700 kHz)	.PTS
		SSS	Edgetech 4200 MP (300 / 600 kHz, 65 - 75 m range)	.xtf

Survey Company	Survey Vessel	Data Type	Equipment	Data Format
		Mag.	Geometrics G-882	.txt
		Positioning	Kongsberg $\mu$ PAP 2013-3-NEL portable positioning system with cNode Mini and Micro transponders	N/A
		Positioning	Applanix (Trimble) Pos MV OceanMaster	N/A
	Fastnet Pelican	SBP	Applied Acoustics AA301 surface towed boomer	.sgy
			Edgetech 3200-P SBP chirp system	.sgy
		MBES	R2Sonic 2024 (70-450 kHz)	.PTS
		SSS	Edgetech 4200 MP (300 / 600 kHz, 65 - 75 m range)	.xtf
		Mag.	Geometrics G-882	.txt
		Positioning	Kongsberg $\mu$ PAP 201-3-NEL portable positioning system with cNode Mini and Micro transponders	N/A
		Positioning	SBG APOGEE	N/A

#### Geophysical data - processing

- 3.6.5 A number of datasets were assessed over the study area, each dataset was processed separately using the following software (**Table 2**).

**Table 2** Software used for geophysical assessment

Dataset	Processing Software	Interpretation and rationalisation
SBP	CodaOctopus Survey Engine v8.1	ArcMap v10.8.1
MBES	QPS Fledermaus v7.7.5	
SSS – Array site	CodaOctopus Survey Engine v5.5	
SSS – OECC	CodaOctopus Survey Engine v8.1	
Mag. – Array site	MagPick v3.25 and proprietary software	
Mag. – OECC	Proprietary software	

- 3.6.6 The SBP and MBES data were used as the primary datasets for the palaeographic assessment and SSS, MBES and Mag. datasets were used for the seabed features assessment.
- 3.6.7 The SBP data were processed using CodaOctopus Survey Engine 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.
- 3.6.8 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 1,600 ms<sup>-1</sup>. This is a standard estimate for shallow, unconsolidated sediments.

- 3.6.9 The SBP data can also be used to identify small reflectors, which may indicate buried material such as a wreck site covered by sediment. The position and dimensions of any such objects are noted in a gazetteer, and an image acquired of each anomaly for future reference. It should be noted that anomalies of this type are rare, as the sensors must pass directly over such an object in order to detect an anomaly.
- 3.6.10 For the SBP assessment, 25% of the lines were initially assessed within the OECC and 10% of the lines within the Array site due to the high-density of lines. Where features of interest were identified, additional lines were then interpreted in order to more accurately map the extents of these features. In the OECC, the interpretation was primarily undertaken using the Chirp data, although the Boomer data were also referenced. In the Array site, the interpretation was undertaken using the parametric sonar data.
- 3.6.11 The MBES data were analysed to identify any unusual seabed structures that could be palaeogeographic features, shipwrecks or other anthropogenic debris. The data were gridded at 0.25 m and analysed using QPS Fledermaus software, which enables a 3-D visualisation of the acquired data and geo-picking of seabed anomalies.
- 3.6.12 The high frequency .xtf SSS data files were processed using CodaOctopus Survey Engine Sidescan+ 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.
- 3.6.13 A mosaic of the SSS 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.
- 3.6.14 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 be unrelated individual features, define the edges of a buried but intact feature, or may be all that remains as a result of past impacts from, for example, dredging or fishing. Assessment is made of such groups of anomalies during data interpretation to determine which of these alternatives is the most likely.
- 3.6.15 The Array site Mag. data were processed using Geometrics MagPick software and in-house proprietary software. The OECC data were processed using only in-house proprietary software. The data were processed and interpreted in order to identify any discrete magnetic contacts which could represent buried metallic debris or structures such as wrecks.
- 3.6.16 The software enables both the visualisation of individual lines of data and gridding of data to produce a magnetic anomaly map. The data were checked to 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 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 based on the grid and individual profile lines. Images are taken in a similar process to that of the SSS data.

- 3.6.17 For the purposes of this assessment, any identified magnetic anomalies have been classified depending on their amplitude as small (5 nanotesla (nT) to 49 nT), medium (50 nT to 99 nT), or large (>100 nT).

*Geophysical data - data quality*

- 3.6.1 Once processed, the geophysical data sets were individually assessed for quality and their suitability for archaeological purposes, and rated using the following criteria (**Table 3**).

**Table 3** Criteria for assigning data quality rating

Data quality	Description
Good	Data which are clear and unaffected or only slightly affected by weather conditions, sea state, background noise or data artefacts. Seabed datasets are suitable for the interpretation of upstanding and partially buried wrecks, debris fields, and small individual anomalies. The structure of wrecks is clear, allowing assessments on wreck condition to be made. Subtle reflectors are clear within SBP data. These data provide the highest probability that anomalies of archaeological potential will be identified.
Average	Data which are moderately affected by weather conditions, sea state and noise. Seabed datasets are suitable for the identification of upstanding and partially buried wrecks, the larger elements of debris fields and dispersed sites, and larger individual anomalies. Dispersed and/or partially buried wrecks may be difficult to identify. Interpretation of continuous reflectors in SBP data is problematic. These data are not considered to be detrimentally affected to a significant degree.
Below Average	Data which are affected by weather conditions, sea state and noise to a significant degree. Seabed datasets are suitable for the identification of relatively intact, upstanding wrecks and large individual anomalies. Dispersed and/or partially buried wrecks, or small isolated anomalies may not be clearly resolved. Small palaeogeographic features, or internal structure may not be resolved in SBP data.
Variable	This category contains datasets where the individual lines range in quality. Confidence of interpretation is subsequently likely to vary within the study area.

- 3.6.2 Using the above criteria, the data sets have been rated for quality as outlined in the table below (**Table 3**):

**Table 4** Summary table assigning quality ratings to multiple datasets

Survey Details			Data Quality			
Operator and Year	Area	Vessel	SBP	MBES	SSS	Mag.
MMT 2021	Array	<i>Roman Rebel</i>	Good	Average	Below Average	N/A
MMT 2021	Array	<i>Relume</i>	Good	Average	Average	Average
G-tec 2021	ECC	<i>Arctic Ocean</i>	Average	Average	Variable	Average
G-tec 2021	ECC	<i>Fastnet Pelican</i>	Average	Average	Variable	Average

- 3.6.3 The quality of the MMT acquired SBP data has been rated as 'Good' using the above criteria. The quality of the G-Tec acquired SBP data has been rated 'Average' using the above criteria. It should be noted that the penetration of both the Parametric Sonar and the CHIRP data is such that it was not always possible to trace the basal reflectors of features, particularly where it deepens or is located under thicker units of sand. However, overall, the data were considered suitable for archaeological assessment.

- 3.6.4 In general, the MBES data have been rated as 'Average'. The data quality and resolution of 0.25 m were found to be of a standard that small objects and finer details were visible. A slight mis-match in tidal corrections between lines is visible within some of the data sets and some swell and roll noise has also affected the data to a slight degree. This has resulted in some data artefacts being present which were indistinguishable from 'real' seabed features. This does not affect the data to a significant degree and so these data sets were considered suitable for archaeological assessment of features over 0.25 m in size.
- 3.6.5 The SSS data are generally affected by cable snatching and weather noise which has affected interpretation to a slight degree. However, these data have been rated as 'Below Average' and 'Variable' due to apparent problems with positioning, where some features seen on adjacent lines were located up to 70 m apart. This occurred throughout the *Roman Rebel* data set, affecting the interpretation of the data to a significant degree. This occurred in the G-tec data on several lines but not the entire datasets. Where this occurred, the MBES data was used to position these anomalies where corresponding features could be seen and identified, but this was not always possible and so the positioning of some SSS-only features is compromised.
- 3.6.6 The Mag. data have been rated as 'Average' using the above criterial table. Some spiking was present and the data were slightly affected by weather noise and cable snatching causing navigational spikes but the data were not affected to a significant degree. The variable line spacing means that smaller ferrous features may not be visible in the data, but on the whole the data are considered suitable for archaeological interpretation.

#### *Geophysical data - anomaly grouping and discrimination*

- 3.6.7 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.
- 3.6.8 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, a MBES anomaly, and multiple SSS anomalies.
- 3.6.9 In the north-west extents of the Array site where there was no Mag. data coverage, the results of the 2013 Osiris interpretation were plotted and used. These results took the form of a gazetteer; there were no data or data images provided.
- 3.6.10 These results were only used where there no data coverage on the limits of the 2021 data sets; the 2013 Osiris results were not grouped in with the results of the MMT data assessment throughout the entire site.

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 5**).

**Table 5** Criteria discriminating relevance of identified features to proposed scheme

Overview classification	Discrimination	Criteria	Data type
Archaeological	P1	Feature of probable archaeological interest, either because of its palaeogeography or likelihood for producing palaeoenvironmental material	SBP, MBES
Archaeological	P2	Feature of possible archaeological interest	SBP, MBES
Archaeological	A1	Anthropogenic origin of archaeological interest	MBES, SSS, Mag.
Archaeological	A2_h	Anomaly of likely anthropogenic origin but of unknown date; may be of archaeological interest or a modern feature	MBES, SSS, Mag.
Archaeological	A2_l	Anomaly of possible anthropogenic origin but interpretation is uncertain; may be anthropogenic or a natural feature	MBES, SSS, Mag.
Archaeological	A3	Historic record of possible archaeological interest with no corresponding geophysical anomaly	MBES, SSS, Mag.
Non-archaeological	U1	Not of anthropogenic origin	MBES, SSS, Mag.
Non-archaeological	U2	Known non-archaeological feature / Feature of non-archaeological interest	MBES, SSS, Mag., SBP
Non-archaeological	U3	Recorded loss	MBES, SSS, Mag.
Non-impact	O1	Outside horizontal footprint of study area	MBES, SSS, Mag., SBP
Non-impact	O2	Outside vertical footprint of proposed impact	SBP
Non-impact	O3	Area subsequently cleared after data acquired, anomaly/object recovered	MBES, SSS, Mag., SBP

- 3.6.11 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.
- 3.6.12 Any anomalies located outside of the defined study areas, either previously recorded in known databases (e.g. UKHO) or identified during this geophysical assessment, are deemed beyond the scope of the current assessment and are subsequently not included in this report.

### 3.7 Geoarchaeological Methodology

#### *Proposed substation, DPC boreholes, South River Liffey*

- 3.7.1 A total of seven boreholes were acquired during the geotechnical survey. Boreholes were acquired using cable percussion through the superficial sediments and recorded by a geotechnical engineer offshore. Geotechnical logs were provided to Wessex Archaeology for review and geoarchaeological assessment. The deposits recovered were assigned either a high, moderate or low priority status based on their perceived geoarchaeological significance. Core photographs were not available during the review and as such, interpretations were made based on borehole logs alone.
- 3.7.2 The results from the review of geotechnical logs were used to produce a deposit model using Rockworks v.20 to outline the character, extent and depth of deposits within the south River Liffey, adjacent to the proposed onshore substation site (known as Pigeon Park) (**Figure 4c**). A total of four boreholes were included in a single cross section to illustrate the stratigraphic relationship between deposits. Elevation (m OD) data was not provided for borehole (3FM\_BH-TC-06) and hence was not included in the transect.

#### *Array site*

- 3.7.3 A total of 12 boreholes were acquired during a geotechnical survey undertaken in 2023. The location of boreholes recovered from the CWP Project Array site are presented in **Figure 3**.
- 3.7.4 Boreholes were acquired using a high-performance corer across the Array site (**Figure 3**). The target depth of engineering boreholes was approximately 40 mbsf. Boreholes were acquired in clear liners, split into 1 m sections offshore and transported to the site laboratory, photographed and described in detail. Geotechnical logs and core photographs were provided to Wessex Archaeology for review and geoarchaeological assessment.
- 3.7.5 The vertical reference level is given as metres below sea floor (mbsf) which assumes the top of the borehole is equal to the level of the sea floor. Water depths are given as metres below Lowest Astronomical Tide (LAT). Location data for boreholes is presented in **Annex 5**.
- 3.7.6 Geoarchaeological review of borehole logs was undertaken by a trained geoarchaeologist, during which all deposits were assigned a high, moderate or low priority status based on their perceived geoarchaeological significance. The results of this review are itemised in **Annex 6**.

### 3.8 Assumptions and Limitations

#### *Archaeological data*

- 3.8.1 Data used to compile this report consists of primary geophysical survey data and secondary information derived from a variety of sources, only some of which have been directly examined for the purposes of this assessment. The assumption is made that the secondary data, as well as that derived from other secondary sources, are reasonably accurate for their use as contextual information for the primary datasets, unless otherwise stated in the text.
- 3.8.2 The records held by the UKHO, WIID and the other sources used in this assessment are not a record of all surviving cultural heritage assets, rather a record of the discovery of a wide range of archaeological and historical components of the marine historic environment. The information held within these is not complete and does not preclude the subsequent



discovery of further elements of the historic environment that are, at present, unknown. In particular, this relates to buried archaeological features.

- 3.8.3 The Topographical Files from NMI have been obtained without geospatial data, and only for the terrestrial and intertidal zones of the development, relating to Townlands and their immediate coastal waters. The offshore development area is too large for the staff of NMI to run a simple search.

## 4 SEABED PREHISTORY BASELINE

### 4.1 Geological baseline and archaeological potential

- 4.1.1 The following is an overview of the geological and archaeological history of the wider region from the Pleistocene to the Holocene marine transgression. This is based on a range of secondary sources, including academic papers, monographs, geological information (e.g. BGS mapping), and previous work undertaken by Wessex Archaeology within the Irish Sea area and the wider region. This serves as a baseline for the palaeogeographic assessment, and aids in producing a stratigraphy for the study area, assigning archaeological potential to identified units, and informing future sampling strategies. Although the island of Ireland it is currently divided into Northern Ireland and the Republic of Ireland, this divide is political and did not exist in prehistory and, as such, the name 'Ireland' refers to the island as a whole.
- 4.1.2 The study area is located offshore Wicklow, on the east coast of the Republic of Ireland, in the Kish Bank Basin/Wicklow Head Shelf area of the Irish Sea (Dobson *et al.* 1973). The basement geology of this area of the Irish Sea comprises sandstones and mudstones dating from the Cambrian through to the Triassic, with Carboniferous mudstone, sandstone and limestone being expected in the central and western Irish Sea, as well as some localised igneous intrusions (Jackson *et al.* 1995, Mellett *et al.* 2015, MMT 2021).
- 4.1.3 The upper surface of the bedrock represents a significant unconformity, and the bedrock units are directly overlain by Quaternary sediments within the study area (Jackson *et al.* 1995, Mellett *et al.* 2015). The Quaternary history of the Irish Sea, as with most of the UK and Republic of Ireland, is complex and has been dominated by recent glacial/interglacial cycles, which have been recorded within the regional geology.
- Pre-Anglian to Ipswichian (>478 ka–115 ka; >Marine Isotope Stage (MIS) 12–5e)*
- 4.1.4 The western Irish Sea has experienced at least three glacial advances and retreats since the Anglian period. These advances and retreats are recorded as repeated phases of major incisions, lodgement/ablation tills, and associated interglacial deposits identified at different levels within the Irish Sea stratigraphy (Jackson *et al.* 1995, Mellett *et al.* 2015).
- 4.1.5 The periodic formation and ablation of ice sheets affected local (and global) relative sea levels, fluctuations in which likely resulted in the western Irish Sea being periodically sub-aerially exposed. Although the region was directly covered by ice during multiple glacial advances, periods of time may have existed between marine regression and glacial advance (and *vice versa*) where the landscape was free of both water and ice.
- 4.1.6 From an archaeological perspective, evidence for human occupation in excess of 700,000 years has previously been recorded at sites around the UK, particularly in the East Anglia region (Parfitt *et al.* 2005, Parfitt *et al.* 2010). Periods of sub-aerial exposure of the shallow shelf areas around the UK will have permitted the movement of Pleistocene animals, and may have facilitated occupation and exploitation of this landscape by early hominins. Direct evidence of hominin occupation of the shallow shelf areas of the UK has previously been identified off the coast of Suffolk, when numerous lithic artefacts dating from the Early Middle Palaeolithic (c. 350 ka–180 ka BP) were recovered from the seabed during aggregate dredging (Wessex Archaeology 2011d, Tizzard *et al.* 2014).
- 4.1.7 At present, there is very little archaeological evidence of Palaeolithic presence in Ireland, with just four isolated lithic finds of Lower to Middle Palaeolithic appearance having been identified: two hand axes of uncertain provenance and two flakes from re-worked contexts

(Westley and Woodman 2020). However, the presence of Palaeolithic cave sites along the North Wales coast indicate that similar occupation of the Irish Sea during times of low relative sea level may have been possible. In particular, early Neanderthal remains discovered in Pontnewydd Cave near St Asaph, Denbighshire, dating from c. 225 ka before present (BP), indicate hominin presence in the area during the Early Middle Palaeolithic, prior to the late glacial maximum (LGM) (Lynch *et al.* 2000, Flemming 2005). However, the area will have been uninhabitable during the heights of the Anglian and Saalian glaciations and so will have been abandoned during these periods. As such, any habitation in the area was potentially sporadic and punctuated by extended periods of absence.

- 4.1.8 Due to the highly erosive effect glaciations have upon the underlying landscape, subsequent glaciations tend to remove most evidence of the preceding pre-glacial/interglacial landscapes. Similarly, any archaeological material deposited offshore during earlier ice-free periods is likely to have been removed by subsequent glaciations, with the exception of some coastal cave sites (Flemming 2005).

*Devensian to LGM (c. 115 ka–18 ka; MIS 5d -2)*

- 4.1.9 The Devensian glaciation was the last, although not the most extensive, glacial advance experienced by Britain and Ireland, during which the Irish Sea was again likely to have been entirely covered by ice. Relict terrestrial features still visible on the seabed, such as drumlins, moraines, eskers, and periglacial patterned ground, are all evidence of the advance and retreat of the Devensian ice sheet and its effect on the underlying landscape (Jackson *et al.* 1995, Van Landeghem *et al.* 2009, Van Landeghem and Chiverrell 2011, Mellett. *et al.* 2015).
- 4.1.10 Several bathymetric deeps within the area are interpreted as being tunnel valleys which were proglacial or sub-glacially formed by the Irish Sea Ice Stream during the Last Glacial Maximum when it was the main ice stream draining the former British-Irish Ice Sheet (Coughlan *et al.* 2020).
- 4.1.11 As noted in paragraph 4.1.7, there is very little evidence of palaeolithic presence in Ireland; however, the presence of the four isolated lithics, as well as a cut-marked bear patella (radiocarbon dated to 12,810–12,590 cal BP) and cut marked bear vertebrae (dated to 11,080–10,400 cal BP), both found in Alice and Gwendoline Cave (County Clare), suggest human incursion into Ireland during the Upper palaeolithic, if not occupation (Dowd and Carden 2016, Westley and Woodman 2020). Across the Irish Sea in Wales, there is evidence of occupation at least during the earlier Devensian, with Neanderthal finds dating from 50 ka BP identified from Coygan Cave near Tenby, and modern human remains dating from 26 ka BP discovered in Paviland Cave on the Gower Peninsular, both in South Wales (Lynch *et al.* 2000, Flemming 2005).
- 4.1.12 The reasons for lack of Irish Palaeolithic evidence are unclear; however, it may be explained in part by the removal of material by subsequent glaciation (Westley and Woodman 2020). Within the Irish Sea, palaeoenvironmental analysis of borehole samples acquired for the Walney OWF recovered pollen sequences relating to the Upper Palaeolithic (ca. 34 ka BP), suggesting isolated pockets of material from the earlier, pre-glacial advance of the Devensian period may have survived further offshore (Wessex Archaeology 2010a). Although, as with the previous glacial advances, the area would again have been uninhabitable and abandoned by the Last Glacial Maximum. It is also hypothesised that a lack of faunal resources, particularly large game animals, may have made Ireland a less viable location for subsisting (Westley and Woodman 2020).

*Post-LGM and early Holocene (18,000–6,000 BP; MIS 2-1)*

- 4.1.13 The history of the Irish Sea since the LGM is unclear, and the relative sea level curve for the region is complicated due to complex interactions between global sea level rise and isostatic readjustment (Flemming 2005, Shennan *et al.* 2011, Westley and Woodman 2020). The long-standing view suggests that, as climate conditions warmed and the ice front retreated northwards, relative sea level remained low throughout the whole Irish Sea, exposing the area as a terrestrial environment for a significant period of time (Jackson *et al.* 1995, Coles 1998). The opening of the North Channel between 16 and 15 ka BP allowed a gradual inundation, with approximate modern day sea levels reached by around 6,000 ka BP (Coughlan *et al.* 2020).
- 4.1.14 This is also supported by work undertaken as part of the West Coast Palaeolandscapes Survey (WCPS), where potential Holocene features such as coastlines, fluvial channels (e.g. the offshore extension of the river Mersey across Liverpool Bay) and deltaic features were identified and mapped from geophysical data sets (Fitch *et al.* 2011). Potential Holocene terrestrial features were also identified during the assessments of the Irish Sea Round 3 Zone, Rhiannon OWF and Awel y Môr which supported this (Wessex Archaeology 2011d, 2014, 2021).
- 4.1.15 However, more recent studies undertaken in the area suggest a marine termination of the retreating ice sheet with no, or a very limited, period of sub-aerial exposure between LGM and marine transgression (Van Landeghem *et al.* 2009, Van Landeghem and Chiverrell 2011, Mellett. *et al.* 2015). This is based in part due to the presence of interpreted iceberg plough marks cut into the now submerged relict glacial landforms on the seabed of the Irish Sea, suggesting direct iceberg calving into water from the foot of the retreating ice sheet (Van Landeghem *et al.* 2009, Van Landeghem and Chiverrell 2011).
- 4.1.16 Flemming (2005, p. 16–17) proposes a third model for glacial retreat – one with an extensive proglacial lake which initially partially covered the present-day Irish Sea area, before retreating northwards with the ice front to expose a terrestrial landscape, followed by final inundation sometime after 7,000 BP. This model would explain iceberg calving into a large lake, whilst still providing a terrestrial environment within which features such as those identified by Fitch *et al.* (2011) could develop.
- 4.1.17 The correct model of glacial retreat has significant consequences for the post-LGM archaeological potential of the Irish Sea; a fully inundated landscape has low potential for the deposition of artefacts, and vice versa. However, the majority of models and field evidence agree that the Late Glacial/Early Holocene low stand, which occurred across the Irish shelf, is concurrent with the earliest occupation of Ireland (Westley and Woodman 2020). As models suggest that Ireland was not connected to Britain from at least 15,000 cal BP onwards, it is hypothesised that Mesolithic settlement in Ireland was accomplished by people who were able to make seafaring journeys (Westley and Woodman 2020).
- 4.1.18 Assuming a terrestrial followed by marine transgression model, gradual sea level rise would have probably placed much of the Irish Sea either on the coastline or just offshore by the Mesolithic period (c. 10 ka–6 ka BP) (Shennan and Horton 2002). Past identification of submerged peat deposits and drowned forests around the Irish and Welsh coastlines and the edges of the Irish Sea suggests coastlines in the area were stable for periods of time during marine transgression (Steers 1948, Flemming 2005, Wessex Archaeology 2009, Westley and Woodman 2020).
- 4.1.19 The earliest, irrefutable evidence of occupation in Ireland is an Early Mesolithic hunter-gatherer camp at Mount Sandel in County Derry, dated to c. 9800 cal BP (Dowd and

Carden, 2016, Westley and Woodman 2020), which appears to have a single, continuous phase of archaeological activity. Although the make-up of the flint assemblages discovered at Mount Sandel suggest that there may have been earlier traces of Mesolithic settlement which have not yet been discovered in Ireland (Bayliss & Woodman 2009).

- 4.1.20 It is thought that during the Mesolithic, populations were mobile hunter gatherers (Westley and Woodman 2020). The Mesolithic record of Britain and Ireland suggests a strong relationship between human activity and coasts, wetlands, rivers and streams. These areas provide rich sources of food and resources for these hunter/gatherer groups, as well as important transport routes inland or between islands. Any surviving sedimentary deposits from this period could potentially contain both *in-situ* and derived artefacts from a time when these coastal and littoral landscapes, now submerged by the sea, were utilised intensively by human populations.
- 4.1.21 In addition to these submerged coastal landscapes, the Mesolithic archaeological record potentially contains examples of coastal or sea going craft made from dugout logs or hide covered wooden frames as well as worked flint and chert artefacts.
- 4.1.22 A number of archaeological sites have been identified around the coast of Ireland although, at present, none of the sites which are completely submerged are *in situ* sites (Westley and Woodman 2020). However it should be noted that two worked flint nodules were recovered during dredging works on the Arklow Bank in 2003 ahead of work for the Arklow Bank Wind Park, just to the south of the study area (Campbell 2003, SPLASHCOS, Westley and Woodman 2020).
- 4.1.23 By the end of the Mesolithic, the Irish Sea would have been completely submerged, with coastlines approximately close to their present day positions, and archaeological evidence from the Neolithic onwards will be of an increasingly maritime nature. However, continued use of the intertidal zone surrounding the Irish Sea has been found in the form of lithic and organic artefacts, including a logboat, dated to 5500–5000 cal BP which was found in intertidal mud in Strangford Lough, Northern Ireland (Westley and Woodman 2020). Further offshore, any artefacts from this period not related to maritime activity are likely to be derived and re-deposited after introduction to the area by fluvial processes or coastal erosion.
- 4.1.24 Post the Holocene marine transgression, the archaeological potential of the study area shifts to the maritime history of Britain and Ireland, which is presented in **Section 5**.

## 4.2 Palaeogeographic Assessment

### *Stratigraphy*

- 4.2.1 A number of palaeogeographic features of archaeological potential have been identified within the study area. These features are discussed below, individually described in gazetteer format in **Annex 3** and **Annex 4** and illustrated in **Figures 3–6**.
- 4.2.2 During assessment of the SBP data, the identified geology within the study area was divided into 4 separate units, subdivided into their different members, as described below.

**Table 6** Shallow stratigraphy of the CWP study area

Formation	Unit	Unit name	Geophysical Characteristics (1)	Interpreted Sediment Type (2)	Archaeological Potential
Surface Sand Formation	4b	Holocene Sediments SL1– Post-transgression (Holocene, MIS 1)	Observed as either a veneer or deposit of mobile sediment a few metres thick. Generally acoustically quiet but with some areas of cross bedded reflectors..	Sand with shell fragments.	Considered of low potential in itself, but possibly contains reworked artefacts and can cover wreck sites and other cultural heritage.
	4a	Holocene Sediments SL2 – Pre-transgression / transgression (Early Holocene, MIS 2 – 1)	Broad blanket deposit characterised by numerous horizontal reflectors. Basal reflector obscured by gas.	Possible intertidal to marine sediments of sands, silts and clays. Possible gas at base.	Potential to contain <i>in situ</i> and derived archaeological material, and palaeoenvironmental material.
-	3	Channel Complex Deposits (Late Devensian/Early Holocene, MIS 2 – 1)	Generally identified as multi-phase channel features with either acoustically quiet or layered fills.	Fluvial/terrestrial sediments, including potential layers of organic clay.	Potential depends on the age of the deposit – may be too glacial proximal for human habitation, but if later may contain both <i>in situ</i> and derived artefacts.
Western Irish Sea Formation	2c	Codling Bank (Late Devensian, MIS 2 – 1)	Generally acoustically quiet with some dipping internal reflectors, although occasionally seen as chaotic	Coarse-grained deposits, including cobbles and boulders, possibly late-glacial braid-plain deposits or related to subaqueous ice-rafting and sediment gravity flows.	Likely a glacial proximal deposit, and so low potential for <i>in situ</i> archaeological material, but may contain derived material depending on age.
	2b	Prograded facies (Late Devensian, MIS 2 – 1)	Variable geophysical characteristics, ranging from chaotic to internal dipping reflectors. Generally a strong basal reflector.	Potential delta front deposit comprising muddy sands.	Likely a glacial proximal deposit, and so low potential for <i>in situ</i> archaeological material, but may contain derived material depending on age.

	2a	Chaotic facies (Late Devensian, MIS 2 – 1)	Not definitively identified in the SBP data but expected to be generally acoustically chaotic with occasional dipping horizons.	Potentially glaciomarine /glaciolacustrine sands and gravels.	Likely a glacial proximal deposit, and so low potential for archaeological material.
Cardigan Bay Formation	1	Upper Till (Devensian, MIS 5d – 2)	Not definitively identified in the SBP data but expected to be generally acoustically chaotic.	Stiff to hard glacial till.	Unlikely to contain archaeological material.
<p>(1) Based on geophysical data</p> <p>(2) Based on geophysical characteristics, Jackson <i>et al.</i> (1995), and Mellett <i>et al.</i> (2015)</p>					

- 4.2.3 The potential sediment types described in **Table 6** are based on previous research in the wider region (e.g. Jackson *et al.*) and the geophysical characteristics of the units. No ground truthing data (e.g. core logs) have been supplied to Wessex Archaeology from within the study area at this time, and such sampling would be required in order to confirm (or otherwise) the sedimentary interpretation provided in this report.
- 4.2.4 Due to the penetration of the SBP data and the acoustic similarities between some of the units, it has not always been possible to accurately differentiate between the different underlying units. As such, not all units listed above have been definitively identified in the SBP data.
- 4.2.5 Unit 1 represents the oldest unit expected within the study area. This is the Upper Till member of the Cardigan Bay Formation; an extensive deposit of hard, over-consolidated glacial tills deposited during the Devensian glaciation. This unit is expected to be present throughout much of the study area underlying the various Western Irish Sea Formation (Unit 2) members. Due to the penetration of the sensors, it has not definitively been identified in the SBP data; however, it is possibly observed as a lower acoustically chaotic unit, particularly within the OECC.
- 4.2.6 As a glacial deposit, Unit 1 will have been laid down during a period of human absence in the area, when the Irish Sea was covered by ice sheets. As such, Unit 1 is not considered to be of archaeological potential. However, its upper surface, particularly close to the coast, may have provided a land surface post-LGM upon which archaeological material could be deposited.
- 4.2.7 Units 2a, 2b and 2c are interpreted as recording the melting and retreat of the Devensian ice sheet immediately post-LGM.
- 4.2.8 Unit 2a is expected to be present across much of the study area, directly overlying Unit 1. Due to the penetration of the SBP data, as well as the acoustic similarities between the different members, it is not always possible to easily differentiate between Unit 2a and 2b and, as such, it has not definitively been identified in the SBP data. However, based on

previous surveys in the area, which used UHRS to map Unit 2a, it is expected that Unit 2a is present across the survey area as a tabular deposit up to 71.2 m thick (MMT 2021).

- 4.2.9 Unit 2a is interpreted as a glaciomarine or glaciolacustrine deposit, potentially sands and gravels, laid down immediately post-LGM as the Devensian ice sheet retreated north across the Irish Sea. Due to the interpreted glacial proximal (and aquatic) depositional environment of Unit 2a, the surrounding landscape is likely to have been uninhabitable at the time of deposition, and so Unit 2a is not considered to be of archaeological potential.
- 4.2.10 Unit 2b has been identified across most of the study area and is expected to be overlying Unit 2a where it is present, and Unit 1 where Unit 2a is absent (MMT 2021). This unit is acoustically highly variable, ranging from relatively chaotic to containing numerous internal features and dipping reflectors. The base of Unit 2b is not always clearly visible in the data or is identified as a poorly defined reflector difficult to distinguish from the underlying Unit 2.
- 4.2.11 Unit 2b has been interpreted as a possible delta front and outwash deposits, and comprises different sediments including clay, gravel and sand (MMT 2021). This may suggest a gradual filling and/or draining of the body of water responsible for the deposition of Unit 2a, and an introduction of more fluvial-derived sediments into the area. Unit 2b is still interpreted as a water-lain deposit, and so the potential for *in situ* archaeological artefacts is considered to be low. However, since the unit is interpreted to have been deposited in an increasingly distal glacial environment, there is the potential for Unit 2b to contain derived archaeological material delivered to the area via fluvial systems and redeposited in a secondary context.
- 4.2.12 These lower three units are present across most of the study area, however Unit 2c has only tentatively been identified within some areas of the OECC and north-western area of the Array site. It is identified as an intermittent unit below the seabed with a distinct, flat basal reflector and acoustically chaotic fill. These sediments are thought to be coarse sediments including cobbles and boulders, which may be late-glacial braid-plain and/or sandur deposits (Jackson *et al.* 1995).
- 4.2.13 Units 1 and 2a, 2b and 2c are considered of relatively low archaeological potential; there is some potential for derived archaeological material to be found within these units, although it should be noted that they are thought to have been deposited prior to the earliest evidence of incursion into Ireland. However, the distribution and potential of the overlying Holocene units varies between the CWP Array site and the OECC. As such, these shall now be discussed by area.

#### *CWP Array site*

##### Palaeogeographic Features

- 4.2.14 The distribution of palaeogeographic features of archaeological potential identified within the Array site is illustrated in **Figure 3a–c**, and the individual features described in **Annex 3**.
- 4.2.15 Unit 3 has been identified predominantly in the west of the Array site. This unit is mainly represented by interpreted channel features **75011**, **75014 – 75016**, **75020 – 75021** and **75025**.
- 4.2.16 The most prominent of these channel features is complex channel **75014**, which is identified in the central, west section of the Array site. The feature generally has a distinct basal reflector, although this dips beyond the penetration of the parametric sonar data to the west and, as such, the boundaries mapped here should be considered a minimum. The unit fill is complex, with evidence of numerous phases of cut and fill. The fill is generally

characterised by numerous horizontal reflectors, indicating well-layered sediments, as well as some areas of acoustically quiet and chaotic fill suggesting some re-working and different depositional environments. There is some possible evidence of gas at the base of the feature, which may have been caused by the microbial breakdown of organic matter, indicating there may be sediments of palaeoenvironmental interest associated with the channel feature, although this is not definitive.

- 4.2.17 Within complex channel **75014**, a unit of interpreted fine-grained material (**75015**) has been identified as a sediment lens characterised by numerous dipping reflectors as well as a strong upper reflector (**Figure 5**). These features have the potential of being terrestrial in origin, but it may also have formed subaqueously. Although the origin of this feature is uncertain, if it is terrestrial in origin it suggests it formed during a significant period of aerial exposure and, as such, may be of high archaeological potential.
- 4.2.18 Cutting into the channel **75014**, a secondary smaller channel can be seen (**75016**). This feature does not have a distinct basal reflector, but is characterised by a fill of numerous draping reflectors which appears acoustically quiet in some places. This second phase potentially represents later reactivation of the channel as a fluvial feature following initial complete infilling with sediment.
- 4.2.19 The numerous phases of fill within channel **75014**, as well as the contained fine-grained deposits (**75015**) suggest a complex history of deposition, including changes of sediment input and potential periods of drying out/exposure. As a terrestrial deposit it is possibly of high archaeological potential, as it would have the potential to contain both *in situ* and derived archaeological artefacts and palaeoenvironmental material.
- 4.2.20 The other channel features, **75011**, **75020**, **75021** and **75025** are smaller and shallower than **75014**, and are generally characterised by a single phase of layered fill. It is possible that these channel features, possibly with the exception of **75025**, are all part of the same fluvial system, created in a terrestrial environment between the LGM and Holocene marine transgression. As such, they are considered of high archaeological potential, and could contain both *in situ* and derived archaeological artefacts and preserved palaeoenvironmental material. The river system would have provided the natural resources which would have made this landscape attractive for early prehistoric populations.
- 4.2.21 A small number of smaller cut and fill features (see **Annex 3** for full list) are also present within the Array site and are also attributed to Unit 3. These potentially represent the remains of partially eroded fluvial channels created during the period of sub-aerial exposure of the study area between the LGM and the Holocene marine transgression. However, these features cannot be traced over great distance and their origin is less certain: they could either represent pre-transgression Holocene deposits or be internal features of the underlying units or related to glacial outwash. As such, these are classified as of possible archaeological potential.

#### Geoarchaeological assessment of marine boreholes

- 4.2.22 A total of 12 borehole logs from the 2023 geotechnical survey were reviewed as part of the Stage 1 works, with the aim of understanding the distribution of previously identified palaeolandscapes features and associated deposits of potential archaeological significance, with recommendations made for further geoarchaeological work (if necessary) (Wessex Archaeology 2023). Outline descriptions based on geotechnical logs are presented in **Annex 5** and accompanied by an interpretation of the deposits.

- 4.2.23 Based on previous research in the region, it is reasonable to suggest that the deposits recovered from the Array site most likely correlate to Quaternary geological formations previously defined within the Western Irish Sea (**Table 6**). However, it is recognised that other depositional units may exist within the Array site and where identified, these will be discussed further.
- 4.2.24 Stiff heterogeneous gravelly sandy clays and silts were recovered as the lowermost sediments in six boreholes (A09\_Alt\_BH, B03\_BH, B09-BH, B13-BH, D13-BH and OSS-01-BH). The upper surface of this deposit was recorded at depths of between 34.40 mbsf (OSS-01-BH) and 51.75 mbsf (B09-BH), however, the base was not identified and therefore the vertical extent of this deposit is uncertain. The high shear strength and heterogenous nature of this clay suggests it was deposited in a glacial environment and is interpreted as glacial till.
- 4.2.25 In seven boreholes, shelly sands and gravels, stiff clay with rare gravel clasts and shell fragments and stiff clay with thin laminations and beds of silt and sand were recovered overlying glacial till. The high strength of these sands and clays likely suggests that formation occurred in a glacial environment. The sands and gravels and stiff slightly gravelly clays overlying glacial till contain frequent shell fragments and are thus interpreted as representing deposition in a glaciomarine environment. However, in a single borehole (OSS-03-BH), very stiff sandy clay with closely spaced laminae of silt and fine sand was recorded and may represent lower energy glaciolacustrine sediments.
- 4.2.26 In all 12 boreholes, lithologically variable deposits characterised as silty sands with rare shells, organic matter and laminae of stiff clay, clayey sands, slightly gravelly silty sands and thin to thick beds of stiff silty and sandy clay were recorded. Given the interbedded nature of these sediments, these deposits are tentatively interpreted to represent an active sand-rich pro-delta sequence, possibly deposited in a subaqueous environment as supported by the frequent presence of shell fragments. The shelly silty sands assigned to this unit are lithologically similar to underlying deposits interpreted as glaciomarine sediments. This highlights the complexity of the glacial stratigraphy across the CWP Project and difficulties in defining stratigraphic units.
- 4.2.27 In a single borehole (E08-BH) very gravelly sands and sandy gravels were recorded between 1.30 mbsf and 3.65 mbsf. The coarse-grained nature of these sediments is indicative of deposition in a high energy environment. The depositional history of this deposit is unclear; however, it may represent fluvial deposition, with subangular to subrounded gravel clasts recorded.
- 4.2.28 In five boreholes (A09\_Alt-BH, B07-BH, G04\_Alt-BH, OSS-02-BH and OSS-03-BH), sandy clays, silty sands and silts with rare to occasional shell fragments and organic matter including wood fragments were recorded between seabed and 14.88 mbsf. The presence of shell fragments may be indicative of marine conditions; however the presence of organic and wood fragments could possibly suggest that deposition occurred in a marginal, or alluvial, environment. Although the depositional history of the fine-grained sediments is unclear, gravel clasts are occasionally recorded and coupled with the recovery of detrital organic material, suggests a high degree of post-depositional reworking.
- 4.2.29 Overlying these fine-grained deposits in three boreholes (B03-BH, G04\_Alt-BH and OSS-02-BH) are slightly gravelly and silty sands, with rare shell fragments and occasional pockets and lenses of black organic material. The presence of organic fragments may suggest that deposition occurred in a coastal setting with lenses indicative of tidal processes. However, based on the presence of shell fragments and occasional gravels

indicative of high-energy conditions, this unit was likely laid down in a shallow marine environment.

- 4.2.30 In ten boreholes, slightly gravelly fine to coarse sands with frequent shell fragments were recorded at seabed. This deposit is lithologically dissimilar to shallow marine sands due to the increased gravel and shell content and are hence interpreted to represent modern seabed sediments.
- 4.2.31 The results from the geotechnical boreholes in the CWP Array site are consistent with the expected stratigraphy in this area of the Western Irish Sea (**Table 6**). These deposits collectively comprise a sequence of glacial sediments characteristic of the Cardigan Bay Formation (Unit 1) and Western Irish Sea Formation (Units 2a-b), overlain by pre-transgression sediments and sealed by post-transgression marine sands.
- 4.2.32 Based on this Stage 1 review, coarse-grained deposits including boulders and cobbles associated with the Codling Bank facies of the Western Irish Sea Formation were not identified.

#### Cardigan Bay Formation

- 4.2.33 The oldest sediments recovered in the boreholes comprise very stiff gravelly sandy clays and silts. These heterogeneous sediments are interpreted as extensive, overconsolidated glacial tills deposited during the Midlandian glaciation and forming the basal Quaternary deposit in many geotechnical boreholes from the area. In the absence of a secure chronology, the precise age of the Upper Till of the Cardigan Bay Formation (Unit 1) is uncertain, however it is typically considered to represent the final advance of the British-Irish Ice Sheet (BIIS) during the Late Midlandian (Jackson *et al.* 1995; Mellett *et al.* 2015).
- 4.2.34 The Upper Till of the Cardigan Bay Formation has low geoarchaeological potential as collectively, these stiff clays were deposited when the Irish Sea would have been unsuitable for hominin occupation.

#### Western Irish Sea Formation

- 4.2.35 The majority of sediments recovered in boreholes from the CWP Array site are associated with the Western Irish Sea Formation and are related to the retreat of the Midlandian ice sheet following the Last Glacial Maximum (LGM, MIS 2–1; Jackson, *et al.* 1995; Mellett *et al.* 2015).

#### Western Irish Sea Formation – Unit 2a

- 4.2.36 The lowermost sediments associated with the Western Irish Sea Formation are characterised by shelly sands and gravels, stiff clays with rare gravel clasts and shell fragments and stiff clay with thin laminations and beds of silts and fine sands. These sediments are collectively interpreted as the chaotic facies (Unit 2a) of the Western Irish Sea Formation. Palaeoenvironmental (i.e. foraminifera) analysis has demonstrated that these sediments were deposited in arctic conditions, likely in an ice-proximal setting (Jackson *et al.* 1995).
- 4.2.37 These high strength sands and clays with shell fragments are interpreted to represent glaciomarine conditions, with the landscape becoming inundated following the initial retreat of ice post-LGM. The sands were likely deposited in an ice-proximal setting, however the clays with closely spaced thin laminae of silts and sands may represent more ice-distal deposits as the BIIS retreated northwards. The depositional history of these laminated clays is uncertain; however they may represent deposits laid down in either a glaciomarine or glaciolacustrine environment. If deposited in a glacial lake, it may suggest that the

landscape was at least partially exposed following LGM ice retreat. However, given the absence of organics and presence of frequent laminae indicative of a water-lain deposition, this deposit is considered to be of low geoarchaeological potential with deposits of higher potential generally associated with those on the fringes of such features. Stiff clays with occasional gravel clasts were also recorded and may represent dropstones, reinforcing that deposition likely occurred in a glaciomarine setting. Glaciomarine deposits are considered to have a low geoarchaeological potential.

#### Western Irish Sea Formation – Unit 2b

- 4.2.38 A lithologically variable sequence comprising silty sands with rare shells, organic matter and laminae of stiff clay, clayey sands, slightly gravelly silty sands and beds of silty and sandy clay was recorded stratigraphically overlying either the chaotic facies of Unit 2a or the Cardigan Bay Formation. These deposits are correlated to the pro-graded facies associated with the Western Irish Sea Formation (Unit 2b) (Jackson *et al.* 1995; Mellett *et al.* 2015).
- 4.2.39 The interbedded nature of these high strength sediments demonstrates the complexity associated with the Irish Sea Quaternary stratigraphy. This is reinforced by the seismic investigation undertaken by Wessex Archaeology (2023) which demonstrated a highly variable seismic facies interpreted as Unit 2b and characterised by chaotic to internal dipping reflectors. Thick sequences of Unit 2b were identified in the geotechnical data (<37.17 m; E08-BH) and highlight the active retreat of the BIIS and in turn excessive deposition of outwash deposits.
- 4.2.40 Given the variability in lithology, it is difficult to determine the depositional history of this unit. However, the frequent beds and laminae preserved coupled with the presence of shell fragments throughout may suggest deposition in a subaqueous fan with low-energy deposition periodically interspersed with high-energy outwash sediments. In addition, a coarsening-up succession is observed with deposits becoming progressively sandy, a characteristic of deltas forming in subaqueous environments as a result of wave action reworking the upper sediments (Nichols 2009). These deposits, although variable in lithology, are collectively interpreted as representing deposition in a subaqueous, ice-proximal to possibly ice-distal setting and as such, their geoarchaeological potential is considered to be low.

#### Fluvial and alluvial sediments

- 4.2.41 The history of the Irish Sea since the LGM is highly contested with more recent geomorphological evidence (i.e. iceberg plough marks) suggesting that a marine termination of the retreating ice sheet occurred, with no, or a very limited period of sub-aerial exposure prior to final marine transgression (Van Landeghem *et al.* 2009, Van Landeghem and Chiverrell 2011, Mellett. *et al.* 2015). Despite this, geophysical investigations of the submerged landscape have identified a series of features including coastlines, fluvial channels and deltaic systems (Fitch *et al.* 2011; Wessex Archaeology 2011d, 2014, 2021) which highlight the possibility of a Late Glacial to Early Holocene terrestrial landscape suitable for hominin occupation.
- 4.2.42 A recent geophysical investigation was undertaken across the CWP Project area comprising the interpretation of sub-bottom profiling (SBP) data (Wessex Archaeology 2023). The investigation highlighted a series of possible palaeochannel features and depressions incised into underlying glacial sediments attributed to the Western Irish Sea Formation. This review of geotechnical boreholes has identified possible sediments associated with these channel features (Unit 3; **Table 6**).

- 4.2.43 B07-BH is located on the margin of the most extensive channel feature (**75014**) and comprises an extensive sequence of fine silty sands with wood and shell fragments, tentatively interpreted as a lower energy alluvial, or possibly floodplain, deposit. Although these wood fragments are detrital in nature, their preservation may indicate that a marginal or former terrestrial environment formed locally. Despite the presence of woody material, these fragments are reworked and thus this deposit is considered to have low geoarchaeological with the material unsuitable for palaeoenvironmental analysis and radiocarbon dating.
- 4.2.44 Equivalent deposits comprised of silty sand with shell and wood fragments were also recorded in G04\_Alt-BH and OSS-02-BH. These alluvial sands may be associated with submerged palaeochannels; however this is unclear based on the absence of features identified in the seismic data at these areas (Wessex Archaeology 2023). These deposits are also assigned a low geoarchaeological priority due to the absence of *in situ* organic material suitable for palaeoenvironmental analysis.
- 4.2.45 Gravelly and sandy silts and clays were identified in A09\_Alt-BH and likely represent a degree of reworking, possibly by waves and tidal processes associated with marine transgression.
- 4.2.46 A single borehole (E08-BH) recorded sands and gravels, overlying an interbedded sequence interpreted as the prograded facies of Unit 2b. This deposit is tentatively interpreted as high energy fluvial sediments and may represent an extension of palaeochannel feature **75014** mapped to the northwest (**Figure 3a**). However, these coarse sediments were deposited in a high-energy environment, and although may contain reworked artefacts, are unlikely to contain *in situ* archaeology and material suitable for palaeoenvironmental analysis. Therefore, this deposit is assigned a low priority status.

#### Intertidal to shallow marine

- 4.2.47 Overlying the alluvial sediments in three boreholes are slightly silty sand with occasional organic material, lenses of sand and clay and few shell fragments. These sediments are collectively interpreted as intertidal to shallow marine sands and likely correlate to Unit 4 interpreted based on seismic data (Wessex Archaeology, 2023; Unit 4). These deposits may represent dune or sandbank features mapped across the seabed in this region (Jackson *et al.* 1995; Mellett *et al.* 2015). This is supported by the frequency of gravel clasts suggesting a high degree of post-depositional reworking. As such, these deposits are considered to have low geoarchaeological potential.

#### Seabed sediments

- 4.2.48 Modern day sea levels were reached by approximately c. 6,000 ka BP (Coughlan *et al.* 2020). During marine transgression, marine processes began to rework the uppermost deposits in places, forming gravelly sands with frequent shell fragments which cap the extensive glacial sequences across the CWP Array site. Although there is potential for these deposits to contain reworked archaeology or bury palaeolandscape features, their geoarchaeological potential is considered low.

#### CWP OECC

##### Palaeogeographic Features

- 4.2.49 The distribution of palaeogeographic features of archaeological potential identified within the OECC is illustrated in **Figure 4a–b**, and the individual features described in **Annex 4**.

- 4.2.50 Unit 3 is represented within the OECC by four cut and fill features (**75028–75031**). These are generally all characterised by faint basal reflectors and acoustically chaotic fill. Of these, cut and fill **75031** is seen in the SBP data to be causing acoustic blanking of the lower horizons. This can be indicative of shallow gas although, based on its acoustic properties, it may be more likely due to the feature containing coarse sediments.
- 4.2.51 As with the cut and fills identified within the Array site, the origins of these features are less certain. They may represent remnant fluvial features or they may be internal features or glacial outwash features. As such, they are considered as of possible archaeological potential.
- 4.2.52 Within the P2 portion of the OECC, a broad unit characterised by numerous horizontal reflectors with gas obscuring its base has been identified (**Figure 6**). This has been interpreted as Unit 4a, which is thought to comprise possible intertidal to marine sediments of sands, silts and clays. Within this unit, a large distinct layer of gas is seen to obscure the majority of the basal reflector, making it difficult to discern the thickness of this unit. This shallow gas may have been caused by the microbial breakdown of organic matter, indicating there may be sediments of palaeoenvironmental interest within the unit. The unit is seen to overly a unit characterised by numerous sub-horizontal reflector which may represent Unit 2b Prograding Facies, or potentially the Mud Facies which is known to also contain gas (Mellett *et al.* 2015).
- 4.2.53 Unit 4a is interpreted as a largely water-lain deposit, and so the potential for *in situ* archaeological artefacts is considered to be low. As such, its extents have been mapped but it has not been assigned an ID at this time or included in the gazetteer at this time. However, there is the potential for Unit 2b to contain derived reworked artifacts or archaeological material delivered to the area via fluvial systems and redeposited in a secondary context.
- 4.2.54 Unit 4b, the Holocene seabed sediment, is present across both the Array site and the OECC. It ranges from a thin veneer over the underlying Quaternary deposits to occasionally relatively thick areas of mega-ripples and sand waves. As a post-transgression (modern) sedimentary deposit, Unit 4b is not considered of archaeological potential in itself, but it has the potential to bury archaeological sites (e.g. shipwrecks) in areas where the sediment is sufficiently thick and mobile.
- 4.2.55 Additionally, it is known that the composition of the seabed sediment within the Irish Sea partially includes reworked underlying sediments, particularly from Unit 2b (Jackson *et al.* 2005). As such, the potential remains for chance isolated finds in a secondary context to be present within Unit 4b.

#### *Proposed substation, South River Liffey*

##### Geoarchaeological assessment of marine boreholes

- 4.2.56 A total of seven borehole logs from the 2022 geotechnical survey were reviewed as part of the geoarchaeological assessment, with the aim of identifying deposits of potential archaeological significance with recommendations made for further geoarchaeological work, if necessary. The results of the review were used to produce a single deposit model to outline the character, extent, and depth of deposits within the south bank of the River Liffey adjacent to the proposed onshore substation site.
- 4.2.57 In a total of seven boreholes, bedrock characterized as shell-rich Lower Carboniferous (Mississippian) limestone of the Lucan Formation (c.  $345.3 \pm 2.1$  to  $328.3 \pm 1.6$  Ma) was reached between 29.90 mbsf (-32.71 m OD; 3FM\_BH-TC-04) and 36.30 mbsf (3FM\_BH-

TC-06). The archaeological potential of bedrock is considered low as deposition predates the occupation of humans in Britain and Ireland.

- 4.2.58 Dense to very dense gravelly sand and sandy gravel with occasional cobbles was recovered in all seven boreholes. The gravel lithology was predominantly recorded as limestone; however schist, psammite and siltstone clasts were also observed. The occasional presence of frequent to abundant shell fragments suggests high energy processes scoured and reworked the underlying soft, fossil-rich Lucan Formation during the Quaternary (Kealy et al. 2021). Given the high strength and coarse-grained nature of these deposits, they are collectively interpreted as representing deposition in a glaciofluvial environment.
- 4.2.59 Deposit modelling of the glacial sediments has illustrated a broadly consistent tripartite sequence, with stiff glacial tills stratigraphically enclosed by dense glaciofluvial deposits (**Figure 4c**). The lower glaciofluvial deposit was typically a thin unit (<2.85 m) with the upper surface recorded between 28.50 mbsf (-31.33 m OD; 3FM\_BH-TC-04) and 35.00 mbsf (3FM\_BH-TC-06). The uppermost glaciofluvial sediments are comparatively thicker (<13.00 m; 3FM\_BH-TC-05) with the upper surface recorded at depths of between 0.50 mbsf (0.51 m OD; 3FM\_BH-TC-03) and 6.00 mbsf (-7.81 m OD; 3FM\_BH-TC-04). These glaciofluvial deposits are associated with a significant pre-Devensian channel feature (the Palaeo-Liffey) mapped based on extensive deposit modelling as reaching depths of approximately 40 m in the study area (Farrington 1928; O'Connor et al. 2020).
- 4.2.60 The sequence is consistent with the event chronology for the development of the channel proposed by Kealy *et al.* (2021), with the first phase of deglaciation resulting in glaciofluvial erosion of the bedrock surface and deposition of a coarse-grained sequence in response to ice retreat. A second phase of glaciation followed with ice advancement compressing the underlying gravels and resulting in the deposition of glacial till. Subsequent deglaciation reactivated meltwater channels with a secondary unit of gravels laid down. Based on modelling, the geotechnical boreholes are located in the centre of the channel. This is supported by the absence of a lower glacial till, which is constrained to the flanks of the channel (Kealy et al. 2021). Given the high energy nature of these deposits, they are considered to have low geoarchaeological and archaeological potential.
- 4.2.61 Glacial till described as firm to very stiff occasionally gravelly sandy silty fissured clay was recorded in all geotechnical boreholes at depths of between 13.00 mbsf (3FM\_BH-TC-03) and 35.00 mbsf (3FM\_BH-TC-06). These deposits are interpreted as the Dublin Boulder Clay and are collectively assigned a low geoarchaeological and archaeological priority, given that deposition occurred at a time when ice covered the landscape (Gallagher et al. 2022).
- 4.2.62 In all seven boreholes, soft to very soft occasionally gravelly sandy silty clay was recorded overlying glacial sediments with thicknesses ranging between 2.50 m (3FM\_BH-TC-01) and 6.00 m (3FM\_BH-TC-04). Shell fragments were frequently recorded and suggest deposition occurred in an estuarine environment. Although the absolute age of this fine-grained unit is uncertain, the strong organic and hydrocarbon odour is likely indicative of late Holocene deposition. Detrital material such as wood fragments and gravels were also recovered and suggest a degree of post-depositional reworking. Although there is potential for these deposits to contain reworked archaeology or bury palaeolandscape features, their archaeological potential is considered low.

## 5 MARITIME AND AVIATION ARCHAEOLOGY BASELINE

### 5.1 Introduction

- 5.1.1 The following assessment of the maritime resource is based on records of known shipwrecks, aircraft crash sites and obstructions, as well as an archaeological assessment of geophysical data.

### 5.2 Designated Maritime and Aviation Receptors

- 5.2.1 All wreck over 100 years old and archaeological objects located in the sea are protected under the *National Monuments (Amendment) Act 1987* (s. 3(4)). Wreck includes any vessel, or part of a vessel, lying wrecked on, in or under the seabed, and any objects that are or were contained in or on it (*National Monuments (Amendment) Act 1987* s. 1(1)). Archaeological objects are movable property which because of their archaeological interest has a value substantially greater than its intrinsic value (*National Monuments Act 1930*, s. 2). This includes human and animal remains. Additionally, other wrecks may be protected through an underwater heritage order (*National Monuments (Amendment) Act 1987* s. 3(1-3)).
- 5.2.2 Within the study area there are a number of features subject to protection. This includes known wreck HMS *Guide Me II* that sank in 1918, over 100 years ago (**70366** – see **Section 5.5**).
- 5.2.3 The debris field **70040** (see **Section 5.4**) will also likely be subject to protection, if it is related to a wreck that sank over 100 years ago.
- 5.2.4 The known wreck **70463** and an anchor **70352** (see **Section 5.5**) may also be subject to protection.
- 5.2.5 It is essential to note that all wreck material over 100 years old will be protected. There are therefore also numerous other anomalies that may be subject to protection once their character is confirmed.

### 5.3 Geophysical seabed features assessment

- 5.3.1 The geophysical data were assessed to identify features of archaeological potential relating to maritime and aviation activity within both the Array site and OECC.
- 5.3.2 The assessment of the Array site was undertaken first with the OECC assessment undertaken subsequently. These assessments have been written up separately below and the results have been presented in separate gazetteers and figures.

### 5.4 Seabed features assessment results for the Array site

- 5.4.1 The results of this assessment are collated in gazetteer format detailed in **Annex 7** and illustrated in **Figures 7** and **8**.
- 5.4.2 After the anomaly grouping and discrimination phase as outlined in Section 3.6, a total of 194 anomalies have been identified as being of possible archaeological potential within the Array site. These anomalies start from ID number 70000.

These are discriminated as shown in **Table 7** (refer to **section 3.6** for full list).

**Table 7** Anomalies of archaeological potential within the Array site

Archaeological discrimination	Quantity	Interpretation
A1	1	Anthropogenic origin of archaeological interest
A2_h	36	Anomaly of likely anthropogenic origin but of unknown date; may be of archaeological interest or a modern feature
A2_l	157	Anomaly of possible anthropogenic origin but interpretation is uncertain; may be anthropogenic or a natural feature
<b>Total</b>	<b>194</b>	

5.4.3 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 anomalies identified within the Array site

Anomaly classification	Definition	Quantity
Debris field	A discrete area containing numerous individual debris items that are potentially anthropogenic, and can include dispersed wreck sites for which no coherent structure remains	4
Debris	Distinct objects on the seabed, generally exhibiting height or with evidence of structure, that are potentially anthropogenic in origin	4
Rope/chain	Curvilinear dark reflectors, often with a small amount of height, indicating rope or chain (if ferrous)	20
Seabed disturbance	An area of disturbance without individual, distinct objects. Potentially indicates wreck debris or other anthropogenic features buried just below the seabed	19
Bright reflector	Individual objects or areas of low reflectivity, characteristic of materials that absorb acoustic energy, such as waterlogged wood or synthetic materials. Precise nature is uncertain	2
Dark reflector	Individual objects or areas of high reflectivity, displaying some anthropogenic characteristics. Precise nature is uncertain	55
Mound	A mounded feature with height not considered to be natural. Mounds may form over wreck sites or other debris.	9
Depression	An area of disturbed seabed with depth. Potentially indicates scour around a buried feature or where a feature has been cleared	1
Magnetic	No associated seabed surface expression, and have the potential to represent possible buried ferrous debris or buried wreck sites	80
<b>Total</b>		<b>194</b>

5.4.4 One anomaly (**70040**) within the Array site has been discriminated as A1 - anthropogenic origin of archaeological interest.

5.4.5 This anomaly has been classified as a debris field; an area of numerous debris items with no coherent structure (**Figure 7c** and **Figure 8**).



- 5.4.6 This debris field was identified in the SSS data as an area (measuring 23.5 x 18.5 x 0.6 m) of multiple small, angular dark reflectors with the largest measuring 3.3 x 0.3 x 0.2 m. It was also identified in the MBES data as a distinct irregular mound. This feature has an associated large magnetic anomaly of 389 nT, indicating a significant amount of ferrous material is present.
- 5.4.7 There is no coherent structure present, so this feature has not been classified as a wreck, but is interpreted as an area of ferrous debris.
- 5.4.8 A total of 36 anomalies (for full list see **Annex 7**) within the Array site have been discriminated A2\_h - anomaly of likely anthropogenic origin but of unknown date; may be of archaeological interest or a modern feature.
- 5.4.9 Three anomalies (**70032**, **70034** and **70035**) have been classified as debris fields; areas of numerous debris items with no coherent structure. None of these have an associated magnetic anomaly and have been interpreted as debris on the basis of their form in the SSS or MBES data.
- 5.4.10 Anomaly **70032** was identified in the MBES data as a compact and distinct slightly linear series of irregular mounds measuring 28.0 x 5.6 x 1.1 m. The location of this anomaly was not covered by 2021 Mag. data and no anomalies were identified at this location by Osiris. This is interpreted as an area of multiple possible items of debris.
- 5.4.11 Anomaly **70034** was identified in the SSS data as a central sub-angular dark reflector measuring 6.3 x 2.4 x 3.0 m, surrounded by an area of multiple dark reflectors measuring 12.9 x 8.0, with a general height of less than metre. The location of this anomaly was not covered by 2021 Mag. data and no anomalies were identified at this location by Osiris. This is interpreted as an area of multiple possible items of debris.
- 5.4.12 Anomaly **70035** was identified in the SSS data as a compact area of small angular and irregular dark reflectors measuring 8.3 x 6.1 x 0.7 m, with the largest visible object measuring 1.1 x 0.6 x 0.5 m. The location of this anomaly was not covered by 2021 Mag. data and no anomalies were identified at this location by Osiris. This is interpreted as an area of multiple possible items of debris.
- 5.4.13 Four anomalies (**70004**, **70055**, **70123** and **70190**) have been classified as individual items of debris. None of these have an associated magnetic anomaly and have been interpreted as debris on the basis of their form in the SSS or MBES data.
- 5.4.14 Anomaly **70004** was identified in the MBES data as a small but angular mound, measuring 4.4 x 3.8 x 1.6 m within some surrounding scour. The location of this anomaly was not covered by 2021 Mag. data and no anomalies were identified at this location by Osiris. This is interpreted as possible debris.
- 5.4.15 Anomaly **70055** was identified in the SSS data as a short, thin, curvilinear dark reflector measuring 4.5 x 0.6 x 0.1 m, and is interpreted as possible non-ferrous debris, not obviously rope or chain.
- 5.4.16 Anomaly **70123** was identified in the SSS data as a distinct, thin dark reflector, measuring 6.5 x 0.6 x 0.1 m, generally straight with a slight angular bend at the centre. This anomaly was also interpreted as possible non-ferrous debris, not obviously rope or chain.

- 5.4.17 Anomaly **70190** was identified in the SSS data as a distinct, angular dark reflector measuring 2.2 x 1.3 x 0.5 m, and is interpreted as possible non-ferrous debris.
- 5.4.18 A total of 20 anomalies (for full list see **Annex 7**) have been classified as lengths of possible rope or chain. An example of one (**70171**) is shown in **Figure 8**.
- 5.4.19 These range in size from 10.6 x 0.2 x 0.1 m (**70085**) up to 208.6 x 1.0 x 0.1 m (**70138**).
- 5.4.20 Six of these features (**70005**, **70053**, **70057**, **70132**, **70138** and **70162**) have corresponding magnetic anomalies ranging in amplitude from 15 nT (**70053**) up to 40 nT (**70138**) indicating these are likely to comprise ferrous material.
- 5.4.21 The remaining 14 features with no magnetic anomaly have all been interpreted as possible rope or likely non-ferrous chain material.
- 5.4.22 Nine anomalies (**70003**, **70006**, **70030**, **70060**, **70062**, **70064**, **70074**, **70091** and **70115**) have been classified as magnetic anomalies with no corresponding anomalous features identified in the SSS or MBES data.
- 5.4.23 These range in amplitude from 51 nT (**70074**) up to 214 nT (**70030**).
- 5.4.24 All these anomalies have the potential to represent possible ferrous debris that is either buried, or with no surface expression. Due to their form and amplitude, these are considered to be anomalies of higher archaeological potential.
- 5.4.25 The remaining 157 anomalies within the Array site (for full list see **Annex 7**) have been discriminated as A2\_I - anomaly of possible anthropogenic origin but interpretation is uncertain; may be anthropogenic or a natural feature.
- 5.4.26 A total of 19 anomalies (for full list see **Annex 7**) have been classified as seabed disturbances; a feature or group of features of uncertain origin.
- 5.4.27 These seabed disturbances range in size from 5.0 x 3.8 x 1.0 m (**70012**) up to 79.2 x 8.2 x 1.1 m (**70106**).
- 5.4.28 Three of these anomalies (**70012**, **70038** and **70117**) have corresponding magnetic anomalies ranging in amplitude from 12 nT (**70012**) up to 19 nT (**70038**). These have been retained as seabed disturbances rather than debris or debris fields due to their ambiguous form in the SSS, MBES and Mag. data sets. They are interpreted to be possible geological features with high concentrations of ferrous material or they may be possible ferrous debris.
- 5.4.29 The remaining 16 seabed disturbances with no magnetic anomaly have all been interpreted as possible natural features or may be possible non-ferrous debris.
- 5.4.30 Two of these seabed disturbance features (**70041** and **70042**) have been identified as two large, irregular ring-shaped mounds, both with a central low-lying mound. These features are very anomalous and have been interpreted as possible palaeogeographic features or may be possible debris (see **Figure 8**).
- 5.4.31 Two anomalies (**70008** and **70036**) have been classified as bright reflectors; a feature of uncertain origin identified in the SSS data.



- 5.4.32 Anomaly **70008** was identified as an elongate bright reflector, possibly in part indicating shadow or scour of an indistinct object, measuring 2.2 x 0.5 x 0.5 m. This anomaly was also visible in the MBES data as an elongate mound with some scour.
- 5.4.33 Anomaly **70036** was identified as an irregular bright reflector with irregular shadow measuring 1.2 x 0.8 x 0.2 m. This anomaly was also visible in the MBES data as a rounded mound within some scour.
- 5.4.34 Neither of these features have an associated magnetic anomaly. Both may be natural features, or may represent possible debris comprising materials that absorb acoustic energy, such as waterlogged wood or synthetic materials.
- 5.4.35 A total of 55 anomalies (for full list see **Annex 7**) have been classified as dark reflectors; features of uncertain origin identified in the SSS data. An example of one (**70019**) is shown in **Figure 9**.
- 5.4.36 These anomalies range in size from 0.5 x 0.2 x 0.3 m (**70158**) up to 19.5 x 1.5 x 0.4 m (**70128**).
- 5.4.37 Five of these anomalies (**70066**, **70076**, **70112**, **70147** and **70166**) have corresponding magnetic anomalies ranging in amplitude from 9 nT (**70011** and **70112**) up to 53 nT (**70076**). These have been retained as dark reflectors rather than debris due to their ambiguous form in both the SSS and Mag. data sets. They are interpreted to be possible geological features with high concentrations of ferrous material or they may be possible ferrous debris.
- 5.4.38 The remaining 50 dark reflectors with no associated magnetic anomaly have all been interpreted to be either possible natural features or possible non-ferrous debris.
- 5.4.39 Nine anomalies (**70063**, **70068**, **70081**, **70120**, **70126**, **70148**, **70149**, **70159** and **70179**) have been classified as mounds; mounded areas which may indicate possible debris but may also be natural features.
- 5.4.40 These anomalies range in size from 2.8 x 1.5 x 0.5 m (**70126**) up to 10.3 x 4.2 x 0.9 m (**70159**).
- 5.4.41 One of these anomalies (**70126**) has an associated small magnetic anomaly of 9 nT, and was interpreted as a possible natural feature with ferrous content or possible ferrous debris.
- 5.4.42 The remaining eight anomalies do not have an associated magnetic anomaly and are all interpreted as possible natural features or possible non-ferrous debris.
- 5.4.43 One anomaly (**70127**) has been classified as a depression; an area of disturbed seabed with depth. This was identified in the SSS data as a distinct linear dark reflector with scouring measuring 18.8 x 8.2 x -0.5 m. The interpretation of this feature is uncertain; it may be a possible seabed scar, may be a natural feature or may indicate possible non-ferrous linear debris.
- 5.4.44 A total of 71 anomalies (for full list see **Annex 7**) have been classified as low potential magnetic anomalies with no corresponding anomalous features identified in the SSS or MBES data.
- 5.4.45 These range in amplitude from 5 nT (**70108** and **70111**) up to 73 nT (**70072**). Based on their form and amplitude, all have the potential to represent possible ferrous debris that is either

buried or with no surface expression, or these anomalies may also represent a natural feature, and so are considered of lower archaeological potential. Further investigation by ground-truthing would be needed to confirm.

## 5.5 Seabed features assessment results for the OECC

- 5.5.1 The results of this assessment are collated in gazetteer format detailed in **Annex 8** and illustrated in **Figures 9** and **10**.
- 5.5.2 After the anomaly grouping and discrimination phase as outlined in **Section 3.6**, a total of 260 anomalies have been identified as being of possible archaeological potential within the OECC. These anomalies start from ID number 70200.

These are discriminated as shown in **Table 9** (refer to **Section 3.6** for full list).

**Table 9** Anomalies of archaeological potential within the OECC

Archaeological discrimination	Quantity	Interpretation
A1	1	Anthropogenic origin of archaeological interest
A2_h	109	Anomaly of likely anthropogenic origin but of unknown date; may be of archaeological interest or a modern feature
A2_l	148	Anomaly of possible anthropogenic origin but interpretation is uncertain; may be anthropogenic or a natural feature
A3	2	Historic record of possible archaeological interest with no corresponding geophysical anomaly
<b>Total</b>	<b>260</b>	

- 5.5.3 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 anomalies identified within the OECC

Anomaly classification	Definition	Quantity
Wreck	Areas of coherent structure including wrecks of ships, submarines and some aircraft (where coherent structure survives)	1
Debris field	A discrete area containing numerous individual debris items that are potentially anthropogenic, and can include dispersed wreck sites for which no coherent structure remains	6
Linear debris	Distinct linear objects, or a linear series of objects on the seabed, either straight or curved. Potentially anthropogenic in origin. May represent linear anthropogenic debris which are unlikely to be (solely) rope or chain	31
Debris	Distinct objects on the seabed, generally exhibiting height or with evidence of structure, that are potentially anthropogenic in origin	33
Rope/chain	Curvilinear dark reflectors, often with a small amount of height, indicating rope or chain (if ferrous)	23
Seabed disturbance	An area of disturbance without individual, distinct objects. Potentially indicates wreck debris or other anthropogenic features buried just below the seabed.	28

Anomaly classification	Definition	Quantity
Dark reflector	Individual objects or areas of high reflectivity, displaying some anthropogenic characteristics. Precise nature is uncertain	72
Mound	A mounded feature with height not considered to be natural. Mounds may form over wreck sites or other debris.	16
Depression	An area of disturbed seabed with depth. Potentially indicates scour around a buried feature or where a feature has been cleared	1
Magnetic	No associated seabed surface expression, and have the potential to represent possible buried ferrous debris or buried wreck sites	47
Recorded Wreck	Position of a recorded wreck at which previous surveys have identified definite seabed anomalies, but for which no associated feature has been identified within the current data set.	1
Recorded obstruction	Position of a recorded obstruction (e.g. foul ground, fisherman's fastener recorded by the UKHO), but for which no associated feature has been identified within the current data set	1
<b>Total</b>		<b>260</b>

- 5.5.4 One anomaly (**70366**) within the OECC has been discriminated as A1 - anthropogenic origin of archaeological interest.
- 5.5.5 This anomaly has been classified as a wreck and was identified in the SSS data as a distinct elliptical dark reflector measuring 31.5 x 7.1 x 3.2 m, demarking the outline of an interpreted generally intact hull. A more pointed end at the south-east indicates this may be the bow and a more angular north-west end is interpreted as the stern. Some internal angular dark reflectors are visible which suggest outlines of internal structure and a taller more central shadow may indicate the vessel is standing upright.
- 5.5.6 The wreck was identified in the MBES data at a general depth of -29.3 m as a distinct elliptical mound with no obvious upstanding superstructure visible. Deep scouring is visible at the south-east end.
- 5.5.7 The wreck has an associated magnetic anomaly (93 nT) indicating the presence of ferrous material, although the extents of the wreck were not directly covered by the Mag. data and therefore this amplitude is considered to be a minimum.
- 5.5.8 This wreck is charted by the UKHO (6943) and has an associated NMS record (W01482) which report the wreck as being identified by Divers as HMS *Guide Me II*, a British fishing vessel which was converted to an armed patrol vessel in 1915 and was sunk following a collision with SS *Glen Garriff* on 29 August 1918. A naval gun and the ship's bell have since been recovered. It has been recorded as a generally intact and upright wreck with collision damage visible on the port side. (**Figure 9e, Sheet 1**).
- 5.5.9 A total of 109 anomalies (for full list see **Annex 8**) within the OECC have been discriminated A2\_h - anomaly of likely anthropogenic origin but of unknown date; may be of archaeological interest or a modern feature.

- 5.5.10 Six anomalies (**70225**, **70229**, **70328**, **70342**, **70365** and **70427**) have been classified as debris fields; areas of numerous debris items with no coherent structure. None of these have an associated magnetic anomaly and have been interpreted as debris on the basis of their form in the SSS or MBES data.
- 5.5.11 Anomaly **70225** was identified in the SSS data with total dimensions of 25.6 x 1.5 x 0.5 m comprising an indistinct, irregular dark reflector with a distinct irregular shadow measuring 5.3 x 1.5 x 0.5 m with a possibly attached curvilinear dark reflector extending NNW for 20.3 m. This feature was also identified in the MBES data as a small mound with a thinner, curvilinear mound extending to the NNW. No anomalies were identified at this location in the Mag. data. This is interpreted as a possible item of non-ferrous debris with associated possible rope or chain.
- 5.5.12 Anomaly **70229** was identified in the SSS data as a compact but indistinct group of individual dark reflectors with shadows measuring 8.6 x 5.4 x 1.0 m. This anomaly was also identified in the MBES data as a distinct group of three mounds; one sub-angular and measuring 5.5 x 3.1 x 1.0 m, one short straight mound measuring 4.1 x 1.5 x 0.6 m and a smaller, more likely natural, sub-angular mound measuring 2.4 x 1.6 x 0.4 m. No anomalous features were identified in the Mag. data at this location. Based on its form in the MBES data, this feature is interpreted as multiple items of possible non-ferrous debris.
- 5.5.13 Anomaly **70328** was identified in the SSS data as an indistinct mound, with a possible linear dark reflector extending to the north with the full extents measuring 21.5 x 9.1 x 0.5 m. The mound was tentatively identified in the MBES data but not the linear feature. No anomalous features were identified in the Mag. data at this location. Based on its form in the SSS data, this feature is interpreted as possible non-ferrous debris.
- 5.5.14 Anomaly **70342** was identified in the SSS data as a compact angular area of distinct, irregular dark reflectors measuring 33.5 x 8.1 x 0.3 m. The dark reflectors appear interconnected by straight and curvilinear dark reflectors. This feature is tentatively visible in the MBES data as a slight disturbance. No anomalous features were identified in the Mag. data at this location although this feature was only partially covered by the Mag. data. Based on its appearance in the SSS data this feature has been interpreted as possible debris, and may be modern, but this cannot be confirmed without visual inspection.
- 5.5.15 Anomaly **70365** was identified in the SSS data as a linear array of three individual, distinct, sub-angular, dark reflectors all measuring approximately 2.5 x 1.2 x 0.1 m, aligned generally north to south and covering a full area of 12.6 x 1.2 x 0.1 m. This was identified on only one line of the SSS data which has unreliable positioning, and no obvious corresponding features were identified in the MBES or Mag. data. The nearest object is calculated to be located approximately 38 m SSW of wreck **70366** but this is not certain. Due to its possible proximity to the wreck, these objects have been interpreted as possible associated debris.
- 5.5.16 Anomaly **70427** was identified in the SSS data as a small compact area of multiple dark reflectors measuring 2.3 x 2.3 x 0.2 m, which was also identified in the MBES data as a short, linear mound within scour. No magnetic anomaly was associated with this feature and it has been interpreted as possible non-ferrous debris.
- 5.5.17 A total of 31 anomalies (for full list see **Annex 8**) have been classified as linear debris; a linear object or linear series of objects likely to be anthropogenic in origin. An example (**70369**) is shown in **Figure 10**.
- 5.5.18 These range in size from 6.8 x 0.5 x 0.1 m (**70407**) up to 263.0 x 0.4 x 0.1 m (**70221**).

- 5.5.19 One of these anomalies (**70270**) has a corresponding small magnetic anomaly (17 nT) located within the centre of the feature (identified in the SSS data as a series of linear dark reflectors covering 57.2 x 1.7 x 0.5 m) which indicates the presence of possible ferrous material at this location, although the full extents of the feature were only partially covered by the Mag. data.
- 5.5.20 The remaining 30 anomalies do not have an associated magnetic anomaly, although may not have been fully covered by the Mag. data, and have been interpreted as debris based on their appearance in the SSS or MBES data.
- 5.5.21 Of these 30 anomalies, one (**70407**) is interpreted as possible linear debris of possible archaeological potential.
- 5.5.22 Four of these anomalies (**70423**, **70435**, **70436** and **70438**) are interpreted as possible disused cable; however, these are not charted and so have been retained subject to visual inspection as they could also be rope or chain features.
- 5.5.23 One of these anomalies (**70433**) is identified as a linear series of depressions which may contain debris or may represent cleared linear debris.
- 5.5.24 The remaining 25 linear anomalies (including **70270**, see paragraph 5.5.19) are interpreted as linear debris are interpreted as having the potential to be modern features such as fishing gear, but have been retained subject to visual inspection as this cannot be certain.
- 5.5.25 A total of 33 anomalies (for full list see **Annex 8**) have been classified as individual items of debris. Two examples of debris anomalies (**70400** and **70429**) are shown in **Figure 10**.
- 5.5.26 These features range in size from 1.0 x 0.9 x 0.5 m (**70244**) up to 9.5 x 0.5 x 0.1 m (**70462**).
- 5.5.27 Five of these anomalies (**70348**, **70362**, **70400**, **70422** and **70456**) have corresponding magnetic anomalies ranging in amplitude from 42 nT (**70456**) up to 126 nT (**70400**) and these are interpreted to be possible items of ferrous debris.
- 5.5.28 The remaining 28 anomalies do not have an associated magnetic anomaly, although not all may have been directly covered by the Mag. data. All have been interpreted as debris on the basis of their form in the SSS or MBES data. An example is shown in **Figure 10**.
- 5.5.29 A total of 23 anomalies (for full list see **Annex 8**) have been classified as lengths of possible rope or chain.
- 5.5.30 These features range in size from 4.3 x 0.8 x 0.2 m (**70384**) up to 273.7 x 0.6 x 0.1 m (**70311**).
- 5.5.31 None of these features have an associated magnetic anomaly (although not all may have been fully covered by the Mag. data). All have been interpreted as possible lengths of rope or chain (either ferrous or non-ferrous in origin).
- 5.5.32 A total of 32 anomalies (for full list see **Annex 8**) have been classified as high potential magnetic anomalies with no corresponding anomalous features identified in the SSS or MBES data.
- 5.5.33 These range in amplitude from 50 nT (**70355**) up to 413 nT (**70420**). Anomaly **70420** is shown in **Figure 10**.

- 5.5.34 All these anomalies have the potential to represent possible ferrous debris that is either buried, or with no surface expression. Due to their form and amplitude, these are considered to be anomalies of higher archaeological potential. Further investigation by ground-truthing would be needed to confirm.
- 5.5.35 A total of 148 anomalies within the OECC (for full list see **Annex 8**) have been discriminated as A2\_I - anomaly of possible anthropogenic origin but interpretation is uncertain; may be anthropogenic or a natural feature.
- 5.5.36 Twenty-eight anomalies (for full list see **Annex 8**) have been classified as seabed disturbances; a feature or group of features of uncertain origin.
- 5.5.37 These seabed disturbances range in size from 2.5 x 1.6 x -0.2 m (**70228**) up to 128.3 x 14.3 x 0.3 m (**70224**).
- 5.5.38 Four of these anomalies (**70224**, **70261**, **70265** and **70292**) have corresponding magnetic anomalies ranging in amplitude from 6 nT (**70261**) up to 37 nT (**70224**). These have been retained as seabed disturbances rather than debris or debris fields due to their ambiguous form in the SSS, MBES and Mag. data sets. They are interpreted to be possible geological features with high concentrations of ferrous material, although they may be possible ferrous debris.
- 5.5.39 The remaining 24 seabed disturbances with no magnetic anomaly have all been interpreted as possible natural features or may be possible non-ferrous debris.
- 5.5.40 Seabed disturbance **70224** was identified in the SSS data as two parallel curvilinear dark reflectors which separate and converge along the total length. It was also identified in the MBES data as a generally curvilinear ridge aligned north-east to south-west, with two elongate 'plateaus'. A small magnetic anomaly was identified in the very south-western extents of the feature, indicating the presence of ferrous material in this location. No other magnetic anomalies have been identified within the feature extents although this feature was only partially covered by the Mag. data. This feature is interpreted as a possible natural feature though may be possible debris subject to further investigation (see **Figure 10**).
- 5.5.41 A total of 72 anomalies (for full list see **Annex 8**) have been classified as dark reflectors; features of uncertain origin identified in the SSS data. An example (**70346**) is shown in **Figure 10**.
- 5.5.42 These anomalies range in size from 0.8 x 0.2 x 0.1 m (**70237**) up to 125.3 x 0.4 x 0.1 m (**70340**). The second longest dark reflector measures as 11.9 x 0.8 x 0.8 m (**70289**).
- 5.5.43 One of these anomalies (**70282**) has a corresponding magnetic anomaly of 38 nT. This dark reflector was identified in the SSS data measuring 6.4 x 1.1 x 0.5 m close to the nadir and, as such, was not well imaged. It has been retained as dark reflectors rather than debris due to its ambiguous form in both the SSS and Mag. data sets. This feature is interpreted to be a possible geological feature with high concentrations of ferrous material or it may be possible ferrous debris.
- 5.5.44 The remaining 72 dark reflectors with no associated magnetic anomaly have all been interpreted to be possible natural features or may be possible non-ferrous debris.
- 5.5.45 Sixteen anomalies (for full list see **Annex 8**) have been classified as mounds; mounded areas which may indicate possible debris but may also be natural features.

- 5.5.46 These anomalies range in size from 1.4 x 1.1 x 0.4 m (**70235**) up to 5.9 x 4.0 x 0.3 m (**70389**). None of these anomalies have an associated magnetic anomaly and all are interpreted as possible natural features or possible non-ferrous debris.
- 5.5.47 One anomaly (**70396**) has been classified as a depression; an area of disturbed seabed with depth. This was identified in the MBES data as a distinct sub-rounded depression with an even base measuring 9.6 x 6.1 x -0.3 m. It was not identified in the SSS data and was not directly covered by the Mag. data and therefore it is not possible to ascertain whether ferrous material is present at this location. The interpretation of this feature is uncertain; it may be a natural feature, may indicate partially buried debris or may indicate where an object on the seabed has been cleared.
- 5.5.48 A total of 32 anomalies (for full list see **Annex 8**) have been classified as low potential magnetic anomalies with no corresponding anomalous features identified in the SSS or MBES data.
- 5.5.49 These range in amplitude from 5 nT (**70267** and **70280**) up to 83 nT (**70256**). Based on their form and amplitude, all have the potential to represent possible ferrous debris that is either buried or with no surface expression, or these anomalies may also represent a natural feature, and so are considered of lower archaeological potential. Further investigation by ground-truthing would be needed to confirm.
- 5.5.50 Two records (**70352** and **70463**) have been classified as A3 - Historic record of possible archaeological interest with no corresponding geophysical anomaly.
- 5.5.51 Record **70463** is classified a recorded wreck. This is the reported position of a wooden wreck through the NMS (W01544) database, discovered by a Dutch dredging company in 1989 during works for the installation of a sewerage pipe, measuring approximately 15 ft across and consisting of a 'wooden framework' with a cargo of uncut slate. This wreck was reburied once the pipe was laid. No anomalous features were identified in the SSS data. This position was not directly covered by the MBES or Mag. datasets and therefore it is not possible to ascertain whether ferrous material is present at this location, and any responses may be obscured by the presence of the pipeline overlying the reported wreck position, and which is visible within the data. There is potential for associated debris to be present within the vicinity (**Figure 9f**).
- 5.5.52 Recorded **70352** is classified as a recorded obstruction. This is the recorded position of an anchor identified on the seabed in both the UKHO (6971) and NMS (W10597) databases. This obstruction was first identified in 1991 and last surveyed in 2009. No anomalous features were identified in the geophysical data at this location. An anomaly has been identified approximately 45 m NNW (**70353**) but this anomaly is not obviously consistent with the appearance of an anchor and so this record has been retained separately as a precaution (**Figure 9d**).

## 5.6 Maritime Archaeological Potential

- 5.6.1 The assessment of potential for the discovery of shipwreck and shipwreck-derived material within the study area draws on the results of the geophysical survey and desk-based research combined with further research of the wider area.
- 5.6.2 There is potential for discoveries of maritime craft from the Mesolithic to the modern period (Brady 2008, 13–47; Bolton 2012). There is little direct archaeological evidence of ships and boats from earlier periods, but there is indirect evidence for seafaring that includes the exploitation of marine resources and seaborne trade. Post-medieval and modern wrecks,

as they were generally made of more substantial material, are more likely to have been discovered through surveys, and thus recorded in the archaeological record. However, there is still potential for discovery of previously unrecorded wreck sites, particularly of wooden wrecks, broken up wrecks or partially buried wrecks that are more difficult to detect through geophysical survey.

5.6.3 The area around Dublin Harbour, which includes Poolbeg, has the highest concentration of wrecks in the Republic of Ireland (Brady 2008, 244).

5.6.4 As part of the onshore aspect of the Project a geophysical survey was undertaken in Dublin Port by Hydromaster Ltd, with advice from ADCO (Hydromaster Ltd 2022). This aimed to identify seabed features within four defined zones to the north of Poolbeg and to recommend further work on sites of archaeological potential. These zones were:

- Poolbeg mooring area;
- Poolbeg marina;
- Poolbeg power station and berth 48 area; and
- Pigeon house harbour.

5.6.5 No sites of archaeological or historical interest were identified following ground truthing (via diving) on 17 of the identified anomalies (ADCO 2023).

#### *Navigational hazards*

5.6.6 The coastal section of the proposed development is within an area of high potential for navigational hazards with an extensive shallow seabed. A number of sand banks are found within these shallow waters, with the OECC passing through the South Bull, and the Array site located largely on Codling Bank. Sandbanks are not only comprised of finer grained sediments (more suited to the preservation of archaeological material than coarser grained deposits such as gravels), but also often present navigational hazards to vessels passing through the area. In general, therefore, areas in which sandbanks are present may have a greater potential for wreck sites to exist, and may have a higher likelihood of the presence of buried or partially buried wreck material.

5.6.7 The study area falls within an area of significant shipping and navigation activity. These include the passage of merchant vessels, recreational craft, military vessels, and vessels engaged on specialist operations. An inshore traffic zone intersects the OECC off Dalkey Island. Numerous navigation buoys are also present in the site, or close to it, including the buoys marking the East, West and South Codling Bank. Temporary navigation buoys for recreational sailing are also known to have been present in the OECC area in the past.

#### *Recorded losses*

5.6.8 As discussed in **Section 3.5**, Recorded Losses are records for ships or aircraft that are known to have wrecked or crashed offshore, but for which the exact locations are not known. These records relate to vessels reportedly lost or for which no physical wreck remains have ever been identified.

5.6.9 Many vessels were lost without a record being made, and sometimes even the records that were created have since been lost. Examining the recorded losses discussed above provides an indication to the potential for further discoveries.

- 5.6.10 Recorded Losses can be considered as an indication of the potential for archaeological maritime remains to exist within the study area and the type and number of wrecks that could be present. There will be a bias in these records towards vessels dating to the post-medieval period and later. While this to some extent could represent a significant increase in shipping during the post medieval period, it also reflects the fact that reports of shipwreck events in Ireland were not systematically recorded until the 18th century. There will also be a bias towards vessels that sank in inshore waters.
- 5.6.11 The WIID dataset contains over 14,000 Recorded Losses without positional data. These are records for which although a vessel (or vessels) is known to have been lost in the general area, no material has been encountered on the seabed at the recorded location.
- 5.6.12 This data set was searched using a number of key terms relating to the location of the proposed development. These included the names of towns, harbours, sandbanks, bays and islands. These terms in alphabetical order are:
- Bray;
  - Burford;
  - Codling;
  - Dalkey;
  - Dublin;
  - Dun Laoghaire;
  - Frazer;
  - India;
  - Killiney;
  - Kish;
  - Muglins;
  - North Bull;
  - Poolbeg; and
  - South Bull.
- 5.6.13 Results within wider Co. Dublin north of Howth Head such as Skerries and Rush, were then omitted. Those that were recorded as being lost between Dublin and other cities or places such as Cadiz and Quebec were also omitted. This left 1518 individual records of vessels and one aircraft. A full gazetteer of these has been included in **Annex 9**. This is not meant to represent a full list of every vessel that has possibly wrecked in the study area, but rather to give a picture of the types of vessels that have wrecked in the area through time, in order to highlight the potential for further possible discoveries.

- 5.6.14 The losses generally represent post-medieval and modern vessels. In general, Recorded Losses paint a vibrant picture of the types of voyages being undertaken around the east coast of Ireland. The types of vessels highlight the wide range of maritime activities in the study area over time, including national and international trade and the fishing industry.
- 5.6.15 **Table 11** shows the distribution of these documented losses according to the date of loss for those records and shows the range of types of vessels represented. Details regarding these losses are presented in **Annex 9**.

**Table 11** Recorded Losses – summary by date

Date	Number of records of ships	Number of records of aircraft
Pre 1500 AD	1	
1500 to 1799	535	
1800 to 1899	853	
1900 to 1945	123	1
Post – 1946	1	
Unknown	5	
<b>Total</b>	<b>1518</b>	<b>1</b>

- 5.6.16 **Table 12** shows the range of types of vessel recorded as having been lost in the area pre-1800. Dublin was a key port in the post medieval period, particularly for trade across the Irish Sea (Brady 2008, 40–1). This is shown in the most common types of recorded loss from this period, which include barques, coasters and packet boats. John Rocque's *Survey of the City, Harbour, Bay and Environs of Dublin* of 1757 shows numerous substantial three-masted vessels moored to the north of 'the Piles', a timber breakwater constructed by 1731 along the south bank of the Liffey. This shows the area in which the larger sea-going vessels would stop, with goods being ferried upriver by smaller craft.
- 5.6.17 The most numerous categories of ship type in this period are the generic terms 'ship' and 'boat' as well as vessels of unknown type.

**Table 12** Recorded Losses pre-1800 – summary by type

Classification	Count of Classification
Barge	1
Bark	2
Barque	14
Boat	23
Brig	41
Coaster	16
Collier	14
Dutch Galliot	1
East Indiaman	1
Fishing boat	4
Flat	1
Frigate	1
Gabbard	11
Galliot	1

Classification	Count of Classification
Hulk	1
Lighter	7
Man O' War	1
Merchant Vessel	9
Packet boat	4
Pleasure Boat	1
Sailing Ship	6
Schooner	2
Ship	35
Sloop	51
Smack	5
Snow	3
Unknown	254
Vessel	2
West Indiaman	4
Wherry	16
Yawl	4
<b>Total</b>	<b>536</b>

- 5.6.18 The 19th century saw a rapid development of maritime technology, with ships beginning to being constructed with iron and steel, and the development of stream power, first with paddles, and then with screw propulsion. This is represented in the recorded losses of the period, with sailing vessels such as brigs and schooners still heavily represented, but steamships of various types also beginning to appear (**Table 13**).

**Table 13** Recorded Losses 1800-1899 – summary by type

Classification	Count of Classification
Barque	25
Boat	12
Brig	65
Brigantine	20
Coaster	1
Collier	15
Cutter	15
Dandy	5
Dredger	1
Dutch Galliot	1
Fishing boat	2
Flat	1
Full-rigged ship	1
Galliot	2
Hacker	3
Hobble	1
Hopper Barge	1

Classification	Count of Classification
Iron Steam Yacht	1
Iron Steamship	1
Jigger	1
Ketch	3
Lifeboat	4
Lighter	4
Lugger	6
Lugsail	2
Mail boat	1
Man O' War	1
Packet boat	2
Sailing Boat	4
Sailing Ship	3
Schooner	95
Screw Steamer	2
Ship	19
Skiff	1
Sloop	33
Smack	29
Smack Yacht	1
Steam Packet	1
Steam Tug	2
Steamship	24
Stone hacker	2
Trawler	36
Tug	1
Unknown	388
Vessel	1
Wooden Steam Tug	1
Yacht	5
Yawl	8
<b>Total</b>	<b>853</b>

The 20th century saw the development of the first motor vessels, but sailing vessels and steam vessels are still more heavily represented in the recorded losses (**Table 14**).

**Table 14** Recorded Losses 1900-present – summary by type

Classification	Count of Classification
Barge	2
Barque	3
Barquentine	1
Boat	2
Coast Guard Cruiser	1
Collier	1

Classification	Count of Classification
Cutter	5
Dandy	1
Fishing boat	9
Hobble	2
Iron Steamship	1
Ketch	8
Light Ship	1
Lighter	1
Lugger	2
Lugsail	2
Motor Boat	3
Motor Fishing Vessel	1
Paddler Steamer	1
Sailing Boat	4
Schooner	9
Scow	1
Ship	5
Sloop	1
Smack	4
Steam Trawler	2
Steamship	8
Steel Steamship	1
Trawler	8
Tug	1
Unknown	20
Yacht	10
Yawl	3
<b>Total</b>	<b>124</b>

### *Overview of potential*

- 5.6.19 There is potential for the presence of archaeological material of maritime nature spanning from the Mesolithic period to the present day within the study area. The key periods of potential are summarised in **Table 15** below.

**Table 15** Summary of key periods of maritime potential

Period	Summary
Pre-1500 AD	Low potential for material associated with prehistoric maritime activities. Prehistoric maritime activities include coastal travel, fishing and the exploitation of other marine and coastal resources. Vessels of this period include rafts, hide covered watercraft and log boats
	Low potential for material associated with later prehistoric maritime activities, including seaworthy watercraft suitable for overseas voyages to facilitate trade and the exploitation of deep water resources. Such remains are likely to comprise larger boat types, including those representing new technologies such as the Bronze Age sewn plank boats which are associated with a growing scale of seafaring activities.

Period	Summary
	Low potential for material of Roman date, associated with the expansion and diversification of trade with the Continent. Watercraft of this period, where present, may be representative of a distinct shipbuilding tradition known as 'Romano-Celtic' shipbuilding, often considered to represent a fusion of Roman and northern European methods.
	Low potential for material associated with coastal and seafaring activity in the Early Medieval Period, associated with the renewed expansion of trade routes and Norse invasion and migration. Vessels of this period may be representative of new shipbuilding traditions.
	Low potential for material associated with medieval maritime activity, including that associated with increasing trade between the UK and Europe, the development of established ports around the southern North Sea and the expansion of fishing fleets and the herring industry. Vessels of this period are representative of a shipbuilding industry which encompassed a wide range of vessel types (comprising both larger ships and vernacular boats). Such wrecks may also be representative of new technologies (e.g. the use of flush-laid strakes in construction), developments in propulsion, the development of reliable navigation techniques and the use of ordnance.
1500 to 1800	Medium potential for post-medieval shipwrecks representative of continuing technological advances in the construction, fitting and arming of ships, and in navigation, sailing and steering techniques. Vessels of this period continued to variously represent both the clinker techniques and construction utilising the flush-laid strakes technique.
	Medium potential for post-medieval shipwrecks associated with the expansion of transoceanic communications and the opening up of the New World.
	Medium potential for post-medieval shipwrecks associated with the establishment of the British Royal Navy and the increasing scale of battles at sea.
	Medium potential for post-medieval shipwrecks associated with continuing local trade and marine exploitation including the transport of goods associated with the agricultural revolution.
1800 to 1913	Higher potential for the discovery of shipwrecks associated with the introduction of iron and later steel in shipbuilding techniques. Such vessels may also be representative of other fundamental changes associated with the industrial revolution, particularly with regards to propulsion and the emergence of steam propulsion and the increasing use of paddle and screw propelled vessels.
	Higher potential for the discovery of shipwrecks demonstrating a diverse array of vernacular boat types evolved for use in specific environments.
	Higher potential for wrecks associated with large scale worldwide trade, the fishing industry or coastal maritime activity including marine exploitation.
1914 to 1945	Higher potential for the discovery of shipwrecks associated with the two world wars including both naval vessels and merchant ships. Wrecks of this period may also be associated with the increased shipping responding to the demand to fulfil military requirements. A large number of vessels dating to this period were lost as a result of military action
Post- 1946	Potential for wrecks associated with a wide range of maritime activities, including military, commerce, fishing and leisure. Although ships and boats of this period are more numerous, losses decline due to increased safety coupled with the absence of any major hostilities. Vessels dating to this period are predominantly lost as a result of any number of isolated or interrelated factors including human error, adverse weather conditions, collision with other vessels or navigational hazards or mechanical faults.

## 5.7 Aviation archaeological baseline and potential

- 5.7.1 Marine aviation archaeology receptors comprise the remains or associated remains of military and civilian aircraft that have been lost at sea.
- 5.7.2 Ireland is rich in First World War aviation heritage, including airfields, landing grounds, and training facilities. In some cases, these sites are still visible in the landscape, in other cases they have disappeared. In total there were 23 aviation sites established in Ireland. The operators of these sites were the Royal Flying Corps (RFC), Royal Navy Air Service (RNAS) and US Navy and Air Service (USNAS) (Warner and Cromie, 2012).
- 5.7.3 The assessment of potential for the discovery of aircraft crash sites and aircraft derived material within the study area draws on the results of the geophysical survey and desk-based research combined with further research of the wider area.
- 5.7.4 There are no known aircraft crash sites recorded within the study area, however there is potential for the discovery of previously unknown aircraft material.

### *Recorded losses*

- 5.7.5 There is one recorded loss of an aircraft in the area. This was the loss of a de Havilland Moth on 24 May 1933, piloted by Major Samuel Dunckley of the Irish Aero Club. Major Dunckley and a passenger, Edward Clayson, were killed. The crash was witnessed by numerous people.

**Table 16** Recorded losses of aircraft

Wreck No	Classification	Place of Loss	Year of Loss
W14272	Airplane	off Dalkey / Mullings	1933

### *Overview of potential*

- 5.7.6 There is potential for the presence of aviation material dating from the early 20th century until more recent times, with a concentration dating to the World Wars and in particular to the Second World War (Wessex Archaeology 2008a). Discoveries may occur anywhere within the study area. Aircraft crash sites are also difficult to identify through archaeological assessments of geophysical survey, although past experience indicates material from the site, such as engines or other material may be recorded as small obstructions or anomalies.
- 5.7.7 The key periods of aviation potential that may be uncovered within the study area are summarised in **Table 17**.

**Table 17** Summary of key periods of aviation potential

Period	Summary
Pre- 1939	Minimum potential for material associated with the early development of aircraft. Aircraft of this period may represent early construction techniques (e.g. those constructed of canvas covered wooden frames) or may be associated with the mass-production of fixed wing aircraft in large numbers during First World War.
	Minimum potential for material associated with the development of civil aviation during the 1920s and 1930s, associated with the expansion of civilian flight from the British Isles to a number of European and worldwide destinations.



1939 to 1945	High potential for Second World War aviation remains, despite the neutrality of the Ireland during Second World War. Aircraft of this period are likely to be representative of technological innovations propelled by the necessities of war which extended the reliability and range of aircraft.
Post- 1945	Potential for aviation remains associated with military activities dominated by the Cold War, the evolution of commercial travel and recreational flying and the intensification of offshore industry (including helicopter remains). Aircraft of this period may be representative of advances in aerospace engineering and the development of the jet engine

## 6 ARCHAEOLOGICAL ASSESSMENT: INTERTIDAL HERITAGE ASSETS

### 6.1 Introduction

- 6.1.1 A gazetteer of intertidal heritage assets is included in **Annex 10**. Their locations are shown in **Figure 11**.
- 6.1.2 The offshore cable route landfall is at Poolbeg Peninsula, and will run through the intertidal zone of Dublin Bay, and more specifically within Sandymount Strand, and over the sandbar known as the South Bull.

### 6.2 Data assessment

- 6.2.1 There is one known maritime site located within the intertidal zone. This is the Ringsend wreck (**1020**), and redeposited timbers from the wreck at four different locations (**1021–1024**). This wooden wreck was discovered during the excavation of a pipeline trench in 2001 (Dennehy 2001; Brady 2008, 295-298). It is thought to date from the early 19th century.
- 6.2.2 Topographical files from the NMI were also consulted for the townlands of Sandymount and Dublin South City which cover the intertidal area of the development. The NMI confirmed there were no relevant proximate records from Dublin South City. The results for Sandymount are presented in **Table 18**.

**Table 18** Sandymount topographical files.

NMI Register No	Simple Name	Component	Townland	ID	Find Place	County
1884:3	Vessel	Bronze	N/A	82902	Sandymount Strand	Dublin
1991C1:135	Inkwell	Lead	Sandymount	285790	Unknown	Dublin
2003:9	Human remains	Bone	N/A	18253	Sandymount Strand	Dublin
M1949:7	Horseshoe	Iron	Sandymount	70784	Unknown	Dublin

- 6.2.3 The finds listed in the Topographical files highlight the potential for archaeological finds in the intertidal zone of the project, particularly the human remains found on Sandymount Strand.

### 6.3 Archaeological Surveys

- 6.3.1 An intertidal walkover survey was conducted in the intertidal zone of Sandymount Strand, South Dublin Bay on 30 August 2021 by De Faoite Archaeology. This survey observed five new features (**1001–1005**). These include parts of a carvel-built hull (**1001**) and possible associated timber elements (**1002**, **1003**). Photographs of these features are included in **Figures 12–15**. The features appear to be one or more sections of a broken carvel-built hull with numerous treenails. The dimensions of the exposed timbers of **1001** are as follows:
- Length 4.30 m;
  - Width 1.02 m;
  - Plank width 0.14–0.23 m;
  - Plank thickness could not be determined without excavation.

- 6.3.2 The planking appears to be a softwood such as pine or larch, the other elements appear to be hard wood. The wreck remains were reported to the Underwater Archaeology Unit. It is not currently known whether these timbers were in situ or had washed in from elsewhere.
- 6.3.3 A further truncated pine timber was also observed on the survey (**1004**), as were the remains of a possible weir across the main channel (**1005**).
- 6.3.4 A metal detection survey was also undertaken in advance of geotechnical works in South Dublin Bay between (Wessex Archaeology 2022). A total of 14 anomalies were located within 50 m x 50 m grids at three of the ground investigation locations (**1006–1019**).

## 6.4 Overview of potential

- 6.4.1 The area of the South Bull and Sandymount Strand, enclosed by Poolbeg to the north and running along the coast to Dun Laoghaire to the south, is an area characterised by extensive intertidal sandflats.
- 6.4.2 Although there is no existing record of early prehistoric activity within the area of Poolbeg, the River Liffey and Dublin Bay would have made the area an attractive location for occupation given the riverine and coastal environments that would have supported the movement of people and goods. Mesolithic deposits have been identified within the former estuarine area associated with the River Liffey and along the shores of Dublin Bay, north and south (Mitchell 1972), and Mesolithic fish traps were excavated from within estuarine layers at Spencer Dock, approximately 3 km to the northwest (McQuade and O'Donnell 2007).
- 6.4.3 The earliest evidence for the area around Dublin acting as a significant fording point or routeway dates to the late Bronze Age. An excavation at Islandbridge exposed an extensive wooden revetement dated to the late Bronze Age; the structure may have been associated with a fording place at Kilmainham (Bennett 2007, 519). Further evidence for fording of the Liffey was identified at Ormond Quay consisting of a timber braced gravel bank with an associated pathway made of hurdles, dating to the Iron Age (Licence Ref.: 04E1206, 2008:428). The earliest secure reference to a settlement in Dublin dates to the early Medieval Period, with reference to '*Duiblinn*' for the ecclesiastical enclosure, and '*Baile Ath Cliath*' for the secular settlement, developed to guard over the 'ford of the hurdles', (Clarke 1990, 58). Dublin continued to develop and prosper, with the Liffey Estuary providing a point of entry to the country as easy access to the central plains of Ireland. However, the area of Dublin Bay presented major dangers for shipping, requiring investment in a safe harbour.
- 6.4.4 Poolbeg is an artificial peninsula, with construction first commencing in the mid-18th century. Prior to this the area was open water characterised by mud and sand flats that comprised the Liffey's estuary and delta. In the 18th century works were started to enclose the area and deepen the main channel. The early construction is visible on John Rocque's *Survey of the City, Harbour, Bay and Environs of Dublin* of 1757, with a section of the South Wall extending eastwards from Ringsend along the south bank of the Liffey, and north of the South Bull. Further piling extends north-east from the eastern end of the wall. These piles were installed by 1731, as Dublin Corporation's first attempt to control the shipping channel by building a breakwater out into the bay. By the end of the 18th century these piles had been replaced by stone, completing the Great South Wall.
- 6.4.5 The wall is seen on the 1816 Taylor's *Environs of Dublin* map. The Pidgeon House fort, barracks and basin were located approximately halfway along the wall, taking its name from the Pidgeon House restaurant it replaced following the 1798 Rebellion. This developed through the 19th century to include an armoury and a hospital and was sold to the Dublin

Corporation in 1897. It then became a sewage processing facility and a power station, which was still known as the Pidgeon House. A second Poolbeg power station was constructed from the 1960s onwards. The rest of Poolbeg Peninsula, including the land that is now the Irishtown Nature Park, was infilled with rubble and waste from the 1970s onwards.

- 6.4.6 There are numerous vessels known to have wrecked in this area, generally while attempting to enter or leave Dublin Harbour (Brady 2008, 314). This suggests there is great potential for further unknown intertidal heritage to be located within the OECC in the intertidal zone. Indeed, archaeological monitoring of dredging for a submarine pipeline in Dublin Bay in 2001 discovered over 200 timbers, most of which were from vessels. This includes the Ringsend wreck (**1020**), but also timbers from the twelfth or thirteenth century and others from the eleventh century (Brady 2008, 297). Other finds from those works included cannonballs and other ordnance, ceramics, anchors, pullets, iron-plating and other metal features from vessels and a capstan (Brady 2008, 296). There is also the potential for other finds in the intertidal zone related to coastal infrastructure such as jetties and quays, and marine exploitation such as fish traps. Mesolithic fish traps have also been found elsewhere in the Liffey Estuary during development work (McQuade and O'Donnell 2007).

## 7 CONCLUSIONS

### 7.1 Summary of results

#### *Palaeogeographic features*

7.1.1 The assessment of the geophysical data within the study area resulted in the identification of a total of 32 features of palaeogeographic interest. These are summarised as follows:

- a total of six channels and one fine-grained deposit were assigned a P1 archaeological rating; and
- a total of 25 cut and fills were assigned a P2 archaeological rating.

7.1.2 As terrestrial features interpreted as being deposited during periods of known human occupation of Britain and Ireland, those features given a P1 archaeological rating are considered of high archaeological potential. Those features with a P2 discrimination are considered of medium archaeological potential, partly due to the uncertainty of features formation and fill. Geoarchaeological work would aid in refining the interpretation of these features, and therefore help determine the archaeological potential of the area.

7.1.3 Based on the Stage 1 review of 12 boreholes acquired during a geotechnical survey undertaken in 2023 within the Codling Wind Park Project Array site, a sequence of Quaternary deposits was identified comprising the Upper Till of the Cardigan Bay Formation, the chaotic facies (Unit 2a) and prograded facies (Unit 2b) of the Western Irish Sea Formation and overlain by possible alluvial and fluvial sediments associated with submerged palaeochannel features. In few instances, these deposits are capped by intertidal to shallow marine gravelly sands and shell-rich modern seabed sediments.

7.1.4 In three boreholes recovered from the CWP Array site, silty sands with organic wood fragments were recorded. Organic deposits are typically considered to be of high geoarchaeological and palaeoenvironmental potential, however, these fragments are detrital in nature and are likely reworked from a marginal environment in the wider area. Therefore, these deposits were assigned a low priority status.

7.1.5 A total of seven borehole logs from the DPC 2022 geotechnical survey within the South River Liffey were reviewed as part of the geoarchaeological assessment of the proposed substation site in the area known as Pigeon Park, with the aim of identifying deposits of potential archaeological significance. The archaeological potential of the recorded sediment sequences is judged to be low and no recommendations are made for further geoarchaeological work.

7.1.6 Based on the results of these marine geoarchaeological assessment, Stage 2 geoarchaeological recording of these borehole locations is not recommended.

#### *Seabed features – Array site*

7.1.7 The assessment of the geophysical data within the Array site resulted in a total of 194 anomalies identified as being of possible archaeological interest. These are summarised as follows:

- a total of one anomaly was assigned an A1 archaeological rating; anthropogenic origin of archaeological interest;

- a total of 36 anomalies were assigned an A2\_h archaeological rating; anomaly of likely anthropogenic origin but of unknown date; may be of archaeological interest or a modern feature; and
- a total of 157 anomalies were assigned an A2\_l archaeological rating; Anomaly of possible anthropogenic origin but interpretation is uncertain; may be anthropogenic or a natural feature.

#### *Seabed features – OECC*

7.1.8 The assessment of the geophysical data within the study area resulted in a total of 260 anomalies identified as being of possible archaeological interest. These are summarised as follows:

- one anomaly was assigned an A1 archaeological rating; anthropogenic origin of archaeological interest;
- a total of 109 anomalies were assigned an A2\_h archaeological rating; anomaly of likely anthropogenic origin but of unknown date; may be of archaeological interest or a modern feature;
- a total of 148 anomalies were assigned an A2\_l archaeological rating; Anomaly of possible anthropogenic origin but interpretation is uncertain; may be anthropogenic or a natural feature;
- one item, a recorded wreck, was assigned an A3 archaeological discrimination; and
- one item, a recorded obstruction, was assigned an A3 archaeological discrimination.

#### *Intertidal heritage assets*

7.1.9 There is one known maritime site located within the intertidal zone. This is the Ringsend wreck (**1020**), and redeposited timbers from the wreck at four different locations (**1021–1024**). An intertidal walkover survey observed five new features (**1001–1005**), including parts of a carvel-built hull (**1001**) and possible associated timber elements (**1002, 1003**). There is also potential for further unknown intertidal heritage to be located within the OECC in the intertidal zone.

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### Websites

SPLASHCOS ([splashcos-viewer.eu](http://splashcos-viewer.eu))



## APPENDICES

### Annex 1: Terminology

#### Glossary

Term	Definition
<b>The Applicant</b>	The developer, Codling Wind Park Limited (CWPL).
<b>Archaeological Exclusion Zone (AEZ)</b>	An area around a heritage asset in which construction activities and anchoring are prohibited in order to avoid impacts to the asset.
<b>Archaeological interest</b>	There will be archaeological interest in a heritage asset if it holds, or potentially may hold, evidence of past human activity worthy of expert investigation at some point. Heritage assets with archaeological interest are the primary source of evidence about the substance and evolution of places, and of the people and cultures that made them.
<b>Array site</b>	The red line boundary area within which the wind turbine generators (WTGs), inter-array cables (IACs) and the Offshore Substation Structures (OSSs) are proposed.
<b>Codling Wind Park (CWP) Project</b>	The proposed development as a whole is referred to as the Codling Wind Park (CWP) Project, comprising of the offshore infrastructure, the onshore infrastructure and any associated temporary works.
<b>Codling Wind Park Limited (CWPL)</b>	A joint venture between Fred. Olsen Seawind (FOS) and Électricité de France (EDF) Renewables, established to develop the CWP Project.
<b>Environmental Impact Assessment</b>	A procedure to be followed for certain types of projects to ensure that decisions are made in full knowledge of any likely significant effects on the environment.
<b>Heritage asset</b>	A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. Heritage assets include designated and undesignated assets.
<b>High Water Mark (HWM)</b>	The line of high water of ordinary or medium tides of the sea or tidal river or estuary
<b>Historic environment</b>	All aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, and landscaped and planted or managed flora.
<b>Historic environment record (HER)</b>	Information services that seek to provide access to comprehensive and dynamic resources relating to the historic environment of a defined geographic area for public benefit and use.



<b>Offshore export cable corridor (OECC)</b>	The area between the Array site and the landfall, within which the offshore export cables cable will be installed along with cable protection and other temporary works for construction.
<b>Offshore Transmission Infrastructure (OfTI)</b>	The offshore transmission assets comprising the OSSs, interconnector cables and offshore export cables. The EIAR considers both permanent and temporary works associated with the OfTI.
<b>Significance</b>	The value of a heritage asset to this and future generations because of its heritage interest. That interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting.



## Chronology

Where referred to in the text, the main archaeological periods in Ireland are broadly defined by the following date ranges:

Prehistoric (BC 10,860 – 399 AD)		Historic (400 AD – Present)	
Upper Palaeolithic	10,860 – 8001 BC	Early Medieval	400 – 1099 AD
Mesolithic	8000 - 4001 BC	Late Medieval	1100 – 1599 AD
Neolithic	4000 – 2501 BC	Post-medieval	Post AD 1600
Chalcolithic	2500 – 2201 BC	Modern	Post AD 1800
Bronze Age	2200 – 801 BC		
Iron Age	800 BC – AD 399		



## Annex 2: Legislation and Policy

### Global Policy and Legislation

Legislation/Policy	Summary
<b>The World Heritage Convention 1972</b>	The Convention provides for the identification, protection, conservation and presentation of cultural and natural sites of 'outstanding universal value' for inscription on the World Heritage List. The Convention sets out the duties of States Parties in identifying potential sites and their role in protecting and preserving them. By signing the Convention, each country pledges to conserve not only the World Heritage sites situated on its territory, but also to protect its national heritage. The 1972 UNESCO World Heritage Convention was ratified by the UK in 1984 and the UK currently has 29 World Heritage Sites.
<b>The United Nations Convention on the Law of the Sea 1982</b>	UNCLOS 1982 was ratified by the UK in 1997. Article 149 applies only to those archaeological and historical objects that lie outside national jurisdiction and stipulates that 'all objects of an archaeological and historical nature found in the Area shall be preserved or disposed of for the benefit of mankind as a whole, particular regard being paid to the preferential rights of the State or country of origin, or the State of cultural origin, or the State of historical and archaeological origin'. Article 303 stipulates that 'states have the duty to protect objects of an archaeological and historical nature found at sea and shall co-operate for this purpose'. Article 303 also provides for coastal states to exert a degree of control over the archaeological heritage to 24 nm, though the UK has not introduced any measures to implement this right.
<b>International Council of Monuments and Sites Charter on the Protection and Management of Underwater Cultural Heritage 1996 (the Sofia Charter)</b>	The Charter upon which the Annex of the UNESCO Convention is largely based includes a series of statements regarding best practice, intending 'to ensure that all investigations are explicit in their aims, methodology and anticipated results so that the intention of each project is transparent to all'. The UK is a member of the International Council of Monuments and Sites.
<b>UNESCO Convention on the Protection of the Underwater Cultural Heritage (2001)</b>	The UNESCO Convention was concluded in 2001, and is a comprehensive attempt to codify the law internationally with regards to underwater archaeological heritage. The UK abstained in the vote on the final draft of the Convention, however, it has stated that it has adopted the Annex of the Convention, which governs the conduct of archaeological investigations, as best practice for archaeology. Although the UK is not a signatory, the convention entered into force on 2nd January 2009 having been signed or ratified by 20 member states.

## European Policy and Legislation

Legislation/Policy	Summary
<b>The European Convention on the Protection of the Archaeological Heritage (Revised) 1992 (The Valletta Convention)</b>	<p>The Articles of the Valletta Convention tackle various aspects. Article 1 deals with the inventorying and protection of sites and areas; Article 2 deals with the mandatory reporting of chance finds and providing for 'archaeological reserves' on land or underwater; Article 3 promotes high standards for all archaeological work undertaken by suitably qualified people; Article 4 requires the conservation of excavated sites and the safe-keeping of finds; and Article 5 is concerned with consultation that should take place between planning authorities and developers to avoid damage to archaeological remains.</p> <p>The Valletta Convention was ratified by the UK Government in 2000 and came into force in 2001. The convention binds the UK to implement protective measures for the archaeological heritage within the jurisdiction of each party, including sea areas. Insofar as the UK exerts jurisdiction over the Continental Shelf, then it would appear that the provisions of the Valletta Convention apply to that jurisdiction.</p>
<b>The European Landscape Convention 2000</b>	<p>The European Landscape Convention became binding on the UK from 1 March 2007. Its principal clauses require the Government to protect and manage landscapes and to integrate landscape into regional and town planning policies including its cultural, environmental, agricultural, social and economic policies. The Convention applies to the entire territory of the UK and includes land, inland water and marine areas. It is not regarded as applying to sea areas regulated by the UK that lie beyond territorial waters.</p>
<b>European Directives for Environmental Impact Assessments (2014/52/EU)</b>	<p>The EIA Directive entered into force on 15 May 2014 to simplify the rules for assessing the potential effects of projects on the environment. The newly amended directive replaces former directives (85/337/EEC; 97/11/EC; 2003/35/EC; 2009/31/EC; 2011/92/EU) and Member States must apply these from 16 May 2017 at the latest.</p>



## Republic of Ireland Policy and Legislation

Legislation/Policy	Summary
<b>National Monuments (Amended) Acts 1930 to 2004</b>	These Acts provide a legislative basis for the protection of archaeological monuments and area and archaeological objects. Section 3 of the 1987 Act states that wrecks greater than 100 years old and archaeological objects found underwater are protected. The Act also allows the imposition of an Underwater Heritage Order to protect sites of historical, archaeological or artistic importance. This can include wrecks less than 100 years old.
<b>Monuments and Archaeological Heritage Bill 2023</b>	The Monuments and Archaeological Heritage Act, when it comes into force, will repeal and replace the National Monuments Acts. The Bill seeks to introduce new measures to protect archaeological structures and sites, including the establishment of a single Register of Monuments, a statutory reporting scheme for newly discovered monuments and provisions to prevent the illicit import and possession of stolen cultural property. This Bill will incorporate historic wrecks and underwater cultural archaeological objects into the new scheme for monument protection.
<b>Merchant Shipping (Salvage and Wreck) Act 1993</b>	The Director of the National Museum of Ireland (NMI) has a statutory role regarding dealing with notifications from receivers of unclaimed wreck and the retention on behalf of the state of unclaimed wreck if it is of archaeological interest. Under Section 2 (1) 'wreck' includes jetsam, flotsam, lagan and derelict found in or on the shores of the sea or any tidal water or harbour.
<b>Heritage Council Acts 1995 and 2018</b>	This established a statutory 'Heritage Council', the functions of which include proposing policies and priorities for the identification, protection and preservation of the national heritage.
<b>Local Government (Planning and Development) Acts 1936 to 1993</b>	Under these Acts, the use of land for agriculture (including turbary) or forestry (including afforestation) are exempted by statute from the provision therein.
<b>National Marine Planning Framework (NMPF)</b>	This framework sets out the policy, legislative and regulatory context for marine spatial planning and the development of Ireland's first plan. This was published by the Department of Housing, Planning and Local Government on behalf of the Government, and covers Ireland's maritime area, including internal waters (sea area), territorial seas, Exclusive Economic Zone (EEZ) and continental shelf.



### Annex 3: Palaeogeographic features of archaeological potential within the Array site

ID	Classification	Archaeological discrimination	Depth Range (mBSB)		Description	Area	Sensor
			From	To			
75000	Cut and fill	P2	0.4	7.9	A relatively small, possible cut and fill identified below veneer of seabed sediments, cutting into the interpreted Western Irish Sea Formation. Basal reflector not always clearly discernible and, as such, feature may extend beyond those mapped here. Unit fill comprises numerous draping reflectors indicating layered fill. Possible remnants of a fluvial channel, but could be a seabed depression filled with reworked modern sediment or internal feature within Western Irish Sea Formation.	Array	Parametric Sonar
75001	Cut and fill	P2	0.2	3.1	A relatively small, possible cut and fill identified below veneer of seabed sediments, cutting into the interpreted Western Irish Sea Formation. Basal reflector not clearly discernible and feature may extend beyond the depths reported here. Unit fill comprises numerous draping reflectors indicating layered fill. Possible remnants of a fluvial channel, but could be a seabed depression filled with reworked modern sediment or internal feature within Western Irish Sea Formation. Only identified on one survey line.	Array	Parametric Sonar
75002	Cut and fill	P2	0.2	8.0	A possible cut and fill identified beneath a veneer of seabed sediments, cutting into the interpreted Western Irish Sea Formation. Basal reflector is relatively distinct in places, but not clearly discernible in others. Unit fill appears to be relatively unstructured, occasionally chaotic. May be a glacial outwash or internal feature within Western Irish Sea Formation; however, there is the potential it represents remnants of a fluvial channel and as such it has been retained as a precaution. Likely associated with nearby features <b>75003 - 75005</b> .	Array	Parametric Sonar
75003	Cut and fill	P2	0.2	3.2	A possible cut and fill identified beneath a veneer of seabed sediments, cutting into the interpreted Western Irish Sea Formation. Basal reflector is relatively distinct in places, but not clearly discernible in others. Unit fill appears to be relatively unstructured and occasionally chaotic. May be a glacial outwash or internal feature within Western Irish Sea Formation; however, there is the potential it represents remnants of a fluvial channel and as such it has been retained as a precaution. Likely associated with nearby features <b>75002- 75005</b> . Possibly weakly observed on adjacent line, however not clearly discernible.	Array	Parametric Sonar



ID	Classification	Archaeological discrimination	Depth Range (mBSB)		Description	Area	Sensor
			From	To			
75004	Cut and fill	P2	0.2	3.4	A possible cut and fill identified beneath a veneer of seabed sediments, cutting into the interpreted Western Irish Sea Formation. Basal reflector is relatively distinct in places, but not clearly discernible in others. Unit fill appears to be relatively unstructured, occasionally chaotic. May be a glacial outwash or internal feature within Western Irish Sea Formation; however, there is the potential it represents remnants of a fluvial channel and as such it has been retained as a precaution. Likely associated with nearby features <b>75003 - 75005</b> . Possibly weakly observed on adjacent line, however not clearly discernible.	Array	Parametric Sonar
75005	Cut and fill	P2	0.3	8.8	A possible cut and fill identified beneath a veneer of seabed sediments, cutting into the interpreted Western Irish Sea Formation. Basal reflector is relatively distinct in places, but not clearly discernible in others. Unit fill appears to be relatively unstructured, occasionally chaotic. May be a glacial outwash or internal feature within Western Irish Sea Formation; however, there is the potential it represents remnants of a fluvial channel and as such it has been retained as a precaution. Likely associated with nearby features <b>75003 - 75004</b> .	Array	Parametric Sonar
75006	Cut and fill	P2	0.2	6.0	A possible complex cut and fill identified beneath a veneer of seabed sediments, cutting into the interpreted Western Irish Sea Formation. Basal reflector is relatively faint. Unit fill appears to be relatively complex with multiple phases of fill, some of which are characterised by numerous draping horizons suggesting layered sediments. May be a glacial outwash or internal feature within Western Irish Sea Formation; however, there is the potential it represents remnants of a fluvial channel and as such it has been retained as a precaution. Possibly associated with nearby features <b>75003 - 75005</b> , although the unit fill appears different.	Array	Parametric Sonar
75007	Cut and fill	P2	0.3	4.0	A relatively small, possible cut and fill identified beneath a veneer of seabed sediments, cutting into the interpreted Western Irish Sea Formation. Basal reflector is relatively distinct with acoustically unstructured, occasionally chaotic fill. May be a glacial outwash or seabed depression infilled with modern sediments, although there is the potential it represents remnants of a fluvial channel and, as such, it has been retained as a precaution.	Array	Parametric Sonar
75008	Cut and fill	P2	0.3	4.9	A relatively small, possible cut and fill identified beneath a veneer of seabed sediments, cutting into the interpreted Western Irish Sea Formation. Basal reflector is	Array	Parametric Sonar



ID	Classification	Archaeological discrimination	Depth Range (mBSB)		Description	Area	Sensor
			From	To			
					relatively distinct with acoustically quiet fill. May be a glacial outwash or seabed depression infilled with modern sediments; however, there is the potential it represents remnants of a fluvial channel and as such it has been retained as a precaution.		
75009	Cut and fill	P2	0.2	6.5	A possible cut and fill identified beneath a veneer of seabed sediments, cutting into the interpreted Western Irish Sea Formation. Basal reflector is relatively distinct with numerous draping horizons indicating layered fill. May be an internal feature or possible remnants of fluvial feature; however, there is the potential it represents remnants of a fluvial channel and as such it has been retained as a precaution.	Array	Parametric Sonar
75010	Cut and fill	P2	0.4	3.6	A small possible cut and fill identified beneath a veneer of seabed sediments, cutting into the interpreted Western Irish Sea Formation. Basal reflector is relatively distinct with acoustically quiet fill. May be a glacial outwash or seabed depression infilled with modern sediments. Although there is the potential it represents remnants of a fluvial channel and as such it has been retained as a precaution. Only identified on one survey line.	Array	Parametric Sonar
75011	Channel	P1	0.2	8.1	A possible channel feature identified below a veneer of modern marine sediments, cut into the interpreted Western Irish Sea Formation. Feature has a relatively well-defined basal reflector, which appears gaseous in some places, possibly suggesting gas produced by the biogenic breakdown of organic matter, although this is not certain. Unit fill is characterised by numerous sub-horizontal reflectors indicating layered, possibly multi-phase fill. Possible remnant fluvial feature, likely related to nearby feature <b>75014</b> .	Array	Parametric Sonar
75012	Cut and fill	P2	0.3	3.0	A small possible cut and fill identified beneath a veneer of seabed sediments, cutting into the interpreted Western Irish Sea Formation. Basal reflector is relatively distinct with acoustically chaotic fill. May be a glacial outwash or seabed depression infilled with modern sediments, although has the potential of being remnant fluvial feature.	Array	Parametric Sonar
75013	Cut and fill	P2	1.3	8.0	A small, simple cut and fill identified beneath a unit of sand, cutting into the interpreted Western Irish Sea Formation. Basal reflector is relatively distinct with unit fill characterised by numerous faint, draping horizons, possibly indicating layered fill.	Array	Parametric Sonar



ID	Classification	Archaeological discrimination	Depth Range (mBSB)		Description	Area	Sensor
			From	To			
					May be an internal feature or a remnant fluvial feature. Only identified on one survey line.		
75014	Complex channel	P1	0.2	15.7	A broad feature identified below a veneer to thicker unit of sand, cutting into the interpreted Western Irish Sea Formation chaotic or prograding facies. Feature has a relatively distinct basal reflector, however in some locations this dips beyond the penetration of the parametric sonar and therefore its exact extents cannot be determined, particularly towards the west. As such the boundaries mapped here should be considered the minimum extents. The unit fill appears complex with numerous phases of cut and fill. Unit fill is generally characterised by numerous horizontal reflectors, indicating layered fill, although it appears complex and chaotic in other areas which may suggest it has been reworked. There is some evidence of gas identified at the base/within the feature, which may have been caused by the microbial breakdown of organic matter, although this isn't certain. Within the feature, a lens of interpreted fine-grained deposits has been identified ( <b>75015</b> ) which have the potential of being terrestrial in formation, although they may have been formed subaqueously. If terrestrial, it would suggest a complex history of deposition, including changes of sediment input and potential periods of drying out/exposure.	Array	Parametric Sonar
75015	Fine-grained deposit	P1	1.0	6.7	A lens of interpreted fine-grained material identified within complex channel feature <b>75014</b> . Feature is characterised by numerous, dipping, sub-horizontal reflectors, and a strong upper reflector. This feature has the potential of being possibly terrestrial in origin, however it may also be subaqueous in formation. If this internal feature is terrestrial in origin, it suggests it formed during a significant period of aerial exposure and may be of high archaeological potential, although this cannot be confirmed without further investigation.	Array	Parametric Sonar
75016	Channel	P1	0.2	10.5	An upper channel feature identified beneath a unit of sand, cutting into complex channel feature <b>75014</b> . Feature largely has no clearly discernible basal reflector however it is characterised by numerous draping reflectors cross-cutting the lower horizons, with some acoustically quiet fill in places. May represent a later phase of cut and fill within the larger complex channel, or a later reactivation of the channel feature.	Array	Parametric Sonar



ID	Classification	Archaeological discrimination	Depth Range (mBSB)		Description	Area	Sensor
			From	To			
75017	Cut and fill	P2	0.3	4.9	A small, simple cut and fill identified beneath a unit of sand, cutting into the interpreted Western Irish Sea Formation. Basal reflector is relatively faint with unit fill characterised by numerous faint, draping horizons, possibly indicating layered fill. May be an internal feature or a remnant fluvial feature, possibly relating to nearby channel complex <b>75014</b> .	Array	Parametric Sonar
75018	Cut and fill	P2	0.3	2.4	A small, simple cut and fill identified beneath a unit of sand, cutting into the interpreted Western Irish Sea Formation. Basal reflector is relatively defined with unit fill characterised by numerous faint, draping horizons, possibly indicating layered fill. May be an internal feature or a remnant fluvial feature, possibly relating to nearby channel complex <b>75014</b> . Only identified on one survey line.	Array	Parametric Sonar
75019	Cut and fill	P2	0.4	3.6	A simple cut and fill identified beneath a veneer to thicker unit of sand, cutting into the interpreted Western Irish Sea Formation. Basal reflector is relatively well defined, although dips beyond the penetration of the parametric sonar to the north. Fill is characterised by numerous sub-horizontal reflectors. May be an internal feature or a remnant fluvial feature, likely relating to nearby channel complex <b>75014</b> .	Array	Parametric Sonar
75020	Channel	P1	0.4	8.7	A possible channel identified beneath a veneer of sand, cutting into the interpreted Western Irish Sea Formation. Basal reflector is relatively faint with fill characterised by numerous sub-horizontal reflectors. May be an internal feature or a remnant fluvial feature, probably relating to nearby cut and fills <b>75019</b> , <b>75021</b> and channel complex <b>75014</b> .	Array	Parametric Sonar
75021	Channel	P1	0.2	9.5	A channel identified beneath a veneer of sand, cutting into the interpreted Western Irish Sea Formation. Basal reflector is relatively distinct with fill characterised by numerous sub-horizontal reflectors and possibly two or more phases of fill. Likely related to nearby channel feature <b>75020</b> .	Array	Parametric Sonar
75022	Cut and fill	P2	0.5	7.4	A simple cut and fill identified beneath a veneer of sand, cutting into the interpreted Western Irish Sea Formation. Basal reflector is relatively distinct with fill characterised by numerous sub-horizontal reflectors. May be related to nearby channel feature <b>75021</b> .	Array	Parametric Sonar
75023	Cut and fill	P2	0.3	7.7	A simple cut and fill identified beneath a veneer of sand, cutting into the interpreted Western Irish Sea Formation. Basal reflector is faint and hard to discern, but fill is	Array	Parametric Sonar



ID	Classification	Archaeological discrimination	Depth Range (mBSB)		Description	Area	Sensor
			From	To			
					characterised by numerous sub-horizontal reflectors. May be an internal feature or a remnant fluvial feature.		
75024	Cut and fill	P2	0.6	2.6	A small, simple cut and fill identified beneath a veneer of sand, cutting into the interpreted Western Irish Sea Formation. Basal reflector is relatively distinct with acoustically quiet fill. May be an internal feature or a remnant fluvial feature, probably relating to nearby cut and fill <b>75025</b> . Only identified on one survey line.	Array	Parametric Sonar
75025	Channel	P1	0.3	8.6	A possible channel identified beneath a veneer of sand, cutting into the interpreted Western Irish Sea Formation. Basal reflector is faint and hard to discern, but fill is characterised by numerous sub-horizontal reflectors. May be an internal feature or a remnant fluvial feature, likely relating to nearby cut and fills <b>75025</b> and <b>75026</b> .	Array	Parametric Sonar
75026	Cut and fill	P2	0.5	5.2	A small, simple cut and fill identified beneath a veneer of sand, cutting into the interpreted Western Irish Sea Formation. Basal reflector is faint and hard to discern, but fill is characterised by numerous sub-horizontal reflectors. May be an internal feature or a remnant fluvial feature, likely relating to nearby cut and fill <b>75025</b> . Only identified on one survey line.	Array	Parametric Sonar
75027	Cut and fill	P2	0.4	4.2	A small cut and fill identified beneath a thin unit of coarse sediments, cutting into the interpreted Western Irish Sea Formation. Feature has a relatively distinct basal reflector, although this becomes less clear towards the east. Unit fill is characterised by numerous draping reflectors indicating layered fill. May be an internal feature or a remnant fluvial feature.	Array	Parametric Sonar



#### Annex 4: Palaeogeographic features of archaeological potential within the CWP OECC

ID	Classification	Archaeological discrimination	Depth Range (mBSB)		Description	Area	Sensor
			From	To			
75028	Cut and fill	P2	0.2	4.9	A simple cut and fill identified beneath a veneer of sand, cutting into the interpreted Western Irish Sea Formation. Basal reflector is not particularly distinct, but feature appears to have acoustically chaotic fill. May be a glacial outwash or internal feature within Western Irish Sea Formation; however, there is the potential it represents remnants of a fluvial channel and as such it has been retained as a precaution.	ECR P1	Chirp
75028	Cut and fill	P2	0.4	2.5	A small, simple cut and fill identified beneath a veneer of sand, cutting into the interpreted Western Irish Sea Formation. Basal reflector is not particularly distinct, but feature appears to have acoustically chaotic fill. May be a glacial outwash or internal feature within Western Irish Sea Formation; however, there is the potential it represents remnants of a fluvial channel and as such it has been retained as a precaution. Only identified on one survey line.	ECR P1	Chirp
75029	Cut and fill	P2	0.3	2.7	A small, simple cut and fill identified beneath a veneer of sand, cutting into the interpreted Western Irish Sea Formation. Basal reflector is not particularly distinct, but feature appears to have acoustically chaotic fill. May be a glacial outwash or internal feature within Western Irish Sea Formation; however, there is the potential it represents remnants of a fluvial channel and as such it has been retained as a precaution.	ECR P1	Chirp
75031	Cut and fill	P2	0.3	7.4	A simple cut and fill identified beneath a veneer of sand, cutting into the interpreted Surface Sands Formation SL2 member . Feature is characterised by acoustically chaotic fill with no clearly discernible basal reflector, however it appears to cause acoustic banking of the lower horizons. May be a glacial outwash or internal feature within Western Irish Sea Formation; however, there is the potential it represents remnants of a fluvial channel and as such it has been retained as a precaution.	ECR P2	Chirp



## Annex 5: Location of boreholes

ID	Easting	Northing	Elevation (m LAT)	End depth (m)
A09_Alt-BH	309547.42	5880479.49	-14.4	40.74
B03-BH	311072.17	5889186.23	-10.65	40.28
B07-BH	310870.42	5883981.34	-14.36	40.72
B09-BH	310797.04	5881367.97	-14.37	51.75
B13-BH	310561.41	5876179.98	-17.55	40.4
D13-BH	312895.24	5876088.31	-19.55	41.74
E08-BH	314313.11	5882533.04	-15.76	40.82
G04_Alt-BH	317984.18	5887250.24	-15.18	40.48
G12-BH	316441.4	5877255.42	-22.67	40.47
OSS-01-BH	313944.62	5888074.48	-15.11	40.4
OSS-02-BH	314466.93	5884495.57	-15.55	41.04
OSS-03-BH	311723.31	5882040.41	-13.96	40.4



## Annex 6: Stage 1 geotechnical review

ID	Depth from (m)	Depth to (m)	Description	Interpretation	Priority
A09_Alt-BH	0.00	0.32	Dark greyish brown to black slightly clayey subrounded to well-rounded GRAVEL with low cobble content and shell fragments	Seabed sediments	Low
A09_Alt-BH	0.32	1.22	No recovery	N/A	Low
A09_Alt-BH	1.22	2.09	Greyish brown slightly clayey gravelly SAND with occasional shell fragments	Seabed sediments	Low
A09_Alt-BH	2.09	6.07	Firm greyish brown slightly sandy CLAY with frequent pockets of dark grey silt and beds of slightly gravelly silty sand with some shell fragments	Fluvial to alluvial - Unit 3	Low
A09_Alt-BH	6.07	7.30	Dark greyish brown slightly gravelly slightly sandy SILT with rare shell fragments and a medium bed of sandy silt	Fluvial to alluvial - Unit 3	Low
A09_Alt-BH	7.30	8.13	Dark greyish brown slightly silty fine to medium SAND with a thin bed of stiff clay	Western Irish Sea Formation - Unit 2b	Low
A09_Alt-BH	8.13	9.22	Dark grey sandy SILT with frequent pockets of firm clay and a medium bed of slightly silty sand	Western Irish Sea Formation - Unit 2b	Low
A09_Alt-BH	9.22	10.46	Stiff dark greyish brown CLAY	Western Irish Sea Formation - Unit 2b	Low
A09_Alt-BH	10.46	11.54	Dark greyish brown silty SAND with frequent pockets of silt	Western Irish Sea Formation - Unit 2b	Low
A09_Alt-BH	11.54	14.22	Stiff dark greyish brown silty CLAY	Western Irish Sea Formation - Unit 2b	Low
A09_Alt-BH	14.22	14.90	Firm dark grey slightly sandy gravelly SILT. Gravel is fine to medium subangular to rounded of mixed lithologies	Western Irish Sea Formation - Unit 2b	Low
A09_Alt-BH	14.90	15.77	Dark greyish brown slightly sandy clayey SILT	Western Irish Sea Formation - Unit 2b	Low
A09_Alt-BH	15.77	16.42	Dark grey silty SAND	Western Irish Sea Formation - Unit 2b	Low
A09_Alt-BH	16.42	19.42	Dark greyish brown slightly silty SAND with rare pockets of silt	Western Irish Sea Formation - Unit 2b	Low
A09_Alt-BH	19.42	21.08	Dark grey slightly sandy clayey SILT with a medium bed of stiff clay with closely spaced thin laminae of sand	Western Irish Sea Formation - Unit 2b	Low
A09_Alt-BH	21.08	25.84	Dark greyish brown slightly silty SAND with rare pockets of silt	Western Irish Sea Formation - Unit 2b	Low
A09_Alt-BH	25.84	28.58	Dark greyish brown slightly sandy SILT with a medium bed of stiff clay	Western Irish Sea Formation - Unit 2b	Low



ID	Depth from (m)	Depth to (m)	Description	Interpretation	Priority
A09_Alt-BH	28.58	30.10	Dark greyish brown slightly silty SAND with rare pockets of silt	Western Irish Sea Formation - Unit 2b	Low
A09_Alt-BH	30.10	34.26	Dark greyish brown silty slightly micaceous SAND with occasional pockets and lenses of clay and occasional to frequent shell fragments	Western Irish Sea Formation - Unit 2a	Low
A09_Alt-BH	34.26	36.48	Dark greyish brown silty slightly micaceous SAND with frequent shell fragments and medium beds of stiff sandy clay with shell fragments	Western Irish Sea Formation - Unit 2a	Low
A09_Alt-BH	36.48	40.74	Very stiff foliated dark greyish brown gravelly sandy CLAY	Cardigan Bay Formation	Low
B03-BH	0.00	0.95	No recovery	N/A	Low
B03-BH	0.95	1.20	Dark yellowish grey slightly silty SAND with occasional lenses of black organic material	Intertidal to shallow marine - 4a	Low
B03-BH	1.20	1.40	Dark yellowish grey slightly gravelly medium to coarse SAND	Intertidal to shallow marine - 4a	Low
B03-BH	1.40	1.72	Dark yellowish grey slightly gravelly slightly silty fine to medium SAND	Intertidal to shallow marine - 4a	Low
B03-BH	1.72	9.32	Dark greyish brown gravelly SAND with frequent shell fragments. Gravel is fine to medium subangular to subrounded of mixed lithologies	Western Irish Sea Formation - Unit 2b	Low
B03-BH	9.32	10.64	Dark greyish brown slightly silty SAND with occasional shell fragments	Western Irish Sea Formation - Unit 2b	Low
B03-BH	10.64	11.00	Dark orangish brown gravelly SAND with frequent shell fragments. Gravel is fine to coarse subangular to subrounded of mixed lithologies	Western Irish Sea Formation - Unit 2b	Low
B03-BH	11.00	15.20	Greyish brown slightly gravelly silty SAND. Gravel is fine to medium subangular to subrounded of mixed lithologies	Western Irish Sea Formation - Unit 2b	Low
B03-BH	15.20	16.72	Greyish brown silty SAND with closely spaced thin beds of coarse sand	Western Irish Sea Formation - Unit 2b	Low
B03-BH	16.72	17.84	Dark greyish brown slightly silty SAND with occasional shell fragments	Western Irish Sea Formation - Unit 2b	Low
B03-BH	17.84	19.00	Greyish brown silty fine to medium SAND	Western Irish Sea Formation - Unit 2b	Low
B03-BH	19.00	26.30	Dark orangish brown gravelly SAND with frequent shell fragments. Gravel is fine to coarse subangular to subrounded of mixed lithologies	Western Irish Sea Formation - Unit 2b	Low
B03-BH	26.30	30.40	Light grey silty SAND with rare pockets of organic matter and rare medium spaced medium beds of very stiff clay	Western Irish Sea Formation - Unit 2b	Low



ID	Depth from (m)	Depth to (m)	Description	Interpretation	Priority
B03-BH	30.40	33.44	Greyish brown silty SAND with rare shell fragments with pockets and rare thin beds of high strength foliated clay and rare wood fragments between 33.20-33.44m	Western Irish Sea Formation - Unit 2b	Low
B03-BH	33.44	34.37	Greyish brown clayey SAND with frequent pockets of stiff foliated clay	Western Irish Sea Formation - Unit 2b	Low
B03-BH	34.37	34.96	Very stiff foliated greyish brown sandy CLAY	Western Irish Sea Formation - Unit 2a	Low
B03-BH	34.96	37.20	Very stiff foliated brown CLAY	Western Irish Sea Formation - Unit 2a	Low
B03-BH	37.20	39.28	Stiff greyish brown slightly gravelly sandy CLAY	Cardigan Bay Formation	Low
B03-BH	39.28	40.28	Very stiff brown slightly gravelly slightly sandy CLAY	Cardigan Bay Formation	Low
B07-BH	0.00	2.72	Yellowish brown slightly gravelly silty SAND with rare to occasional shell fragments. Gravel is fine to medium of mixed lithologies	Seabed sediments	Low
B07-BH	2.72	3.72	Yellowish brown slightly gravelly silty SAND with rare shell fragments. Gravel is fine to coarse subangular to rounded of mixed lithologies	Seabed sediments	Low
B07-BH	3.72	4.49	Yellowish brown gravelly to very gravelly slightly silty SAND with rare shell fragments. Gravel is fine to coarse subangular to rounded of mixed lithologies	Seabed sediments	Low
B07-BH	4.49	5.76	Yellowish brown slightly gravelly silty SAND with rare shell fragments. Gravel is fine to coarse subangular to subrounded of mixed lithologies	Seabed sediments	Low
B07-BH	5.76	14.88	Yellowish brown slightly silty fine to medium SAND with occasional black specking and shell fragments and occasional black wood fragments between 8.30-8.35m	Fluvial to alluvial - Unit 3	Low
B07-BH	14.88	23.53	Dark grey slightly silty fine to medium SAND	Western Irish Sea Formation - Unit 2b	Low
B07-BH	23.53	30.19	Dark brownish grey slightly silty SAND with occasional shell fragments	Western Irish Sea Formation - Unit 2b	Low
B07-BH	30.19	31.60	Stiff dark grey sandy calcareous SILT	Western Irish Sea Formation - Unit 2b	Low
B07-BH	31.60	39.20	Dark grey slightly silty SAND with rare shell fragments and black speckling	Western Irish Sea Formation - Unit 2b	Low
B09-BH	0.00	0.50	No recovery	N/A	Low
B09-BH	0.50	2.10	Greyish brown slightly gravelly slightly silty SAND with frequent shell fragments and a thin bed of basalt gravel	Seabed sediments	Low



ID	Depth from (m)	Depth to (m)	Description	Interpretation	Priority
B09-BH	2.10	4.15	Greyish brown slightly gravelly silty SAND with occasional shell fragments. Gravel is fine of mixed lithologies	Seabed sediments	Low
B09-BH	4.15	5.96	Light orangish brown silty to very silty SAND with rare becoming frequent shell fragments	Seabed sediments	Low
B09-BH	5.96	9.10	Greyish brown slightly gravelly slightly silty SAND with rare shell fragments. Gravel is fine subangular gravel	Seabed sediments	Low
B09-BH	9.10	12.14	Greyish brown silty SAND with frequent shell fragments	Seabed sediments	Low
B09-BH	12.14	15.80	Dark grey silty SAND with frequent mica and shell fragments and thin laminae of silt between 13.96-14.36m	Western Irish Sea Formation - Unit 2b	Low
B09-BH	15.80	16.97	Orangish grey slightly silty SAND with frequent mica fragments	Western Irish Sea Formation - Unit 2b	Low
B09-BH	16.97	18.63	Light grey silty SAND with frequent mica fragments	Western Irish Sea Formation - Unit 2b	Low
B09-BH	18.63	24.50	Very dark grey slightly silty gravelly SAND with frequent mica fragments and rare shell fragments and organic matter	Western Irish Sea Formation - Unit 2b	Low
B09-BH	24.50	26.84	Very dark grey slightly silty very gravelly SAND with frequent mica fragments and rare shell fragments and organic matter	Western Irish Sea Formation - Unit 2b	Low
B09-BH	26.84	28.36	Very dark grey slightly silty gravelly SAND with rare shell fragments and mica fragments	Western Irish Sea Formation - Unit 2b	Low
B09-BH	28.36	29.58	No recovery	N/A	Low
B09-BH	29.58	29.88	Very dark grey slightly silty gravelly SAND with rare shell fragments and mica fragments	Western Irish Sea Formation - Unit 2b	Low
B09-BH	29.88	30.78	No recovery	N/A	Low
B09-BH	30.78	31.00	Very dark grey slightly gravelly silty SAND with rare shell fragments and organic matter and mica fragments	Western Irish Sea Formation - Unit 2b	Low
B09-BH	31.00	35.96	Very dark grey slightly gravelly slightly silty SAND with thin to medium beds of firm foliated clay with rare shell fragments organic matter and mica fragments	Western Irish Sea Formation - Unit 2b	Low
B09-BH	35.96	36.96	No recovery	N/A	Low



ID	Depth from (m)	Depth to (m)	Description	Interpretation	Priority
B09-BH	36.96	37.01	Very dark grey slightly gravelly slightly silty SAND with thin to medium beds of firm foliated clay with rare shell fragments organic matter and mica fragments	Western Irish Sea Formation - Unit 2b	Low
B09-BH	37.01	37.48	Very dark grey slightly silty gravelly SAND with frequent mica fragments and shell fragments	Western Irish Sea Formation - Unit 2a	Low
B09-BH	37.48	38.50	No recovery	N/A	Low
B09-BH	38.50	38.68	Very dark grey slightly silty gravelly SAND with frequent mica fragments and rare shell fragments	Western Irish Sea Formation - Unit 2a	Low
B09-BH	38.68	40.52	Very dark grey sandy clayey GRAVEL. Gravel is fine to coarse angular to subrounded of mixed lithologies	Western Irish Sea Formation - Unit 2a	Low
B09-BH	40.52	42.22	Very dense SAND	Western Irish Sea Formation - Unit 2a	Low
B09-BH	42.22	42.75	No recovery	N/A	Low
B09-BH	42.75	51.75	Very stiff dark grey slightly gravelly slightly sandy CLAY with rare shell fragments	Cardigan Bay Formation	Low
B13-BH	0.00	0.40	Dark greyish brown gravelly silty SAND with shell fragments. Gravel is fine to coarse subangular to subrounded of mixed lithologies	Seabed sediments	Low
B13-BH	0.40	2.62	Stiff dark greyish brown slightly gravelly silty CLAY with few shell fragments	Western Irish Sea Formation - Unit 2b	Low
B13-BH	2.62	5.16	Firm dark greyish brown slightly sandy SILT with rare shell fragments	Western Irish Sea Formation - Unit 2b	Low
B13-BH	5.16	5.66	Dark greyish brown gravelly silty SAND with frequent shell fragments. Gravel is fine to medium subangular to subrounded of mixed lithologies	Western Irish Sea Formation - Unit 2b	Low
B13-BH	5.66	6.53	Stiff dark greyish brown gravelly silty CLAY with some shell fragments. Gravel is fine to medium subangular to subrounded of mixed lithologies	Western Irish Sea Formation - Unit 2b	Low
B13-BH	6.53	8.08	Firm dark greyish brown slightly sandy SILT with rare shell fragments	Western Irish Sea Formation - Unit 2b	Low
B13-BH	8.08	8.70	Dark greyish brown gravelly silty SAND with frequent shell fragments. Gravel is fine to medium subangular to subrounded of mixed lithologies	Western Irish Sea Formation - Unit 2b	Low
B13-BH	8.70	9.83	Firm dark greyish brown slightly sandy SILT with a medium bed of stiff silty clay	Western Irish Sea Formation - Unit 2b	Low
B13-BH	9.83	13.26	Stiff dark greyish brown silty CLAY	Western Irish Sea Formation - Unit 2b	Low



ID	Depth from (m)	Depth to (m)	Description	Interpretation	Priority
B13-BH	13.26	15.20	Firm to stiff dark brown CLAY	Western Irish Sea Formation - Unit 2b	Low
B13-BH	15.20	18.15	Dark greyish brown slightly gravelly slightly silty SAND. Gravel is fine of mixed lithologies	Western Irish Sea Formation - Unit 2b	Low
B13-BH	18.15	19.49	Dark greyish brown silty SAND	Western Irish Sea Formation - Unit 2b	Low
B13-BH	19.49	21.70	Dark greyish brown silty SAND with rare to occasional shell fragments with stiff beds of sandy clay	Western Irish Sea Formation - Unit 2b	Low
B13-BH	21.70	22.61	Dark greyish brown slightly silty SAND with rare shell fragments and rare medium beds of gravelly clayey sand	Western Irish Sea Formation - Unit 2b	Low
B13-BH	22.61	23.90	Dark greyish brown slightly gravelly very silty SAND with rare shell fragments and rare thin beds of firm sandy clay	Western Irish Sea Formation - Unit 2b	Low
B13-BH	23.90	25.55	Dark greyish brown gravelly silty SAND with rare shell fragments. Gravel is fine to coarse subrounded to well rounded of mixed lithologies	Western Irish Sea Formation - Unit 2b	Low
B13-BH	25.55	26.36	Soft to firm sandy CLAY with occasional pockets of sand	Western Irish Sea Formation - Unit 2a	Low
B13-BH	26.36	26.94	Dark greyish brown gravelly clayey SAND	Western Irish Sea Formation - Unit 2b	Low
B13-BH	26.94	27.63	Firm dark greyish brown slightly gravelly slightly sandy CLAY with frequent pockets and lenses of silty sand	Western Irish Sea Formation - Unit 2a	Low
B13-BH	27.63	28.46	Firm dark greyish brown CLAY with rare pockets of silt and a medium bed of stiff clay with frequent lenses of silty sand	Western Irish Sea Formation - Unit 2a	Low
B13-BH	28.46	29.16	Very stiff very dark greyish brown slightly gravelly CLAY with occasional pockets of silty sand	Western Irish Sea Formation - Unit 2a	Low
B13-BH	29.16	29.90	Very stiff very dark greyish brown slightly gravelly CLAY with some pockets of silty sand and rare shell fragments	Western Irish Sea Formation - Unit 2a	Low
B13-BH	29.90	30.70	Very stiff dark greyish brown slightly gravelly CLAY with rare shell fragments	Western Irish Sea Formation - Unit 2a	Low
B13-BH	30.70	34.40	Very stiff dark greyish brown CLAY with rare to occasional pockets of silt with thin to medium beds of stiff foliated clay	Western Irish Sea Formation - Unit 2a	Low
B13-BH	34.40	35.90	Firm dark greyish brown slightly clayey SILT with rare to occasional pockets of silt	Western Irish Sea Formation - Unit 2a	Low



ID	Depth from (m)	Depth to (m)	Description	Interpretation	Priority
B13-BH	35.90	38.54	Firm greyish brown slightly silty CLAY with rare medium beds of silty sand	Western Irish Sea Formation - Unit 2a	Low
B13-BH	38.54	39.34	No recovery	N/A	Low
B13-BH	39.34	40.40	Very stiff light brownish grey slightly gravelly slightly sandy CLAY with rare pockets and lenses of silt	Cardigan Bay Formation	Low
D13-BH	0.00	0.60	No recovery	N/A	Low
D13-BH	0.60	3.94	Olive brown slightly gravelly silty SAND with frequent abundant shell fragments	Seabed sediments	Low
D13-BH	3.94	5.46	Dark greyish brown slightly silty SAND with frequent shell fragments	Seabed sediments	Low
D13-BH	5.46	8.50	Dark greyish brown slightly gravelly slightly silty SAND with frequent shell fragments	Seabed sediments	Low
D13-BH	8.50	13.10	Dark grey silty SAND with frequent to abundant shell fragments	Seabed sediments	Low
D13-BH	13.10	14.58	Dark greyish brown slightly gravelly silty SAND with rare pockets of clay with rare shell fragments	Western Irish Sea Formation - Unit 2b	Low
D13-BH	14.58	16.15	Stiff to very stiff dark grey CLAY	Western Irish Sea Formation - Unit 2b	Low
D13-BH	16.15	17.62	Dark greyish brown silty SAND with rare shell fragments and pockets of clay	Western Irish Sea Formation - Unit 2b	Low
D13-BH	17.62	19.42	Dark greyish brown silty SAND with rare shell fragments and mica fragments	Western Irish Sea Formation - Unit 2b	Low
D13-BH	19.42	20.14	Dark greyish brown very silty SAND with rare shell fragments	Western Irish Sea Formation - Unit 2b	Low
D13-BH	20.14	21.08	Dark greyish brown silty SAND rare with shell fragments and mica fragments	Western Irish Sea Formation - Unit 2b	Low
D13-BH	21.08	21.74	Dark greyish brown silty SAND with rare shell fragments and mica fragments and occasional pockets of silt	Western Irish Sea Formation - Unit 2b	Low
D13-BH	21.74	22.88	Stiff dark greyish brown CLAY with pockets and lenses of fine sand	Western Irish Sea Formation - Unit 2b	Low
D13-BH	22.88	25.97	Dark greyish brown silty SAND with occasional shell fragments and rare pockets of silt and mica fragments with bed of stiff foliated clay between 24.90-25.12m	Western Irish Sea Formation - Unit 2b	Low
D13-BH	25.97	27.34	Stiff fissured dark greyish brown CLAY with rare pockets of sand	Western Irish Sea Formation - Unit 2b	Low
D13-BH	27.34	27.74	Stiff dark greyish brown slightly gravelly CLAY with pockets of medium sand	Western Irish Sea Formation - Unit 2b	Low



ID	Depth from (m)	Depth to (m)	Description	Interpretation	Priority
D13-BH	27.74	28.24	No recovery	N/A	Low
D13-BH	28.24	28.93	Stiff very dark greyish brown CLAY with a thin bed of sand	Western Irish Sea Formation - Unit 2b	Low
D13-BH	28.93	29.74	No recovery	N/A	Low
D13-BH	29.74	31.24	Dark brown silty SAND with rare shell fragments	Western Irish Sea Formation - Unit 2b	Low
D13-BH	31.24	32.74	Stiff greyish brown slightly gravelly CLAY with rare pockets and lenses of sand	Western Irish Sea Formation - Unit 2b	Low
D13-BH	32.74	34.24	Very thinly interbedded stiff slightly gravelly CLAY with rare pockets and lenses of sand and clayey SAND with rare mica fragments	Western Irish Sea Formation - Unit 2b	Low
D13-BH	34.24	34.59	Stiff dark greyish brown CLAY	Western Irish Sea Formation - Unit 2b	Low
D13-BH	34.59	35.74	No recovery	N/A	Low
D13-BH	35.74	36.34	Very thinly interbedded slightly silty SAND with rare mica fragments and slightly gravelly CLAY	Western Irish Sea Formation - Unit 2b	Low
D13-BH	36.34	37.24	No recovery	N/A	Low
D13-BH	37.24	40.24	Very stiff light brownish grey gravelly CLAY. Gravel is fine to medium of mixed lithologies with few cobbles	Cardigan Bay Formation	Low
D13-BH	40.24	41.74	Very stiff light brownish grey slightly gravelly silty CLAY with frequent pockets and lenses of sand. Gravel is fine to coarse subrounded of mixed lithologies	Cardigan Bay Formation	Low
E08-BH	0.00	0.50	No recovery	N/A	Low
E08-BH	0.50	1.30	Light brownish grey gravelly SAND with rare shell fragments. Gravel is medium to coarse angular to rounded of mixed lithologies	Seabed sediments	Low
E08-BH	1.30	2.20	Light orangish brown slightly gravelly SAND. Gravel is fine to coarse subrounded to rounded of mixed lithologies	Fluvial to alluvial - Unit 3	Low
E08-BH	2.20	2.60	Dark orangish brown sandy GRAVEL. Sand is coarse. Gravel is subangular to subrounded of mixed lithologies	Fluvial to alluvial - Unit 3	Low
E08-BH	2.60	3.12	Dark brown gravelly silty SAND. Gravel is fine to coarse subangular to subrounded of mixed lithologies	Fluvial to alluvial - Unit 3	Low



ID	Depth from (m)	Depth to (m)	Description	Interpretation	Priority
E08-BH	3.12	3.65	Dark brown very gravelly slightly silty SAND	Fluvial to alluvial - Unit 3	Low
E08-BH	3.65	6.35	Brown slightly gravelly SAND with frequent shell fragments. Gravel is fine to coarse subangular to subrounded basalt and sandstone	Western Irish Sea Formation - Unit 2b	Low
E08-BH	6.35	7.38	Dark brown slightly silty gravelly SAND with frequent shell fragments. Gravel is fine to medium subangular to subrounded of mixed lithologies	Western Irish Sea Formation - Unit 2b	Low
E08-BH	7.38	9.73	Brown SAND with rare shell fragments and frequent mica fragments	Western Irish Sea Formation - Unit 2b	Low
E08-BH	9.73	11.72	Brown gravelly SAND with frequent shell fragments. Gravel is fine to medium angular to rounded of mixed lithologies	Western Irish Sea Formation - Unit 2b	Low
E08-BH	11.72	13.02	Dark brown slightly silty gravelly SAND with rare shell fragments. Gravel is fine to coarse subangular to subrounded of mixed lithologies	Western Irish Sea Formation - Unit 2b	Low
E08-BH	13.02	16.93	Brown gravelly SAND with frequent shell fragments. Gravel is fine to medium angular to rounded of mixed lithologies	Western Irish Sea Formation - Unit 2b	Low
E08-BH	16.93	17.52	Brown slightly silty SAND with rare shell fragments and frequent mica fragments	Western Irish Sea Formation - Unit 2b	Low
E08-BH	17.52	18.02	No recovery	N/A	Low
E08-BH	18.02	19.54	Brown gravelly SAND with rare shell fragments and frequent mica fragments. Gravel is fine to coarse angular to rounded of mixed lithologies	Western Irish Sea Formation - Unit 2b	Low
E08-BH	19.54	21.06	Light brown slightly silty gravelly SAND with rare shell fragments. Gravel is fine to medium subangular to subrounded of mixed lithologies	Western Irish Sea Formation - Unit 2b	Low
E08-BH	21.06	22.58	Light brown slightly gravelly SAND with rare shell fragments and a thin bed of stiff silty clay. Gravel is fine to medium subrounded of mixed lithologies	Western Irish Sea Formation - Unit 2b	Low
E08-BH	22.58	22.92	Dark greyish brown slightly gravelly SAND with rare shell fragments	Western Irish Sea Formation - Unit 2b	Low
E08-BH	22.92	23.21	Dark greyish brown silty slightly sandy GRAVEL. Gravel is fine to coarse subangular to subrounded of mixed lithologies	Western Irish Sea Formation - Unit 2b	Low
E08-BH	23.21	24.90	Dark greyish brown slightly gravelly SAND. Gravel is fine to coarse subangular to subrounded of mixed lithologies	Western Irish Sea Formation - Unit 2b	Low
E08-BH	24.90	26.46	Brown slightly silty SAND	Western Irish Sea Formation - Unit 2b	Low



ID	Depth from (m)	Depth to (m)	Description	Interpretation	Priority
E08-BH	26.46	29.26	Dark brown gravelly SAND with rare shell fragments. Gravel is fine to coarse subangular to subrounded of mixed lithologies	Western Irish Sea Formation - Unit 2b	Low
E08-BH	29.26	29.42	Dark greyish brown silty SAND with rare shell fragments	Western Irish Sea Formation - Unit 2b	Low
E08-BH	29.42	35.24	Dark greyish brown gravelly SAND with frequent shell fragments. Gravel is fine to medium subangular to subrounded of mixed lithologies	Western Irish Sea Formation - Unit 2b	Low
E08-BH	35.24	36.90	Dark greyish brown slightly gravelly SAND with rare shell fragments	Western Irish Sea Formation - Unit 2b	Low
E08-BH	36.90	38.29	Light brown slightly gravelly silty SAND with rare shell fragments	Western Irish Sea Formation - Unit 2b	Low
E08-BH	38.29	38.78	Greyish brown slightly gravelly slightly silty SAND with rare shell fragments	Western Irish Sea Formation - Unit 2b	Low
E08-BH	38.78	39.30	Dark greyish brown gravelly SAND	Western Irish Sea Formation - Unit 2b	Low
E08-BH	39.30	40.00	Greyish brown slightly gravelly SAND with rare shell fragments	Western Irish Sea Formation - Unit 2b	Low
E08-BH	40.00	40.82	Dark grey gravelly silty SAND	Western Irish Sea Formation - Unit 2b	Low
G04_Alt-BH	0.00	1.55	Dark yellowish brown slightly gravelly silty SAND with frequent shell fragments and a fragment of wood	Seabed sediments	Low
G04_Alt-BH	1.55	6.45	Dark grey slightly gravelly sandy clayey SILT with rare shell fragments and frequent pockets and lenses of clay	Intertidal to shallow marine - 4a	Low
G04_Alt-BH	6.45	9.01	Dark yellowish brown slightly gravelly silty SAND with few shell fragments	Intertidal to shallow marine - 4a	Low
G04_Alt-BH	9.01	10.36	Brown slightly silty SAND with rare shell fragments and frequent mica fragments and abundant fragments of wood and frequent organic matter between 10.09-10.36m	Fluvial to alluvial - Unit 3	Low
G04_Alt-BH	10.36	11.75	Firm foliated reddish brown sandy SILT with rare pockets and lenses of sand	Western Irish Sea Formation - Unit 2b	Low
G04_Alt-BH	11.75	13.83	Greyish brown slightly gravelly silty SAND with frequent shell fragments and a medium bed of firm foliated sandy clayey silt	Western Irish Sea Formation - Unit 2b	Low
G04_Alt-BH	13.83	14.77	Reddish brown silty SAND with rare pockets and lenses of fine sand	Western Irish Sea Formation - Unit 2b	Low
G04_Alt-BH	14.77	15.69	Reddish brown very silty SAND with closely spaced thin laminations of silt and clay	Western Irish Sea Formation - Unit 2b	Low



ID	Depth from (m)	Depth to (m)	Description	Interpretation	Priority
G04_Alt-BH	15.69	16.55	Reddish brown very silty SAND with closely spaced thin laminations of black organic matter and occasional pockets and lenses of clay	Western Irish Sea Formation - Unit 2b	Low
G04_Alt-BH	16.55	17.69	Reddish brown very silty SAND with closely spaced thin laminations of dark reddish brown silt	Western Irish Sea Formation - Unit 2b	Low
G04_Alt-BH	17.69	21.50	Very stiff dark greyish brown sandy CLAY with rare shell fragments and few pockets of silt	Western Irish Sea Formation - Unit 2b	Low
G04_Alt-BH	21.50	27.80	Very stiff gravelly slightly sandy CLAY with rare shell fragments and pockets of silt	Western Irish Sea Formation - Unit 2b	Low
G04_Alt-BH	27.80	30.04	Dark greyish brown slightly silty SAND with few shell fragments and rare thin beds of stiff clay	Western Irish Sea Formation - Unit 2b	Low
G04_Alt-BH	30.04	31.36	Stiff dark grey slightly gravelly slightly sandy clayey SILT with rare shell fragments and few pockets of organic matter	Western Irish Sea Formation - Unit 2b	Low
G04_Alt-BH	31.36	31.96	Dark greyish brown slightly gravelly slightly silty SAND with few shell fragments	Western Irish Sea Formation - Unit 2b	Low
G04_Alt-BH	31.96	32.88	Dark grey silty SAND with rare shell fragments with a medium bed of very stiff clay with pockets of organic matter and sandy silt	Western Irish Sea Formation - Unit 2b	Low
G04_Alt-BH	32.88	33.71	Dark greyish brown slightly silty SAND with few shell fragments	Western Irish Sea Formation - Unit 2a	Low
G04_Alt-BH	33.71	35.34	Dark greyish brown slightly silty gravelly SAND with frequent shell fragments	Western Irish Sea Formation - Unit 2a	Low
G04_Alt-BH	35.34	40.48	Dark greyish brown slightly silty SAND with few shell fragments	Western Irish Sea Formation - Unit 2a	Low
G12-BH	0.00	0.35	Dark greyish brown slightly gravelly silty SAND	Seabed sediments	Low
G12-BH	0.35	1.70	Light yellowish brown slightly gravelly SAND with occasional shell fragments	Seabed sediments	Low
G12-BH	1.70	2.47	Light yellowish brown gravelly SAND with frequent shell fragments	Seabed sediments	Low
G12-BH	2.47	3.69	Stiff to very stiff dark greyish brown CLAY with medium beds of silt and sand	Western Irish Sea Formation - Unit 2b	Low
G12-BH	3.69	5.11	Firm dark greyish brown slightly sandy SILT with medium beds of stiff clay	Western Irish Sea Formation - Unit 2b	Low
G12-BH	5.11	6.01	Dark yellowish brown slightly gravelly SAND with occasional shell fragments	Western Irish Sea Formation - Unit 2b	Low
G12-BH	6.01	7.78	Firm to stiff dark brown CLAY with closely spaced thin beds of sand	Western Irish Sea Formation - Unit 2b	Low



ID	Depth from (m)	Depth to (m)	Description	Interpretation	Priority
G12-BH	7.78	9.55	Firm to stiff foliated dark brown slightly gravelly CLAY	Western Irish Sea Formation - Unit 2b	Low
G12-BH	9.55	11.59	Firm dark greyish brown slightly gravelly slightly sandy SILT with medium spaced thinly laminated sand	Western Irish Sea Formation - Unit 2b	Low
G12-BH	11.59	12.67	Firm dark reddish brown slightly sandy SILT with a medium bed of slightly sandy silty clay with very thin beds of black organic matter	Western Irish Sea Formation - Unit 2b	Low
G12-BH	12.67	14.80	Stiff dark greyish brown slightly gravelly slightly sandy CLAY	Western Irish Sea Formation - Unit 2b	Low
G12-BH	14.80	16.75	Stiff greyish brown slightly sandy slightly gravelly CLAY	Western Irish Sea Formation - Unit 2b	Low
G12-BH	16.75	17.67	Greyish brown clayey SAND with rare shell fragments and thin beds of firm clay	Western Irish Sea Formation - Unit 2b	Low
G12-BH	17.67	28.12	Greyish brown SAND with rare shell fragments with occasional thin beds of clayey sand with frequent black fossilised wood fragments	Western Irish Sea Formation - Unit 2b	Low
G12-BH	28.12	30.80	Light greyish brown slightly gravelly SAND with rare shell fragments	Western Irish Sea Formation - Unit 2b	Low
G12-BH	30.80	31.64	Brownish grey fine SAND	Western Irish Sea Formation - Unit 2b	Low
G12-BH	31.64	33.77	Light brown fine to medium SAND with rare shell fragments	Western Irish Sea Formation - Unit 2b	Low
G12-BH	33.77	36.56	Light greyish brown slightly silty SAND with rare black organic matter	Western Irish Sea Formation - Unit 2b	Low
G12-BH	36.56	38.76	Firm light greyish brown slightly sandy SILT with rare black organic matter	Western Irish Sea Formation - Unit 2b	Low
G12-BH	38.76	39.45	Light greyish brown silty SAND	Western Irish Sea Formation - Unit 2b	Low
G12-BH	39.45	40.47	No recovery	N/A	Low
OSS-01-BH	0.00	0.80	No recovery	N/A	Low
OSS-01-BH	0.80	1.34	Greyish brown gravelly silty SAND with rare shell fragments	Seabed sediments	Low
OSS-01-BH	1.34	2.52	Greyish brown slightly gravelly silty SAND with frequent shell fragments and a wood fragment at 2.24m	Seabed sediments	Low
OSS-01-BH	2.52	2.92	Greyish brown gravelly slightly silty SAND with frequent shell fragments	Seabed sediments	Low
OSS-01-BH	2.92	5.22	Greyish brown slightly silty SAND with occasional mica fragments and frequent shell fragments	Seabed sediments	Low



ID	Depth from (m)	Depth to (m)	Description	Interpretation	Priority
OSS-01-BH	5.22	6.10	Greyish brown gravelly silty SAND with frequent shell fragments	Seabed sediments	Low
OSS-01-BH	6.10	10.82	Greyish brown silty SAND with rare shell fragments and rare thin beds of firm clay	Western Irish Sea Formation - Unit 2b	Low
OSS-01-BH	10.82	18.32	Dark yellowish brown slightly gravelly SAND with occasional to frequent shell fragments with rare fossilised wood fragments and black organic matter	Western Irish Sea Formation - Unit 2b	Low
OSS-01-BH	18.32	24.40	Dark grey silty SAND with occasional black wood fragments	Western Irish Sea Formation - Unit 2b	Low
OSS-01-BH	24.40	27.44	Dark grey silty SAND with closely spaced lenses of medium to coarse sand	Western Irish Sea Formation - Unit 2b	Low
OSS-01-BH	27.44	34.40	Stiff dark grey foliated CLAY with rare thin beds of silty sand	Western Irish Sea Formation - Unit 2a	Low
OSS-01-BH	34.40	36.15	Dark grey slightly sandy clayey SILT with rare gravel clasts	Cardigan Bay Formation	Low
OSS-01-BH	36.15	40.40	Very stiff foliated dark brown slightly sandy slightly gravelly CLAY	Cardigan Bay Formation	Low
OSS-02-BH	0.00	0.62	No recovery	N/A	Low
OSS-02-BH	0.62	5.56	Brown slightly gravelly SAND with rare shell fragments. Gravel is fine to coarse angular to subangular of mixed lithologies	Seabed sediments	Low
OSS-02-BH	5.56	6.08	Brown slightly gravelly SAND with rare shell fragments and closely spaced lenses of silty sand	Intertidal to shallow marine - 4a	Low
OSS-02-BH	6.08	7.99	Brown SAND with rare shell fragments and occasional pockets of black organic material	Intertidal to shallow marine - 4a	Low
OSS-02-BH	7.99	8.96	Light brown SAND with closely spaced lenses of silty sand	Intertidal to shallow marine - 4a	Low
OSS-02-BH	8.96	10.12	Dark grey silty SAND with closely spaced very thin beds of clay and frequent wood fragments	Fluvial to alluvial - Unit 3	Low
OSS-02-BH	10.12	10.64	No recovery	N/A	Low
OSS-02-BH	10.64	13.89	Dark grey silty SAND with a thin bed of sand with frequent shell fragments	Western Irish Sea Formation - Unit 2b	Low
OSS-02-BH	13.89	15.30	Greyish brown slightly gravelly SAND with occasional lenses of sand and clay	Western Irish Sea Formation - Unit 2b	Low
OSS-02-BH	15.30	16.05	Brown slightly gravelly SAND with frequent shell fragments. Gravel is fine to medium subangular of sandstone	Western Irish Sea Formation - Unit 2b	Low



ID	Depth from (m)	Depth to (m)	Description	Interpretation	Priority
OSS-02-BH	16.05	16.72	No recovery	N/A	Low
OSS-02-BH	16.72	17.07	Dark greyish brown fine to medium SAND	Western Irish Sea Formation - Unit 2b	Low
OSS-02-BH	17.07	18.24	No recovery	N/A	Low
OSS-02-BH	18.24	18.94	Dark yellowish brown SAND with frequent shell fragments with closely spaced thick laminae and thin beds of silty sand	Western Irish Sea Formation - Unit 2b	Low
OSS-02-BH	18.94	20.06	Dark greyish brown slightly silty SAND with rare shell fragments	Western Irish Sea Formation - Unit 2b	Low
OSS-02-BH	20.06	25.15	Dark grey silty SAND with rare black speckling and black wood fragments	Western Irish Sea Formation - Unit 2b	Low
OSS-02-BH	25.15	25.84	Dark grey silty SAND with medium spaced thin beds of firm sandy silty laminated clay	Western Irish Sea Formation - Unit 2b	Low
OSS-02-BH	25.84	27.36	Dark grey very silty SAND	Western Irish Sea Formation - Unit 2b	Low
OSS-02-BH	27.36	28.01	Dark grey slightly silty SAND with rare shell fragments	Western Irish Sea Formation - Unit 2a	Low
OSS-02-BH	28.01	29.08	Light yellowish brown silty SAND with rare black speckling	Western Irish Sea Formation - Unit 2a	Low
OSS-02-BH	29.08	30.90	Dark grey slightly silty SAND with rare shell fragments	Western Irish Sea Formation - Unit 2a	Low
OSS-02-BH	30.90	32.82	Greyish brown slightly silty SAND with a thick bed of dark grey clayey sand	Western Irish Sea Formation - Unit 2a	Low
OSS-02-BH	32.82	34.33	Greyish brown silty SAND with occasional pockets of black organic material	Western Irish Sea Formation - Unit 2a	Low
OSS-02-BH	34.33	41.04	Dark greyish brown slightly silty SAND with rare shell fragments	Western Irish Sea Formation - Unit 2a	Low
OSS-03-BH	0.00	0.50	Soft dark greyish brown slightly gravelly slightly sandy CLAY	Fluvial to alluvial - Unit 3	Low
OSS-03-BH	0.50	2.40	Yellowish brown SAND with occasional shell fragments and black organic matter	Fluvial to alluvial - Unit 3	Low
OSS-03-BH	2.40	4.00	Light yellowish brown clayey SAND with occasional shell fragments with rare lenses of soft reddish clay	Fluvial to alluvial - Unit 3	Low
OSS-03-BH	4.00	5.40	Yellowish brown SAND with occasional shell fragments	Western Irish Sea Formation - Unit 2b	Low
OSS-03-BH	5.40	10.84	Dark greyish brown SAND with frequent shell fragments and frequent fragments of fossilised wood	Western Irish Sea Formation - Unit 2b	Low



ID	Depth from (m)	Depth to (m)	Description	Interpretation	Priority
OSS-03-BH	10.84	11.04	Dark greyish brown very silty SAND	Western Irish Sea Formation - Unit 2b	Low
OSS-03-BH	11.04	11.83	Greyish brown silty SAND with rare closely spaced thin laminations of soft silty clay	Western Irish Sea Formation - Unit 2b	Low
OSS-03-BH	11.83	12.86	Dark yellowish brown slightly silty SAND with closely spaced thin laminae of soft reddish brown clay and frequent fragments of black organic matter	Western Irish Sea Formation - Unit 2b	Low
OSS-03-BH	12.86	15.20	Firm friable greyish brown slightly sandy SILT	Western Irish Sea Formation - Unit 2b	Low
OSS-03-BH	15.20	16.70	Stiff to very stiff foliated dark brown slightly sandy CLAY with occasional lenses of sandy silt	Western Irish Sea Formation - Unit 2a	Low
OSS-03-BH	16.70	18.50	Stiff foliated brown silty CLAY with occasional very closely spaced thin laminae of silt	Western Irish Sea Formation - Unit 2a	Low
OSS-03-BH	18.50	20.57	Stiff foliated brown slightly sandy silty CLAY with frequent lenses of light grey silt	Western Irish Sea Formation - Unit 2a	Low
OSS-03-BH	20.57	27.20	Stiff foliated brown slightly sandy CLAY with frequent lenses of silty sand	Western Irish Sea Formation - Unit 2a	Low
OSS-03-BH	27.20	33.20	Very stiff foliated greyish brown slightly sandy CLAY with frequent very closely spaced thin laminae of grey fine sand	Western Irish Sea Formation - Unit 2a	Low
OSS-03-BH	33.20	40.40	Stiff foliated greyish brown CLAY with frequent closely spaced thin laminae of grey fine sand and silt	Western Irish Sea Formation - Unit 2a	Low



**Annex 7: Seabed features of archaeological potential within the array site**

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70000	Dark reflector	311547	5891783	A2_l	4.2	0.6	0.4	-	-	An angular dark reflector with a bright shadow. Large and distinct in comparison to surrounding boulders. Not definitively identified in the MBES data. No anomalous features were identified in the 2013 Mag. data contact list. This position was not covered by 2021 Mag. data. Possible natural feature or may be possible debris.	SSS	2021_MMT_SSS_B01_NW_RR	CWP Array	-
70001	Dark reflector	312224	5891753	A2_l	14.8	9.9	3.7	-9.3	-	Three distinct rounded dark reflectors with bright shadow, with the largest measuring 10.6 x 3.2 x 2.1 m. Identified in the 2021 MBES data as a highly angular and irregular mound with a triangular top and some additional surrounding angular features. Smaller feature <b>70002</b> is located approximately 50 m east. No anomalous features were identified in the 2013 Mag. data contact list. This position was not covered by 2021 Mag. data. Possible natural feature or may be possible debris.	SSS, MBES	2021_MMT_SSS_B01_NW_RR, 2021_MMT_MBES_B01_RE, 2021_MMT_MBES_B01NS_RR	CWP Array	-
70002	Dark reflector	312276	5891751	A2_l	4.1	3.2	1.1	-	-	A distinct angular dark reflector with a bright shadow. Observed in the MBES data as a distinct sub-angular mound. Located approximately 50 m east of larger feature <b>70001</b> . No anomalous features were identified in the 2013 Mag. data contact list. This position was not covered by 2021 Mag. data. Possible natural feature or may be possible debris.	SSS	2021_MMT_SSS_B01_NW_RR	CWP Array	-
70003	Magnetic	310201	5891848	A2_h	-	-	-	-	59	A negative monopole identified in the 2013 data contact list. No anomalous features were identified in the SSS or MBES data at this location. This position was not covered by 2021 Mag. data. Retained as a precaution. May represent possible ferrous debris either buried or with no surface expression.	Mag.	2013_Mag_Osiris	CWP Array	Osiris_M1
70004	Debris	311880	5891711	A2_h	4.4	3.8	1.6	-10.0	-	A small but prominent, roughly square mound with slightly stepped sides and situated in some surrounding scour. No anomalous features were identified in the SSS or 2013 Mag. data at this location. This position was not covered by 2021 Mag. data. Interpreted as possible debris.	MBES	2021_MMT_MBES_B01_RE, 2021_MMT_MBES_B01NS_RR	CWP Array	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70005	Rope/chain	310231	5891648	A2_h	26.1	0.3	0.3	-11.0	26	A distinct linear dark reflector with a bright shadow on an approximate north to south alignment in the SSS data. Appears slightly irregular at either end which may indicate further objects or entangled further length. Identified in the MBES data as a very slight linear mound with larger irregular mounds at each end. This location was not covered by 2021 Mag. data but the northern end of this feature is associated with a magnetic anomaly identified in the 2013 Mag. data contact list, indicating ferrous material may be present at this location. Interpreted as possible length of rope or chain, with some possible ferrous material present at the northern end.	SSS, MBES, Mag.	2021_MMT_SSS_B01_NW_RR, 2021_MMT_MBES_B01_RE, 2021_MMT_MBES_B01NS_RR, 2013_Mag_Osiris	CWP Array	Osiris_M3
70006	Magnetic	312018	5891217	A2_h	-	-	-	-	53	Asymmetric dipole identified in the 2013 Mag. data contact list. No anomalous features were identified in the SSS or MBES data at this location. This position was not covered by 2021 Mag. data. Retained as a precaution. May represent possible ferrous debris either buried or with no surface expression.	Mag.	2013_Mag_Osiris	CWP Array	Osiris_M6
70007	Magnetic	309985	5890004	A2_l	-	-	-	-	23	Asymmetric dipole identified in the 2013 data contact list. No anomalous features were identified in the SSS or MBES data at this location. This position was not covered by 2021 Mag. data. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2013_Mag_Osiris	CWP Array	Osiris_M8
70008	Bright reflector	310082	5889769	A2_l	2.2	0.5	0.5	-	-	An elongate angular shadow of a very indistinct object in the SSS data. Visible in the MBES data as an elongate mound within scour. No anomalous features were identified in the 2013 Mag. data contact list. This position was not covered by 2021 Mag. data. Possible natural feature or may be possible debris.	SSS	2021_MMT_SSS_B01_NW_RR	CWP Array	-
70009	Dark reflector	311485	5889762	A2_l	2.9	0.6	0.7	-	-	An elongate, angular dark reflector, possibly hollow, with an irregular shadow within some slight scour. Visible in the MBES data as an elongate mound with some smaller mounds directly to the north, within scour. No anomalous features were identified in the 2013 Mag. data contact list. This position was not covered by 2021 Mag. data. Possible natural feature or may be possible debris.	SSS	2021_MMT_SSS_B01_NW_RR	CWP Array	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70010	Dark reflector	311430	5889677	A2_I	3.8	3.6	0.3	-	-	A sub-rounded edge of raised seabed comprising indistinct dark reflectors causing a curved shadow, with no distinct opposite edge and some possible central internal shadow or depression. Visible in the MBES data as a sub-angular mound within some slight scour. No anomalous features were identified in the 2013 Mag. data contact list. This position was not covered by 2021 Mag. data. Possible natural feature or may be possible debris.	SSS	2021_MMT_SSS_B01_NW_RR	CWP Array	-
70011	Dark reflector	311958	5889457	A2_I	2.9	1.7	1.0	-	9	An angular dark reflector with long, bright shadow. Visible in the MBES data as a distinct sub-angular mound with some slight scour. Associated with an asymmetric dipole identified in the 2013 Mag. data contact list. This position was not covered by 2021 Mag. data. Possible natural feature with ferrous content or may be possible ferrous debris.	SSS, Mag.	2021_MMT_SSS_B01_NW_RR, 2013_Mag_Osiris	CWP Array	Osiris_M9
70012	Seabed disturbance	311382	5889077	A2_I	5.0	3.8	1.0	-	12	Small seabed disturbance comprising at least three indistinct dark reflectors with shadow, with largest measuring 1.0 x 0.6 x 1.0 m. Visible in the MBES data as a distinct elongate mound within scour and some surrounding small rounded mounds. Associated with a positive monopole identified in the 2013 Mag. data contact list. This position was not covered by 2021 Mag. data. Possible natural feature with ferrous content or may be possible ferrous debris.	SSS, Mag.	2021_MMT_SSS_B01_NW_RR, 2013_Mag_Osiris	CWP Array	Osiris_M10
70013	Seabed disturbance	310563	5888958	A2_I	17.7	4.7	0.3	-	-	A seabed disturbance comprising an area of dark reflectors of varying size and shape, with the most distinct measuring 3.1 x 1.1 m. Visible in the MBES data as a series of small mounds, slightly anomalous for the area. No anomalous features were identified in the 2013 Mag. data contact list at this location and this position was not covered by 2021 Mag. data. Possible natural feature or may be possible debris.	SSS	2021_MMT_SSS_B01_NW_RR	CWP Array	-
70014	Magnetic	311282	5888841	A2_I	-	-	-	-	22	A small asymmetric dipole with peak and trough on one isolated profile line in the 2021 Mag. data. Associated with an asymmetric dipole identified in the 2013 Mag. data contact list (4 nT). No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B01_RE, 2013_Mag_Osiris	CWP Array	Osiris_M11



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70015	Dark reflector	310581	5888597	A2_I	4.7	1.2	0.0	-	-	A very faint curvilinear dark reflector with no clear shadow. Appears indistinct in an area of irregular seabed. Observed as a small elongate mound in the MBES data. No anomalous features were identified in the 2013 Mag. data at this location and this position was not covered by 2021 Mag. data. Possible natural feature or may be possible debris.	SSS	2021_MMT_SSS_B01_NW_RR	CWP Array	-
70016	Dark reflector	309795	5888052	A2_I	1.2	0.9	0.2	-	-	A slightly indistinct elongate dark reflector with a distinct shadow. Located in an area of featureless seabed. No anomalous features were identified in the MBES or 2013 Mag. data. This position was not covered by 2021 Mag. data. Possible natural feature or may be possible debris.	SSS	2021_MMT_SSS_B01_NW_RR	CWP Array	-
70017	Dark reflector	310398	5888248	A2_I	5.4	1.7	1.7	-10.4	-	A rounded dark reflector with a bright shadow and significant height. Anomalous to surrounding rocks. Identified in the MBES data as a rounded mound with a highly irregular surface. Some minor scour is visible surrounding the feature. No anomalous features were identified in the 2013 Mag. data contact list. This position was not covered by 2021 Mag. data. Possible natural feature or may be possible debris.	SSS, MBES	2021_MMT_SSS_B01_NW_RR, 2021_MMT_MBES_B01_RE, 2021_MMT_MBES_B01NS_RR	CWP Array	-
70018	Dark reflector	310885	5888159	A2_I	2.6	1.2	0.9	-	-	An irregularly shaped dark reflector, possibly hollow, with a bright shadow. Visible in the MBES data as a small cluster of mounds with a hollow in the centre. No anomalous features were identified in the 2013 Mag. data contact list. This position was not covered by 2021 Mag. data. Possible natural feature or may be possible debris.	SSS	2021_MMT_SSS_B01_NW_RR	CWP Array	-
70019	Dark reflector	311966	5888143	A2_I	7.9	1.0	0.2	-	-	A curved elongate dark reflector with a bright narrow shadow. The feature is situated within an area of sand ripples, lying perpendicular. No anomalous features were identified in the MBES or 2013 Mag. data contact list. This position was not covered by 2021 Mag. data. Possible natural feature or may be possible debris.	SSS	2021_MMT_SSS_B01_NW_RR	CWP Array	-
70020	Dark reflector	311994	5887986	A2_I	2.9	2.5	1.1	-	-	An irregular dark reflector with a bright shadow. Variable surface reflectivity may indicate multiple segments. Visible in the MBES data as a small, elongate, segmented mound with some surrounding scour. No anomalous features were identified in the 2013 Mag. data contact list. This position was not covered by 2021 Mag. data. Possible natural feature or may be possible debris.	SSS	2021_MMT_SSS_B01_NW_RR	CWP Array	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70021	Seabed disturbance	311163	5887849	A2_I	19.1	16.8	1.4	-11.7	-	A seabed disturbance comprising a fairly compact area of irregular dark reflectors with shadow. Largest clear dark reflector measures 3.1 x 0.7 x 0.3 m. Also identified in the MBES data as a cluster of angular mounds. No anomalous features were identified in the 2013 Mag. data contact list. This position was not covered by 2021 Mag. data. Possible natural feature or may be possible debris.	SSS, MBES	2021_MMT_SSS_B01_NW_RR, 2021_MMT_MBES_B01_RE, 2021_MMT_MBES_B01NS_RR	CWP Array	-
70022	Dark reflector	311141	5887828	A2_I	3.2	1.7	1.1	-	-	A distinct rounded dark reflector with a bright shadow. Located approximately 20.0 m south-west of 70021 and may be related. Visible in the MBES data as an elongate mound. No anomalous features were identified in the 2013 Mag. data contact list. This position was not covered by 2021 Mag. data. Possible natural feature or may be possible debris.	SSS	2021_MMT_SSS_B01_NW_RR	CWP Array	-
70023	Dark reflector	311176	5887766	A2_I	6.2	1.8	0.9	-	-	An indistinct elongate dark reflector with a bright shadow. The shadow is slightly irregular, possibly indicating a more complex anomaly. Also visible in the MBES data as an elongate, irregular mound, anomalous for the area. No anomalous features were identified in the 2013 Mag. data contact list. This position was not covered by 2021 Mag. data. Possible natural feature or may be possible debris.	SSS	2021_MMT_SSS_B01_NW_RR	CWP Array	-
70024	Magnetic	311251	5887789	A2_I	-	-	-	-	8	Asymmetric dipole identified in the 2013 data contact list. No anomalous features were identified in the SSS or MBES data at this location. This position was not covered by 2021 Mag. data. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2013_Mag_Osiris	CWP Array	Osiris_M17
70025	Seabed disturbance	310916	5887577	A2_I	19.4	1.1	0.8	-	-	A seabed disturbance comprising a series of elongate dark reflectors with bright shadow, the largest measuring 4.3 x 0.5 x 0.8 m. Visible in the MBES data as a series of four small elongate mounds with some distinct surrounding scour. No anomalous features were identified in the 2013 Mag. data contact list. This position was not covered by 2021 Mag. data. Possible natural feature or may be possible debris.	SSS	2021_MMT_SSS_B01_NW_RR	CWP Array	-
70026	Magnetic	311841	5887469	A2_I	-	-	-	-	8	Negative monopole identified in the 2013 data contact list. No anomalous features were identified in the SSS or MBES data at this location. This position was not covered by 2021 Mag. data. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2013_Mag_Osiris	CWP Array	Osiris_M19



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70027	Magnetic	309809	5887379	A2_I	-	-	-	-	10	Positive monopole identified in the 2013 data contact list. No anomalous features were identified in the SSS or MBES data at this location. This position was not covered by 2021 Mag. data. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2013_Mag_Osiris	CWP Array	Osiris_M20
70028	Dark reflector	312200	5887031	A2_I	6.8	4.5	1.1	-	-	An angular dark reflector with a distinct, double tapered shadow. Adjacent to another smaller dark reflector (70029) and may be associated. Visible in the MBES data as an irregular mound with a smaller mound adjacent. No anomalous features were identified in the 2013 Mag. data contact list. This position was not covered by 2021 Mag. data. Possible natural feature or may be possible debris.	SSS	2021_MMT_SSS_B01_RE, 2021_MMT_SSS_B0X_RE	CWP Array	-
70029	Dark reflector	312198	5887037	A2_I	3.7	0.8	0.6	-	-	An elongate dark reflector with a large bright pointed shadow, 6 m north from larger feature (70028). Visible in the MBES data as a small elongate irregular mound with a larger mound adjacent. No anomalous features were identified in the 2013 Mag. data contact list at this location. This position was not covered by 2021 Mag. data. Possible natural feature or may be possible debris.	SSS	2021_MMT_SSS_B0X_RE	CWP Array	-
70030	Magnetic	309610	5887063	A2_h	-	-	-	-	214	Broad negative monopole indicating a broad feature, that appears not to extend over adjacent lines, identified in the 2013 data contact list. No anomalous features were identified in the 2021 SSS or 2021 MBES data at this location, but is at the position of a large sand wave visible in the 2021 MBES data. This position was not covered by 2021 Mag. data. May represent possible ferrous debris either buried or with no surface expression.	Mag.	2013_Mag_Osiris	CWP Array	Osiris_M23
70031	Dark reflector	310749	5886887	A2_I	10.1	1.9	0.8	-12.7	-	A complex dark reflector with bright shadow. Possibly three separate features, but unclear. Located in an area of irregular seabed with frequent rocks. Also identified in the MBES data as a slightly irregular, elongate mound with a double peak. No anomalous features were identified in the 2013 Mag. data contact list at this location. This position was not covered by 2021 Mag. data. Possible natural feature or may be possible debris.	SSS, MBES	2021_MMT_SSS_B01_NW_RR, 2021_MMT_MBES_B01_RE, 2021_MMT_MBES_B01NS_RR	CWP Array	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70032	Debris field	311740	5886823	A2_h	28.0	5.6	1.1	-12.7	-	A highly irregular, elongate series of small mounds, which curved northwards slightly at the eastern end identified in the MBES data. These features are compact and located in an area of otherwise relatively featureless seabed, although some natural mounds are present. This feature was not fully imaged in the SSS data but parts visible appear as a cluster of dark reflectors of varying sizes, shapes and heights. No anomalous features were identified in the 2013 Mag. data contact list. This position was not covered by 2021 Mag. data. Based on its form in the MBES data, this feature has been interpreted as an area of possible debris.	MBES	2021_MMT_MBES_B01_RE, 2021_MMT_MBES_B01NS_RR	CWP Array	-
70033	Dark reflector	309777	5886799	A2_l	2.0	0.3	0.4	-	-	A distinct dark reflector with a slightly irregular edge and bright shadow. Visible in the MBES data as a small round mound within scour. No anomalous features were identified in the 2013 Mag. data contact list at this location. This position was not covered by 2021 Mag. data. Possible natural feature or may be possible debris.	SSS	2021_MMT_SSS_B01_NW_RR	CWP Array	-
70034	Debris field	310835	5886452	A2_h	12.9	8.0	3.0	-11.4	-	A very tall, highly irregular and sub-angular dark reflector measuring 6.3 x 2.4 x 3.0 m, surrounded by multiple smaller dark reflectors measuring less than a metre. Also identified in the MBES data as a compact area of smaller mounds surrounding a larger angular mound aligned north-west to south-east. Very anomalous to the surrounding seabed. No anomalous features were identified in the 2013 Mag. data contact list at this location. This position was not covered by 2021 Mag. data. Interpreted as an area of possible debris.	SSS, MBES	2021_MMT_SSS_B01_RE, 2021_MMT_SSS_B01_NW_RR, 2021_MMT_MBES_B01_RE, 2021_MMT_MBES_B01NS_RR	CWP Array	-
70035	Debris field	310571	5886219	A2_h	8.3	6.1	0.7	-11.7	-	A compact area of small angular and irregular dark reflectors with shadow with some possible sediment build up in the centre. On an east to west alignment with the east end appearing rounded and the west end more square. Largest dark reflector measures 1.1 x 0.6 x 0.5 m. Also identified in the MBES data as a highly irregular, sub-rounded mound which is relatively distinct. Some minor scour is present surrounding the feature. No anomalous features were identified in the 2013 Mag. data contact list at this location. This position was not covered by 2021 Mag. data. Interpreted as an area of possible debris.	SSS, MBES	2021_MMT_SSS_B01_NW_RR, 2021_MMT_MBES_B01_RE, 2021_MMT_MBES_B01NS_RR	CWP Array	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70036	Bright reflector	309722	5885905	A2_l	1.2	0.8	0.2	-	-	An irregularly shaped bright reflector with irregular shadow located at the edge of an area of irregular seabed. Also visible in the MBES data as a small rounded mound within scour. No anomalous features were identified in the 2013 Mag. data at this location. This position was not covered by 2021 Mag. data. Possible natural feature or may be possible debris.	SSS	2021_MMT_SSS_B01_NW_RR	CWP Array	-
70037	Magnetic	310344	5885717	A2_l	-	-	-	-	6	Asymmetric dipole and interpreted as possibly geological, as identified in the 2013 data contact list. No anomalous features were identified in the SSS or MBES data at this location. This position was not covered by 2021 Mag. data. Retained as a precaution. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2013_Mag_Osiris	CWP Array	Osiris_M29
70038	Seabed disturbance	310080	5885526	A2_l	20.6	12.6	0.2	-14.1	19	A seabed disturbance comprising a distinct area of roughly curvilinear mounds arranged in an approximate parallelogram form, with a featureless area of seabed in the centre. The feature is surrounded by small rounded mounds, which are likely natural. No anomalous features were identified in the SSS data at this location. Associated with an asymmetric dipole identified in the 2013 data contact list. This position was not covered by 2021 Mag. data. May be a natural feature with ferrous content or may be possible ferrous debris.	MBES, Mag.	2021_MMT_MBES_B01_RE, 2021_MMT_MBES_B01NS_RR, 2013_Mag_Osiris	CWP Array	Osiris_M32
70039	Rope/chain	311149	5885700	A2_h	26.7	0.6	0.1	-	-	An indistinct linear dark reflector with a more prominent north-east extents and a more distinct west side. No anomalous features were identified in the MBES or 2013 Mag. data at this location. This position was not covered by 2021 Mag. data. Interpreted as a possible length of rope or chain.	SSS	2021_MMT_SSS_B01_NW_RR	CWP Array	-
70040	Debris field	311209	5885554	A1	23.5	18.5	0.6	-13.7	389	An area of irregular seabed visible as a multitude of small angular dark reflectors with shadow in the SSS data. There appears to be scour on the east side. Most distinct dark reflector measures 3.3 x 0.3 x 0.2 m. Also identified in the MBES data as a highly irregular, sub-rounded mound with an irregular surface. Some sediment build-up is visible in the immediate surroundings indicating the full extents of this feature may be buried. Associated with a large asymmetric dipole with peak and trough on one profile line identified in the 2021 Mag. data. Also identified in the 2013 contact list (182 nT). Interpreted as an area of partially buried ferrous debris of unknown origin.	SSS, MBES, Mag.	2021_MMT_MBES_B01_RE, 2021_MMT_MBES_B01NS_RR	CWP Array	Osiris_M31



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70041	Seabed disturbance	310639	5885414	A2_I	54.8	48.8	0.4	-14.5	-	A seabed disturbance comprising a large, irregular ring feature consisting of a low, partially complete mound (less distinct in the northern and southern section) in the MBES data surrounding an irregular, central mound, measuring approximately 11.5 m x 4.7 m x 0.4 m as identified in the SSS data. This feature is one of two similar features with 70042, approximately 12 m apart. No anomalous features were identified in the 2013 Mag. data contact list. This position was not covered by 2021 Mag. data. Possibly natural but may be of palaeogeographic interest.	SSS, MBES	2021_MMT_SSS_B01_NW_RR, 2021_MMT_MBES_B01_RE, 2021_MMT_MBES_B01NS_RR	CWP Array	-
70042	Seabed disturbance	310684	5885369	A2_I	45.4	35.2	0.5	-14.7	-	A seabed disturbance comprising a large, irregular ring feature consisting of a low mound identified in the SSS and MBES data surrounding an irregular, central mound, measuring approximately 14 m x 10 m x 0.5 m. This feature is one of two similar features with 70041, approximately 12 m apart. No anomalous features were identified in the 2013 Mag. data contact list. This position was not covered by 2021 Mag. data. Possibly natural but may be of palaeogeographic interest.	SSS, MBES	2021_MMT_SSS_B01_RE, 2021_MMT_MBES_B01_RE, 2021_MMT_MBES_B01NS_RR	CWP Array	-
70043	Dark reflector	310824	5885359	A2_I	3.0	0.5	0.7	-	-	An elongate dark reflector with a bright shadow. Located in an area of irregular seabed and sand ripples. Observed in the MBES data as a small sub-rounded mound. No anomalous features were identified in the 2021 Mag. data. Possible natural feature or may be possible non-ferrous debris.	SSS	2021_MMT_SSS_B01_NW_RR	CWP Array	-
70044	Dark reflector	310930	5885145	A2_I	3.1	2.6	0.5	-14.2	-	A sub-rounded dark reflector with bright, flared shadow. Identified in the MBES data as a small sub-angular mound with tapering height. No anomalous features were identified in the 2021 Mag. data. Possible natural feature or may be possible non-ferrous debris.	SSS, MBES	2021_MMT_SSS_B01_NW_RR, 2021_MMT_MBES_B01_RE, 2021_MMT_MBES_B01NS_RR	CWP Array	-
70045	Rope/chain	310456	5884871	A2_h	110.8	0.3	0.1	-	-	A very long, curvilinear dark reflector with a shadow of varying height along its length and may have an object attached at one end, though this cannot be certain. This location is not covered by the MBES or 2021 Mag. data. A magnetic anomaly identified in the 2013 data contact list which is interpreted as separate is located approximately 30 m SSE (70046). Interpreted as a possible length of rope or chain.	SSS	2021_MMT_SSS_B01_RE	CWP Array	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70046	Magnetic	310463	5884787	A2_I	-	-	-	-	8	Dipole identified in the 2013 data contact list. No anomalous features were identified in the SSS or MBES data at this location. This position was not covered by 2021 Mag. data. Located 30 m SSE of rope/chain anomaly 70045. May represent possible ferrous debris either buried or with no surface expression.	Mag.	2013_Mag_Osiris	CWP Array	Osiris_M38
70047	Dark reflector	310099	5884609	A2_I	2.5	0.5	0.5	-	-	An elongate dark reflector with a bright shadow. Visible in the MBES data a small sub-rounded mound. No anomalous features were identified in the 2021 Mag. data. Possible natural feature or may be possible non-ferrous debris.	SSS	2021_MMT_SSS_B01_NW_RR	CWP Array /ECR	-
70048	Rope/chain	310365	5884504	A2_h	20.0	0.2	0.1	-	-	A curved linear dark reflector with a bright narrow shadow. Very indistinct in an area of clear seabed. No anomalous features were identified in the MBES or 2021 Mag. data at this location. Possible length of non-ferrous rope or chain.	SSS	2021_MMT_SSS_B01_NW_RR	CWP Array	-
70049	Seabed disturbance	312012	5884668	A2_I	30.8	16.0	0.2	-15.6	-	Irregular seabed disturbance comprising an irregular mound, appears as a large hollow ring to the east with a extended mound to the west. No anomalous features were identified in the SSS or 2021 Mag. data at this location. Possibly natural but may be of palaeogeographic interest.	MBES	2021_MMT_MBES_B01_RE, 2021_MMT_MBES_B01NS_RR	CWP Array	-
70050	Magnetic	310810	5884393	A2_I	-	-	-	-	20	A small negative monopole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B01_RE	CWP Array	-
70051	Magnetic	310684	5884301	A2_I	-	-	-	-	18	A small asymmetric dipole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B01_RE	CWP Array	-
70052	Rope/chain	311252	5884153	A2_h	16.1	0.1	0.1	-	-	A curved linear dark reflector with a bright narrow shadow. Appears distinct in an area of irregular seabed. No anomalous features were identified in the MBES or 2021 Mag. data at this location. Possible length of non-ferrous rope or chain.	SSS	2021_MMT_SSS_B01_NW_RR	CWP Array	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70053	Rope/chain	311530	5884095	A2_h	32.5	0.9	0.1	-	15	A long, highly curvilinear dark reflector with a short, intermittent shadow. The feature is unclear in places and may be partially buried. Tentatively visible in the MBES data as a thin, curvilinear mound. Associated with a small, broad, positive, complex monopole with peak and trough on one profile line identified in the 2021 Mag. data. Negative monopole 20 m east which could be related or associated (70054) but cannot be certain. Possible length of partially ferrous rope or chain.	SSS, Mag.	2021_MMT_SSS_B01_RE, 2021_MMT_Mag_B01_RE	CWP Array	-
70054	Magnetic	311554	5884078	A2_l	-	-	-	-	11	A small negative monopole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location, though a rope/chain feature (70053) is located approximately 20 m west and maybe associated but cannot be certain. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B01_RE	CWP Array	-
70055	Debris	312107	5884052	A2_h	4.5	0.6	0.1	-	-	A short, slightly curved and very narrow linear dark reflector with a short shadow. Tentatively seen in the MBES data as a thin, curvilinear mound. No anomalous features were identified in the 2021 Mag. data at this location. Interpreted as possible non-ferrous debris.	SSS	2021_MMT_SSS_B01_RE	CWP Array	-
70056	Magnetic	309922	5883691	A2_l	-	-	-	-	21	A small negative monopole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B01_RE	CWP Array	-
70057	Rope/chain	309536	5883238	A2_h	146.2	0.5	0.1	-	26	A very long curvilinear dark reflector, slightly variable in width, with a very short shadow. A possible thicker part (2.7 x 0.6 m), may indicate a possible object along the length. The feature is highly curvilinear towards the east. Likely continues out of the study area. Associated with a small positive monopole identified toward the south extents indicating the presence of ferrous material at this location. Interpreted as possible length of partially ferrous rope or chain.	SSS, Mag.	2021_MMT_SSS_B01_RE, 2021_MMT_Mag_B01_RE	CWP Array	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70058	Magnetic	309591	5883233	A2_l	-	-	-	-	6	A small negative monopole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location but located 14 m south-east of anomaly <b>70057</b> and may indicate further ferrous material. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B01_RE	CWP Array	-
70059	Magnetic	309713	5883179	A2_l	-	-	-	-	32	A small asymmetric dipole with peak and trough on one profile line in the 2021 Mag. data, with a larger negative response ( <b>70060</b> ) directly adjacent. No anomalous features were identified in the SSS or MBES data at this location. May represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B01_RE	CWP Array	-
70060	Magnetic	309714	5883189	A2_h	-	-	-	-	67	A medium negative monopole with peak and trough on one profile line in the 2021 Mag. data, with a small asymmetric dipole ( <b>70059</b> ) directly adjacent. No anomalous features were identified in the SSS or MBES data at this location. May represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B01_RE	CWP Array	-
70061	Magnetic	309752	5883148	A2_l	-	-	-	-	34	A small asymmetric dipole with peak and trough on one profile line in the 2021 Mag. data. Possibly forming a trend with <b>70059</b> and <b>70060</b> . No anomalous features were identified in the SSS or MBES data at this location. May represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B01_RE	CWP Array	-
70062	Magnetic	310037	5883072	A2_h	-	-	-	-	52	A medium positive monopole with peak and trough on one profile line in the 2021 Mag. data. On alignment with trend to west ( <b>70059</b> - <b>70061</b> ) but isolated. No anomalous features were identified in the SSS or MBES data at this location. May represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B01_RE	CWP Array	-
70063	Mound	309657	5883025	A2_l	4.9	2.2	0.5	-26.0	-	Small angular and elongate mound with some very slight surrounding scour situated at the base of a slope. No anomalous features were identified in the SSS or 2021 Mag. data at this location. Possible natural feature or may be possible non-ferrous debris.	MBES	2021_MMT_MBES_B01_RE, 2021_MMT_MBES_B01NS_RR	CWP Array	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70064	Magnetic	311530	5882880	A2_h	-	-	-	-	79	A medium, asymmetric dipole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B01_RE	CWP Array	-
70065	Rope/chain	312010	5882843	A2_h	19.3	0.4	0.1	-	-	A long, narrow, curvilinear dark reflector with a short shadow along its length. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible length of non-ferrous rope or chain	SSS	2021_MMT_SSS_B01_RE	CWP Array	-
70066	Dark reflector	309558	5882803	A2_l	2.1	1.9	0.6	-	11	A small, sub-rounded dark reflector with a clear, relatively long and slightly irregular shadow in the SSS data. Identified in the MBES data as a small sub-angular mound with tapering height on the edge of a slope. Associated with a small, broad negative monopole with peak and trough on one profile line in the Mag. data, though this may be related to the slope, rather than the actual feature. A second object (70067) is located approximately 15 m south-west and is and possibly related. Possible natural feature with ferrous content or may be possible debris.	SSS, MBES, Mag.	2021_MMT_SSS_B01_RE, 2021_MMT_MBES_B01_RE, 2021_MMT_MBES_B01NS_RR, 2021_MMT_Mag_B01_RE	CWP Array	-
70067	Dark reflector	309542	5882796	A2_l	4.1	2.5	0.3	-25.0	-	A sub-angular, irregular dark reflector with a short but slightly jagged shadow in the SSS data. Also identified in the MBES data as a small elongate and irregular mound on the edge of a slope. No anomalous features were identified in the 2021 Mag. data at this location. A second object (70066) is located approximately 15 m north-east and is and possibly related. Possible natural feature may be possible non-ferrous debris.	SSS, MBES	2021_MMT_SSS_B01_RE, 2021_MMT_MBES_B01_RE, 2021_MMT_MBES_B01NS_RR	CWP Array	-
70068	Mound	309496	5882748	A2_l	4.3	2.8	0.4	-26.0	-	Small elongate mound on the edge of a slope identified in the MBES data. No anomalous features were identified in the SSS or Mag. data at this location. Approximately 65 m south-west of anomalies 70066 and 70067. Possible natural feature may be possible non-ferrous debris.	MBES	2021_MMT_MBES_B01_RE, 2021_MMT_MBES_B01NS_RR	CWP Array	-
70069	Magnetic	309727	5882550	A2_l	-	-	-	-	7	A small, broad asymmetric dipole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B01_RE	CWP Array	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70070	Magnetic	310664	5882080	A2_I	-	-	-	-	27	A small symmetric dipole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B01_RE	CWP Array	-
70071	Magnetic	311064	5882114	A2_I	-	-	-	-	6	A small, broad positive monopole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B01_RE	CWP Array	-
70072	Magnetic	310078	5881568	A2_I	-	-	-	-	73	A medium, broad asymmetric dipole with peak and trough on one profile line in the 2021 Mag. data. Located within a wider geological magnetic trend in the grid, but this amplitude is anomalous. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B01_RE	CWP Array	-
70073	Magnetic	310222	5880737	A2_I	-	-	-	-	20	A small asymmetric dipole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B01_RE	CWP Array	-
70074	Magnetic	310605	5880606	A2_h	-	-	-	-	51	A medium, symmetric dipole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B01_RE	CWP Array	-
70075	Magnetic	310257	5880364	A2_I	-	-	-	-	7	A small, broad asymmetric dipole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B01_RE	CWP Array	-
70076	Dark reflector	309689	5880237	A2_I	4.0	2.5	1.1	-	53	A sub-angular dark reflector with a clear, slightly rounded, tall shadow in the SSS data. Also visible in the MBES data as a sub-angular mound located in an area of relatively featureless seabed. Associated with an anomalous but broad medium symmetric dipole with peak and trough on one profile line in the 2021 Mag. data. May be a natural feature with ferrous content or may be possible ferrous debris.	SSS, Mag.	2021_MMT_SSS_B01_RE, 2021_MMT_Mag_B01_RE	CWP Array	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70077	Magnetic	310521	5880200	A2_I	-	-	-	-	28	A small, broad asymmetric dipole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B01_RE	CWP Array	-
70078	Magnetic	309541	5879379	A2_I	-	-	-	-	9	A small, broad asymmetric dipole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris	Mag.	2021_MMT_Mag_B01_RE	CWP Array	-
70079	Dark reflector	311073	5879026	A2_I	1.8	0.8	1.1	-	-	A distinct sub-angular dark reflector with a very bright shadow and some slight scour to the south for 4 m in the SSS data. Visible as a small elongate mound in the MBES data. No anomalous features were identified in the 2021 Mag. data at this location. Possible natural feature or may be possible non-ferrous debris.	SSS	2021_MMT_SSS_B0X_RE	CWP Array	-
70080	Dark reflector	310296	5878850	A2_I	4.3	4.0	3.7	-15.8	-	A large, round dark reflector with a slightly asymmetric, tapered shadow. Located within a boulder field in the SSS data. Identified in MBES data as a prominent, circular mound with a slightly irregular top. A small circle of scour is visible surrounding the feature. No anomalous features were identified in the 2021 Mag. data at this location. Possible natural feature or may be possible non-ferrous debris.	SSS, MBES	2021_MMT_SSS_B01_RE, 2021_MMT_MBES_B01_RE, 2021_MMT_MBES_B01NS_RR	CWP Array	-
70081	Mound	310341	5878860	A2_I	4.2	3.1	0.3	-17.3	-	A small elongate mound in the MBES data. Tentatively observed in the SSS data as an indistinct dark reflector with very irregular bright shadow. No anomalous features were identified in the 2021 Mag. data at this location. Possible natural feature or may be possible non-ferrous debris.	MBES	2021_MMT_MBES_B01_RE, 2021_MMT_MBES_B01NS_RR	CWP Array	-
70082	Magnetic	311358	5878558	A2_I	-	-	-	-	46	A small asymmetric dipole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B01_RE	CWP Array	-
70083	Rope/chain	309291	5877763	A2_h	32.0	0.6	0.1	-	-	A long, curvilinear dark reflector with a short shadow along its length in the SSS data. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible length of non-ferrous rope or chain.	SSS	2021_MMT_SSS_B01_RE	CWP Array	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70084	Dark reflector	309475	5877710	A2_I	4.9	0.5	0.2	-	-	Short, slightly curved linear dark reflector with a short shadow which is consistent along its length in the SSS data. No anomalous features were identified in the MBES or Mag. data at this location. Possible natural feature or may be possible non-ferrous debris.	SSS	2021_MMT_SSS_B01_RE	CWP Array	-
70085	Rope/chain	311726	5876811	A2_h	10.6	0.2	0.1	-	-	A short, curvilinear dark reflector with a short shadow along its length, snagged on an adjacent interpreted indistinct natural feature (4.2 x 3.8 x 0.4 m). No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible length of non-ferrous rope or chain.	SSS	2021_MMT_SSS_B01_RE	CWP Array	-
70086	Magnetic	310102	5876660	A2_I	-	-	-	-	16	A small, broad asymmetric dipole with peak and trough on one profile line in the 2021 Mag. data. Seen smaller on adjacent line. Possibly two separate responses. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B01_RE	CWP Array	-
70087	Magnetic	309404	5876259	A2_I	-	-	-	-	11	A small, broad asymmetric dipole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B01_RE	CWP Array	-
70088	Dark reflector	311403	5876136	A2_I	4.4	1.4	0.7	-19.9	-	An indistinct elongate dark reflector with an uneven shadow in the SSS data. Identified in the MBES data as a small sub-angular elongate mound with an irregular top and slight immediate scouring. No anomalous features were identified in the 2021 Mag. data at this location. Possible natural feature or may be possible non-ferrous debris.	SSS, MBES	2021_MMT_SSS_B0X_RE, 2021_MMT_MBES_B01_RE, 2021_MMT_MBES_B01NS_RR	CWP Array	-
70089	Magnetic	312934	5891633	A2_I	-	-	-	-	6	A small, broad asymmetric dipole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B02_RE	CWP Array	-
70090	Magnetic	313596	5891543	A2_I	-	-	-	-	21	A small asymmetric dipole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B02_RE	CWP Array	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70091	Magnetic	312557	5891449	A2_h	-	-	-	-	143	A large, sharp asymmetric dipole with peak and trough on one profile line in the 2021 Mag. data. Also seen smaller on overlapping line. No anomalous features were identified in the SSS or MBES data at this location. May represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B02_RE	CWP Array	-
70092	Magnetic	312488	5891113	A2_l	-	-	-	-	6	A small, broad positive monopole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B02_RE	CWP Array	-
70093	Magnetic	314095	5890839	A2_l	-	-	-	-	27	A small positive monopole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B02_RE	CWP Array	-
70094	Seabed disturbance	314850	5890755	A2_l	12.3	11.8	0.4	-13.0	-	Slightly irregular area of seabed disturbance comprising multiple small elongate mounds of similar size and form within scour. No anomalous features were identified in the SSS or Mag. data at this location. Possible natural feature or may be possible non-ferrous debris.	MBES	2021_MMT_MBES_B02_RE	CWP Array	-
70095	Magnetic	314024	5890523	A2_l	-	-	-	-	35	A small negative monopole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B02_RE	CWP Array	-
70096	Magnetic	314109	5890488	A2_l	-	-	-	-	14	A small, broad symmetric dipole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B02_RE	CWP Array	-
70097	Magnetic	313523	5890488	A2_l	-	-	-	-	13	A small, broad positive monopole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B02_RE	CWP Array	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70098	Magnetic	313937	5890414	A2_I	-	-	-	-	6	A small, broad symmetric dipole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B02_RE	CWP Array	-
70099	Magnetic	314153	5890413	A2_I	-	-	-	-	20	A small asymmetric dipole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B02_RE	CWP Array	-
70100	Magnetic	313003	5890390	A2_I	-	-	-	-	22	A small asymmetric dipole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the 2021 SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B02_RE	CWP Array	-
70101	Magnetic	313996	5890212	A2_I	-	-	-	-	11	A small, broad positive monopole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B02_RE	CWP Array	-
70102	Seabed disturbance	314071	5889930	A2_I	25.5	5.8	0.9	-12.1	-	Irregular area of distinct mounds measuring 11.3 x 5.5 m, with a smaller object 12 m south measuring 4.1 x 3.1 x 0.6 m. No anomalous features were identified in the SSS or 2021 Mag. data at this location. Possible natural feature or may be possible non-ferrous debris.	MBES	2021_MMT_MBES_B02_RE	CWP Array	-
70103	Magnetic	314838	5889869	A2_I	-	-	-	-	12	A small, broad asymmetric dipole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B02_RE	CWP Array	-
70104	Magnetic	314755	5889730	A2_I	-	-	-	-	12	A small, broad positive monopole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B02_RE	CWP Array	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70105	Magnetic	313383	5889865	A2_I	-	-	-	-	14	A small, broad negative monopole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B02_RE	CWP Array	-
70106	Seabed disturbance	313163	5889853	A2_I	79.2	8.2	1.1	-11.4	-	Area of seabed disturbance comprising several distinct dark reflectors with shadows in the SSS data. Identified in the MBES data as a curvilinear series of sub-angular mounds measuring between (21.2 m x 1.8 m x 1.1 m) and (2.5 m x 1.4 m x 0.1 m) with some associated scour (up to 0.3m deep), distinct from surrounding seabed. No anomalous features were identified in the 2021 Mag. data at this location. Possible natural feature or may be possible non-ferrous debris.	SSS, MBES	2021_MMT_SSS_B02_RE, 2021_MMT_MBES_B02_RE	CWP Array	-
70107	Magnetic	312760	5889717	A2_I	-	-	-	-	11	A small, broad asymmetric dipole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B02_RE	CWP Array	-
70108	Magnetic	313518	5889582	A2_I	-	-	-	-	5	A small, broad positive monopole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B02_RE	CWP Array	-
70109	Magnetic	313694	5889575	A2_I	-	-	-	-	11	A small, broad positive monopole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B02_RE	CWP Array	-
70110	Magnetic	313812	5889336	A2_I	-	-	-	-	9	A small, broad positive monopole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B02_RE	CWP Array	-
70111	Magnetic	314772	5889393	A2_I	-	-	-	-	5	A small negative monopole with peak and trough on one profile line in the 2021 Mag. data. Seen smaller on overlapping line. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B02_RE	CWP Array	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70112	Dark reflector	314685	5889322	A2_I	10.4	1.7	1.6	-13.2	9	Distinct linear but angular dark reflector with a bright shadow. Also identified in the MBES data as an elongate sub-angular mound within slight depression, with small (1.2 x 1.1 x 0.4 m) sub-rounded mound at the west end, distinct from surrounding seabed. Associated with a small, broad asymmetric dipole with peak and trough on one profile line in the 2021 Mag. data. May be a natural feature with ferrous content or be possible ferrous debris.	SSS, MBES, Mag.	2021_MMT_SSS_B02_RE, 2021_MMT_MBES_B02_RE, 2021_MMT_Mag_B02_RE	CWP Array	-
70113	Magnetic	314884	5889312	A2_I	-	-	-	-	24	A small negative monopole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B02_RE	CWP Array	-
70114	Dark reflector	314783	5889167	A2_I	3.3	3.0	1.0	-	-	A large and distinct possibly sub-angular dark reflector with a bright flared shadow. Possibly multiple objects or distorted data. Isolated and distinctive in shape. Observed in the MBES data as a small angular object with a secondary smaller mound. No anomalous features were identified in the 2021 Mag. data at this location. Possible natural feature or may be possible non-ferrous debris.	SSS	2021_MMT_SSS_B02_RE	CWP Array	-
70115	Magnetic	314886	5889174	A2_h	-	-	-	-	93	A medium asymmetric dipole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B02_RE	CWP Array	-
70116	Magnetic	313213	5889112	A2_I	-	-	-	-	16	A small negative monopole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B02_RE	CWP Array	-
70117	Seabed disturbance	314287	5887253	A2_I	6.7	4.2	0.8	-	18	Small distinct area of seabed disturbance comprising multiple rounded and irregular dark reflectors. The largest of which is an irregular dark reflector which measures 2.4 x 1.0 m. Observed in the MBES as a distinct cluster of small mounds. Associated with a small asymmetric dipole with peak and trough on one profile line in the 2021 Mag. data. May be a natural feature with ferrous content or be possible ferrous debris.	SSS, Mag.	2021_MMT_SSS_B02_RE, 2021_MMT_Mag_B02_RE	CWP Array	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70118	Seabed disturbance	312407	5887048	A2_I	17.1	6.0	0.4	-	-	An area of seabed disturbance comprising indistinct dark reflectors with shadows, the largest dark reflector measures 4.2 x 0.8 m. Observed in the MBES data as small, slight, irregular mounds within a slight scour. No anomalous features were identified in the 2021 Mag. data at this location. Possible natural feature or may be possible non-ferrous debris.	SSS	2021_MMT_SSS_B0X_RE	CWP Array	-
70119	Magnetic	312905	5886187	A2_I	-	-	-	-	9	A small, broad positive monopole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B02_RE	CWP Array	-
70120	Mound	312925	5885294	A2_I	2.9	1.9	0.6	-15.4	-	Elongate mound with irregular edges. Anomalous to surrounding interpreted natural features. No anomalous features were identified in the SSS or 2021 Mag. data at this location. Possible natural feature or may be possible non-ferrous debris.	MBES	2021_MMT_MBES_B02_RE	CWP Array	-
70121	Magnetic	313406	5884530	A2_I	-	-	-	-	12	A small, broad asymmetric dipole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B02_RE	CWP Array	-
70122	Dark reflector	313404	5884169	A2_I	3.3	3.1	0.7	-	-	A large, distinct angular dark reflector with a bright shadow. In an area of otherwise featureless seabed. Observed in the MBES data as an elongate mound. No anomalous features were identified in the 2021 Mag. data at this location. Possible natural feature or may be possible non-ferrous debris.	SSS	2021_MMT_SSS_B02_RE	CWP Array	-
70123	Debris	313064	5884077	A2_h	6.5	0.6	0.1	-	-	A distinct, thin linear dark reflector with slight angular bend and corresponding shadow in an area of largely featureless sandy seabed. Observed as a slight curvilinear thin mound in the MBES data. No anomalous features were identified in the 2021 Mag. data at this location. Interpreted as possible non-ferrous debris.	SSS	2021_MMT_SSS_B02_RE	CWP Array	-
70124	Magnetic	312202	5884022	A2_I	-	-	-	-	13	A small negative monopole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B02_RE	CWP Array	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70125	Seabed disturbance	312641	5883998	A2_I	14.8	11.4	0.5	-	-	An area of seabed disturbance comprising indistinct angular and sub-angular dark reflectors with shadows within slight sand waves. The average object measures 1.3 x 0.3 m. Observed as a rounded series of slight mounds in the MBES data. No anomalous features were identified in the 2021 Mag. data at this location. Possible natural feature or may be possible non-ferrous debris.	SSS	2021_MMT_SSS_B0X_RE	CWP Array	-
70126	Mound	312525	5883873	A2_I	2.8	1.5	0.5	-16.3	9	Elongate mound with irregular edges identified in the MBES data. Associated with a small negative monopole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS data at this location. May be a natural feature with ferrous content or may be possible ferrous debris.	MBES, Mag.	2021_MMT_MBES_B02_RE, 2021_MMT_Mag_B02_RE	CWP Array	-
70127	Depression	312809	5883680	A2_I	18.8	8.2	-0.5	-	-	A distinct linear dark reflector with possible scour in an area of largely featureless sandy seabed. Observed as the edge of a slight irregular depression with an irregular base in the MBES data. No anomalous features were identified in the 2021 Mag. data at this location. Possible natural feature or may indicate possible non-ferrous debris.	SSS	2021_MMT_SSS_B02_RE	CWP Array	-
70128	Dark reflector	313017	5882884	A2_I	19.5	1.5	0.4	-	-	An indistinct curvilinear dark reflector with a slight shadow in an area of largely featureless seabed. Also observed in the MBES data as a thin curvilinear mound which may continue and appears surrounded by scour. No anomalous features were identified in the 2021 Mag. data at this location. Possible natural feature or may be possible non-ferrous debris.	SSS	2021_MMT_SSS_B02_RE	CWP Array	-
70129	Magnetic	313162	5882865	A2_I	-	-	-	-	11	A small, broad asymmetric dipole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B02_RE	CWP Array	-
70130	Magnetic	312216	5882736	A2_I	-	-	-	-	14	A small, broad positive monopole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B02_RE	CWP Array	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70131	Magnetic	313327	5882490	A2_I	-	-	-	-	25	A small, broad asymmetric dipole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B02_RE	CWP Array	-
70132	Rope/chain	314291	5882062	A2_h	88.9	1.4	0.1	-16.6	36	Long , generally straight, thin linear mound aligned north-east to south-west with a possible elongate mound at the south-west end. May be partially buried. Associated with a small asymmetric dipole with peak and trough on one profile line in the 2021 Mag. data at the north-east end of this feature indicating the possible presence of ferrous material. No anomalous features were identified in the SSS data at this location. Interpreted as a possible rope or chain comprising at least some ferrous material.	MBES, Mag.	2021_MMT_MBES_B02_RE, 2021_MMT_Mag_B02_RE	CWP Array	-
70133	Dark reflector	312242	5880992	A2_I	1.8	0.2	0.7	-	-	A thin, elongate dark reflector with a bright, slightly uneven shadow isolated on the seabed. Visible as a small elongate mound in the MBES data. No anomalous features were identified in the 2021 Mag. data at this location. Possible natural feature or may be possible non-ferrous debris.	SSS	2021_MMT_SSS_B0X_RE	CWP Array	-
70134	Magnetic	313597	5880923	A2_I	-	-	-	-	17	A small negative monopole with peak and trough on one profile line in the 2021 Mag. data. Also seen as a smaller dipole (12 nT) on another line. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B0X_RE, 2021_MMT_Mag_B02_RE	CWP Array	-
70135	Magnetic	314645	5880935	A2_I	-	-	-	-	11	A small, broad positive monopole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B02_RE	CWP Array	-
70136	Magnetic	314462	5880899	A2_I	-	-	-	-	27	A small, broad positive monopole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B02_RE	CWP Array	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70137	Magnetic	314222	5880403	A2_I	-	-	-	-	12	A small, broad asymmetric dipole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B02_RE	CWP Array	-
70138	Rope/chain	313362	5880337	A2_h	208.6	1.0	0.1	-17.5	40	Long narrow curvilinear discontinuous mound in the MBES data with scour along the northern edge up to 15 m across and 0.2 m deep. A possibly associated small rounded mound at the western end (1.0 x 1.0 x 0.2 m). No anomalous features were identified in the SSS data at this location. Associated with three magnetic anomalies ranging from 17 - 40 nT along the length, suggesting the presence of ferrous material. Interpreted as a length of possible rope or chain, at least partially ferrous.	MBES, Mag.	2021_MMT_MBES_B02_RE, 2021_MMT_Mag_B02_RE	CWP Array	-
70139	Magnetic	313341	5879768	A2_I	-	-	-	-	23	A small asymmetric dipole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B02_RE	CWP Array	-
70140	Magnetic	311940	5878898	A2_I	-	-	-	-	15	A small, broad asymmetric dipole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B02_RE	CWP Array	-
70141	Magnetic	314397	5877683	A2_I	-	-	-	-	14	A small, broad symmetric dipole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B02_RE	CWP Array	-
70142	Magnetic	313638	5876989	A2_I	-	-	-	-	25	A small, broad positive monopole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B02_RE	CWP Array	-
70143	Magnetic	313606	5876935	A2_I	-	-	-	-	12	A small, broad symmetric dipole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B0X_RE	CWP Array	-



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70144	Magnetic	312027	5876216	A2_I	-	-	-	-	9	A small, broad symmetric dipole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B02_RE	CWP Array	-
70145	Dark reflector	315347	5889777	A2_I	3.5	0.5	0.6	-	-	Elongate sub-angular dark reflector with broad tapered shadow, distinct from the surrounding seabed. No anomalous features were identified at this location in the MBES or Mag. data. May be a natural feature or may be possible non-ferrous debris.	SSS	2021_MMT_SSS_B03_RE	CWP Array	-
70146	Magnetic	315768	5889194	A2_I	-	-	-	-	22	A small asymmetric dipole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris that is either buried or with no surface expression.	Mag.	2021_MMT_Mag_B03_RE	CWP Array	-
70147	Dark reflector	316290	5888993	A2_I	4.8	3.1	1.8	-12.5	17	An elongate dark reflector with long straight-sided shadow extending to the edge of the data. Visible in the MBES data as an elongate mound with a pointed top and some minor surrounding scour. Associated with a small negative monopole with peak and trough on one profile line in the 2021 Mag. data, but not visible on adjacent lines of data. This feature is one of three located approximately 10 m apart from each other (with 70148 and 70149). May be a natural feature or may be partially ferrous debris.	SSS, MBES, Mag.	2021_MMT_SSS_B03_RE, 2021_MMT_MBES_B03_RE, 2021_MMT_Mag_B03_RE	CWP Array	-
70148	Mound	316281	5888994	A2_I	5.4	2.7	0.7	-13.0	-	An elongate mound with a pointed top, a smaller, adjacent secondary mound, and some minor surrounding scour. No anomalous features identified in the SSS or 2021 Mag. data at this location. This feature is one of three mounds located approximately 10 m apart from each other (with 70147 and 70149) and are potentially related. May be a natural feature or may be possible non-ferrous debris.	MBES	2021_MMT_MBES_B03_RE	CWP Array	-
70149	Mound	316277	5888984	A2_I	5.0	2.8	0.6	-13.0	-	An elongate mound with a pointed top and some minor surrounding scour. No anomalous features identified in the SSS or 2021 Mag. data at this location. This feature is one of three mounds located approximately 10 m apart from each other (with 70147 and 70148) and are potentially related. May be a natural feature or may be possible non-ferrous debris.	MBES	2021_MMT_MBES_B03_RE	CWP Array	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70150	Seabed disturbance	316073	5887884	A2_I	8.8	5.8	1.1	-	-	Area of seabed disturbance comprising several small elongate and sub-angular dark reflectors with shadows, the largest of which measures (1.8 x 0.4 x 0.8 m). The feature is distinct from the surrounding generally featureless seabed. Observed as a small area of elongate mounds in the MBES data. No anomalous features were identified in the 2021 Mag. data at this location. May be a natural feature or may be possible non-ferrous debris.	SSS	2021_MMT_SSS_B03_RE	CWP Array	-
70151	Magnetic	315202	5887311	A2_I	-	-	-	-	21	A small positive monopole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B03_RE	CWP Array	-
70152	Dark reflector	314903	5885845	A2_I	5.6	3.8	2.3	-11.7	-	A large, distinct, elongate dark reflector with a large, bright variable shadow and significant height. Identified in the MBES data as a very prominent, sub-angular mound with a pointed top, with an elongate north-south area of scour centred around the feature. Located in an area with scattered mounds and small sand waves. No anomalous features were identified in the 2021 Mag. data at this location. May be a natural feature or may be possible non-ferrous debris.	SSS, MBES	2021_MMT_SSS_B0X_RE, 2021_MMT_MBES_B03_RE	CWP Array	-
70153	Seabed disturbance	315169	5885723	A2_I	10.3	7.3	1.9	-13.5	-	A small cluster of approximately five irregular mounds, all roughly adjacent, with the largest feature measuring 4.8 x 4.2 x 1.5 m. Identified in the MBES data as two disitnct sub-rounded mounds with several smaller surrounding. Similar mounds are seen frequently in the data, but clusters like this are unusual. No anomalous features were identified in the 2021 Mag. data at this location. May be a natural feature or may be possible non-ferrous debris.	SSS, MBES	2021_MMT_SSS_B03_RE, 2021_MMT_MBES_B03_RE	CWP Array	-
70154	Seabed disturbance	315378	5885343	A2_I	19.2	12.2	1.2	-13.9	-	An area of relatively poorly defined dark reflectors with distinct shadows, located within scour. Identified in the MBES data as a distinct cluster of sub-rounded mounds, with the largest measuring 3.4 x 3.0 x 1.0 m. Similar mounds are seen frequently in the dataset but clusters like this are rare. No anomalous features were identified in the 2021 Mag. data at this location. May be a natural feature or may be possible non-ferrous debris.	SSS, MBES	2021_MMT_SSS_B03_RE, 2021_MMT_MBES_B03_RE	CWP Array	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70155	Magnetic	315583	5885347	A2_I	-	-	-	-	46	A small symmetric dipole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B03_RE	CWP Array	-
70156	Dark reflector	315991	5885145	A2_I	6.0	5.2	1.5	-14.4	-	An elongate irregular dark reflector with shadow extending to the edge of the data along its length, distinct from surrounding seabed. Identified in the MBES data as a highly irregular, sub-rounded mound with an irregular surface, and some minor surrounding scour. Located in an area with other small mounds and some mobile sand. No anomalous features were identified in the 2021 Mag. data at this location. May be a natural feature or may be possible non-ferrous debris.	SSS, MBES	2021_MMT_SSS_B03_RE, 2021_MMT_MBES_B03_RE	CWP Array	-
70157	Dark reflector	316336	5884875	A2_I	2.6	0.1	0.1	-	-	Short, discontinuous curvilinear dark reflector with variable shadow, distinct from surrounding seabed. Tentatively visible in the MBES data as elongate mound measuring approximately 3 m in length. Located on the edge of an area of mobile seabed sediment, and immediately adjacent to anomaly 70158 which may be related. No anomalous features were identified in the 2021 Mag. data at this location. May be natural feature or seabed scar, possible non-ferrous linear debris, or a short length of rope or chain.	SSS	2021_MMT_SSS_B03_RE	CWP Array	-
70158	Dark reflector	316337	5884876	A2_I	0.5	0.2	0.3	-	-	Small elongate dark reflector with broad shadow, distinct from surrounding seabed. Located on the edge of an area of mobile seabed sediment, and immediately adjacent to anomaly 70157 which may be related. No anomalous features were identified in the 2021 Mag. data at this location. May be a natural feature or may be possible non-ferrous debris.	SSS	2021_MMT_SSS_03_RE	CWP Array	-
70159	Mound	316153	5884680	A2_I	10.3	4.2	0.9	-13.2	-	An angular mound within a slight scour and some sediment build-up to the west, within an area of sand ripples. No anomalous features were identified in the SSS or Mag. data at this location. May be a natural feature or may be possible non-ferrous debris.	MBES	2021_MMT_MBES_B03_RE	CWP Array	-
70160	Dark reflector	315324	5884200	A2_I	2.9	1.6	1.5	-	-	Irregular angular dark reflector with a long broad shadow and associated scour, distinct from the surrounding seabed. Visible in the MBES data as a tall sub-angular mound. No anomalous features were identified in the 2021 Mag. data at this location. May be a natural feature or may be possible non-ferrous debris.	SSS	2021_MMT_SSS_B03_RE	CWP Array	-



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70161	Dark reflector	316039	5883347	A2_l	1.8	0.4	1.0	-	-	Small elongate dark reflector with long round-ended shadow, distinct from surrounding seabed. Dimensions may be inaccurate due to slight data distortion. Possible short linear attached but data distortion makes this uncertain. Observed in the MBES data as an elongate mound. No anomalous features were identified in the 2021 Mag. data at this location. May be a natural feature or may be possible non-ferrous debris.	SSS	2021_MMT_SSS_B03_RE	CWP Array	-
70162	Rope/chain	316174	5882954	A2_h	28.2	0.2	0.4	-16.4	25	Intermittent, curvilinear dark reflector with shadow along most of its length. The feature curves back on itself at the south-west end. Visible in the MBES data as a small, curvilinear mound, and associated with a small asymmetric dipole with peak and trough on one profile line at the south-west end. Probable length of rope or chain that is at least partially ferrous.	SSS, MBES, Mag.	2021_MMT_SSS_B03_RE, 2021_MMT_MBES_B03_RE, 2021_MMT_Mag_B03_RE	CWP Array	-
70163	Seabed disturbance	315375	5883109	A2_l	29.1	14.9	2.1	-13.9	-	An area of seabed disturbance comprising numerous relatively poorly defined dark reflectors with distinct shadows and faint scour. The largest object measures approximately 5.0 x 4.9 x 1.5 m, and is visible in the MBES data as an irregular sub-rounded mound. No anomalous features were identified in the 2021 Mag. data at this location. May be a natural feature or may be an area of possible non-ferrous debris.	SSS, MBES	2021_MMT_SSS_B03_RE, 2021_MMT_MBES_B03_RE	CWP Array	-
70164	Rope/chain	315674	5882874	A2_h	37.4	0.4	0.2	-	-	A poorly defined, intermittent, curvilinear dark reflector with small shadows along sections of its length. No anomalous features were identified in the MBES or the Mag. data at this location. Possible length of non-ferrous rope or chain.	SSS	SSS_B0X_RE	CWP Array	-
70165	Rope/chain	315861	5882666	A2_h	19.2	0.8	0.2	-	-	Long faint narrow curvilinear dark reflector with variable shadow, somewhat distinct form surrounding seabed. Observed in the MBES data as a generally straight, long, narrow mound. Possibly attached to 70166. No anomalous features were identified in the 2021 Mag. data along its length. Possible length of non-ferrous rope or chain.	SSS	2021_MMT_SSS_B03_RE	CWP Array	-
70166	Dark reflector	315834	5882644	A2_l	1.3	0.8	0.6	-	19	Small irregular sub-rounded dark reflector with long tapered shadow, possibly related to nearby rope/chain feature 70165. Observed in the MBES data as small, slight rounded mound. Associated with a small, broad positive monopole with peak and trough on one profile line in the 2021 Mag. data. May be a natural feature with ferrous content or may be possible ferrous debris.	SSS, Mag.	2021_MMT_SSS_B03_RE, 2021_MMT_Mag_B03_RE	CWP Array	-



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70167	Rope/chain	315327	5882538	A2_h	57.1	0.2	0.1	-	-	Long narrow curvilinear dark reflector with short shadow along its length. Visible in the MBES data as a slightly curvilinear long, narrow depression. No anomalous features were identified in the 2021 Mag. data at this location. May be a seabed scar or may be a possible length of non-ferrous rope or chain with scouring.	SSS	2021_MMT_SSS_B03_RE	CWP Array	-
70168	Dark reflector	315853	5882246	A2_l	2.9	1.2	1.3	-	-	Irregular sub-angular dark reflector with long angular shadow, somewhat distinct from relatively featureless seabed. Visible in the MBES data as a sub-angular mound. No anomalous features were identified in the 2021 Mag. data at this location. May be a natural feature or may be possible non-ferrous debris.	SSS	2021_MMT_SSS_B03_RE	CWP Array	-
70169	Rope/chain	315265	5882105	A2_h	21.3	0.2	0.3	-	-	Long narrow curvilinear dark reflector with variable shadow along its length, distinct from surrounding seabed. Possibly continues but indistinct. Observed in the MBES data as a short, curvilinear, narrow mound within scouring. No anomalous features were identified in the 2021 Mag. data at this location. May be a possible length of non-ferrous rope or chain.	SSS	2021_MMT_SSS_B03_RE	CWP Array	-
70170	Magnetic	315043	5881969	A2_l	-	-	-	-	14	A small, broad positive monopole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B03_RE	CWP Array	-
70171	Rope/chain	314764	5881821	A2_h	11.2	0.5	0.2	-	-	A distinct, thin and curvilinear dark reflector with a uneven shadow along its length, with a possible object at one end. Observed in the MBES as a curvilinear slight mound. No anomalous features were identified in the 2021 Mag. data at this location. May be a possible length of non-ferrous rope or chain.	SSS	2021_MMT_SSS_B0X_RE	CWP Array	-
70172	Dark reflector	315630	5880067	A2_l	1.3	0.4	1.1	-	-	Small faint elongate dark reflector with flared shadow, somewhat distinct from surrounding featureless seabed. Visible in the MBES data as a sub-rounded mound. No anomalous features were identified in the 2021 Mag. data at this location. May be a natural feature or may be possible non-ferrous debris.	SSS	2021_MMT_SSS_B03_RE	CWP Array	-
70173	Magnetic	315700	5879412	A2_l	-	-	-	-	33	A small asymmetric dipole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B03_RE	CWP Array	-



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70174	Dark reflector	315964	5879431	A2_l	1.7	0.2	0.7	-	-	Small elongate dark reflector with long shadow, possibly related or attached to neighbouring rope/chain 70175. This location was not covered by the MBES or Mag. data. May be a natural feature or may be possible debris.	SSS	2021_MMT_SSS_B03_RE	CWP Array	-
70175	Rope/chain	315965	5879385	A2_h	94.4	0.3	0.1	-	-	Long narrow curvilinear dark reflector with short even shadow along its length, distinct from surrounding seabed. Possibly attached or related to anomaly 70174. Also appears separate, but close, to similar feature 70176. This location was not covered by the MBES or Mag. data. Interpreted as a possible length of rope or chain.	SSS	2021_MMT_SSS_B03_RE	CWP Array	-
70176	Rope/chain	315959	5879228	A2_h	183.6	0.2	0.3	-	-	Long narrow curvilinear dark reflector with short shadow along its length. Also appears separate, but close, to similar feature 70175. Anomaly 70177 is located at the midpoint and may be attached or snagged. This location was not fully covered by the MBES or Mag. data. Interpreted as a possible length of rope or chain.	SSS	2021_MMT_SSS_B03_RE	CWP Array	-
70177	Dark reflector	315957	5879224	A2_l	1.7	0.5	0.9	-	-	Small elongate dark reflector with scour and broad shadow, distinct from surrounding seabed and possibly attached or snagged by rope/chain 70176. Observed in the MBES data as a slight mound. No anomalous features were identified in the 2021 Mag. data at this location. May be a natural feature or may be possible non-ferrous debris.	SSS	2021_MMT_SSS_B03_RE	CWP Array	-
70178	Dark reflector	315621	5879127	A2_l	0.8	0.2	0.6	-	-	Small narrow elongated dark reflector with broad, varying shadow somewhat distinct from surrounding featureless seabed. Visible in the MBES data as a sub-rounded mound. No anomalous features were identified in the 2021 Mag. data at this location. May be a natural feature or may be possible non-ferrous debris.	SSS	2021_MMT_SSS_B03_RE	CWP Array	-
70179	Mound	314826	5878797	A2_l	5.4	2.1	0.8	-21.2	-	A distinct elongate mound within a wide sub-rounded scour measuring 20.6 x 13.1 x -0.5 m, very anomalous for the area. No anomalous features were identified in the SSS or 2021 Mag. data at this location. May be a natural feature or may be possible non-ferrous debris.	MBES	2021_MMT_MBES_B03_RE	CWP Array	-
70180	Magnetic	315830	5876299	A2_l	-	-	-	-	26	A small symmetric dipole with peak and trough over two profile lines in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B03_RE	CWP Array	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70181	Dark reflector	315191	5875928	A2_I	2.4	0.2	0.8	-	-	Elongate faint dark reflector with irregular shadow, somewhat distinct from surrounding seabed. Visible in the MBES data as a small, angular mound. No anomalous features were identified in the 2021 Mag. data at this location. May be a natural feature or may be possible non-ferrous debris.	SSS	2021_MMT_SSS_B03_RE	CWP Array	-
70182	Dark reflector	315254	5875926	A2_I	3.8	1.2	1.4	-22.4	-	An elongate dark reflector wider at one end with a large variable shadow suggesting uneven height. Identified in the MBES data as a distinct elongate mound within an area of slight scour. No anomalous features were identified in the 2021 Mag. data at this location. May be a natural feature or may be possible non-ferrous debris.	SSS, MBES	2021_MMT_SSS_B0X_RE, 2021_MMT_SSS_B03_RE, 2021_MMT_MBES_B03_RE	CWP Array	-
70183	Dark reflector	316532	5887895	A2_I	5.4	4.4	1.7	-13.4	-	An elongate, curved dark reflector with a broad variable shadow, distinct from the surrounding relatively featureless seabed. Also identified in the MBES data as an elongate, slightly irregular mound with a rounded top. No anomalous features were identified in the 2021 Mag. data at this location. May be a natural feature or may be possible non-ferrous debris.	SSS, MBES	2021_MMT_SSS_B03_RE, 2021_MMT_SSS_B04_RE, 2021_MMT_MBES_B04_RE	CWP Array	-
70184	Magnetic	317056	5887784	A2_I	-	-	-	-	14	A small, broad positive monopole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B04_RE	CWP Array	-
70185	Dark reflector	316453	5885807	A2_I	2.3	2.1	0.9	-	-	A squared, angular dark reflector with distinct rounded shadow, located within a small associated scour. No anomalous features were identified at this location in the MBES or Mag. data. May be a natural feature or may be possible non-ferrous debris.	SSS	2021_MMT_SSS_B03_RE, 2021_MMT_SSS_B04_RE	CWP Array	-
70186	Dark reflector	317226	5884893	A2_I	3.6	0.4	0.1	-	-	A slightly curved, short dark reflector with an irregular short shadow and some surrounding scour, located within an area of mobile seabed sediments. Tentatively visible as a small mound in the MBES data. No anomalous features were identified in the 2021 Mag. data at this location. May be a natural feature or may be possible non-ferrous debris.	SSS	2021_MMT_SSS_B04_RE	CWP Array	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70187	Dark reflector	317386	5884579	A2_I	2.8	0.8	0.3	-	-	An elongate, slightly irregular dark reflector with a rounded shadow and surrounding scour. Located within an area of mobile seabed sediment. Data snatching may affect the measurements. Tentatively visible as a small mound in the MBES data. No anomalous features were identified in the 2021 Mag. data at this location. May be a natural feature or may be possible non-ferrous debris.	SSS	2021_MMT_SSS_B04_RE	CWP Array	-
70188	Dark reflector	316366	5883717	A2_I	3.8	1.5	0.7	-	-	Relatively large, rounded object with distinct shadow, located on the edge of an area of mobile seabed sediment. Tentatively visible as a small mound in the MBES data. No anomalous features were identified in the 2021 Mag. data at this location. May be a natural feature or may be possible non-ferrous debris.	SSS	2021_MMT_SSS_B03_RE	CWP Array	-
70189	Seabed disturbance	317090	5883685	A2_I	6.6	3.8	0.3	-16.1	-	Small seabed disturbance comprising two slight mounds within some slight sediment build-up. No anomalous features were identified in the SSS or 2021 Mag. data at this location. May be a natural feature or may be possible non-ferrous debris.	MBES	2021_MMT_MBES_B04_RE	CWP Array	-
70190	Debris	317480	5881595	A2_h	2.2	1.3	0.5	-	-	Distinct, angular, wedge-shaped dark reflector with shadow, located in a relatively featureless area of seabed. No anomalous features were identified at this location in the MBES or Mag. data. Interpreted as possible non-ferrous debris.	SSS	2021_MMT_SSS_B04_RE	CWP Array	-
70191	Dark reflector	316527	5879438	A2_I	3.8	3.2	1.3	-21.9	-	A relatively large, sub-angular dark reflector with a distinct, irregular shadow and small associated scour. Identified in the MBES data as an angular mound within a scour, located within a relatively featureless area of seabed. No anomalous features were identified in the 2021 Mag. data at this location. May be a natural feature or may be possible non-ferrous debris.	SSS, MBES	2021_MMT_SSS_B04_RE, 2021_MMT_MBES_B04_RE	CWP Array	-
70192	Magnetic	316999	5879014	A2_I	-	-	-	-	38	A small asymmetric dipole with peak and trough on one profile line in the 2021 Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_MMT_Mag_B04_RE	CWP Array	-
70193	Magnetic	317111	5876879	A2_I	-	-	-	-	12	A small positive monopole with peak and trough over two profile lines in the 2021 Mag. data. No anomalous features were identified at this location in the SSS or MBES data. May represent a natural feature or may represent possible ferrous debris that is either buried or without surface expression.	Mag.	2021_MMT_Mag_B04_RE	CWP Array	-



Annex 8: Seabed features of archaeological potential within the OECC

ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70047	Dark reflector	310099	5884609	A2_l	2.5	0.5	0.5	0.0	-	An elongate dark reflector with a bright shadow in the array SSS data. Visible in the MBES data a small sub-rounded mound. No anomalous features were identified in either of the 2021 Mag. data sets or the OECC SSS or MBES datasets. Interpreted as possible natural feature or may be possible non-ferrous debris.	SSS	2021_MMT_SSS_B01_NW_RR	CWP Array Site /OECC	-
70200	Rope/chain	309703	5885164	A2_h	24.7	0.2	0.1	0.0	-	A curvilinear dark reflector with a bright short shadow along its length, identified in the array SSS data. Possibly in two pieces with 70201. No corresponding anomalous features were identified in any of the MBES, Mag. or the OECC SSS datasets. Retained as a precaution although positioning of this dataset is known to be unreliable. Interpreted as a possible length of rope or chain.	SSS	2021_MMT_SSS_B01_NW_RR	CWP OECC	-
70201	Rope/chain	309708	5885146	A2_h	9.7	0.2	0.1	0.0	-	A curvilinear dark reflector with a bright short shadow along its length, identified in the array SSS data. Possibly in two pieces with 70200. No corresponding anomalous features were identified in any of the MBES, Mag. or the OECC SSS datasets. Retained as a precaution although positioning of this dataset is known to be unreliable. Interpreted as a possible length of rope or chain.	SSS	2021_MMT_SSS_B01_NW_RR	CWP OECC	-
70202	Dark reflector	309656	5884822	A2_l	2.8	2.8	0.9	-	-	A distinct sub-angular dark reflector with a shadow identified in the SSS dataset, also identified in the MBES data as a distinct mound with steep, uneven sides and a rounded peak. This feature is present in a slight depression within a wider area of sandy seabed in proximity to sand waves. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS, MBES	2021_G-tec_SSS_P1_AO, 2021_G-tec_MBES_P1_AO	CWP OECC	-
70203	Dark reflector	309076	5885358	A2_l	3.6	2.4	0.9	-	-	A sub-angular dark reflector which casts an angular and flared shadow identified in the SSS dataset. This is present in an area of sandy seabed. Also observed in the MBES data as a slightly irregular mound with an associated depression. There is a small data gap directly over this feature, therefore it is not possible to fully assess and has been retained as a precaution. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	2021_G-tec_SSS_P1_AO	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70204	Dark reflector	308124	5885761	A2_I	2.5	0.2	0.2	-	-	A distinct narrow linear dark reflector with a slight shadow identified in the SSS dataset. This is present in an area of sandy seabed. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	2021_G-tec_SSS_P1_AO	CWP OECC	-
70205	Dark reflector	307823	5885957	A2_I	2.6	0.9	0.5	-	-	A distinct curvilinear dark reflector with a slight shadow and scour identified in the SSS dataset. This is present in an area of sandy seabed. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	2021_G-tec_SSS_P1_AO	CWP OECC	-
70206	Dark reflector	307844	5886159	A2_I	4.2	1.3	2.0	-	-	A distinct slightly elongate dark reflector with a bright tapering shadow identified in the SSS dataset, also identified in the MBES data as a large, distinct angular mound with gently sloping sides and uneven rounded peak. This is present in an area of sandy seabed. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS, MBES	2021_G-tec_SSS_P1_AO, 2021_G-tec_MBES_P1_AO	CWP OECC	-
70207	Dark reflector	307301	5886274	A2_I	2.9	0.3	0.2	-	-	A distinct elongate dark reflector with an angular shadow identified in the SSS dataset. This is present in an area of sandy seabed. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	2021_G-tec_SSS_P1_AO	CWP OECC	-
70208	Dark reflector	304853	5886670	A2_I	2.6	2.4	1.3	-	-	An indistinct angular dark reflector with a bright angular shadow identified in the SSS dataset, also identified in the MBES data as a distinct mound within a steep-sided irregular depression. This is present in an area of sandy seabed. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS, MBES	2021_G-tec_SSS_P1_AO, 2021_G-tec_MBES_P1_AO	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70209	Magnetic	304736	5886630	A2_I	-	-	-	-	6	A small, broad positive monopole with peak and trough on one profile line identified in the Mag. dataset. This feature is present on the edge of a larger broad negative response. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_G-tec_Mag_P1_AO	CWP OECC	-
70210	Mound	304819	5886805	A2_I	2.0	1.6	0.2	-	-	An irregular mound at the south-west end of a short, straight linear depression in the MBES dataset. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	MBES	2021_G-tec_MBES_P1_AO	CWP OECC	-
70211	Mound	304293	5887096	A2_I	4.3	3.3	1.2	-	-	A very distinct mound with steep sides and a flat but slightly uneven peak. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	MBES	2021_G-tec_MBES_P1_AO	CWP OECC	-
70212	Rope/chain	304167	5886966	A2_h	24.5	0.5	0.1	-	-	An indistinct dark reflector which casts a small shadow identified in the SSS dataset. This is present in an area of sandy seabed. No anomalous features were identified in the MBES data at this location. This position was not fully covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible length of rope or chain.	SSS	2021_G-tec_SSS_P1_AO	CWP OECC	-
70213	Magnetic	303878	5886866	A2_I	-	-	-	-	17	A small asymmetric dipole with peak and trough on one profile line identified in the Mag. dataset. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_G-tec_Mag_P1_AO	CWP OECC	-
70214	Debris	303787	5886992	A2_h	4.9	1.4	0.7	-	-	A distinct sub-angular dark reflector which casts a bright, angular and varied shadow identified in the SSS dataset, also identified in the MBES data as a distinct, elongate and angular mound. This is present within a slight scour, in an area of sandy seabed. Not directly covered by Mag. data and therefore it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible debris.	SSS, MBES	2021_G-tec_SSS_P1_AO, 2021_G-tec_MBES_P1_AO	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70215	Dark reflector	303952	5887349	A2_I	3.1	1.4	0.6	-	-	A distinct sub-rounded dark reflector with a slight shadow identified in the SSS dataset, also identified in the MBES data as small sub-angular double-peaked mound. This is present within a slight depression, in an area of sandy seabed. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS, MBES	2021_G-tec_SSS_P1_AO, 2021_G-tec_MBES_P1_AO	CWP OECC	-
70216	Mound	303912	5887531	A2_I	2.0	1.3	0.3	-	-	An isolated irregular mound within some surrounding scour in the MBES data. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	MBES	2021_G-tec_MBES_P2_AO	CWP OECC	-
70217	Dark reflector	303793	5887611	A2_I	2.6	1.7	0.5	-	-	A distinct sub-angular dark reflector with a bright, angular shadow in the SSS data. Also identified in the MBES data as a low-lying but distinct angular mound within a scour. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS, MBES	2021_G-tec_SSS_P2_AO, 2021_G-tec_MBES_P1_AO,	CWP OECC	-
70218	Dark reflector	303823	5887785	A2_I	3.2	1.2	0.4	-	-	Two directly adjacent dark reflectors identified in the SSS data; one sub-rounded and one sub-angular, both with shadows. Identified in the MBES data as an irregular mound with some slight scour to the north. This position was not directly covered by Mag. data and therefore it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	SSS, MBES	2021_G-tec_SSS_P2_AO, 2021_G-tec_MBES_P2_AO	CWP OECC	-
70219	Dark reflector	303552	5887992	A2_I	6.4	0.6	0.2	-	-	A distinct small dark reflector with bright shadow, which appears stretched, in the SSS data. Tentatively observed in the MBES data as a small, slight, rounded mound. This position was not directly covered by Mag. data and therefore it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	SSS	2021_G-tec_SSS_P2_AO	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70220	Debris	303709	5888090	A2_h	4.1	1.4	0.3	-	-	A distinct angular dark reflector with a slight shadow and scour in the SSS data. No anomalous features were identified in the MBES data at this location. This position was not directly covered by Mag. data and therefore it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible debris.	SSS	2021_G-tec_SSS_P2_AO	CWP OECC	-
70221	Linear debris	303186	5888034	A2_h	263.0	0.4	0.1	-	-	A narrow curvilinear dark reflector which casts a small shadow, with multiple small dark reflectors located along its length identified in the SSS dataset. These small dark reflectors measure on average 1.2 x 0.3 x 0.1 m, the largest measures 2.0 x 0.5 x 0.1 m. This is present in an area of sandy seabed. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as linear debris. This is interpreted as a possibly modern feature such as fishing gear and therefore may not be of archaeological interest. However, as this cannot be confirmed without further investigation, the feature has been retained as a precaution.	SSS	2021_G-tec_SSS_P1_AO	CWP OECC	-
70222	Dark reflector	303192	5888098	A2_l	3.3	1.3	0.5	-	-	A sub-rounded dark reflector with a sub-rounded shadow identified in the SSS dataset, also identified in the MBES data as a slightly irregular mound. This feature has an associated scour and is present in an area of sandy seabed. This position was not directly covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	SSS, MBES	2021_G-tec_SSS_P1_AO, 2021_G-tec_MBES_P1_AO	CWP OECC	-
70223	Debris	303511	5888412	A2_h	3.4	3.2	0.9	-	-	A distinct sub-angular dark reflector with a shadow within a small seabed disturbance. Also identified as a distinct sub-angular mound within slight scouring. This position was not directly covered by Mag. data and therefore it is not possible to ascertain whether ferrous material is present at this	SSS, MBES	2021_G-tec_SSS_P2_AO, 2021_G-tec_MBES_P2_AO	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
										location. Based on its form this feature is interpreted as possible debris.				
70224	Seabed disturbance	303312	5888430	A2_l	128.3	14.3	0.3	-	37	An irregular seabed disturbance, comprising two parallel curvilinear dark reflectors in the SSS data which separate and converge along the total length and which could be interpreted as lengths of rope or chain. Also identified in the MBES data as a generally curvilinear ridge aligned north-east to south-west, with two elongate 'plateaus'. The slope is gradual on the north-west face and sharper and deeper on the south-east. There is slight depression in the northern section, approximately 0.2 deep, and is much shallower in the south. A small asymmetric dipole with peak and trough on one profile line in the Mag. data has been identified in the very south-western extents of the feature, indicating the presence of ferrous material in this location. No other magnetic anomalies have been identified within the feature extents although this feature was only partially covered by the Mag. data and so it is not possible to ascertain whether ferrous material is present throughout. This feature is interpreted as a possible natural feature or may be possible debris subject to further investigation.	SSS, MBES, Mag.	2021_G-tec_SSS_P2_AO, 2021_G-tec_MBES_P2_AO, 2021_G-tec_Mag_P2_AO	CWP OECC	-
70225	Debris field	303566	5888560	A2_h	25.6	1.5	0.5	-	-	A debris field comprising a an indistinct irregular dark reflector with distinct irregular shadow measuring 5.3 x 1.5 x 0.5 m, and a curvilinear dark reflector measuring 20.3 x 0.5 x 0.3 m extending away in the SSS data. Identified in the MBES data as a distinct irregular mound with an indistinct curvilinear mound extending NNW. No anomalous features were identified in the Mag. data at this location. Interpreted as possible non-ferrous debris.	SSS, MBES	2021_G-tec_SSS_P2_AO, 2021_G-tec_MBES_P2_AO	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70226	Rope/chain	302995	5888463	A2_h	117.0	0.4	0.1	-	-	A narrow curvilinear dark reflector with a small shadow identified in the SSS dataset. This is present in an area of sandy seabed. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible long length of rope or chain.	SSS	2021_G-tec_SSS_P1_AO	CWP OECC	-
70227	Debris	303317	5888571	A2_h	6.6	4.8	0.6	-	-	A distinct irregular dark reflector with an angular shadow in the SSS data. Also identified in the MBES data as a distinct irregular mound within scour. No anomalous features were identified in the Mag. data at this location. Interpreted as possible non-ferrous debris.	SSS, MBES	2021_G-tec_SSS_P2_AO, 2021_G-tec_MBES_P2_AO	CWP OECC	-
70228	Seabed disturbance	303374	5888991	A2_l	2.5	1.6	-0.2	-	-	A small, distinct seabed disturbance comprising a small rounded mound (1.4 x 0.8 x 0.1 m) within a wider sub-angular scour or depression to the east in the MBES data. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	MBES	2021_G-tec_MBES_P2_AO	CWP OECC	-
70229	Debris field	303093	5889515	A2_h	8.6	5.4	1.0	-	-	A compact but indistinct group of individual dark reflectors with shadows in the SSS data. Also identified in the MBES data as a distinct group of three mounds; two are sub-angular and one is straight. The largest is sub-angular and lies at the south measuring 5.5 x 3.1 x 1.0 m. A second, short straight mound lies at the north-eastern edge measuring 4.1 x 1.5 x 0.6 m. A smaller, natural looking sub-angular mound lies on the north-western edge measuring 2.4 x 1.6 x 0.4 m. No anomalous features were identified in the Mag. data at this location. Based on its form in the MBES data this feature is interpreted as possible non-ferrous debris.	SSS, MBES	2021_G-tec_SSS_P2_AO, 2021_G-tec_MBES_P2_AO	CWP OECC	-
70230	Dark reflector	309921	5888260	A2_l	1.7	1.7	0.5	-	-	An angular dark reflector with an irregular shadow identified in the SSS dataset. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	2021_G-tec_SSS_P3_FP	CWP Array Site	-
70231	Dark reflector	309790	5888216	A2_l	1.4	0.8	0.5	-	-	A rounded dark reflector with tapered shadow identified in the SSS dataset. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	2021_G-tec_SSS_P3_FP	CWP Array Site	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70232	Dark reflector	309813	5888344	A2_I	3.3	0.9	0.2	-	-	A short, straight linear dark reflector with angular shadow identified in the SSS dataset. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	SSS	2021_G-tec_SSS_P3_FP	CWP Array Site	-
70234	Mound	308816	5888472	A2_I	1.8	1.1	0.8	-	-	An elongate mound identified in the MBES dataset. No anomalous features were identified in the SSS data at this location. This position was not directly covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. Anomaly 70235 located approximately 5 m to the WNW and may be associated. Interpreted as a possible natural feature or may be possible debris.	MBES	2021_G-tec_MBES_P1_AO	CWP OECC	-
70235	Mound	308810	5888474	A2_I	1.4	1.1	0.4	-	-	A sub-angular mound identified in the MBES dataset. This has scour present on the south-eastern edge and is 0.2 m deep. No anomalous features were identified in the SSS data at this location. This position was not directly covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. A long narrow linear mound runs adjacent to, or under this feature. This is oriented north-west by south-east, measures 77.0 x 0.9 m and is not visible on the chart. Anomaly 70234 lies approximately 5 m to the ESE and may be associated. Interpreted as a possible natural feature or may be possible debris.	MBES	2021_G-tec_MBES_P1_AO	CWP OECC	-
70236	Dark reflector	308601	5888743	A2_I	1.5	0.7	0.3	-	-	An irregular dark reflector with irregular shadow identified in the SSS dataset. This was observed in the MBES data as a small mound within an area of sand waves. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	2021_G-tec_SSS_P3_FP	CWP OECC	-
70237	Dark reflector	308173	5888957	A2_I	0.8	0.2	0.1	-	-	A narrow elongate dark reflector with an irregular shadow identified in the SSS dataset. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	2021_G-tec_SSS_P3_FP	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70238	Dark reflector	306963	5889250	A2_I	2.1	0.5	0.2	-	-	A narrow elongate dark reflector with irregular shadow identified in the SSS dataset. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	SSS	2021_G-tec_SSS_P3_FP	CWP OECC	-
70240	Magnetic	305797	5890307	A2_I	-	-	-	-	34	A small asymmetric dipole with peak and trough on one profile line identified in the Mag. dataset. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	2021_G-tec_Mag_P3_FP	CWP OECC	-
70242	Seabed disturbance	305681	5889758	A2_I	19.0	12.1	0.1	-	-	Seabed disturbance made up of over 35 rounded and sub-rounded mounds identified in the MBES dataset. These are located around a large oval mound measuring 3.0 x 1.2 x 0.1 m. This feature is at the edge of the survey extent and may be larger. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	MBES	2021_G-tec_MBES_P1_AO	CWP OECC	-
70243	Mound	305595	5889385	A2_I	2.0	2.0	0.1	-	-	A sub-angular mound with a central depression identified in the MBES dataset. Some scour seen on the northern side. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	MBES	2021_G-tec_MBES_P1_AO	CWP OECC	-
70244	Debris	305375	5889240	A2_h	1.0	0.9	0.5	-	-	An elongate dark reflector with irregular shadow identified in the SSS dataset. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as possible non-ferrous debris.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-
70245	Dark reflector	305356	5889478	A2_I	4.1	1.6	0.8	-	-	An indistinct dark reflector, possibly one irregular feature or multiple, which casts a long shadow identified in the SSS dataset. If multiple features, each appears to be around 0.9 m across. This is present within an area of stretched data, which may affect dimensions. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	2021_G-tec_SSS_P3_FP	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70246	Debris	305318	5889392	A2_h	3.7	1.2	0.6	-	-	A slightly indistinct angular dark reflector with irregular shadow identified in the SSS dataset. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as possible non-ferrous debris.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-
70247	Dark reflector	305402	5889807	A2_l	2.4	0.2	0.2	-	-	A sub-angular dark reflector with an irregular shadow identified in the SSS dataset. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	2021_G-tec_SSS_P3_FP	CWP OECC	-
70248	Dark reflector	305290	5889499	A2_l	1.6	0.8	0.7	-	-	An elongate dark reflector with an angular shadow identified in the SSS dataset. Two similar, larger features are located approximately 8 m away that may be related (70249 and 70250). No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-
70249	Debris	305284	5889495	A2_h	2.3	1.6	0.3	-	-	A narrow linear dark reflector with an angular shadow identified in the SSS dataset. Two similar features are located approximately 8 m away that may be related (70248 and 70250). No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as possible non-ferrous debris.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-
70250	Seabed disturbance	305284	5889505	A2_l	6.4	1.6	0.7	-	-	A sub-angular dark reflector with an angular shadow identified in the SSS dataset. Located approximately 8 m from two similar features that may be related (70248 and 70249). No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-
70251	Magnetic	305314	5889867	A2_h	-	-	-	-	202	A large, sharp asymmetric dipole with peak and trough on one profile line identified in the Mag. dataset. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	2021_G-tec_Mag_P3_AO	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70252	Mound	305482	5890687	A2_I	2.5	1.2	0.3	-	-	An elongate mound identified in the MBES dataset. No anomalous features were identified in the SSS data at this location. This position was not directly covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	MBES	2021_G-tec_MBES_P1_AO	CWP OECC	-
70253	Seabed disturbance	305209	5889540	A2_I	3.7	2.2	0.5	-	-	A linear dark reflector with an irregular shadow identified in the SSS dataset. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-
70254	Magnetic	305094	5889275	A2_I	-	-	-	-	8	A small, broad positive monopole with peak and trough on one profile line identified in the Mag. dataset. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	2021_G-tec_Mag_P3_AO	CWP OECC	-
70255	Magnetic	305106	5889372	A2_I	-	-	-	-	16	A small, broad asymmetric dipole with peak and trough on one profile line identified in the Mag. dataset. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	2021_G-tec_Mag_P3_AO	CWP OECC	-
70256	Magnetic	305309	5890102	A2_I	-	-	-	-	83	A medium, sharp asymmetric dipole with peak and trough on one profile line identified in the Mag. dataset. No anomalous features were identified in the SSS or MBES data at this location. Within an area of increased magnetic response and may represent a natural feature or may represent possible ferrous debris either buried or with no surface expression.	Mag.	2021_G-tec_Mag_P3_AO	CWP OECC	-
70257	Dark reflector	305401	5891041	A2_I	3.5	1.3	0.6	-	-	A small area with several sub-angular dark reflectors which cast irregular shadow identified in the SSS dataset, also visible in the MBES data as a sub-rounded mound. Scour is seen to the north-western and south-western sides. This position was not directly covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	SSS, MBES	2021_G-tec_SSS_P3_FP, 2021_G-tec_MBES_P1_AO	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70258	Dark reflector	305402	5891021	A2_I	0.8	0.2	0.7	-	-	A rounded dark reflector with a tapered shadow identified in the SSS dataset. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	SSS	2021_G-tec_SSS_P3_FP	CWP OECC	-
70259	Seabed disturbance	305333	5890965	A2_I	18.9	13.4	0.4	-	-	An area of sub-angular dark reflectors which cast sub-angular shadows identified in the SSS dataset. The largest feature measures 1.4 x 1.2 x 0.4 m. No anomalous features were identified in the MBES data at this location. This position was not fully covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	SSS	2021_G-tec_SSS_P3_FP	CWP OECC	-
70260	Seabed disturbance	304846	5889232	A2_I	26.7	6.5	1.7	-	-	An irregular elongate dark reflector with an irregular shadow identified in the SSS dataset, also identified in the MBES data as an elongate rounded mound, gently sloped, with a varied surface. Possibly several closely spaced objects. Situated close to <b>70261</b> and <b>70262</b> and may be related. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS, MBES	2021_G-tec_SSS_P3_AO, 2021_G-tec_MBES_P3_AO	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70261	Seabed disturbance	304836	5889228	A2_l	6.3	4.0	1.3	-	6	An irregular dark reflector with an irregular shadow identified in the SSS dataset. This is located at the northern end of anomaly <b>70262</b> and may be associated. Also identified in the Mag. data as a small, broad asymmetric dipole with peak and trough on one profile line. No anomalous features were identified in the MBES data at this location. Interpreted as a possible natural feature with some ferrous content or may be possible ferrous debris.	SSS, Mag.	2021_G-tec_SSS_P3_AO, 2021_G-tec_Mag_P3_AO	CWP OECC	-
70262	Rope/chain	304833	5889211	A2_h	40.6	0.2	0.1	-	-	A curvilinear dark reflector identified in the SSS dataset. This feature is aligned roughly north-south and possibly had indistinct objects attached along its length, though this is unclear. Anomaly <b>70261</b> is located at its northern end and may be associated. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as possible length of non-ferrous rope or chain.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-
70263	Seabed disturbance	304937	5889649	A2_l	5.6	3.7	0.4	-	-	An area of small dark reflectors with tapered bright shadows identified in the SSS dataset. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-
70264	Seabed disturbance	304857	5889548	A2_l	7.8	3.4	1.3	-	-	An elongate dark reflector which casts a bright angular shadow with a single projection identified in the SSS dataset, also identified in the MBES data as a compact elongate mound, slightly irregular and gently sloped. This is located 6 m north-east of anomaly <b>70265</b> and may be associated. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS, MBES	2021_G-tec_SSS_P3_AO, 2021_G-tec_MBES_P3_AO	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70265	Seabed disturbance	304846	5889541	A2_I	35.4	20.3	1.6	-	28	An area of irregular seabed seen as multiple angular and rounded dark reflectors which cast bright varied shadows identified in the SSS dataset. The largest dark reflector measures 1.4 x 1.0 m. Also identified in the MBES data as two linear mounds oriented north-north-west by south-south-east and one elongate mound. This was also identified in the Mag. data as a small asymmetric dipole with peak and trough on one profile line. This area is irregular in shape and more clearly visible in the MBES data. Some scour is seen around this anomaly. Interpreted as a possible natural feature with some ferrous content or may be possible partially ferrous debris.	SSS, MBES, Mag.	2021_G-tec_SSS_P3_AO, 2021_G-tec_MBES_P3_AO, 2021_G-tec_Mag_P3_AO	CWP OECC	-
70266	Seabed disturbance	304824	5889527	A2_I	21.4	12.9	0.1	-	-	An area of small angular dark reflectors which cast tapered shadows identified in the SSS dataset. These are located approximately 13 m west of anomaly 70265 and may be associated. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-
70267	Magnetic	304787	5889438	A2_I	-	-	-	-	5	A small, broad asymmetric dipole with peak and trough on one profile line identified in the Mag. dataset. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	2021_G-tec_Mag_P3_AO	CWP OECC	-
70268	Magnetic	304876	5889780	A2_I	-	-	-	-	18	A small, broad asymmetric dipole with peak and trough on one profile line identified in the Mag. dataset. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	2021_G-tec_Mag_P3_AO	CWP OECC	-
70269	Dark reflector	304594	5889242	A2_I	1.5	0.8	0.6	-	-	A sub-angular dark reflector with a tapered shadow identified in the SSS dataset. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70270	Linear debris	304627	5889430	A2_h	57.2	1.7	0.5	-	17	A collection of features seen as two narrow curvilinear dark reflectors which cast small shadows and an elongate dark reflector which casts bright varied shadow, measuring 3.5 x 1.7 x 0.5 m identified in the SSS dataset. Associated with a small, broad asymmetric dipole with peak and trough on one profile line in the Mag data. This has been identified in the centre of the feature, indicating the presence of ferrous material in this location. No other magnetic anomalies have been identified within the feature extents although this feature was only partially covered by the Mag. data and so it is not possible to ascertain whether ferrous material is present throughout. No anomalous features were identified in the MBES data at this location. This is interpreted as a possibly modern feature such as fishing gear and therefore may not be of archaeological interest. However, as this cannot be confirmed without further investigation, the feature has been retained as a precaution.	SSS, Mag.	2021_G-tec_SSS_P3_AO, 2021_G-tec_Mag_P3_AO	CWP OECC	-
70271	Seabed disturbance	304648	5889400	A2_l	30.2	16.4	0.5	-	-	Several sub-angular dark reflectors which cast irregular shadows clustered in one area identified in the SSS dataset. May be related to linear debris 70270 situated at the northern extent of this feature. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-
70272	Dark reflector	304639	5889442	A2_l	3.6	1.0	0.5	-	-	An elongate dark reflector which casts a bright angular shadow identified in the SSS dataset. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70273	Linear debris	304657	5889475	A2_h	39.0	2.9	0.4	-	-	A highly curvilinear narrow dark reflector which casts a small shadow along its length identified in the SSS dataset. Small sub-angular dark reflectors may be present along its length. No anomalous features were identified in the MBES data at this location. This position was not fully covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. This is interpreted as a possibly modern feature such as fishing gear and therefore may not be of archaeological interest. However, as this cannot be confirmed without further investigation, the feature has been retained as a precaution.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-
70274	Magnetic	304729	5889740	A2_l	-	-	-	-	22	A small, broad asymmetric dipole with peak and trough on one profile line identified in the Mag. dataset. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	2021_G-tec_Mag_P3_AO	CWP OECC	-
70275	Seabed disturbance	304644	5889581	A2_l	7.2	2.4	0.9	-	-	An area of disturbed seabed visible as a narrow dark reflector which casts bright varied shadow. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-
70276	Dark reflector	304489	5889368	A2_l	1.8	0.4	0.4	-	-	An irregular dark reflector with an irregular shadow identified in the SSS dataset. May be two features adjacent. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-
70277	Seabed disturbance	304986	5891042	A2_l	15.1	6.8	1.0	-	-	An irregular area of seabed disturbance visible as indistinct dark reflectors which cast bright varied shadows identified in the SSS dataset. Also identified in the MBES data as a curvilinear area of sub-angular mounds, either adjacent or connected. This position was not directly covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	SSS, MBES	2021_G-tec_SSS_P3_AO, 2021_G-tec_MBES_P1_AO	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70278	Dark reflector	304994	5891057	A2_I	0.7	0.5	0.7	-	-	A sub-rounded dark reflector with a tapered shadow identified in the SSS dataset. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-
70279	Magnetic	305010	5891093	A2_I	-	-	-	-	9	A small, broad asymmetric dipole with peak and trough on one profile line identified in the Mag. dataset. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	2021_G-tec_Mag_P3_AO	CWP OECC	-
70280	Magnetic	304952	5891069	A2_I	-	-	-	-	5	A small, broad asymmetric dipole with peak and trough on one profile line identified in the Mag. dataset. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	2021_G-tec_Mag_P3_AO	CWP OECC	-
70281	Dark reflector	304892	5891185	A2_I	1.6	0.8	0.4	-	-	An angular dark reflector with an irregular shadow identified in the SSS dataset. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-
70282	Dark reflector	304866	5891186	A2_I	6.4	1.1	0.5	-	38	An irregular elongate dark reflector with an irregularly tapering shadow identified in the SSS dataset. Also identified in the Mag. data as a small asymmetric dipole with peak and trough on one profile line. No anomalous features were identified in the MBES data at this location. Interpreted as a possible natural feature with some ferrous content or may be possible ferrous debris.	SSS, Mag.	2021_G-tec_SSS_P3_AO, 2021_G-tec_Mag_P3_AO	CWP OECC	-
70283	Dark reflector	304644	5890416	A2_I	10.8	6.8	1.6	-	-	An elongate dark reflector with a varied surface, which casts a bright varied shadow identified in the SSS dataset. Also identified in the MBES data as an irregular mound with scour to the north and south of the feature. This position was not fully covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	SSS, MBES	2021_G-tec_SSS_P3_AO, 2021_G-tec_MBES_P3_AO	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70284	Dark reflector	304612	5890744	A2_l	1.3	0.8	0.1	-	-	An angular dark reflector with angular shadow identified in the SSS dataset. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-
70286	Magnetic	304479	5890559	A2_h	-	-	-	-	75	A medium, sharp asymmetric dipole with peak and trough on one profile line identified in the Mag. dataset. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	2021_G-tec_Mag_P3_AO	CWP OECC	-
70287	Debris	304525	5890894	A2_h	1.1	1.0	0.7	-	-	A sub-angular dark reflector which casts a bright varied shadow identified in the SSS dataset. This feature is located 37.0 m south-east of anomaly <b>70288</b> and may be associated. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible debris.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-
70288	Seabed disturbance	304499	5890921	A2_l	9.5	8.3	1.5	-	-	A large irregular dark reflector which casts a long and varied shadow identified in the SSS dataset. Anomaly <b>70287</b> is located approximately 37.0 m south-east and may be associated. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-
70289	Dark reflector	304390	5890596	A2_l	11.9	0.8	0.8	-	-	A sub-angular dark reflector with a tapered shadow identified in the SSS dataset. This feature is located 4.0 m from anomaly <b>70290</b> and may be associated. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-
70290	Dark reflector	304388	5890600	A2_l	3.1	2.8	0.7	-	-	A sub-angular dark reflector which casts a bright angular shadow identified in the SSS dataset. This feature is located 4.0 m from anomaly <b>70289</b> and may be associated. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70291	Rope/chain	304084	5889461	A2_h	76.1	0.2	0.1	-	-	A narrow linear dark reflector which casts a small shadow along its length identified in the SSS dataset. This feature is aligned approximately north-west to south-east. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible long length of rope or chain.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-
70292	Seabed disturbance	304052	5889879	A2_l	18.9	8.6	1.1	-	9	A collection of sub-angular dark reflectors which cast bright varied shadows identified in the SSS dataset. Also identified in the Mag. data as a small, broad positive monopole with peak and trough on one profile line. No anomalous features were identified in the MBES data at this location. Interpreted as a possible natural feature with some ferrous content or may be possible ferrous debris.	SSS, Mag.	2021_G-tec_SSS_P3_AO, 2021_G-tec_Mag_P3_AO	CWP OECC	-
70294	Dark reflector	303983	5890177	A2_l	2.2	0.4	1.3	-	-	A narrow elongate dark reflector with tapered shadow identified in the SSS dataset. This feature is located approximately 5.0 m from anomaly 70295 and may be associated. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-
70295	Seabed disturbance	303984	5890192	A2_l	21.2	0.3	0.1	-	-	An area of seabed disturbance comprising a narrow curvilinear dark reflector which casts a short shadow identified in the SSS dataset. This feature is located approximately 5.0 m north of anomaly 70294 and may be associated. No anomalous features were identified in the MBES data at this location. This position was not fully covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70296	Dark reflector	304120	5890749	A2_I	3.1	2.5	0.8	-	-	An irregular, slightly elongate dark reflector which casts a bright, varied shadow identified in the SSS dataset. Also identified in the MBES data as an elongate mound oriented perpendicular to the sand waves. This position was not directly covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	SSS, MBES	2021_G-tec_SSS_P3_AO, 2021_G-tec_MBES_P3_AO	CWP OECC	-
70297	Dark reflector	304246	5891313	A2_I	2.0	0.7	0.5	-	-	A sub-angular dark reflector with an angular shadow identified in the SSS dataset. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-
70298	Dark reflector	304260	5891294	A2_I	3.6	1.1	0.5	-	-	A rounded dark reflector which casts an angular shadow identified in the SSS dataset. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-
70299	Dark reflector	303721	5890145	A2_I	4.6	3.7	0.3	-	-	A slightly irregular dark reflector with a tapered shadow identified in the SSS dataset. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-
70300	Magnetic	303998	5891246	A2_I	-	-	-	-	14	A small, broad asymmetric dipole with peak and trough on one profile line identified in the Mag. dataset. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	2021_G-tec_Mag_P3_AO	CWP OECC	-
70301	Magnetic	303600	5890422	A2_I	-	-	-	-	9	A small, broad asymmetric dipole with peak and trough on one profile line identified in the Mag. dataset. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	2021_G-tec_Mag_P3_AO	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70302	Dark reflector	303653	5890700	A2_l	5.7	3.3	0.6	-	-	An angular dark reflector which casts a bright angular shadow identified in the SSS dataset. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-
70303	Magnetic	303441	5890864	A2_h	-	-	-	-	65	A medium positive monopole with peak and trough on one profile line identified in the Mag. dataset. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	2021_G-tec_Mag_P3_AO	CWP OECC	-
70304	Magnetic	303371	5890605	A2_l	-	-	-	-	20	A small asymmetric dipole with peak and trough on one profile line identified in the Mag. dataset. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	2021_G-tec_Mag_P3_AO	CWP OECC	-
70305	Dark reflector	303312	5890681	A2_l	0.9	0.6	0.5	-	-	A sub-angular dark reflector which casts an angular shadow identified in the SSS dataset. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-
70306	Debris	303216	5890258	A2_h	6.7	5.7	0.1	-	-	A short curvilinear dark reflector which casts a small shadow along its length. This is located at the crest of a sand wave and situated 16.0 m south-east from anomaly 70307 and may be associated. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible debris.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70307	Debris	303202	5890267	A2_h	4.8	3.2	-	-	-	A narrow curvilinear dark reflector which does not appear to cast a shadow. This feature is located at the crest of a sand wave and situated 16.0 m north-west of anomaly <b>70306</b> and may be associated. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible debris.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-
70308	Magnetic	303178	5890560	A2_l	-	-	-	-	10	A small, broad asymmetric dipole with peak and trough on one profile line identified in the Mag. dataset. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	2021_G-tec_Mag_P3_AO	CWP OECC	-
70309	Magnetic	302999	5890934	A2_l	-	-	-	-	7	A small, broad symmetric dipole with peak and trough on one profile line identified in the Mag. dataset. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	2021_G-tec_Mag_P3_AO	CWP OECC	-
70310	Dark reflector	302826	5891657	A2_l	3.8	0.4	0.2	-	-	A slightly elongate dark reflector which casts an angular shadow identified in the SSS dataset. Situated within the bend in the southern extents of of rope/chain <b>70311</b> and may be associated. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-
70311	Rope/chain	302815	5891737	A2_h	273.7	0.6	0.1	-	-	A long, narrow linear dark reflector which casts a small shadow along its length identified in the SSS dataset. This feature is aligned north to south, with a bend at the southern end. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible long length of rope or chain.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70312	Seabed disturbance	302745	5891800	A2_I	53.9	37.3	-0.1	-	-	A compact area of multiple closely-spaced small depressions seen as bright and dark reflectors identified in the SSS dataset. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-
70313	Mound	302752	5890672	A2_I	4.9	1.0	0.1	-28.4	-	A short, straight mound which appears segmented and may comprise several objects or may be a data artefact. No anomalous features were identified in the SSS or Mag. data at this location but this has been retained as a precaution. May be a possible data artefact, a possible natural feature or may be possible non-ferrous debris.	MBES	2021_G-tec_MBES_P2_AO	CWP OECC	-
70314	Mound	302306	5891426	A2_I	2.2	1.8	0.3	-	-	Sub-rounded mound within slight surrounding scour. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	MBES	2021_G-tec_MBES_P2_AO	CWP OECC	-
70315	Magnetic	302343	5891442	A2_I	-	-	-	-	21	A small, broad asymmetric dipole with peak and trough on one profile line identified in the Mag. dataset. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried or with no surface expression.	Mag.	2021_G-tec_Mag_P3_AO	CWP OECC	-
70316	Debris	302354	5891554	A2_h	2.4	1.7	0.4	-	-	A distinct angular dark reflector with shadow and within a slight scour in the SSS data. Also visible in the MBES data as a short, elongate mound. This position was not directly covered by Mag. data and therefore it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible debris.	SSS	2021_G-tec_SSS_P2_AO	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70317	Rope/chain	302251	5891621	A2_h	98.7	0.1	0.1	-	-	A narrow linear dark reflector which casts a small shadow along its length identified in the SSS dataset. This feature is aligned approximately north-south and anomaly <b>70318</b> is present at the northern end. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible long length of rope or chain.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-
70318	Dark reflector	302236	5891652	A2_l	11.5	0.9	0.4	-	-	A sub-angular dark reflector with tapered shadow identified in the SSS dataset. This is situated at the northern end of a possible rope or chain <b>70317</b> and may be associated. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-
70319	Dark reflector	302076	5891676	A2_l	5.4	0.7	0.6	-	-	A sub-angular dark reflector with a tapered shadow identified in the SSS dataset. This is located adjacent to linear anomaly <b>70320</b> and may be associated. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-
70320	Seabed disturbance	302078	5891686	A2_l	98.3	2.6	-0.1	-	-	A narrow linear dark reflector which appears to have a series of small depressions along its length, or be composed of depressions identified in the SSS dataset. This is broadly aligned north to south. No anomalous features were identified in the MBES data at this location. This position was not fully covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70321	Dark reflector	302103	5891756	A2_I	5.9	2.3	0.6	-	-	A sub-angular dark reflector with a tapered shadow identified in the SSS dataset. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	SSS	2021_G-tec_SSS_P3_AO, 2021_G-tec_SSS_P2_AO	CWP OECC	-
70322	Dark reflector	301933	5891851	A2_I	4.5	1.3	0.5	-	-	An angular dark reflector with tapered shadow and some scour identified in the SSS dataset. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-
70323	Dark reflector	301845	5892010	A2_I	3.1	0.6	0.3	-	-	A sub-angular dark reflector with tapered shadow identified in the SSS dataset. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-
70324	Dark reflector	301773	5891993	A2_I	3.1	3.0	0.7	-	-	A sub-angular dark reflector with tapered shadow identified in the SSS dataset, also identified in the MBES data as a sub-angular mound, with a very steep northern side. Small data gaps are seen over the feature in the MBES data. This position was not directly covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	SSS, MBES	2021_G-tec_SSS_P3_AO, 2021_G-tec_MBES_P3_AO	CWP OECC	-
70325	Dark reflector	301617	5892556	A2_I	3.3	0.8	0.6	-	-	An irregular and indistinct dark reflector with a bright varied shadow identified in the SSS dataset. No anomalous features were identified in the MBES data at this location. This position was not directly covered by the Mag. dataset so it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	SSS	2021_G-tec_SSS_P3_AO	CWP OECC	-
70328	Debris field	301697	5893021	A2_h	21.5	9.1	0.5	-	-	A seabed disturbance comprising an indistinct mound within shadow and a possible linear extending to the north in the SSS data. The mound is tentatively visible in the MBES data. No anomalous features were identified in the Mag. data at this location. Based on its form in the SSS data, this feature is interpreted as possible non-ferrous debris.	SSS	2021_G-tec_SSS_P2_AO	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70329	Dark reflector	301927	5893157	A2_l	1.4	0.6	0.3	-	-	A poorly defined dark reflector, possibly partially obscured by natural seabed features, with a distinct angular shadow. No anomalous features were identified in the MBES or Mag. data at this location. Located approximately 22 m south of anomaly 70330. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	2021_G-tec_SSS_P2_AO	CWP OECC	-
70330	Debris	301929	5893179	A2_h	6.8	2.2	0.5	-	-	A distinct sub-angular dark reflector with a shadow indicating varying height in the SSS data. Also visible in the MBES data as a small mound. This position was not directly covered by Mag. data and therefore it is not possible to ascertain whether ferrous material is present at this location. Located approximately 22 m north of anomaly 70329. Based on its form this is interpreted as possible debris.	SSS	2021_G-tec_SSS_P2_AO	CWP OECC	-
70331	Linear debris	301489	5893232	A2_h	134.9	1.0	0.1	-	-	An indistinct curvilinear bright reflector with multiple dark reflectors with height (each measuring approximately 1.4 x 1.0 x 0.1 m) evenly spaced along its length in the SSS data. Also visible in the MBES data as a linear seabed disturbance comprising a curvilinear discontinuous scour. Within an area of sandy seabed with no other features present. The full extents of this feature were not directly covered by Mag. data and therefore it is not possible to ascertain whether ferrous material is present within the feature extents. Interpreted as possible linear debris and may be modern, such as fishing gear, but this cannot be confirmed without visual inspection.	SSS	2021_G-tec_SSS_P2_AO	CWP OECC	-
70332	Linear debris	301530	5893540	A2_h	127.6	0.3	0.1	-	-	A distinct curvilinear dark reflector with slight shadow and multiple small dark reflectors present along its length (each measuring approximately 1.7 x 0.4 x 0.1 m) in the SSS data. No anomalous features were identified in the MBES data at this location. The full extents of this feature were not directly covered by Mag. data and therefore it is not possible to ascertain whether ferrous material is present within the feature extents. Interpreted as possible linear debris and may be modern, such as fishing gear, but this cannot be confirmed without visual inspection.	SSS	2021_G-tec_SSS_P2_AO	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70333	Dark reflector	300944	5895394	A2_l	4.3	1.4	0.4	-	-	A distinct rounded dark reflector with an angular shadow in the SSS data. Identified in the MBES data as a sub-rounded mound. No anomalous features were identified in the Mag. data at this location. Interpreted as possible natural feature or may be possible non-ferrous debris.	SSS, MBES	2021_G-tec_SSS_P2_AO, 2021_G-tec_MBES_P2_AO	CWP OECC	-
70334	Dark reflector	300357	5897114	A2_l	3.2	1.9	0.3	-	-	A distinct angular dark reflector with a slight shadow and within slight scour in the SSS data. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	2021_G-tec_SSS_P2_AO	CWP OECC	-
70337	Linear debris	299608	5899335	A2_h	31.1	0.1	0.1	-	-	A distinct curvilinear dark reflector with slight shadow and a small dark reflector at each end (each measuring approximately 1.2 x 0.4 x 0.1 m) in the SSS data. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as possible linear debris and may be modern such as fishing gear but this cannot be confirmed without visual inspection.	SSS	2021_G-tec_SSS_P2_AO	CWP OECC	-
70338	Dark reflector	299390	5899750	A2_l	4.2	1.3	0.3	-	-	An indistinct sub-rounded dark reflector with a slight shadow in the SSS data. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	2021_G-tec_SSS_P2_AO	CWP OECC	-
70339	Rope/chain	298787	5899709	A2_h	83.6	0.6	0.1	-	-	A distinct curvilinear dark reflector with a slight shadow aligned NNE to SSW in the SSS data. Visible in the MBES data as a thin, generally straight, linear mound. The full extents of this feature were not directly covered by Mag. data and therefore it is not possible to ascertain whether ferrous material is present within the feature extents. Interpreted as a possible length of rope or chain.	SSS	2021_G-tec_SSS_P2_AO	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70340	Dark reflector	298951	5899808	A2_l	125.3	0.4	0.1	-	-	A distinct curvilinear dark reflector with a slight shadow which hasn't been imaged in full and so these are the minimum extents in the SSS data. Visible as a curvilinear mound in the MBES and may be related to wider disturbance which appear to be multiple seabed scars. No anomalous features were identified in the Mag. data although this feature was only partially covered by the Mag. data and so it is not possible to ascertain whether ferrous material is present throughout. Retained as a precaution as may be the edge of a deeper seabed scar or may be a possible length of rope or chain.	SSS	2021_G-tec_SSS_P2_AO	CWP OECC	-
70341	Debris	299250	5900318	A2_h	2.5	1.0	0.2	-	-	A distinct angular dark reflector with irregular bright shadow in the SSS data. Separate but possibly related to debris field 70342, which lies 16 m NNW. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as possible non-ferrous debris.	SSS	2021_G-tec_SSS_P2_AO	CWP OECC	-
70342	Debris field	299246	5900350	A2_h	33.5	8.1	0.3	-	-	A compact angular area of distinct irregular dark reflectors which appear inter-connected by straight and curvilinear dark reflectors in the SSS data. Tentatively visible in the MBES data as a slight seabed disturbance. No anomalous features were identified in the Mag. data although this feature was only partially covered by the Mag. data and so it is not possible to ascertain whether ferrous material is present throughout. Based on its appearance in the SSS data this feature has been interpreted as possible debris, and may be modern, but this cannot be confirmed without visual inspection.	SSS	2021_G-tec_SSS_P2_AO	CWP OECC	-
70343	Linear debris	299609	5900469	A2_h	101.7	0.1	0.1	-	-	A distinct curvilinear dark reflector with a slight shadow and several possible small objects at an irregular spacing along the length in the SSS data. May not be seen in full. Tentatively seen in the MBES data as a curvilinear series of small depressions. No anomalous features were identified in the Mag. data although this feature was only partially covered by the Mag. data and so it is not possible to ascertain whether ferrous material is present throughout. Interpreted as possible linear debris, and may be modern such as fishing gear, but this cannot be confirmed without visual inspection.	SSS	2021_G-tec_SSS_P2_AO	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70344	Linear debris	298660	5900573	A2_h	41.8	4.5	0.4	-	-	An indistinct generally straight linear seabed disturbance comprising several small dark reflectors, possibly associated with a curvilinear dark reflector in the SSS data. No anomalous features were identified in the MBES data at this location. No anomalous features were identified in the Mag. data although this feature was only partially covered by the Mag. data and so it is not possible to ascertain whether ferrous material is present throughout. Interpreted as possible linear debris, and may be modern such as fishing gear, but this cannot be confirmed without visual inspection.	SSS	2021_G-tec_SSS_P2_AO	CWP OECC	-
70345	Magnetic	298100	5901462	A2_l	-	-	-	-	33	A small positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried with no surface expression.	Mag.	2021_G-tec_Mag_P2_AO	CWP OECC	-
70346	Dark reflector	298798	5901921	A2_l	7.2	1.6	0.8	-	-	An indistinct dark reflector with a variable shadow within slight scour in the SSS data. Also identified in the MBES data as an elongate, possibly segmented mound, within slight scour. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS, MBES	2021_G-tec_SSS_P2_AO, 2021_G-tec_MBES_P2_AO	CWP OECC	-
70347	Mound	298780	5901934	A2_l	2.3	1.1	0.1	-28.9	-	Small, short, straight mound, located 22 m north-west of 70346. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	MBES	2021_G-tec_MBES_P2_AO	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70348	Debris	297958	5902033	A2_h	5.2	2.7	1.4	-	103	A distinct sub-rounded dark reflector with a variable shadow within a slight scour in the SSS data. Also identified in the MBES data as a distinct sub-rounded mound within scour and has an associated linear seabed disturbance extending either side which may indicate snagged rope or chain ( <b>70350</b> ). This position is associated with a large positive monopole with peak and trough on one profile line in the Mag. data indicating the presence of ferrous material. Potentially also associated with similar feature <b>70349</b> located approximately 90 m to the north-west. Interpreted as possible ferrous debris.	SSS, MBES, Mag.	2021_G-tec_SSS_P2_AO, 2021_G-tec_MBES_P2_AO, 2021_G-tec_Mag_P2_AO	CWP OECC	-
70349	Debris	297874	5902070	A2_h	7.2	2.5	1.5	-	-	An indistinct dark reflector with a tall bright shadow, possibly associated or snagged by rope or chain features in the SSS data ( <b>70350</b> ). Identified in the MBES data as a sub-rounded mound with a distinct small peak (2.0 x 1.5 m) and surrounding scour, with a curvilinear disturbance in the vicinity. This position was not directly covered by Mag. data and therefore it is not possible to ascertain whether ferrous material is present at this location. Potentially also associated with similar feature <b>70348</b> located approximately 90 m to the south-east. Interpreted as possible debris.	SSS, MBES	2021_G-tec_SSS_P2_AO, 2021_G-tec_MBES_P2_AO	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70350	Linear debris	297950	5902030	A2_h	188.0	10.5	0.1	-	-	A large, discontinuous curvilinear series of mounds and depressions identified in the MBES data comprising two or possibly three overlapping features, all possibly associated with or snagged on, nearby features <b>70348</b> and <b>70349</b> . It is identified in the SSS data as a curvilinear dark reflector with possible small dark reflectors extending for approximately 15 m south of mound <b>70349</b> , but the full extents of the feature visible in the MBES data are not clearly visible in the SSS data. No anomalous features were identified in the Mag. data although this feature was only partially covered by the Mag. data and so it is not possible to ascertain whether ferrous material is present throughout. This entire feature is interpreted as possible linear debris and may be modern, such as fishing gear, but this cannot be certain without visual inspection.	SSS, MBES	2021_G-tec_SSS_P2_AO, 2021_G-tec_MBES_P2_AO	CWP OECC	-
70352	Recorded obstruction	298325	5902495	A3	-	-	-	-	-	Recorded position of an anchor identified on the seabed. First identified in 1991 and last surveyed in 2009. No anomalous features were identified in the geophysical data at this location. An anomaly has been identified approximately 45 m NNW but is not obviously consistent with the appearance of an anchor so this record has been retained separately as a precaution.	-	-	CWP OECC	UKHO_6971, NMS_W10597
70353	Debris	298305	5902535	A2_h	2.8	0.6	0.1	-	-	A distinct and elongate dark reflector with a slight shadow, isolated in an area of sand ripples in the SSS data. Tentatively visible in the MBES data as a short, straight, slight mound. This position was not directly covered by Mag. data and therefore it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible debris.	SSS	2021_G-tec_SSS_P2_AO	CWP OECC	-
70354	Magnetic	297552	5902455	A2_h	-	-	-	-	92	A medium, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried with no surface expression.	Mag.	2021_G-tec_Mag_P2_AO	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70355	Magnetic	296384	5905157	A2_h	-	-	-	-	50	A medium positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location, although linear debris was identified to the north which may be associated though this has been retained separately (70356). Interpreted as possible ferrous debris either buried with no surface expression.	Mag.	2021_G-tec_Mag_P2_AO	CWP OECC	-
70356	Linear debris	296340	5905179	A2_h	217.8	0.3	0.1	-	-	A distinct curvilinear dark reflector with slight shadow and possible small objects along its length in the SSS data. Also seen in the MBES data as extending further with small depressions along its length. There is a Mag. anomaly (70355) located approximately 10 m south of this feature, but because this is the only magnetic anomaly in the area, this has been kept separate. This feature interpreted as possible linear debris and may be modern such as fishing gear but this cannot be confirmed without visual inspection.	SSS	2021_G-tec_SSS_P2_AO	CWP OECC	-
70357	Magnetic	296864	5905379	A2_l	-	-	-	-	30	A small symmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried with no surface expression.	Mag.	2021_G-tec_Mag_P2_FP	CWP OECC	-
70358	Rope/chain	296644	5905952	A2_h	56.0	0.7	0.1	-	-	A discontinuous curvilinear dark reflector with consistent shadow along its length in the SSS data. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible length (or lengths) of non-ferrous rope or chain.	SSS	2021_G-tec_SSS_P2_AO, 2021_G-tec_SSS_P2_FP	CWP OECC	-
70359	Magnetic	295963	5905752	A2_h	-	-	-	-	68	A medium asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried with no surface expression.	Mag.	2021_G-tec_Mag_P2_AO	CWP OECC	-
70360	Dark reflector	296319	5905940	A2_l	6.0	0.2	0.1	-	-	A distinct elongate dark reflector with a slight shadow, slightly affected by data stretching in the SSS data. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	2021_G-tec_SSS_P2_FP	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70361	Rope/chain	296692	5906247	A2_h	36.2	0.4	0.4	-	-	A distinct curvilinear feature visible as a dark reflector with a slight shadow in the SSS data. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible length of non-ferrous rope or chain.	SSS	2021_G-tec_SSS_P2_FP	CWP OECC	-
70362	Debris	296022	5906501	A2_h	4.0	3.1	0.3	-	44	A distinct irregular dark reflector with slight varying shadow and within a possible slight seabed disturbance in the SSS data. No anomalous features were identified in the MBES data at this location. Associated with a small symmetric dipole with peak and trough on one profile line in the Mag. data, indicating the presence of ferrous material. Interpreted as possible ferrous debris.	SSS, Mag.	2021_G-tec_SSS_P2_FP, 2021_G-tec_Mag_P2_FP	CWP OECC	-
70363	Dark reflector	296148	5906590	A2_l	3.2	0.9	0.1	-	-	A distinct elongate dark reflector, possibly hollow, with a slight shadow and scour visible in the SSS data. Possibly exaggerated by data stretching. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	2021_G-tec_SSS_P2_FP	CWP OECC	-
70364	Mound	296303	5906809	A2_l	5.6	4.1	0.3	-	-	A small, sub-rounded, slightly irregular mound, possibly segmented. No anomalous features were identified in the SSS data at this location. This position was not directly covered by Mag. data and therefore it is not possible to ascertain whether ferrous material is present at this location. Approximately 80 m SSW of wreck <b>70366</b> and may be associated. Interpreted as possible natural feature or may be possible wreck debris.	MBES	2021_G-tec_MBES_P2_FP	CWP OECC	-
70365	Debris field	296343	5906838	A2_h	12.6	1.2	0.1	-	-	A linear array of three distinct sub-angular dark reflectors with shadow (each measuring approximately 2.5 x 1.2 x 0.1 m) in the SSS data located approximately 38 m SSW from the bow of wreck <b>70366</b> and extending further SSW. This SSS line has some positional issues and so the location of this anomaly is unreliable. No similar anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a non-ferrous debris field possibly associated with wreck <b>70366</b> .	SSS	2021_G-tec_SSS_P2_FP	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70366	Wreck	296335	5906890	A1	31.5	7.1	3.2	-	93	A distinct elliptical dark reflector demarking the outline of a large object with tall bright shadow in the SSS data. Interpreted as a generally intact wreck with a more pointed end at the south-east indicating the bow, and the more angular north-west end interpreted as the stern. Some internal angular dark reflectors and taller more central shadow visible which suggest outlines of superstructure and indicate the vessel is standing upright. Some surrounding scour is visible at each end and some sediment build-up is visible along both sides. Identified in the MBES data at a general depth of -29.3 m as a distinct elliptical mound with no obvious upstanding superstructure visible. Deeper, flared scouring is visible at the south-east end. This is associated with a medium negative monopole identified in the Mag. data, although the extents of this wreck were not directly covered by the Mag. data indicating this response is likely to be a minimum. This wreck has associated UKHO and NMS records which reports the wreck was identified by Divers as HMS <i>Guide Me II</i> , a British fishing vessel which was converted to an armed patrol vessel in 1915 and was sunk following a collision with SS <i>GlenGarrieff</i> on 29/08/1918. A naval gun and the ship's bell have since been recovered. It has been recorded as a generally intact and upright wreck with collision damage visible on the port side.	SSS, MBES, Mag.	2021_G-tec_SSS_P2_FP, 2021_G-tec_MBES_P2_FP, 2021_G-tec_Mag_P2_FP	CWP OECC	UKHO_6943, NMS_W01482
70367	Seabed disturbance	296269	5906921	A2_I	20.2	16.4	0.1	-	-	A seabed disturbance comprising a generally compact area of elongate dark reflectors with slight shadow (all measuring approximately 1.4 x 0.7 x 0.1 m) in the SSS data. No anomalous features were identified in the MBES data at this location. This position was not directly covered by Mag. data and therefore it is not possible to ascertain whether ferrous material is present at this location. It is located approximately 60 m north-west of wreck 70366. May be a natural feature or may be possible wreck debris.	SSS	2021_G-tec_SSS_P2_FP	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70368	Dark reflector	296240	5907068	A2_l	2.0	1.8	0.4	-	-	An indistinct angular dark reflector with shadow and slight scour, isolated on the seabed in the SSS data. Tentatively observed in the MBES data as a slight mound with some associated scour, but this SSS line has some positional issues and so the location of this anomaly is unreliable. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	2021_G-tec_SSS_P2_FP	CWP OECC	-
70369	Linear debris	295857	5907165	A2_h	53.2	0.3	0.1	-	-	A distinct curvilinear dark reflector with a slight shadow and several small dark reflectors along its length in the SSS data. No anomalous features were identified in the MBES data at this location. The extents of this feature were not directly covered by Mag. data and therefore it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible linear debris and may be modern such as fishing gear but this cannot be confirmed without visual inspection.	SSS	2021_G-tec_SSS_P2_FP	CWP OECC	-
70370	Seabed disturbance	296126	5907426	A2_l	14.0	1.1	0.1	-	-	An indistinct area of seabed disturbance comprising a generally curvilinear dark reflector which tapers with a slight corresponding shadow. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	2021_G-tec_SSS_P2_FP	CWP OECC	-
70371	Seabed disturbance	295176	5907345	A2_l	12.5	3.0	0.3	-	-	A curvilinear seabed disturbance comprising four angular mounds, ranging in size from smallest in the north, to largest in the south (measuring 5.0 x 2.4 x 0.3 m). Possible sediment build up on the northern and western edges of the disturbance. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	MBES	2021_G-tec_MBES_P2_AO	CWP OECC	-
70372	Seabed disturbance	295137	5907400	A2_l	15.2	5.5	0.6	-29.3	-	A curvilinear seabed disturbance comprising a series of irregular mounds. On the edge of the dataset and so the dimensions should be considered a minimum. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	MBES	2021_G-tec_MBES_P2_AO	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70373	Linear debris	295991	5907883	A2_h	82.1	0.4	0.1	-	-	A distinct straight linear dark reflector with corresponding shadow measuring 7.9 x 0.7 x 0.5 m with a possibly attached curvilinear array of small dark reflectors (all measuring approximately 1.8 x 1.3 x 0.1 m) possibly connected by a curvilinear dark reflector with a slight shadow in the SSS data. The majority of this feature is outside the study area and is therefore not covered by MBES or Mag. data, however, the end does extend inside and so it has been retained. Interpreted as possible linear debris and may be modern such as fishing gear but this cannot be confirmed without visual inspection.	SSS	2021_G-tec_SSS_P2_AO	CWP OECC	-
70374	Debris	295916	5907881	A2_h	4.5	2.4	0.4	-	-	A distinct short curvilinear dark reflector with slight shadow in the SSS data. Tentatively visible in the MBES data as a small mound. This position was not directly covered by Mag. data and therefore it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible debris.	SSS	2021_G-tec_SSS_P2_AO, 2021_G-tec_SSS_P2_FP	CWP OECC	-
70375	Dark reflector	295673	5908150	A2_l	3.7	0.3	0.1	-	-	An indistinct angular dark reflector with a slight shadow situated 15.0 m east of curvilinear feature <b>70376</b> in the SSS data. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	2021_G-tec_SSS_P2_FP	CWP OECC	-
70376	Linear debris	295632	5908179	A2_h	169.3	0.2	0.1	-	-	A distinct curvilinear dark reflector with a slight shadow in the SSS data with several largely indistinct small dark reflectors with height along the length of the feature (all approximately 2.0 x 0.1 x 0.1 m). With a second, likely attached, length visible (measuring 15.5 m) doubled up. No anomalous features were identified in the MBES or Mag. data at this location although this feature was only partially covered by the Mag. data and so it is not possible to ascertain whether ferrous material is present throughout. Interpreted as possible linear debris and may be modern such as fishing gear but this cannot be confirmed without visual inspection.	SSS	2021_G-tec_SSS_P2_FP	CWP OECC	-
70377	Dark reflector	295270	5908216	A2_l	5.5	0.3	0.1	-	-	A distinct short, straight linear dark reflector with a slight shadow in the SSS data. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	2021_G-tec_SSS_P2_FP	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70378	Dark reflector	295256	5908296	A2_I	4.0	3.0	0.4	-	-	An indistinct dark reflector with a slight shadow, possibly exaggerated by data stretching in the SSS data. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	2021_G-tec_SSS_P2_FP	CWP OECC	-
70379	Dark reflector	295209	5908939	A2_I	2.8	1.4	0.7	-	-	A distinct angular dark reflector with corresponding shadow and within scour in the SSS data. No anomalous features were identified in the MBES or Mag. data at this location, although it's on the edge of the dataset and may not be fully covered. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	2021_G-tec_SSS_P2_AO	CWP OECC	-
70380	Dark reflector	294335	5908576	A2_I	2.1	1.2	0.6	-	-	A distinct sub-rounded dark reflector with varying shadow in the SSS data. Also identified in the MBES data as a distinct sub-rounded mound within scour. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS, MBES	2021_G-tec_SSS_P2_FP, 2021_G-tec_MBES_P2_FP	CWP OECC	-
70381	Dark reflector	294735	5908843	A2_I	2.3	0.6	0.6	-	-	A small indistinct angular dark reflector with a shadow in the SSS data. Also identified in the MBES data as small angular mound within scour. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS, MBES	2021_G-tec_SSS_P2_FP, 2021_G-tec_MBES_P2_FP	CWP OECC	-
70382	Rope/chain	294513	5908748	A2_h	9.8	0.2	0.1	-	-	A distinct curvilinear dark reflector with a slight shadow within a possible wider seabed disturbance in the SSS data. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible length of non-ferrous rope or chain.	SSS	2021_G-tec_SSS_P2_FP	CWP OECC	-
70383	Rope/chain	294525	5908767	A2_h	10.2	0.2	0.1	-	-	A distinct curvilinear dark reflector with a slight shadow in the SSS data. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible length of non-ferrous rope or chain.	SSS	2021_G-tec_SSS_P2_FP	CWP OECC	-
70384	Rope/chain	294506	5908791	A2_h	4.3	0.8	0.2	-	-	A distinct short slightly curvilinear dark reflector with a slight shadow in the SSS data. No anomalous features were identified in the MBES or Mag. data at this location. Given the proximity to similar features ( <b>70383</b> , <b>70384</b> and <b>70385</b> ), this is interpreted as a possible short length of non-ferrous rope or chain.	SSS	2021_G-tec_SSS_P2_FP	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70385	Rope/chain	294487	5908805	A2_h	16.2	0.3	0.2	-	-	A distinct highly angular curvilinear dark reflector with a slight shadow in the SSS data. No anomalous features were identified in the MBES or Mag. data at this location. Interpreted as a possible length of non-ferrous rope or chain.	SSS	2021_G-tec_SSS_P2_FP	CWP OECC	-
70386	Rope/chain	294541	5908903	A2_h	20.5	0.3	0.1	-	-	A distinct, discontinuous curvilinear dark reflector with a slight shadow in the SSS data. No anomalous features were identified in the MBES data at this location. No anomalous features were identified in the Mag. data although this feature was only partially covered by the Mag. data and so it is not possible to ascertain whether ferrous material is present throughout. Interpreted as a possible length of rope or chain.	SSS	2021_G-tec_SSS_P2_FP	CWP OECC	-
70387	Linear debris	294638	5909043	A2_h	71.1	0.4	0.1	-	-	A distinct sub-rounded dark reflector with a slight shadow measuring 2.5 x 1.0 x 0.1 m with a distinct and discontinuous curvilinear dark reflector with a slight shadow possibly attached in the SSS data. No anomalous features were identified in the MBES data at this location. This position was not directly covered by Mag. data and therefore it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible linear debris and may be modern such as fishing gear but this cannot be confirmed without visual inspection.	SSS	2021_G-tec_SSS_P2_AO	CWP OECC	-
70388	Linear debris	294422	5909018	A2_h	37.2	0.7	0.2	-	-	A distinct curvilinear dark reflector with slight shadow and several small dark reflectors attached along its length in the SSS data. A larger dark reflector (approximately 4.9 x 0.5 x 0.2m) is located at the north-west end and seems to be attached. This larger dark reflector was identified in the MBES data as a sub-angular mound. No anomalous features were identified in the Mag. data although this feature was only partially covered by the Mag. data and so it is not possible to ascertain whether ferrous material is present throughout. Interpreted as possible linear debris and may be modern such as fishing gear but this cannot be confirmed without visual inspection.	SSS, MBES	2021_G-tec_SSS_P2_FP, 2021_G-tec_MBES_P2_FP	CWP OECC	-
70389	Mound	294145	5908894	A2_I	5.9	4.0	0.3	-	-	A sub-angular mound which appears irregular in form. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as possible natural feature or may be possible non-ferrous debris.	MBES	2021_G-tec_MBES_P2_FP	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70390	Linear debris	294126	5908943	A2_h	39.6	0.3	0.2	-	-	A distinct curvilinear dark reflector with a slight shadow with a possible small rounded dark reflector at one end (measuring approximately 1.0 x 0.5 x 0.1 m) in the SSS data. No anomalous features were identified in the MBES or Mag. data at this location although this feature was only partially covered by the Mag. data and so it is not possible to ascertain whether ferrous material is present throughout. Interpreted as possible linear debris and may be modern such as fishing gear but this cannot be confirmed without visual inspection.	SSS	2021_G-tec_SSS_P2_FP	CWP OECC	-
70391	Mound	294165	5908990	A2_l	3.7	2.6	0.2	-	-	A sub-angular mound which appears irregular in form. No anomalous features were identified in the SSS data at this location. This position was not directly covered by Mag. data and therefore it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	MBES	2021_G-tec_MBES_P2_FP	CWP OECC	-
70392	Linear debris	293809	5909124	A2_h	28.8	0.2	0.2	-	-	A distinct highly angular curvilinear dark reflector with a slight shadow and a small dark reflector at each end (the largest measuring 1.9 x 1.0 x 0.2 m) in the SSS data. No anomalous features were identified in the MBES or Mag. data although this feature was only partially covered by the Mag. data and so it is not possible to ascertain whether ferrous material is present throughout. Interpreted as possible linear debris and may be modern such as fishing gear but this cannot be confirmed without visual inspection.	SSS	2021_G-tec_SSS_P2_FP	CWP OECC	-
70393	Rope/chain	294438	5909525	A2_h	10.5	0.2	0.1	-	-	A distinct linear dark reflector with a slight shadow in the SSS data. No anomalous features were identified in the MBES data. This position was not directly covered by Mag. data and therefore it is not possible to ascertain whether ferrous material is present within the feature extents. Interpreted as a possible short length of rope or chain.	SSS	2021_G-tec_SSS_P2_AO	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70394	Rope/chain	294397	5909682	A2_h	12.5	0.2	0.1	-	-	A distinct curvilinear dark reflector in the SSS data with a slight shadow and a possible small dark reflector at one end but this is uncertain. No anomalous features were identified in the MBES data. This position was not directly covered by Mag. data and therefore it is not possible to ascertain whether ferrous material is present within the feature extents. Interpreted as a possible short length of rope or chain.	SSS	2021_G-tec_SSS_P2_AO	CWP OECC	-
70395	Linear debris	293889	5909467	A2_h	163.8	2.0	0.3	-	-	A distinct curvilinear dark reflector with a slight shadow with a series of small rounded dark reflectors spaced evenly along its length (each measuring approximately 1.8 x 0.7 x 0.3 m) in the SSS data. This feature was also identified in the MBES data as a curvilinear feature with a series of depressions along its length and extending to the north. No anomalous features were identified in the Mag. data although this feature was only partially covered by the Mag. data and so it is not possible to ascertain whether ferrous material is present throughout. Interpreted as possible linear debris and may be modern such as fishing gear but this cannot be confirmed without visual inspection.	SSS, MBES	2021_G-tec_SSS_P2_AO, 2021_G-tec_SSS_P2_FP, 2021_G-tec_MBES_P2_AO, 2021_G-tec_MBES_P2_FP	CWP OECC	-
70396	Depression	293969	5909520	A2_l	9.6	6.1	-0.3	-	-	A distinct sub-rounded depression with an uneven base in the MBES data. No anomalous features were identified in the SSS data at this location. This position was not directly covered by Mag. data and therefore it is not possible to ascertain whether ferrous material is present at this location, therefore this feature has been retained as a precaution. May be a possible natural feature or may contain possible partially buried debris.	MBES	2021_G-tec_MBES_P2_AO	CWP OECC	



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70397	Linear debris	293602	5909242	A2_h	155.7	0.4	0.1	-	-	A distinct curvilinear dark reflector with a slight shadow with a series of small rounded dark reflectors spaced evenly along its length (each measuring approximately 0.8 x 0.2 x 0.1 m), and a larger dark reflector at each end 3.9 x 1.2 x 0.1 m at the eastern end and 1.6 x 1.4 x 0.1 m at the western end) in the SSS data. This feature was also identified in the MBES data as a curvilinear feature with a series of small mounds and depressions along its length and a larger mound at each end. No anomalous features were identified in the Mag. data although this feature was only partially covered by the Mag. data and so it is not possible to ascertain whether ferrous material is present throughout. Interpreted as possible linear debris and may be modern such as fishing gear but this cannot be confirmed without visual inspection.	SSS	2021_G-tec_SSS_P2_AO, 2021_G-tec_SSS_P2_FP, 2021_G-tec_MBES_P2_AO	CWP OECC	-
70398	Linear debris	293772	5909486	A2_h	12.8	0.3	0.1	-	-	A distinct curvilinear dark reflector with a slight shadow and possibly connected to two dark reflectors in the SSS data; a sub-rounded one at the north-west end (1.3 x 1.2 x 0.1 m) and a second indistinct one at the south-east end (3.0 x 1.2 x 0.1 m). Also identified in the MBES as a series of small mounds within depressions. No anomalous features were identified in the Mag. data at this location. Interpreted as possible linear debris and may be modern such as fishing gear but this cannot be confirmed without visual inspection.	SSS	2021_G-tec_SSS_P2_AO	CWP OECC	-
70399	Linear debris	294278	5909789	A2_h	52.1	0.5	0.1	-	-	A distinct curvilinear dark reflector with some small dark reflectors attached (largest measuring 3.5 x 0.8 x 0.1 m) in the SSS data. Also identified in the MBES as a curvilinear series of small depressions. No anomalous features were identified in the Mag. data at this location although this feature was only partially covered by the Mag. data and so it is not possible to ascertain whether ferrous material is present throughout. Interpreted as possible linear debris and may be modern such as fishing gear but this cannot be confirmed without visual inspection.	SSS	2021_G-tec_SSS_P2_AO	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70400	Debris	293726	5910259	A2_h	2.5	1.8	0.2	-	126	A short curvilinear mound within a small depression. No anomalous features were identified in the SSS data at this location. This position is associated with a large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data, indicating the presence of ferrous material. Interpreted as possible ferrous debris.	MBES, Mag.	2021_G-tec_MBES_P2_AO, 2021_G-tec_Mag_P2_AO	CWP OECC	-
70401	Mound	292884	5909841	A2_l	2.3	2.2	0.2	-	-	A distinct short curvilinear mound located within a wider depression. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	MBES	2021_G-tec_MBES_P2_AO	CWP OECC	-
70402	Debris	293172	5910092	A2_h	4.2	0.7	0.1	-	-	A distinct short, straight dark reflector with a slight shadow with some smaller dark reflectors immediately surrounding in the SSS data. Identified in the MBES data as two small elongate mounds. This position was not covered by Mag. data and therefore it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible debris.	SSS, MBES	2021_G-tec_SSS_P2_AO, 2021_G-tec_MBES_P2_AO	CWP OECC	-
70403	Magnetic	293168	5910188	A2_h	-	-	-	-	83	A medium asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried with no surface expression.	Mag.	2021_G-tec_Mag_P2_AO	CWP OECC	-
70404	Linear debris	293490	5910428	A2_h	54.3	0.2	0.1	-	-	A distinct curvilinear dark reflector with a slight shadow which appears to have a small object at one end in the SSS data. Visible in the MBES data as a longer curvilinear series of small rounded depressions. No anomalous features were identified in the Mag. data at this location. Interpreted as possible linear debris and may be modern such as fishing gear but this cannot be confirmed without visual inspection.	SSS, MBES	2021_G-tec_SSS_P2_AO, 2021_G-tec_MBES_P2_AO	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70405	Dark reflector	293502	5910483	A2_l	3.3	1.5	0.3	-	-	A distinct angular dark reflector with a bright angular shadow in the SSS data. Also identified in the MBES data as a distinct elongate mound within scour. This position was not directly covered by Mag. data and therefore it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	SSS, MBES	2021_G-tec_SSS_P2_AO, 2021_G-tec_MBES_P2_AO	CWP OECC	-
70406	Linear debris	293339	5910390	A2_h	10.6	1.4	0.3	-	-	A distinct curvilinear dark reflector with a slight shadow and a possibly small object at one end in the SSS data. Identified in the MBES data as a small sub-rounded mound with an indistinct curvilinear depression extending south-east. This position was not directly covered by Mag. data and therefore it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible linear debris and may be modern such as fishing gear but this cannot be confirmed without visual inspection.	SSS, MBES	2021_G-tec_SSS_P2_AO, 2021_G-tec_MBES_P2_AO	CWP OECC	-
70407	Linear debris	292719	5909974	A2_h	6.8	0.5	0.1	-	-	A distinct straight linear dark reflector with a slight shadow adjacent in the SSS data, and possibly attached, to anomaly 70408. Also visible in the MBES data as a short straight linear mound extending south. No anomalous features were identified in the Mag. data at this location. May be a possible length of rope or chain or may be other possible non-ferrous linear debris.	SSS	2021_G-tec_SSS_P2_AO	CWP OECC	-
70408	Debris	292714	5909983	A2_h	6.6	6.2	1.7	-	-	A distinct rounded dark reflector with shadow and a possible attached linear (70407). Also identified in the MBES data as a distinct tall mound, generally sub-rounded with slightly irregular steep sides and a flat top. No anomalous features were identified in the Mag. data at this location. Interpreted as possible non-ferrous debris. Could be modern but no associated charted obstructions and so retained as a precaution.	SSS, MBES	2021_G-tec_SSS_P2_AO, 2021_G-tec_MBES_P2_AO	CWP OECC	-
70409	Debris	293368	5910512	A2_h	2.9	1.2	0.2	-	-	A distinct elongate dark reflector with a slight shadow and scour in the SSS data approximately 16 m south of rope/chain anomaly 70410 and may be related. Also identified in the MBES data as a small, thin straight mound within slight scour. This position was not directly covered by Mag. data and therefore it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible debris.	SSS, MBES	2021_G-tec_SSS_P2_AO, 2021_G-tec_MBES_P2_AO	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70410	Rope/chain	293367	5910528	A2_h	40.4	0.6	0.1	-	-	A distinct, generally straight, linear dark reflector in the SSS data. Also identified in the MBES data as a distinct, generally straight, linear mound within some slight scour. This position was not directly covered by Mag. data and therefore it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible length of rope or chain.	SSS, MBES	2021_G-tec_SSS_P2_AO, 2021_G-tec_MBES_P2_AO	CWP OECC	-
70411	Mound	293216	5910413	A2_l	1.9	1.8	0.4	-	-	A sub-rounded mound, possibly hollow, within surrounding scour. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	MBES	2021_G-tec_MBES_P2_AO	CWP OECC	-
70412	Debris	292842	5910240	A2_h	6.4	1.8	0.2	-	-	A distinct curvilinear irregular dark reflector with a slight shadow in a slight scour in the SSS data. Also identified in the MBES data as a short straight linear mound and a small sub-rounded mound adjacent to each-other within slight scour, which extends 10 m to the south-east. No anomalous features were identified in the Mag. data at this location. Interpreted as possible non-ferrous linear debris.	SSS, MBES	2021_G-tec_SSS_P2_AO, 2021_G-tec_MBES_P2_AO	CWP OECC	-
70413	Debris	292883	5910304	A2_h	4.2	1.6	0.1	-	-	A distinct angular dark reflector or two adjacent dark reflectors, with a slight shadow within a slight scour in the SSS data. Tentatively observed in the MBES as a small mound within scour. This position was not directly covered by Mag. data and therefore it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible debris.	SSS	2021_G-tec_SSS_P2_AO	CWP OECC	-
70414	Magnetic	292791	5910270	A2_l	-	-	-	-	24	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried with no surface expression.	Mag.	2021_G-tec_Mag_P2_AO	CWP OECC	-
70415	Dark reflector	293203	5910706	A2_l	7.3	0.9	0.3	-	-	A distinct, short, curvilinear dark reflector with a slight shadow in the SSS data. Tentatively observed in the MBES data as slight curvilinear depression. No anomalous features were identified in the Mag. data at this location. Maybe a possible seabed scar, or may be a short length of rope or chain.	SSS	2021_G-tec_SSS_P2_AO	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70416	Debris	293129	5910723	A2_h	4.3	0.5	0.1	-	-	A distinct short straight dark reflector with a bright shadow and within slight scour in the SSS data. Visible in the MBES data as a short straight mound. This position was not directly covered by Mag. data and therefore it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible debris	SSS	2021_G-tec_SSS_P2_AO	CWP OECC	-
70417	Dark reflector	293133	5910729	A2_l	2.3	1.1	0.2	-	-	A slightly indistinct dark reflector with a slight scour and shadow in the SSS data approximately 7 m north-east of anomaly 70416 and may be associated. Visible in the MBES data as a slight mound within a small depression. This position was not directly covered by Mag. data and therefore it is not possible to ascertain whether ferrous material is present at this location. Retained due to proximity to the adjacent anomaly. Interpreted as a possible natural feature or may be possible debris.	SSS	2021_G-tec_SSS_P2_AO	CWP OECC	-
70418	Dark reflector	292828	5910619	A2_l	4.9	3.5	0.2	-	-	Two small dark reflectors directly adjacent in the SSS data. The larger is indistinct but elongate with slight shadow measuring 4.9 x 1.3 x 0.2 m and the second is smaller and sub-angular measuring 2.2 x 0.7 x 0.1 m. Also identified in the MBES data as a rounded mound with a slighter, more elongate mound adjacent. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS, MBES	2021_G-tec_SSS_P2_AO, 2021_G-tec_MBES_P2_AO	CWP OECC	-
70419	Magnetic	292740	5910618	A2_h	-	-	-	-	71	A medium asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried with no surface expression.	Mag.	2021_G-tec_Mag_P2_AO	CWP OECC	-
70420	Magnetic	292671	5910725	A2_h	-	-	-	-	413	A large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried with no surface expression.	Mag.	2021_G-tec_Mag_P2_AO	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70421	Dark reflector	292460	5910710	A2_l	4.2	0.5	0.1	-	-	A short, slightly curved, linear dark reflector with a short tapered shadow in the SSS data. Tentatively observed in the MBES as a small seabed disturbance. This position was not directly covered by Mag. data and therefore it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	SSS	2021_G-tec_SSS_P2_FP	CWP OECC	-
70422	Debris	292455	5910731	A2_h	4.9	1.4	0.5	-	73	A distinct angular dark reflector, possibly comprising several smaller objects, with a corresponding angular shadow with some slight adjacent seabed disturbance in the SSS data. Observed in the MBES data as several small mounds within a slight depression. Associated with a medium, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data, suggesting the presence of ferrous material. Interpreted as possible ferrous debris.	SSS, Mag.	2021_G-tec_SSS_P2_AO, 2021_G-tec_SSS_P2_FP, 2021_G-tec_Mag_P2_AO	CWP OECC	-
70423	Linear debris	292655	5910870	A2_h	39.3	2.0	0.4	-	-	A slightly indistinct, long curvilinear dark reflector within a slight scour in the SSS data. Also identified in the MBES data as a distinct curvilinear mound within surrounding scour. No anomalous features were identified in the Mag. data although this feature was only partially covered by the Mag. data and so it is not possible to ascertain whether ferrous material is present throughout. May be a length of rope or chain or may be modern debris such as disused cable, however this is not charted and so this cannot be confirmed without visual inspection	SSS, MBES	2021_G-tec_SSS_P2_AO, 2021_G-tec_MBES_P2_FP	CWP OECC	-
70424	Magnetic	292682	5910983	A2_l	-	-	-	-	48	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried with no surface expression.	Mag.	2021_G-tec_Mag_P2_AO	CWP OECC	-
70425	Rope/chain	292091	5910762	A2_h	9.9	0.6	0.1	-	-	A distinct curvilinear dark reflector with a slight shadow in the SSS data. Tentatively observed in the MBES data as series of very slight mounds. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible length of non-ferrous rope or chain.	SSS	2021_G-tec_SSS_P2_AO, 2021_G-tec_SSS_P2_FP	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70426	Rope/chain	292569	5911109	A2_h	13.3	1.4	0.1	-	-	A distinct, generally straight, linear dark reflector with a short shadow in the SSS data. Identified in the MBES as a short, linear mound within scour. No anomalous features were identified in the Mag. data at this location. A small group of dark reflectors ( <b>70427</b> ) is located approximately 6.0 m to the west and may be associated. Interpreted as a possible length of non-ferrous rope or chain.	SSS, MBES	2021_G-tec_SSS_P2_AO, 2021_G-tec_SSS_P2_FP, 2021_G-tec_MBES_P2_FP	CWP OECC	-
70427	Debris field	292559	5911109	A2_h	2.3	2.3	0.2	-	-	A small compact area of multiple dark reflectors with shadow in the SSS data. Also visible as a sub-rounded area of small mounds within a wider depression in the MBES data. No anomalous features were identified in the Mag. data at this location. Separate to, but possibly associated with, rope/chain feature <b>70426</b> , and so this feature has been interpreted as a possible non-ferrous debris field.	SSS	2021_G-tec_SSS_P2_AO, 2021_G-tec_SSS_P2_FP	CWP OECC	-
70428	Seabed disturbance	292291	5911352	A2_l	23.9	20.9	0.1	-	-	A seabed disturbance comprising multiple small, generally elongate, mounds within scour. All are approximately 1.9 x 0.8 x 0.1 m in size. No anomalous features were identified in the SSS or Mag. data. Retained as a precaution. Interpreted as a possible natural feature or may be possible debris.	MBES	2021_G-tec_MBES_P2_FP	CWP OECC	-
70429	Debris	292347	5911390	A2_h	5.0	1.8	0.3	-	-	A distinct, straight dark reflector with an angular apex at one end and a second angular offshoot at the other and with corresponding shadow in the SSS data. Observed in the MBES data as an angular mound within scour. Appearance consistent with that of an anchor, although no anomalous features were identified in the Mag. data at this location. Interpreted as possible non-ferrous debris.	SSS	2021_G-tec_SSS_P2_FP	CWP OECC	-
70430	Linear debris	291560	5911162	A2_h	45.6	0.5	0.1	-	-	A distinct generally straight linear dark reflector with a slight shadow and possible small rounded dark reflectors along its length in the SSS data. Tentatively observed in the MBES data as an indistinct linear mound. This position was not directly covered by Mag. data and therefore it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible linear debris and may be modern such as fishing gear but this cannot be confirmed without visual inspection.	SSS	2021_G-tec_SSS_P2_FP	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70431	Seabed disturbance	292008	5911668	A2_l	12.2	6.8	0.1	-	-	A distinct curvilinear dark reflector with a tall shadow in the SSS data. Visible in the MBES data as the edge of a slight sub-rounded mound which may actually be a ring-shaped depression in the seabed. This position was not directly covered by Mag. data and therefore it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	SSS	2021_G-tec_SSS_P2_FP	CWP OECC	-
70432	Dark reflector	291765	5911573	A2_l	3.5	2.1	0.1	-	-	A distinct sub-rounded dark reflector with a slight shadow in the SSS data. Observed in the MBES data as a sub-rounded, possibly hollow, mound within surrounding scour. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS	2021_G-tec_SSS_P2_FP	CWP OECC	-
70433	Linear debris	291864	5911718	A2_h	155.0	3.5	-0.1	-	-	A curvilinear series of small rounded depressions, some with possible objects within. No anomalous features were identified in the SSS or Mag. data but the full extents of this feature were not directly covered by Mag. data and therefore it is not possible to ascertain whether ferrous material is present within the full feature extents. May indicate partially buried debris or could represent where linear debris have been cleared. Retained as a precaution.	MBES	2021_G-tec_MBES_P2_FP	CWP OECC	-
70434	Debris	291619	5911927	A2_h	6.8	3.8	1.2	-	-	A distinct angular, possibly cross-shaped, dark reflector with a corresponding shadow in the SSS data, indicating a general height of 0.2 m and with a possible upstanding section up to 1.2 m in height, which may also be something trailing in the water column. Identified in the MBES data as a small irregular area of small mounds. No anomalous features were identified in the Mag. data at this location. Within an area of similar linear features (70435, 70436 and 70438) which may be modern debris such as disused cable, however these are not charted and so this cannot be confirmed without visual inspection.	SSS, MBES	2021_G-tec_SSS_P2_FP, 2021_G-tec_MBES_P2_FP	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70435	Linear debris	291599	5911922	A2_h	9.7	1.8	0.1	-	-	A distinct straight linear dark reflector with a slight shadow, oriented north-east to south-west in the SSS data. Also identified in the MBES data as a straight linear mound in scour. No anomalous features were identified in the Mag. data at this location. Within an area of similar linear features ( <b>70434</b> , <b>70436</b> and <b>70438</b> ) which may be modern debris such as disused cable, however these are not charted and so this cannot be confirmed without visual inspection.	SSS, MBES	2021_G-tec_SSS_P2_FP, 2021_G-tec_MBES_P2_FP	CWP OECC	-
70436	Linear debris	291448	5911898	A2_h	111.2	1.7	0.2	-	-	A long, thin, generally straight and discontinuous linear dark reflector with some slight shadow in the SSS data. Also identified in the MBES data as a discontinuous linear mound within scour. No anomalous features were identified in the Mag. data at this location. Within an area of similar linear features ( <b>70434</b> , <b>70435</b> and <b>70438</b> ) which may be modern debris such as disused cable, however these are not charted and so this cannot be confirmed without visual inspection.	SSS, MBES	2021_G-tec_SSS_P2_FP, 2021_G-tec_MBES_P2_FP	CWP OECC	-
70437	Debris	291367	5911810	A2_h	3.4	1.1	0.3	-	-	A distinct angular dark reflector with a slight shadow in the SSS data. Observed in the MBES data as a small angular mound within scour. No anomalous features were identified in the Mag. data at this location. Interpreted as possible non-ferrous debris.	SSS	2021_G-tec_SSS_P2_FP	CWP OECC	-
70438	Linear debris	291643	5912018	A2_h	140.6	1.2	0.4	-	-	A long, thin, discontinuous linear dark reflector with some slight shadow in the SSS data. It is generally straight but with an angle at the WSW end. Also identified in the MBES data as a discontinuous linear mound with the same angle and within scour. No anomalous features were identified in the Mag. data at this location. Within an area of similar linear features ( <b>70434</b> , <b>70435</b> and <b>70436</b> ) which may be modern debris such as disused cable, however these are not charted and so this cannot be confirmed without visual inspection.	SSS, MBES	2021_G-tec_SSS_P2_FP, 2021_G-tec_MBES_P2_FP	CWP OECC	-
70439	Mound	291598	5912064	A2_l	5.0	1.5	0.2	-	-	Two small sub-rounded mounds within scour. No anomalous features were identified in the SSS data at this location. This position was not directly covered by Mag. data and therefore it is not possible to ascertain whether ferrous material is present at this location. Approximately 49 m north of anomaly <b>70438</b> and may be associated. Interpreted as a possible natural feature or may be possible debris.	MBES	2021_G-tec_MBES_P2_FP	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70440	Seabed disturbance	291389	5912166	A2_l	6.0	3.7	0.2	-	-	A small tapering seabed disturbance comprising multiple subangular mounds. No anomalous features were identified in the SSS or Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	MBES	2021_G-tec_MBES_P2_FP	CWP OECC	-
70441	Linear debris	290703	5912056	A2_h	59.3	0.2	0.1	-	-	A distinct curvilinear dark reflector with a slight shadow and small dark reflectors located along its length in the SSS data. No anomalous features were identified in the MBES data at this location. No anomalous features were identified in the Mag. data at this location. Interpreted as possible non-ferrous linear debris and may be modern such as fishing gear but this cannot be confirmed without visual inspection.	SSS	2021_G-tec_SSS_P2_FP	CWP OECC	-
70442	Magnetic	290845	5912255	A2_h	-	-	-	-	115	A large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried with no surface expression.	Mag.	2021_G-tec_Mag_P2_FP	CWP OECC	-
70443	Rope/chain	290611	5912626	A2_h	11.0	0.2	0.2	-	-	A distinct curvilinear dark reflector with a slight shadow in the SSS data. Tentatively observed in the MBES data as a slight disturbance. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible length of non-ferrous rope or chain or may be other linear debris.	SSS	2021_G-tec_SSS_P2_FP	CWP OECC	-
70444	Seabed disturbance	290340	5912582	A2_l	9.8	6.0	0.3	-	-	A small seabed disturbance comprising multiple dark reflectors with shadows in the SSS data. Identified in the MBES data as an angular area of small mounds within slight scour in the seabed. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS, MBES	2021_G-tec_SSS_P2_FP, 2021_G-tec_MBES_P2_FP	CWP OECC	-
70445	Magnetic	290801	5912922	A2_l	-	-	-	-	32	A small negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried with no surface expression.	Mag.	2021_G-tec_Mag_P2_FP	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70446	Magnetic	290466	5912873	A2_l	-	-	-	-	78	A medium positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Very broad, so may represent a natural feature or may represent possible ferrous debris either buried with no surface expression.	Mag.	2021_G-tec_Mag_P2_FP	CWP OECC	-
70447	Dark reflector	290151	5912778	A2_l	3.2	2.2	0.8	-	-	A distinct angular dark reflector with a slight shadow in the SSS data. Identified in the MBES data as an angular mound within scour. No anomalous features were identified in the Mag. data at this location. Interpreted as a possible natural feature or may be possible non-ferrous debris.	SSS, MBES	2021_G-tec_SSS_P2_FP, 2021_G-tec_MBES_P2_FP	CWP OECC	-
70448	Magnetic	289966	5912907	A2_l	-	-	-	-	51	A medium, broad asymmetric dipole with peak and trough over two profile lines in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried with no surface expression.	Mag.	2021_G-tec_Mag_P2_FP	CWP OECC	-
70449	Magnetic	290256	5913902	A2_h	-	-	-	-	121	A large negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried with no surface expression.	Mag.	2021_G-tec_Mag_P2_FP	CWP OECC	-
70450	Debris	289946	5913621	A2_h	1.8	0.9	0.2	-	-	A distinct rounded dark reflector, possibly hollow consistent with a ring shape, and with a slight shadow in the SSS data. Adjacent to another very similar feature (70451). This position was not directly covered by Mag. data and therefore it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible debris.	SSS	2021_G-tec_SSS_P2_FP	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70451	Debris	289947	5913623	A2_h	2.2	1.0	0.2	-	-	A distinct rounded dark reflector, possibly hollow consistent with a ring shape, and with a slight shadow in the SSS data. Adjacent to another very similar feature (70450). This position was not directly covered by Mag. data and therefore it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible debris.	SSS	2021_G-tec_SSS_P2_FP	CWP OECC	-
70452	Magnetic	289986	5913870	A2_l	-	-	-	-	40	A small positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried with no surface expression.	Mag.	2021_G-tec_Mag_P2_FP	CWP OECC	-
70453	Magnetic	289579	5913286	A2_h	-	-	-	-	83	A medium positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried with no surface expression.	Mag.	2021_G-tec_Mag_P2_FP	CWP OECC	-
70454	Magnetic	289556	5913699	A2_l	-	-	-	-	29	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried with no surface expression.	Mag.	2021_G-tec_Mag_P2_FP	CWP OECC	-
70455	Magnetic	289386	5913315	A2_l	-	-	-	-	46	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried with no surface expression.	Mag.	2021_G-tec_Mag_P2_FP	CWP OECC	-
70456	Debris	289568	5913815	A2_h	5.5	4.2	0.5	-	42	A distinct angular dark reflector with corresponding shadow in the SSS data. Identified in the MBES data as a small sub-angular area of small mounds, possibly hollow, within a slight depression. Associated with a small asymmetric dipole with peak and trough on one profile line in the Mag. data. Interpreted as possible ferrous debris.	SSS, MBES, Mag.	2021_G-tec_SSS_P2_FP, 2021_G-tec_MBES_P2_FP, 2021_G-tec_Mag_P2_FP	CWP OECC	-
70457	Magnetic	289605	5913998	A2_h	-	-	-	-	82	A medium negative monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried with no surface expression.	Mag.	2021_G-tec_Mag_P2_FP	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70458	Magnetic	289293	5913598	A2_l	-	-	-	-	41	A small positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried with no surface expression.	Mag.	2021_G-tec_Mag_P2_FP	CWP OECC	-
70459	Magnetic	289254	5913594	A2_l	-	-	-	-	12	A small asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried with no surface expression.	Mag.	2021_G-tec_Mag_P2_FP	CWP OECC	-
70460	Magnetic	289401	5914058	A2_h	-	-	-	-	84	A medium positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried with no surface expression.	Mag.	2021_G-tec_Mag_P2_FP	CWP OECC	-
70461	Magnetic	289402	5914138	A2_h	-	-	-	-	106	A large, sharp positive monopole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried with no surface expression.	Mag.	2021_G-tec_Mag_P2_FP	CWP OECC	-
70462	Debris	289091	5913374	A2_h	9.5	0.5	0.1	-	-	A distinct highly angular curvilinear dark reflector with a slight shadow in the SSS data. No anomalous features were identified in the MBES data at this location. This position was not directly covered by Mag. data and therefore it is not possible to ascertain whether ferrous material is present at this location. Interpreted as possible debris.	SSS	2021_G-tec_SSS_P2_FP	CWP OECC	-
70463	Recorded wreck	289033	5913188	A3	-	-	-	-	-	Reported position of a wooden wreck discovered by a Dutch dredging company in 1989 during works for the installation of a sewerage pipe, measuring approximately 15 ft across and consisting of a 'wooden framework' with a cargo of uncut slate. This wreck was reburied once the pipe was laid and no anomalous features were identified in the SSS data. This position was not directly covered by the MBES or Mag. datasets and therefore it is not possible to ascertain whether ferrous material is present at this location, and any responses may be obscured by the presence of the pipeline visible within the data. There is potential for	-	-	CWP OECC	NMS_W01544



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
										associated debris to be present within the vicinity.				
70464	Magnetic	289025	5913378	A2_h	-	-	-	-	230	A large, sharp asymmetric dipole with peak and trough on one profile line in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. Interpreted as possible ferrous debris either buried with no surface expression.	Mag.	2021_G-tec_Mag_P2_FP	CWP OECC	-
70465	Magnetic	289084	5913903	A2_l	-	-	-	-	24	A small, broad asymmetric dipole with peak and trough over two profile lines in the Mag. data. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried with no surface expression.	Mag.	2021_G-tec_Mag_P2_FP	CWP OECC	-
70466	Magnetic	289210	5914343	A2_l	-	-	-	-	28	A small asymmetric dipole with peak and trough on one profile line in the Mag. data on the edge of an interpreted cable response. No anomalous features were identified in the SSS or MBES data at this location. May represent a natural feature or may represent possible ferrous debris either buried with no surface expression.	Mag.	2021_G-tec_Mag_P2_FP	CWP OECC	-
70467	Dark reflector	289004	5913863	A2_l	6.8	1.8	0.4	-	-	A distinct straight dark reflector within a slight scour in the SSS data. No anomalous features were identified in the MBES data at this location. This position was not directly covered by Mag. data and therefore it is not possible to ascertain whether ferrous material is present at this location. Interpreted as a possible natural feature or may be possible debris.	SSS	2021_G-tec_SSS_P2_FP	CWP OECC	-



ID	Classification	Easting	Northing	Archaeological discrimination	Length (m)	Width (m)	Height (m)	Least Depth (m LAT)	Magnetic amplitude (nT)	Description	Anomaly type	Dataset	Section	External references
70468	Rope/chain	289238	5913044	A2_h	10.9	0.6	0.1	-	-	A short, highly curvilinear dark reflector with a very short shadow in the SSS data. This location was not covered by MBES or Mag. data and therefore it is not possible to ascertain whether ferrous material is present at this location. Located within the vicinity of the crossing of a sewer pipe and a cable so may be related debris but retained as a precaution. Interpreted as a possible length of rope or chain.	SSS	2021_G-tec_SSS_P2_FP	CWP OECC	-



## Annex 9: Maritime Recorded Losses

Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1308	Unknown	Unknown	Dalkey, Co Dublin, district of	W01901
1537	Unknown	Unknown	Dalkey to Dublin	W02110
1560	Michael of Hilboy	Unknown	Howth, Co Dublin	W00901
1562	Unknown	Ship	Dublin Bar	W01067
1562	Unknown	Ship	Dublin Bar	W01364
1568	Sampson	Hulk	Dalkey to Bray, c. 9 miles from Dublin	W02084
1574	Unknown	Vessel	Dublin Bar	W01068
1574	Unknown	Vessel	Dublin Bar	W01365
1579	Unknown	Unknown	Howth, Co Dublin	W00921
1593	Unknown	Unknown	Dublin, Pool of Clontarf	W01366
1600	Unknown	Unknown	Dublin	W01514
1608	William	Ship	Dublin, River Liffey, Poolbeg	W01357
1633	Tomine	Unknown	Howth Head, Co Dublin, under	W00918
1637	St. Domingo	Ship	Dublin Harbour, River Liffey	W01313
1637	Unknown	Barque	Dublin	W02111
1637	Unknown	Barque	Dublin	W02112
1637	Unknown	Barque	Dublin	W02113
1637	Unknown	Barque	Dublin	W02114
1637	Unknown	Barque	Dublin	W02115
1637	Unknown	Barque	Dublin	W02116
1637	Unknown	Barque	Dublin	W02117
1637	Unknown	Barque	Dublin	W02118
1637	Unknown	Barque	Dublin	W02119
1637	Unknown	Barque	Dublin	W02120
1637	Unknown	Barque	Dublin	W02121
1637	Unknown	Barque	Dublin	W02122



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1638	Unknown	Ship	Dublin, near	W02123
1639	Samuel	Merchant Vessel	Dublin (?)	W02086
1639	Unknown	Unknown	Dublin	W02124
1640	Unknown	Bark	Dublin	W01367
1644	Unknown	Barque	Merrion Strand, Dublin Bay	W18540
1650	Unknown	Unknown	Dublin Harbour, River Liffey, N side of the channel near N wall extension, centre of the harbour between the Bull Wall and the N wall extension.	W01368
1667	Unknown	Ship	Dublin	W02125
1668	Unknown	Merchant Vessel	Dublin Harbour, River Liffey	W01369
1674	Unknown	Ship	Howth, Co Dublin, Point of, rocks near	W00922
1674	Unknown	Ship	Howth, Co Dublin, Point of, rocks near	W00923
1674	Unknown	Ship	Dublin Harbour, River Liffey	W01370
1674	Unknown	Ship	Dublin Harbour, River Liffey, off	W01371
1677	Unknown	Ship	Howth, Co Dublin	W00924
1683	Unknown	Unknown	Dublin, S Bull	W01696
1684	Unknown	Unknown	Howth, Co Dublin	W00925
1690	Unknown	Collier	Dublin, Sir Patrick Dunne's Hospital, forecourt	W01372
1693	Unknown	Ship	Dublin, River Liffey, N Bull	W01069
1693	Unknown	Collier	Dublin, N Bull	W01070
1693	Unknown	Unknown	Dublin Bar	W01373
1696	William	Packet boat	Sutton, Co Dublin, near	W01064
1711	Hind	Frigate	Dublin Harbour, River Liffey, entrance	W01224
1724	Unknown	Ship	Dublin Bay	W01515
1726	Blessing	Unknown	Dublin, N Bull, near Howth	W00976
1726	Hanover	Unknown	Dublin, River Liffey, near Dublin Port	W01007
1726	Dublin Brothers	Unknown	Dublin, S Bull	W01647
1726	Two Brothers	Unknown	Dublin, S Bull	W01690



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1726	Unknown	Merchant Vessel	Dun Laoghaire to Bullock, Dublin	W01902
1726	Unknown	Sloop	Dun Laoghaire	W01903
1744	Hopewell	Unknown	Dublin, S Bull	W01662
1745	Unknown	Ship	Dublin, River Liffey, N Bull	W01071
1748	Hope	Unknown	Dublin, River Liffey, N Bull	W01013
1748	John	Unknown	Dublin, S Bull	W01663
1748	John and Francis	Unknown	Dublin, S Bull	W01664
1748	St. John Baptist	Unknown	Dublin, S Bull	W01683
1748	Tyger	Ship	Dublin, S Bull	W01691
1748	Union	Unknown	Dublin, S Bull	W01692
1748	Unknown	Unknown	South Bull, near Dublin	W13214
1749	Unknown	Sloop	Dublin, River Liffey, near	W01072
1749	Union	Unknown	Dublin Harbour, River Liffey	W01346
1750	Dursley Gally	Unknown	Dublin, River Liffey, N Bull	W00990
1750	Friendship	Unknown	Dublin, River Liffey, N Bull	W01000
1751	Elizabeth	Unknown	Kish Bank, Co Dublin	W01566
1751	Duke of Cumberland	Unknown	Dublin, near	W01999
1752	Willoughby	Unknown	Dun Laoghaire	W01900
1753	Volunteer	Unknown	Dublin Harbour, River Liffey, entrance	W01352
1755	Hannah & Betty	Unknown	Dublin, River Liffey, N Bull	W01006
1756	Two Brothers	Unknown	Dublin Harbour, River Liffey	W01344
1757	English Oak	Unknown	Dublin Harbour, River Liffey	W01201
1757	Success	Unknown	Dublin, S Bull	W01685
1757	Fortune	Unknown	Dublin, near	W02016
1757	Hope	Unknown	Dublin, near	W02026
1757	Quarantine	Schooner	Dublin, near	W02071
1757	St. Pedro	Unknown	Dublin, near	W02080



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1757	Volunteer	Unknown	Dublin, near	W02100
1757	Wilson	Unknown	Dublin, near	W02106
1757	Unknown	Ship	Dublin, near	W02127
1757	Unknown	Ship	Dublin, near	W02128
1757	Unknown	Unknown	Dublin, near	W02129
1757	Unknown	Unknown	Dublin, near	W02130
1757	Unknown	Unknown	Dublin, near	W02131
1758	William & Mary	Unknown	Dublin Harbour, River Liffey	W01361
1758	Unknown	Packet boat	Dublin Bay	W01516
1758	Unity	Unknown	Dublin, S side of the Piles	W01694
1758	Robert	Unknown	Dublin	W02075
1759	Duke of Bedford	Sloop	Dublin	W01998
1760	Princess of Orange	Unknown	Dublin Harbour, River Liffey	W01302
1761	Quebec	Unknown	Dublin, River Liffey, near Dublin Harbour	W01045
1761	Anne	Unknown	Dublin Harbour, River Liffey	W01153
1761	Emanuel	Unknown	Dublin Harbour, River Liffey	W01198
1761	Northern Lass	Unknown	Dublin Harbour, River Liffey	W01288
1761	Two Brothers	Unknown	Dublin Harbour, River Liffey	W01345
1762	Nostra Senora de Piedade	Unknown	Dublin, River Liffey, N Bull	W01037
1762	Charming Betsey	Unknown	Dublin Harbour, River Liffey	W01173
1762	Unknown	Unknown	Dublin	W01374
1762	Unknown	Ship	Dublin Harbour, River Liffey	W01375
1762	Cheesman	Unknown	Dublin	W01990
1762	Unknown	Collier	Dublin	W02132
1762	Unknown	Collier	Dublin	W02133
1762	Unknown	Unknown	Dublin	W02134
1762	Unknown	Collier	Dublin	W02135



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1762	Unknown	Collier	Dublin	W02136
1762	Unknown	Collier	Dublin	W02137
1763	Susanna	Unknown	Dublin Harbour, River Liffey, near	W01331
1763	Unknown	Unknown	Dublin, River Liffey, Poolbeg	W01376
1763	Neptune	Unknown	Dublin Bay	W01500
1763	Betsey	Unknown	Dublin, S Bull	W01640
1763	Dove	Unknown	Dublin, S Bull	W01646
1763	Good Intent	Unknown	Dublin, S Bull	W01655
1763	Griffin	Unknown	Dublin, S Bull	W01656
1763	Neptune	Unknown	Dublin, S Bull	W01669
1763	Robert	Unknown	Dublin, S Bull	W01681
1763	Union	Unknown	Dublin, S Bull	W01693
1763	Unknown	Sloop	Dublin, S Bull	W01697
1763	Unknown	Brig	Dublin, S Bull	W01698
1763	Unknown	Unknown	Dublin, 16 miles from	W02138
1763	Unknown	Unknown	Dublin, 16 miles from	W02139
1763	Unknown	Unknown	Dublin, 16 miles from	W13178
1763	Unknown	Ship	Dublin, 16 miles from	W13190
1764	Unknown	Unknown	Dublin, River Liffey, N Bull	W01073
1764	Unknown	Unknown	Dublin, River Liffey, N Bull	W01074
1764	Bristol Merchant	Unknown	Dublin Harbour, River Liffey	W01164
1764	Thomas & Ann	Sailing Ship	Dublin Harbour, River Liffey	W01337
1764	Trulove	Unknown	Dublin, River Liffey, Aston Quay	W01343
1764	Unknown	Sloop	Dublin, River Liffey, Aston Quay	W01377
1764	Unknown	Unknown	Dublin, River Liffey, Poolbeg	W01378
1764	Unknown	Unknown	Dublin Harbour, River Liffey	W01379
1764	Unknown	Unknown	Kish Bank, Co Dublink / Southern Banks	W01598



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1764	Unknown	Sloop	Dublin	W02140
1765	Unknown	Unknown	Howth, Co Dublin, back of	W00926
1765	Dunbar	Brig	Dublin, River Liffey, Poolbeg	W01191
1765	Mary & John	Unknown	Dublin Harbour, River Liffey,	W01273
1765	Plymouth	Packet boat	Dublin, River Liffey	W01298
1765	Quebeck	Unknown	Dublin, near the old ferry-boat-slip	W01305
1765	Unknown	Unknown	Dublin, River Liffey	W01381
1765	Unknown	Wherry	Dublin, River Liffey, Piles, about 300 yards W of the lightship	W01382
1765	Neptune	Unknown	Dun Laoghaire	W01861
1765	Unknown	Unknown	Dun Laoghaire	W01904
1766	Unknown	Lighter	Howth, Co Dublin	W00927
1766	Hope and Anchor	Unknown	Dublin Bay, Clontarf, off	W01226
1766	Polly	Unknown	Dublin Bar	W01299
1766	Unknown	Gabbard	Dublin, River Liffey	W01383
1766	Unknown	Sloop	Dublin Bay	W01517
1766	Unknown	Sloop	Dublin, the piles	W01699
1766	Unknown	Unknown	Bray, Co Wicklow to Dalkey	W02141
1766	Unknown	Unknown	Bray Head, Co Wicklow	W02268
1766	Unknown	Smack	Bray, Co Wicklow, off	W02269
1766	Unknown	Boat	Bray and Dalkey, between	W16304
1766	Unknown	Sloop	Dublin Bay	W16306
1766	Unknown	Smack	Bray, off	W16307
1766	Unknown	Unknown	Bray Head	W16309
1766	Unknown	Sloop	Dublin, The Piles	W16314
1766	Unknown	Smack	Bray, off	W16315
1766	Unknown	Sloop	Dublin Bay	W16316
1766	Unknown	Boat	Bray and Dalkey, between	W16322



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1767	Unknown	Wherry	Howth, Co Dublin, off	W00928
1767	Sally	Unknown	Dublin, River Liffey, N Bull	W01049
1767	Enterprize	Sailing Ship	Dublin Harbour, River Liffey, near the second perch at Poolbeg	W01202
1767	Unknown	Sloop	Dublin, River Liffey, Poolbeg	W01384
1767	Unknown	Unknown	Dublin, River Liffey, Poolbeg	W01385
1767	Hope and Speedwell	Unknown	Dublin Bay	W01485
1767	Henry	Brig	Dublin Port, River Liffey, S side of the piles	W01657
1767	Unknown	Unknown	Dublin Bay, Merrion, Co Dublin	W01700
1767	Unknown	Sloop	Poolbeg	W16326
1768	Lady Forbes	Unknown	Sutton, Co Dublin, near	W01023
1768	Youart	Unknown	Dublin, River Liffey, N Bull	W01065
1768	Unknown	Unknown	Sutton, Co Dublin	W01075
1768	Prince of Wales	Unknown	Dublin, River Liffey	W01301
1768	Unknown	Gabbard	Dublin, River Liffey	W01386
1768	Unknown	Unknown	Dublin, N of the lighthouse	W01387
1768	Unknown	Ship	Dublin Bay	W01518
1768	Penelope	Unknown	Dalkey, Co Dublin, near	W01867
1768	Perdgee	Unknown	Dalkey, Co Dublin, near	W01868
1768	Pitt	Unknown	Dublin, near	W02066
1768	Lovely Betsy	Unknown	Poolbeg	W12942
1769	Nancy	Unknown	Dublin, River Liffey, N Bull	W01033
1769	Unknown	Unknown	Dublin, River Liffey, N Bull	W01076
1769	Unknown	Ship	E Bar, 1.25 leagues from the Dublin lighthouse	W01388
1769	Unknown	Gabbard	Dublin, River Liffey, near Ormonde Bridge	W01389
1769	Unknown	Ship	Dublin, River Liffey, Ringsend / Dublin Bar	W01390
1769	Unknown	Ship	Dublin, River Liffey, Ringsend / Dublin Bar	W01391
1770	William	Unknown	Dublin Harbour, River Liffey, entrance	W01358



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1770	Williamson	Unknown	Dublin, near the Harbour Mouth	W01362
1770	Unknown	Gabbard	Dublin, River Liffey, Pigeon House, near	W01392
1770	Unknown	Sloop	Dublin, River Liffey, Poolbeg	W01393
1770	Unknown	Lighter	Dublin, River Liffey	W01394
1770	Unknown	Unknown	Dublin, River Liffey	W01395
1770	Burford	Man O' War	Dublin Bay, Burford Bank	W01471
1770	Unknown	Coaster	Dublin, S Wall, near	W01701
1770	Unknown	Coaster	Dublin, S Wall, near	W01702
1770	Unknown	Coaster	Dublin, S Wall, near	W01703
1770	Unknown	Coaster	Dublin, S Wall, near	W01704
1770	Unknown	Coaster	Dublin, S Wall, near	W01705
1770	Speedwell	Unknown	Dublin, Platters, near	W02091
1770	Paschal Paoli	Unknown	Dublin, en route between Jamaica and	W13027
1770	Royal Oak	Schooner	Dublin Harbour	W13031
1771	Unknown	Snow	Dublin, River Liffey, N Bull	W01077
1771	Neptune	Unknown	Dublin Harbour, River Liffey	W01283
1771	Unknown	Lighter	Dublin Bay, Clontarf	W01396
1771	Unknown	Lighter	Dublin Bay, Clontarf	W01397
1771	Charlotte	Unknown	Dublin Bay, Merrion Strand, Co Dublin, S of the Piles	W01642
1771	Providence	Sailing Ship	Dublin, S Bull, the Piles, near	W01679
1771	Unknown	Unknown	Dublin, S of the piles	W01706
1771	Unknown	Unknown	Dublin, S of the piles	W01707
1772	Greneda Gally	Unknown	Dublin Harbour, River Liffey, N Bull	W01004
1772	Neptune	Unknown	Dublin, River Liffey, N Bull	W01035
1772	Unknown	Unknown	Dublin, River Liffey, N Bull	W01078
1772	Unknown	Boat	Dublin, River Liffey	W01398
1772	Unknown	Wherry	Dublin Bay	W01519



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1772	Neptune	Unknown	Dublin, S Bull	W01670
1772	Pretty Polly	Unknown	Dublin, S Bull, Blackrock to Booterstown, between	W01676
1772	Unknown	Wherry	Dublin Bay	W16330
1773	Anthony	Unknown	Dublin, River Liffey, N Bull	W00971
1773	Happy Return	Unknown	Dublin, River Liffey, N Bull	W01008
1773	Kid	Unknown	Dublin, River Liffey, N Bull	W01022
1773	St. Anthony	Unknown	Dublin, River Liffey, N Bull	W01048
1773	London	Unknown	Dublin Bar, N of the Lighthouse	W01252
1773	London	Unknown	Dublin Bar	W01253
1773	Unknown	Lighter	Dublin Bay, at the point of the N Wall, opposite to Clontarf Island	W01399
1773	Richard	Sloop	Dublin Bay	W01504
1773	Unknown	Wherry	Kish Bank, Co Dublin	W01599
1773	Unknown	Wherry	Dublin, River Liffey, Piles, near	W01708
1773	Unknown	Boat	Dun Laoghaire, near the quay	W01905
1773	Unknown	Gabbard	Dublin, off	W02143
1773	Molly	Brig	Bray, Co Wicklow, off	W02255
1773	Unknown	Gabbard	Dublin Bay	W16349
1774	Unknown	Wherry	Howth, Co Dublin, N side	W00929
1774	Commerce	Unknown	Dublin, River Liffey, N Bull	W00984
1774	Elizabeth	Unknown	Dublin, River Liffey, N Bull	W00995
1774	Unknown	Sloop	Dublin, River Liffey, N Bull	W01079
1774	Unknown	Ship	Dublin, N Bull, near Sutton	W01080
1774	Commerce	Unknown	Maidenhead Bank, within Dublin Bar	W01183
1774	Fullerton	Unknown	Dublin, River Liffey, Poolbeg	W01212
1774	George	Unknown	Dublin Harbour, River Liffey	W01217
1774	Lovely Jane	Unknown	Dublin Bay, Clontarf Island	W01258
1774	Unknown	Unknown	Dublin Bay, Clontarf Island	W01400



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1774	Unknown	Sloop	Dublin Bay, Clontarf	W01401
1774	Unknown	Gabbard	Dublin Bay, Clontarf	W01402
1774	Unknown	Gabbard	Dublin, River Liffey, Poolbeg	W01403
1774	Unknown	Unknown	Dublin, River Liffey, Piles, the	W01709
1774	Morning Star	Sloop	Dun Laoghaire, Hen and Chickens rocks	W01858
1774	Tindal	Brig	Chicken Rocks, Dun Laoghaire	W01891
1774	Francis	Unknown	Bray, Co Wicklow to Dalkey	W02017
1774	Unknown	Sloop	Bray, Co Wicklow	W02270
1774	Unknown	Wherry	Kish Bank, around	W16357
1774	Unknown	Sloop	Dublin, N Bull	W16358
1774	Unknown	Unknown	Dublin Harbour, Piles	W16360
1774	Unknown	Gabbard	Dublin, Poolbeg	W16362
1775	Betty	Unknown	Dublin, River Liffey, N Wall, E end of	W01161
1775	Freemason	Unknown	Dublin, River Liffey, Poolbeg	W01211
1775	Polly	Unknown	Dublin, River Liffey, Poolbeg	W01300
1775	Sophia Magdalena	Unknown	Dublin Harbour, River Liffey, near the piles	W01328
1775	Unknown	Unknown	Dublin Bar	W01404
1775	Unknown	Fishing boat	Dublin Bay	W01520
1775	Unknown	Unknown	Dublin Bay	W01521
1775	Swift	Unknown	Dublin	W02094
1775	Unknown	Fishing boat	Dublin	W16379
1776	Henry	Unknown	Sutton Bar, Co Dublin	W01011
1776	Lucy	Sailing Ship	Dublin, River Liffey, N Bull	W01026
1776	Hibernia	Unknown	Dublin, River Liffey	W01223
1776	Unknown	Sloop	Dublin, River Liffey, Poolbeg	W01405
1776	Unknown	Boat	Dublin Harbour, River Liffey	W01406
1776	Henry	Unknown	Dublin Bay, Sutton	W16189



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1776	Unknown	Unknown	Dublin ?	W16385
1776	Unknown	Unknown	Dublin Bay ?	W16386
1776	Unknown	Sloop	Dublin, Poolbeg	W16387
1776	Unknown	Boat	Dublin, Poolbeg, S anchor	W16388
1777	Marquis	Unknown	Dublin, back of the Pier	W01266
1777	Unknown	Yawl	Dublin, River Liffey	W01407
1777	Unknown	Wherry	Dublin, River Liffey, near Ringsend	W01408
1777	Unknown	Boat	Dublin Bay	W01522
1777	William	Brig	Dublin, near	W02104
1777	Marquis of Granby	Unknown	Dublin, back of the pier	W17207
1778	Unknown	Unknown	Dublin, River Liffey, N Bull	W01081
1778	Bachelor	Brig	Dublin Bar, near the mouth	W01158
1778	Plain Dealing	Brig	Dublin Bar, near the mouth	W01297
1778	Unknown	Unknown	Dublin, River Liffey, near the Pigeon House, opposite the dry dock	W01409
1778	Unknown	Pleasure Boat	Dublin, River Liffey, Pigeon House, near	W01410
1778	Unknown	Unknown	Dublin, Blackrock	W16393
1779	Peggy	Unknown	Dublin, River Liffey, Piles	W01674
1780	Unknown	Gabbard	Dublin, River Liffey, near the Custom House	W01411
1780	Fanny	Ship	Dublin, River Liffey, Piles, near the light-house	W01650
1780	Unknown	Sloop	Dublin, River Liffey, Piles, near the lighthouse	W01713
1780	Mayflower	Unknown	Dalkey, Co Dublin, Slobbersludge / Slobberslush Bay, near	W01850
1780	Unknown	Ship	Dublin, off (?)	W02144
1780	Unknown	Gabbard	Dublin, Custom House, near	W16400
1781	Unknown	Sloop	Dublin, River Liffey, N Bull	W01082
1781	Unknown	Brig	Dublin, River Liffey, N Bull	W01083
1781	Friends	Unknown	Dublin Bay	W01480
1781	Unknown	Coaster	Bray Head, Co Wicklow, off	W02271



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1781	Unknown	Coaster	Bray Head, Co Wicklow, off	W02272
1782	Unknown	Unknown	Dublin, River Liffey	W01412
1782	Unknown	Boat	Dublin Bay, Clontarf, near	W01413
1782	Unknown	Unknown	Kish Bank, Co Dublin, Bray and Wicklow, between	W01600
1782	Unknown	Unknown	Kish Bank, Co Dublin, Bray and Wicklow, between	W01601
1782	Edward & Mary	Unknown	Dublin, near	W02001
1783	Unknown	Unknown	Dublin, River Liffey, N Bull	W01084
1783	Unknown	Unknown	Dublin, River Liffey, N Bull	W01085
1783	Unknown	Unknown	Dublin, River Liffey, N Bull	W01086
1783	Unknown	Boat	Dublin, River Liffey, Pigeon House	W01414
1783	Mary Ann	Unknown	Dublin Bay	W01497
1783	Count de Belgioso	Unknown	Kish Bank, Co Dublin	W01560
1783	Unknown	Ship	Kish Bank, Co Dublin, off Bray Head	W01602
1783	Friendship	Unknown	Bray, Co Wicklow, 0.5 mile from the town	W02242
1783	Unknown	Unknown	Kish Bank, Bray Head, off	W16481
1784	Unknown	Unknown	Dublin, River Liffey, N Bull	W01087
1784	Unknown	Merchant Vessel	Dublin, River Liffey, N Bull	W01088
1784	Unknown	Sloop	Dublin Harbour, River Liffey, the piles	W01415
1784	Sally	Unknown	Dublin Bay	W01506
1784	William & James	Unknown	Dublin Bay	W01513
1784	Lord Campden / Camden	Sailing Ship	Dublin, S Bull	W01666
1784	Aurora	Unknown	Dublin, near	W01981
1784	Unknown	Unknown	Dublin, off (?)	W02145
1784	Unknown	Unknown	Dublin, off (?)	W02146
1784	Unknown	Unknown	Dublin, off (?)	W02147
1784	Unknown	Coaster	Bray Head, Co Wicklow, rocks off	W02273
1784	Unknown	Coaster	Bray Head, Co Wicklow, rocks off	W02274



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1784	James	Unknown	Dublin, en route for	W12934
1784	Unknown	Coaster	Bray Head, rocks off	W16489
1784	Unknown	Coaster	Bray Head, rocks off	W16490
1785	Unknown	Boat	Howth Head, Co Dublin, off	W00930
1785	Unknown	Boat	Howth Head, Co Dublin, off	W00931
1785	Unknown	Smack	Howth, Co Dublin, 1 league beyond	W00932
1785	Unknown	Unknown	Dublin, River Liffey, N Bull	W01089
1785	Unknown	Boat	Dublin Bar	W01416
1785	Unknown	Fishing boat	Dublin, coal quay bridge	W01417
1785	Publica Fides	Snow	Dublin	W02070
1785	Unknown	Boat	Dublin	W02148
1785	Unknown	Ship	George's Quay, Dublin	W12856
1785	Unknown	Boat	Dublin Harbour	W12869
1786	Unknown	Collier	Dublin, River Liffey, N Bull	W01090
1786	Unknown	Brig	Dublin, River Liffey, N Bull	W01091
1786	Unknown	Yawl	Dublin Harbour, River Liffey	W01418
1786	Unknown	Boat	Dublin, River Liffey, N Wall, near	W01419
1786	Jane	Sloop	Kish Bank, Co Dublin, BrayHead and Wicklow, between	W01573
1786	Hannah	Unknown	Dun Laoghaire Pier, near	W01799
1786	Unknown	Sloop	Dalkey Island, Co Dublin	W01906
1786	Unknown	Merchant Vessel	Bray Head, Co Wicklow, off	W02275
1786	Unknown	Sloop	Bray Head, Co Wicklow, near	W02277
1786	Unknown	Sloop	Bray Head, Co Wicklow, near	W02278
1786	Unknown	Merchant Vessel	Bray head	W12842
1787	Unknown	Ship	Howth, Co Dublin	W00933
1787	Favourite Nancy	Unknown	Dublin, River Liffey, N Bull	W00998
1787	James	Sloop	Dublin, River Liffey, N Bull	W01016



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1787	Johanna Florentina	Unknown	Sutton Gut, Co Dublin, Hill of Howth, near	W01019
1787	Speculation	Ship	Dublin, River Liffey, N Bull	W01052
1787	Unknown	Merchant Vessel	Dublin, River Liffey, N Bull	W01092
1787	Unknown	Brig	Dublin, River Liffey, N Bull	W01093
1787	Unknown	Brig	Dublin, River Liffey, N Bull	W01094
1787	Aldeborough	Unknown	Dublin Harbour, River Liffey	W01148
1787	Unknown	Sloop	Dublin, beside the Light house	W01420
1787	Unknown	Yawl	Dublin Bar	W01421
1787	Unknown	Sloop	Dublin, off the lighthouse	W01422
1787	Unknown	Wherry	Dublin, River Liffey, Ringsend, near	W01423
1787	Jemmy and Nancy	Brig	Kish Bank, Co Dublin, near	W01574
1787	Unknown	Unknown	Dublin Bay, S of the piles	W01714
1787	Unknown	Unknown	Dublin Bay, S of the piles	W01715
1787	Unknown	Unknown	Dublin Bay, S of the piles	W01716
1787	Unknown	Unknown	Dublin Bay, S of the piles	W01717
1787	Unknown	Unknown	Dublin Bay, S of the piles	W01718
1787	Unknown	Unknown	Killiney Bay, Co Dublin, near	W01907
1787	Unknown	Ship	Dun Laoghaire	W01908
1787	Unknown	Sloop	Dublin	W02149
1787	Unknown	Sloop	Dublin	W02150
1787	Unknown	Brig	Dublin	W02151
1787	Thomas and Sally	Sloop	Dublin ?	W16117
1787	Jane	Unknown	Dublin Bar	W16142
1787	Unknown	Boat	Bray	W16482
1788	Unknown	Brig	Howth, Co Dublin	W00934
1788	Unknown	Sloop	Howth, Co Dublin	W00935
1788	Lively	Brig	Dublin, River Liffey, N Bull	W01025



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1788	Unknown	Lighter	Dublin, River Liffey / opposite the Marine school	W01424
1788	Ebenezer	Brig	Dublin Harbour, River Liffey, 1.5 miles off	W01474
1788	Anna Maria Ann	Unknown	Killina Bay (sic. Killiney Bay)	W01741
1788	Unknown	Unknown	Dublin (?), at Sea	W02152
1788	Mars	East Indiaman	Dublin	W12789
1789	Unknown	Boat	Howth, Co Dublin, near	W00936
1789	Hope	Unknown	Dublin, N Bull, opposite the lighthouse	W01014
1789	Unknown	Lighter	Sutton, Co Dublin	W01095
1789	Unknown	Coaster	Dublin, River Liffey, N Bull	W01096
1789	Unknown	Unknown	Dun Laogarie Harbour	W01909
1789	Unknown	Wherry	Dublin	W02153
1789	Unknown	Wherry	Dublin	W02154
1789	Unknown	Unknown	Dun Laoghaire Harbour	W12776
1789	Unknown	Unknown	Maiden Rock, Dublin	W12780
1789	Unknown	Sloop	North Bull, Dublin	W12782
1789	Unknown	Sloop	Dublin, Poolbeg, off the Lighthouse	W16119
1790	Clyde	Ship	Dublin, River Liffey, N Bull	W00982
1790	Pewell H.	Unknown	Dublin, River Liffey, N Bull	W01041
1790	Unknown	Brig	Dublin, River Liffey, N Bull	W01097
1790	Unknown	Unknown	Dublin, River Liffey, N Bull	W01098
1790	Unknown	Sailing Ship	Dublin Harbour, River Liffey, entrance	W01425
1790	Unknown	West Indiaman	Dublin Harbour, River Liffey, entrance	W01426
1790	Unknown	Barge	Dublin Bay	W01523
1790	Success	Unknown	Kish Bank, Co Dublin, tail of	W01590
1790	Swallow	Unknown	Dublin, near	W02093
1790	Unknown	Coaster	Dalkey to Bray	W02155
1790	Unknown	Coaster	Dalkey to Bray	W02156



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1790	Unknown	Coaster	Dalkey to Bray	W02157
1790	Unknown	Coaster	Dalkey to Bray	W02158
1791	Clara	Unknown	Dublin Harbour, River Liffey	W01179
1791	Mary	Sloop	Dublin, S Wall, N side of the lighthouse	W01269
1791	Wilmington	Brig	'Coolbeg' (sic. Poolbeg)	W01363
1791	Unknown	Wherry	Dublin, near the Perch	W01427
1791	Unknown	Sloop	Dublin, off the Lighthouse	W01428
1791	Unknown	Smack	Dublin, River Liffey, Ringsend point, near, between the walls.	W01429
1791	Unknown	Sloop	Dublin Harbour, River Liffey	W01430
1791	Unknown/Mary	Sloop	Dublin Harbour, River Liffey	W01431
1791	Marcelia / Marcella	Sloop	Dublin Bay	W01492
1791	Hope	Sloop	Dublin, River Liffey, lighthouse, S side	W01661
1791	Unknown	Unknown	Dublin, S Bull, lighthouse, near	W01719
1791	Unknown	Collier	Dublin, S Bull	W01720
1791	Unknown	Brig	Dun Laoghaire	W01910
1791	Unknown	Wherry	Howth Head, Co Dublin, 7 leagues off	W02159
1791	Precedent	Ship	India Bank, NE of Wicklow Head	W02721
1791	Unknown	Unknown	South Bull, Dublin	W12760
1792	Cardiff	Unknown	Dublin, River Liffey, N Bull	W00980
1792	Young Murray	Sloop	Sutton, Co Dublin, near	W01066
1792	Unknown	Brig	Dublin, River Liffey, N Bull	W01099
1792	Lovely	Unknown	Dublin, Merrion Square	W01257
1792	Unknown	Boat	Dublin Harbour, River Liffey	W01432
1792	Unknown	Boat	Dublin Harbour, River Liffey	W01433
1792	Mercury	Unknown	Muglins	W01853
1792	Endeavour	Unknown	Dublin, near	W02004
1793	Dove	Unknown	Dublin, River Liffey, N Bull	W00989



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1793	Resolution	Unknown	Dublin, River Liffey, N Bull	W01046
1793	Unknown	Unknown	Dublin, River Liffey, N Bull	W01100
1793	Unknown	Collier	Dublin Harbour, River Liffey	W01434
1793	Unknown	Wherry	Dublin, River Liffey, Poolbeg	W01436
1793	Unknown	Unknown	Dublin, N Bull	W16405
1793	Unknown	Unknown	Dublin, near Poolbeg Light	W16407
1793	Unknown	Wherry	Dublin, Poolbeg	W16408
1793	Unknown	Fishing boat	Fennit or Dublin	W16410
1793	Unknown	Boat	Dublin, N Wall, E point of	W17380
1794	Unknown	Brig	Dublin, River Liffey, N Bull	W01101
1794	Mercator	Unknown	Dublin Bar	W01279
1794	Unknown	Brig	Dublin, S Bull, Blackrock, opposite	W01721
1794	New Ceres	Unknown	Dublin, near	W02059
1794	Peace & Plenty	Unknown	Dublin, near	W02064
1794	Gustaff Adolph	Unknown	Bray, Co Wicklow	W02243
1794	Unknown	Sloop	Dublin, N Bull	W17381
1795	Rebecca	Unknown	Dublin, River Liffey	W01309
1795	Ariadne	Unknown	Dublin	W01979
1796	Ponsonby Packet	Unknown	Dublin, River Liffey, N Bull, Harbour	W01043
1796	Amphitrite	Brig	Dublin, near	W01975
1796	Viceroy	Packet boat	Dublin, en route to from Liverpool	W13033
1797	Columbus	Sloop	Howth, Co Dublin, off	W00874
1797	Eliza	Unknown	Dublin, River Liffey, N Bull	W00993
1797	Town of Liverpool	Flat	Dublin, River Liffey, N Bull	W01056
1797	Unknown	Sloop	Dublin, near the Lighthouse	W01437
1797	Diana	Unknown	Dublin Bay	W01473
1797	Unknown	Boat	Dalkey Island, Co Dublin to Clontarf	W01524



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1797	Susannah	Sloop	Dublin, S Bull	W01687
1797	Unknown	Sloop	Dublin, Poolbeg ?	W16416
1798	Abbey	Brig	Dublin, River Liffey, N Bull	W00968
1798	Anna & Maria	Barque	Dublin, River Liffey, N Bull	W00969
1798	Aspanaian	Brig	Dublin, River Liffey, N Bull	W00972
1798	Good Intent	Brig	Dublin, River Liffey, N Bull	W01003
1798	John and Betsey	Brig	Dublin, River Liffey, N Bull	W01020
1798	Peter & Anne	Unknown	Dublin, River Liffey, N Bull	W01040
1798	Robinson	Unknown	Dublin, River Liffey, N Bull	W01047
1798	Virginia	Unknown	Dublin, River Liffey, N Bull	W01063
1798	Unknown	Unknown	Dublin, River Liffey, N Bull	W01102
1798	Unknown	Unknown	Dublin, River Liffey, N Bull	W01103
1798	Unknown	Boat	Dublin, River Liffey, N Bull	W01104
1798	Unknown	Unknown	Dublin, River Liffey, N Bull	W01105
1798	Unknown	Unknown	Dublin, River Liffey, N Bull	W01106
1798	Active	Brig	Dublin Harbour, River Liffey, near	W01144
1798	Commerce	Brig	Dublin, River Liffey	W01184
1798	Expedition	Bark	Dublin, River Liffey	W01205
1798	Henry	Unknown	Dublin Harbour, River Liffey	W01220
1798	London Packet	Unknown	Dublin, River Liffey, Poolbeg	W01255
1798	Nosha Squera de Bonamo	Brig	Dublin, River Liffey	W01289
1798	Noyade	Snow	Dublin Harbour, River Liffey	W01290
1798	Shortland	Unknown	Dublin Harbour, River Liffey	W01324
1798	Unknown	Merchant Vessel	Dublin Bay, Clontarf shore	W01438
1798	Unknown	Merchant Vessel	Dublin Bay, Clontarf shore	W01439
1798	Active	Unknown	Dublin Bay	W01467
1798	Henry	Brig	Dublin, S Wall	W01658



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1798	Unknown	Unknown	Dublin, S Bull	W01722
1798	Unknown	Unknown	Boosterstown, Dublin	W01723
1798	Unknown	Collier	Dun Laoghaire, near the pier	W01911
1798	Unknown	Yawl	Dalkey Island, Co Dublin, near	W01912
1798	Abbey	Unknown	Dublin, near	W01969
1798	Richmond	Unknown	Dublin, near	W02074
1799	Unknown	Collier	Howth, Co Dublin, off	W00937
1799	Dolphin	Unknown	Dublin, River Liffey, N Bull	W00988
1799	Harmonia	Dutch Galliot	Dublin, River Liffey, N Bull	W01009
1799	Swingen	Brig	Dublin, River Liffey, N Bull	W01055
1799	Unknown	Unknown	Dublin, River Liffey, N Bull	W01107
1799	Adventure	Unknown	Dublin Harbour, River Liffey	W01147
1799	Brothers & Sisters	Brig	Dublin Bar	W01167
1799	Carolina	Galliot	Dublin, River Liffey	W01170
1799	Govenor Picton	Unknown	Dublin, River Liffey, Pigeon House, opposite	W01218
1799	Joseph	Unknown	Dublin Harbour, River Liffey	W01242
1799	Maria Carolina	Unknown	Dublin, River Liffey, entrance	W01264
1799	Penguin	Sloop	Dublin, N Bull, Bull Wall Lighthouse	W01295
1799	Slade	Brig	Dublin, River Liffey	W01326
1799	Terpsichore	Brig	Dublin Harbour, River Liffey	W01334
1799	Unknown	West Indiaman	Dublin, near Clontarf	W01440
1799	Unknown	West Indiaman	Dublin, near Clontarf	W01441
1799	Unknown	West Indiaman	Dublin, near Clontarf	W01442
1799	Unknown	Boat	Dublin, near the lighthouse	W01443
1799	Unknown	Collier	Dublin, River Liffey, Poolbeg	W01444
1799	Alexander	Brig	Dublin Bay	W01468
1799	Resolution	Unknown	Dublin Bay	W01503



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1799	Spring Vale	Unknown	Dublin, off	W01509
1799	Uxbridge	Ship	Dublin Bay	W01512
1799	General Prescott	Ship	Dublin, S Bull, the battery and Sandymount, between	W01653
1799	Hero	Brig	Dublin, S Bull, the battery and Sandymount, between	W01659
1799	Hero	Brig	Dublin, S Bull, the battery and Sandymount, between	W01660
1799	Unknown	Unknown	Dublin, S Bull, the battery and Sandymount, between	W01724
1799	Unknown	Unknown	Dublin, S Bull, the battery and Sandymount, between	W01725
1799	Unknown	Unknown	Dublin, S Bull, the battery and Sandymount, between	W01726
1799	Unknown	Unknown	Dublin, S Bull, the battery and Sandymount, between	W01727
1799	Unknown	Unknown	Dublin, S Bull, the battery and Sandymount, between	W01728
1799	Unknown	Brig	Blackrock to Dun Laoghaire	W01729
1799	Unknown	Unknown	Dublin, S Bull	W01730
1799	Experiment	Brig	Dublin, near	W02008
1799	Fanny Source	Unknown	Dublin, near	W02011
1799	Lowther	Unknown	Dublin	W02044
1799	Superb	Unknown	Dublin, near	W02092
1799	Unknown	Unknown	Dublin	W02160
1799	Unknown	Unknown	Dublin	W02161
1799	Unknown	Unknown	Dublin	W02162
1799	Unknown	Collier	Dublin Bay, N & S Bull	W02163
1799	Unknown	Unknown	Dublin Bay, N & S Bull	W02164
1799	Unknown	Unknown	Bray, Co Wicklow	W02279
1799	Unknown	Unknown	Bray, Co Wicklow	W02280
1799	Unknown	Unknown	Dublin, N Bull	W16172
1799	Unknown	Unknown	Bray	W16483
1800	Baron Von Schubarts	Brig	Dublin, River Liffey, N Bull	W00975
1800	Draper	Brig	Dublin Harbour, River Liffey	W01190



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1800	Marren Dorethea	Brig	Dublin Harbour, River Liffey	W01267
1800	Sally	Unknown	Dublin Harbour, River Liffey	W01316
1800	Industry	Unknown	Dublin Bay	W01486
1800	Molly	Unknown	Dublin Bay	W01499
1800	Unknown	Collier	Dun Laoghaire to the Pigeon House	W01525
1800	Success	Ship	Kish Bank, Co Dublin / Near Dublin	W01591
1800	Success	Brig	Dublin, S Bull	W01686
1800	Swallow	Cutter	Dun Laoghaire	W01888
1800	Unknown	Collier	Dublin Bay, N & S Bull	W02165
1800	Unknown	Collier	Dublin Bay, N & S Bull	W02166
1800	Unknown	Collier	Dublin, N & S bull	W16420
1800	Unknown	Unknown	Dublin, N & S Bull	W16421
1801	Unknown	Unknown	Dublin, N Bull, near Howth	W01108
1801	Alexis	Brig	Dublin	W01974
1801	Ann	Unknown	Dublin	W01976
1801	York	Unknown	Dublin	W02108
1802	Mary	Unknown	Dublin, River Liffey, N Bull	W01030
1802	Trial Royal	Unknown	Dublin, River Liffey, N Bull	W01057
1802	Brilliant	Unknown	Dublin Bay	W01470
1802	Adventure	Unknown	Dublin	W01972
1802	Industry	Unknown	Dublin, near	W02029
1802	New Fair Trader	Brig	Dublin	W02060
1802	St. Michael	Unknown	Dublin, near	W02077
1802	Speculation	Unknown	Dublin, near	W02090
1802	Unknown	Barque	Dublin, near	W02167
1803	Frederick	Brig	Dublin, River Liffey, N Bull	W00999
1803	Unknown	Boat	Dublin, River Liffey, N Bull	W01111



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1803	Jane & Bella	Unknown	Dublin Harbour, River Liffey	W01236
1803	Providence	Unknown	Dublin Harbour, River Liffey	W01304
1803	Mary	Unknown	Dublin Bay	W01495
1803	Unknown	Ship	Dublin Bay	W01527
1803	Unknown	Unknown	Dublin Bay	W01528
1803	Mayflower	Unknown	Dalkey Island, Co Dublin	W01851
1803	Anna Maria	Unknown	Dublin, near	W01978
1803	Bolton	Unknown	Dublin, near	W01987
1803	Friends	Unknown	Dublin, near	W02019
1803	Hope	Unknown	Dun Laoghaire, off / Muglins	W02027
1803	Larne	Unknown	Dublin, near	W02045
1803	Providence	Unknown	Dublin	W02069
1803	Russell	Unknown	Dublin	W02076
1803	Eliza	Unknown	Bray Head, Co Wicklow	W02230
1803	Jane	Unknown	Dublin Harbour	W13059
1803	Active	Unknown	Dublin Harbour	W13060
1803	Unknown	Boat	Dublin ?	W16120
1804	Catherine	Unknown	Howth, Co Dublin	W00872
1804	Eliza	Unknown	Dublin Bay, N side	W00994
1804	Morning Star	Unknown	Dublin, River Liffey, N Bull, Harbour	W01031
1804	Triumph	Unknown	Dublin Bay, N side	W01058
1804	Unknown	Sloop	Dublin Bay, N side	W01112
1804	Chester Trader	Sloop	Dublin Harbour, River Liffey	W01175
1804	Three Brothers	Unknown	Dublin, River Liffey, Poolbeg	W01340
1804	Union	Packet boat	Dublin Harbour, River Liffey, Lighthouse, off	W01347
1804	Mercury	Unknown	Dublin Bay	W01498
1804	Mary & Eliza	Unknown	Kelleny (Killiney?) Bay	W01847



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1804	Betsey	Unknown	Dublin, near	W01982
1804	Goodwill	Brig	Dublin, near	W02023
1804	Unknown	Sloop	Dublin, near	W02168
1804	Princess of Wales	Full-rigged ship	Wicklow Bank / Arklow Bank / India Bank	W02853
1804	Bess	Unknown	Dublin, en route to	W13088
1804	Auspicious	Sloop	Cranfield Point, near Dublin	W13089
1805	Venus	Unknown	Dublin, River Liffey, N Bull	W01061
1805	Charles	Unknown	Dublin Bar	W01172
1805	Gebruder	Unknown	Dublin Bay	W01481
1805	Glory	Unknown	Dublin, White Bank, near	W01654
1805	Tentacao	Unknown	Dublin, near	W02095
1806	Intrepid	Unknown	Dublin, River Liffey, N Bull	W01015
1806	Eagle	Unknown	Dublin Bar	W01192
1806	Mentor	Unknown	Dublin Bar	W01278
1806	Elizabeth	Unknown	Dublin, near	W02002
1807	Augusta	Unknown	Dublin, River Liffey, N Bull	W00974
1807	James	Unknown	Dublin Bar	W01232
1807	Unknown	Schooner	Dublin Bar	W01446
1807	Unknown	Collier	Dublin Bay	W01529
1807	Prince of Wales	Brig	Dublin, S Bull, Blackrock House, near	W01677
1807	Rochdale	Brig	Dublin, S Bull, Seapoint tower	W01682
1807	Swan	Unknown	Dublin, S Bull	W01688
1807	Maryann	Unknown	Dublin, near	W02053
1807	Prince Pacquet	Unknown	Dublin	W02068
1807	Fame	Unknown	Dublin from Lisbon, en route to	W13159
1807	Unknown	Sloop	Muglins	W16426
1807	Unknown	Unknown	Dunleary and the South Bull, between	W16427



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1808	Olympia	Unknown	Dublin Bay	W01502
1808	Jane	Unknown	Dun Laoghaire	W01812
1808	Mercanter	Unknown	Dun Laoghaire	W01852
1808	Olympus	Brig	Dun Laoghaire, near	W01864
1808	St. Michael	Unknown	Dun Laoghaire	W01881
1808	Diana	Unknown	Dublin	W01993
1808	Dove	Unknown	Dublin, near	W01994
1808	Mayflower	Unknown	Dublin, near	W02055
1808	Union	Unknown	Dublin	W02098
1808	Transporten	Unknown	Dublin, en route from Gothenburg	W13186
1809	Hope	Unknown	Dublin, River Liffey, lighthouse, near	W01225
1809	Rebecca	Unknown	Dublin, S Bull	W01680
1809	Friends	Unknown	Dun Laoghaire	W01791
1809	Nelly	Unknown	Dun Laoghaire	W01860
1809	Francis	Unknown	Dublin, near	W02018
1809	Cabrenangue	Schooner	Bray Head, Co Wicklow, near	W02228
1810	Mary	Unknown	Dublin, River Liffey, Poolbeg, near	W01270
1810	Invincible	Sloop	Bray, Co Wicklow, beach	W02246
1810	Unknown	Sloop	Dublin, S side of Lighthouse	W16435
1811	Juno	Unknown	Howth, Co Dublin, near	W00891
1811	Commerce	Ship	Dublin, River Liffey	W01185
1811	Isabella	Unknown	Dublin, River Liffey, Poolbeg	W01231
1811	Elizabeth	Unknown	Dublin Bay	W01475
1811	Uniao	Barque	Dublin Bay	W01511
1811	Mary Elizabeth	Unknown	Dublin, near	W02054
1811	True Love	Unknown	Dublin	W02097
1812	Maria	Unknown	Dublin, River Liffey, N Bull	W01028



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1812	Victory	Unknown	Dublin, River Liffey, N Bull	W01062
1812	Anne	Brig	Dublin, River Liffey, Poolbeg lighthouse platform	W01154
1812	Langston	Brig	Dublin, River Liffey	W01247
1812	Mary	Unknown	Dublin, S Bar	W01271
1812	William	Unknown	Dublin, River Liffey	W01359
1812	William	Unknown	Dublin Bar	W01360
1812	Ant	Unknown	Dublin Bay	W01469
1812	Henry	Galliot	Dublin Bay	W01483
1812	Lark	Sloop	Dun Laoghaire and Blackrock, between	W16237
1813	Leopard	Schooner	Dublin	W02040
1813	Nancy	Unknown	Dublin, near	W02056
1813	Unknown	Sloop	Dublin, S Bull	W16440
1814	Unknown	Unknown	Howth, Co Dublin	W00938
1814	Ceres	Unknown	Sutton, Co Dublin, near	W00981
1814	Unknown	Unknown	Dublin, River Liffey, N Bull	W01113
1814	Unknown	Unknown	Dublin, River Liffey, N Bull	W01114
1814	Unknown	Unknown	Dublin, River Liffey, N Bull	W01115
1814	St. Antonio	Schooner	Dublin Harbour, River Liffey, the Bull, near	W01312
1814	Falmouth	Unknown	Dublin Bay	W01479
1814	Eliza	Unknown	Dublin, S Bull	W01648
1814	Jubilee	Unknown	Dublin, S Bull	W01665
1814	Charles	Unknown	Dun Laoghaire	W01759
1814	Isaac	Galliot	Dublin Bay, Sutton Bar	W16240
1815	Wicklow	Unknown	Howth, Co Dublin, near	W00920
1815	Allinson	Unknown	Dublin Bar	W01150
1815	Anna	Unknown	Dublin Bar	W01152
1815	Neptunus	Unknown	Dublin, 15 miles N of	W02058



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1815	Allison	Unknown	Dublin Bay	W13350
1815	Antonio Telea	Schooner	Dublin, N Bull	W16241
1816	Mary Ann	Unknown	Howth, Co Dublin, N of	W00896
1816	Nelly	Unknown	Howth, Co Dublin, near	W00904
1816	Unknown	Unknown	Dublin, N Bull, N end, close to the low-water mark	W01116
1816	Unknown	Unknown	Dublin, N Bull, middle, close to the low water-mark	W01117
1816	Unknown	Unknown	Dublin, N Bull, close to the low water mark	W01118
1816	Mersey	Unknown	Dublin Harbour, River Liffey, Lighthouse	W01281
1816	Unknown	Brig	Dublin Bay, off	W02169
1816	Ann and Betty	Unknown	Bray, Co Wicklow, near	W02223
1817	Ontario	Unknown	Dublin, River Liffey, N Bull	W01039
1817	Isabella	Unknown	Dublin and Holyhead, between	W13305
1817	Unknown	Unknown	Dublin Bay	W16447
1818	Emily	Unknown	Dublin Bay	W01476
1818	Betty	Unknown	Dublin, near	W01983
1818	Newry	Unknown	Bray, Co Wicklow, near	W02256
1818	Unknown	Man O' War	Wicklow Head, NNW 17 or 18M / Codling Bank	W16455
1819	Bryan	Unknown	Howth Harbour, Co Dublin	W00870
1819	Prince of Wales	Unknown	Dublin, River Liffey, N Bull	W01044
1819	Unknown	Brig	Dublin, River Liffey, N Bull	W01119
1819	Princess Augusta	Unknown	Dublin, White Bank, near	W01678
1819	Friends	Sloop	Bray, Co Wicklow, off	W02241
1820	Jennett	Unknown	Howth, Co Dublin, off	W00888
1820	Nicholas	Unknown	Howth, Co Dublin, near	W00905
1820	Mary	Brig	Dublin Bay	W01496
1820	Robert	Unknown	Dublin Bay	W01505
1820	Dublin Packet	Ship	Kish Bank, Co Dublin	W01562



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1820	Unknown	Collier	Kish Bank, Co Dublin	W01603
1820	Kitty	Unknown	Dun Laoghaire	W01821
1820	Unknown	Unknown	Kish Bank	W13245
1821	Atlantic	Unknown	Dublin, River Liffey, N Bull	W00973
1821	Nancy	Unknown	Kysh (Kish) Bank	W01582
1821	Ellen	Brig	Sandycove, Co Dublin, Forty Foot, near	W01777
1821	Eliza	Unknown	Dublin, en route from to London	W13252
1822	Briton	Unknown	Dublin, River Liffey, N Bull	W00978
1822	Elizabeth	Brig	Dun Laoghaire Harbour, E pier	W15816
1823	James	Unknown	Dublin, River Liffey, N Bull	W01017
1823	Edward	Unknown	Dublin, River Liffey, Pigeon House, below	W01194
1823	Unknown	Ship	Bray, Co Wicklow, Swash	W01604
1823	Aurora	Sloop	Dun Laoghaire, E Pier	W01746
1823	Celericus / Celeritas	Schooner	Dun Laoghaire, N side of E Pier	W01756
1823	Mary	Sloop	Dun Laoghaire	W01842
1823	Providence	Sloop	Dun Laoghaire Harbour, E Pier	W01871
1823	Unknown	Stone hacker	Dun Laoghaire, 0.75 mile from centre of entrance	W01913
1823	Brothers	Unknown	Dublin, near	W01989
1823	Nelson	Unknown	Dublin	W02057
1823	Unknown	Hacker	Dun Laoghaire Harbour, entrance to	W15815
1824	Star	Unknown	Dublin, River Liffey, N Bull	W01053
1824	Hero	Unknown	Dublin, River Liffey, Pigeon Hole	W01222
1824	Don	Unknown	Dublin Bay, Merrion Strand, Co Dublin	W01645
1824	Flyde	Unknown	Dublin, White Bank, near	W01651
1824	Fyle	Unknown	Dublin, S Bull	W01652
1824	Mary Frances	Unknown	Dublin Bay, Merrion Strand, Co Dublin	W01667
1824	Dwarf	Cutter	Dun Laoghaire, E Pier	W01772



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1824	Minerva	Schooner	E Pier, Dun Laoghaire	W01855
1824	Union	Sloop	Dun Laoghaire, E Pier	W01893
1824	Letitia	Unknown	Dublin, near	W02041
1824	Margaret	Unknown	Dublin	W02048
1824	Unknown	Unknown	Dublin Bay, S side	W02170
1824	Unknown	Unknown	Dublin Bay, S side	W02171
1824	Frances	Unknown	Bray Head, Co Wicklow, off	W02239
1824	Francis	Unknown	Bray, Co Wicklow	W02240
1824	Agnes	Unknown	New Wall, Dublin	W13369
1824	George	Unknown	Dublin, en route from for Liverpool	W13402
1824	Unknown	Fishing boat	Dun Laoghaire, old Harbour	W15822
1825	Defiance	Unknown	Sutton, Co Dublin, near	W00986
1825	Ellen	Unknown	Sutton, Co Dublin, near	W00996
1825	Brothers	Unknown	Dublin Bar	W01165
1825	Edward	Ship	Dublin Bar, N Wall	W01195
1825	London	Smack	Dublin, River Liffey, N Wall	W01254
1825	Wellington	Schooner	Dublin, River Liffey, Pigeon House, near	W01355
1825	Marchioness of Wellesley	Unknown	Dublin Bay	W01493
1825	Nicholson	Unknown	Blackrock, near, Dublin	W01671
1825	London	Unknown	Dublin Harbour	W13464
1825	Dumfries	Unknown	Dublin en route for from Greenock	W13467
1826	Fame	Unknown	Dublin, River Liffey, N Bull	W00997
1826	Marian	Unknown	Dublin, old pier	W01265
1826	Elizabeth	Unknown	Dun Laoghaire Harbour	W01774
1826	Ann	Unknown	Dublin, sandbank	W01977
1826	Fame	Schooner	Dublin	W02010
1826	Letitia	Unknown	Dublin	W02042



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1826	Sampson	Brig	Dublin	W02085
1827	Bridget	Unknown	Dublin, River Liffey, N Bull	W00977
1827	Stranger	Unknown	Kish Bank, Co Dublin	W01589
1827	Ceres	Unknown	Dublin, S Bull	W01641
1827	Hero	Unknown	Dun Laoghaire, outside the Pier	W01806
1828	Nancy	Unknown	Dublin, River Liffey, N Bull	W01034
1828	Olive	Schooner	Dublin, N Bull, near Sutton / Howth	W01038
1828	Minerva	Unknown	Kish Bank, Co Dublin, off	W01581
1828	Supply	Unknown	Muggle Rock (Muglins?)	W01887
1828	Unknown	Boat	Dun Laoghaire Harbour	W01916
1828	Unknown	Schooner	Dalkey Island, Co Dublin, near	W01917
1828	Unknown	Schooner	Dalkey Island, Co Dublin, near	W01918
1828	Unknown	Unknown	Dalkey Island, Co Dublin, near	W01919
1828	Factor	Unknown	Bray, south of	W13735
1829	Unknown	Schooner	Howth, Co Dublin, off	W00940
1829	Adeline (SS)	Steamship	Dublin, River Liffey	W01145
1829	Louise	Brig	Dublin, Poolbeg lighthouse to Dun Laoghaire, between	W01491
1829	Betsey / Betsy	Schooner	Dun Laoghaire, outside the eastern pier entrance	W01749
1829	Duke	Brig	Sandycove Point, Co Dublin	W01771
1829	Unknown	Brig	Dun Laoghaire Harbour	W01920
1829	Bibby	Unknown	Kish Bank, Co Dublin, lightship, 20 miles off	W01984
1829	James	Unknown	Dublin, near	W02032
1829	Manchester (SS)	Steam Packet	Skerries, Co Dublin / Dublin Bay, sandbanks between Dun Laoghaire and Howth	W02047
1829	Plutarch	Unknown	Kish Bank	W13750
1830	Mary Isabella	Unknown	Dublin, River Liffey, Great N Wall	W01275
1830	Columbus	Unknown	Dublin, S Bull	W01644
1830	Kitty	Unknown	Dun Laoghaire Harbour	W01822



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1830	Annabella	Unknown	Bray Head, Co Wicklow, off	W02224
1831	Magnetan	Unknown	Dublin, River Liffey, N Bull	W01027
1831	Sarah & Maryann	Unknown	Dublin, River Liffey, N Bull	W01050
1831	Robert & Jean	Unknown	Kilkenny Bay (sic Killiney)	W01877
1831	Six Brothers	Unknown	Dublin Bay, near Bennets Bank	W02089
1831	Britannia	Unknown	Bray, Co Wicklow, 12 miles away	W02812
1832	John and William	Sloop	Howth, Co Dublin, off	W00890
1832	Boat of the Ashburton	Boat	Dublin, River Liffey, Pigeon House	W01163
1832	Brothers	Unknown	Dublin, River Liffey, Great N Wall	W01166
1832	John and Isaac	Unknown	Dublin, River Liffey, Great N Wall	W01241
1832	Unknown	Skiff	Dublin, River Liffey, Limehouse	W01447
1832	Shark	Unknown	Dublin, near	W02087
1832	Unknown	Boat	Dublin, River Liffey	W17218
1833	Minerva	Sloop	Howth, Co Dublin, off	W00902
1833	Unknown	Smack	Dublin, River Liffey, N Bull	W01123
1833	Betsy / Betsey	Unknown	Dublin, Lighthouse Platform	W01160
1833	Unknown	Brig	Codling Bank, below the Kish Light	W01605
1833	Speedwell	Unknown	Dublin Harbour, River Liffey, Lighthouse Wall	W01684
1833	Patrick	Unknown	Dublin, near	W02063
1833	Turtle Dove	Unknown	Dublin and Gloucester, between	W11771
1834	Hull Packet	Unknown	Dublin, River Liffey, Great N Wall, E side	W01227
1834	Kitty & Ann	Unknown	Dublin, River Liffey, Great N Wall	W01245
1834	Emily	Unknown	Blackrock "Sands", Dublin	W01649
1834	Essy	Unknown	Dalkey Island, Co Dublin (stranded)	W01781
1834	Eyr	Unknown	Dun Laoghaire Harbour, W Pier	W01784
1834	Maria	Unknown	Dun Laoghaire, Old Harbour	W01837
1834	Rapid	Unknown	Dublin and London, between	W11752



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1835	Earl of Selkirk	Unknown	Kish Bank, Co Dublin	W01563
1835	Nile	Unknown	Kish Bank, Co Dublin	W01583
1835	Maria	Unknown	Sandycove, Co Dublin, near	W01838
1836	Lion	Brig	Dublin, River Liffey, N Bull	W01024
1836	Charles	Unknown	Dun Laoghaire Harbour	W01760
1836	Fame	Collier	Sandycove, Co Dublin	W01786
1836	Raven	Unknown	Dun Laoghaire Harbour	W01875
1836	Unknown	Collier	Sandycove, Co Dublin, near	W01921
1836	Unknown	Brig	Sandycove, Co Dublin, near	W01922
1836	Unknown	Unknown	Dun Laoghaire Harbour, opposite Armstrong's hotel	W01923
1836	Erin	Unknown	Bray, Co Wicklow, near	W02234
1836	Erne	Sloop	Bray, Co Wicklow, opposite Quin's hotel	W02235
1837	St. John	Unknown	Dublin, River Liffey, Pigeon House, near	W01314
1837	Collon	Unknown	Dun Laoghaire, E pier	W01764
1837	John & Grace	Unknown	Dublin, old harbour	W13954
1837	Mary Somerville	Unknown	Dun Laoghaire Bay	W13960
1838	Betsey	Unknown	Howth, Co Dublin	W00868
1838	Unknown	Unknown	Howth, Co Dublin, off	W00941
1838	Mary Ann	Unknown	Dublin Harbour, River Liffey, W Pier	W01274
1838	Success	Unknown	Dublin, River Liffey	W01329
1838	Unknown	Unknown	Codling Bank	W01606
1838	Harmony	Collier	Dun Laoghaire Old Harbour, entrance to	W01800
1838	Unknown	Unknown	Dublin, near	W02173
1838	Unknown	Unknown	Bray, Co Wicklow	W02281
1838	Unknown	Dutch Galliot	Bray, Co Wicklow	W02282
1838	Unknown	Unknown	Wicklow, Greystones and Bray, between	W02880
1838	Isabella	Unknown	Dublin, River Liffey	W13595



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1838	Harlingen	Unknown	Bray Point	W13649
1838	Earl of Selkirk	Unknown	Kish Bank	W13660
1838	Shepherdess	Unknown	Kingstown (Dun Laoghaire)	W13699
1839	Mary & Jane	Unknown	Swash, Kish / Bray Bank	W01579
1839	Unknown	Sloop	Kish Bank, Co Dublin, lightship, near	W01607
1839	Nancy	Unknown	Dublin, S side of the Lighthouse wall	W01668
1839	Unknown	Unknown	Dublin, 18 miles E	W02174
1839	Blanche	Unknown	Dun Laoghaire	W13855
1839	Unknown	Unknown	Dublin	W14214
1840	Perthshire	Barque	Codling Bank	W01585
1840	Dolphin	Unknown	Dun Laoghaire	W01770
1840	Unknown	Sloop	Bray Head, Co Wicklow to Wicklow	W02881
1841	Pomona	Collier	Dun Laoghaire, Old Harbour	W14025
1841	Medina (HMS)	Mail boat	Dun Laoghaire, East Pier	W14029
1842	Maria	Unknown	Dun Laoghaire Harbour	W01839
1842	Leonora	Unknown	Dun Laoghaire	W14046
1843	John and Ellen	Unknown	Howth, Co Dublin, off	W00889
1843	Argyll	Unknown	Dublin, near Ribb's Wall	W01157
1843	Unknown	Unknown	Dublin, River Liffey, N Wall	W01448
1843	Susannah	Unknown	Kish Bank, Co Dublin	W01592
1843	Unknown	Schooner	Kish Bank, Co Dublin	W01608
1843	Unknown	Unknown	Dublin, off	W02175
1844	Thistle	Unknown	Dublin, River Liffey	W01335
1844	Endeavour	Brig	Dublin Bay, Burford Bank	W01477
1844	Seymour	Schooner	Dublin Bay, Burford Bank	W01507
1844	Telford	Unknown	Dublin	W01510
1844	Unknown	Sloop	Bray, Co Wicklow, on a bank	W01609



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1844	Bellevue	Schooner	Dun Laoghaire Harbour	W01748
1844	Capricorn	Brig	Dun Laoghaire Harbour	W01752
1844	Catherine	Sloop	Dun Laoghaire Harbour	W01754
1844	Colonel Smith	Sloop	Dun Laoghaire Harbour	W01765
1844	Commerce	Unknown	Dun Laoghaire Harbour	W01766
1844	Hemer	Brig	Dun Laoghaire Harbour	W01804
1844	Hercules	Unknown	Dun Laoghaire Harbour	W01805
1844	Homer	Unknown	Dun Laoghaire Harbour	W01808
1844	Jane & Frances	Schooner	Dun Laoghaire Harbour	W01814
1844	Maria	Brig	Dun Laoghaire Harbour	W01840
1844	Mary	Brig	Dun Laoghaire Harbour	W01843
1844	Pandora	Unknown	Dun Laoghaire Harbour	W01866
1844	Tom	Unknown	Dun Laoghaire Harbour	W01892
1844	Unknown	Brig	Dun Laoghaire, near Mr Fagan's shipyard	W01924
1844	Unknown	Brig	Dun Laoghaire, near Mr Fagan's shipyard	W01925
1844	Unknown	Brig	Dun Laoghaire, near Mr Fagan's shipyard	W01926
1844	Unknown	Schooner	Dun Laoghaire, near Mr Fagan's shipyard	W01927
1844	Unknown	Schooner	Dun Laoghaire, near Mr Fagan's shipyard	W01928
1844	Unknown	Coaster	Dun Laoghaire	W01929
1844	Unknown	Unknown	Killiney, Co Dublin to Dalkey, between	W01930
1844	Agnes	Unknown	Dun Laoghaire, near	W01973
1844	Sovereign	Unknown	Bray Head, Co Wicklow to Delgany	W02264
1844	Betsy	Unknown	Dun Laoghaire	W12872
1844	Rosebank	Unknown	Dublin, N of	W14140
1844	Kingston	Unknown	Dun Laoghaoire Harbour	W14143
1844	William & Isabella	Unknown	Dun Laoghaire Harbour	W14149
1844	Jupiter	Unknown	Dun Laoghaire Harbour	W14153



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1844	Demerera Packet	Packet boat	Dublin, near	W14220
1844	Unknown	Sloop	Bray Bank	W16484
1845	John and Susan	Unknown	Dublin, Dollymount Bull	W01021
1845	Vanguard	Unknown	Dublin, River Liffey, N Bull	W01060
1845	Lady Saltown	Unknown	Dublin Harbour	W14259
1845	Elizabeth	Unknown	Dun Laoghaire Harbour,	W14284
1846	Catherine Isabella	Unknown	Dun Laoghaire Harbour, W. Pier Head	W01755
1846	Jane Archbold	Unknown	Liffey River, Dublin	W14291
1847	Cherub	Unknown	Dublin, River Liffey, lighthouse	W01174
1847	Unknown	Barque	Dublin, N. Bank	W01449
1847	Unknown	Unknown	Kish Bank, Co Dublin, off	W01610
1847	Unknown	Unknown	Seapoint, Co Dublin	W01732
1847	Molly Bawn	Unknown	Dun Laoghaire (Kingstown) Harbour	W01857
1847	Kingston	Unknown	Dublin	W02034
1847	St. Patrick	Sailing Ship	Dublin, near	W02079
1847	Princess Alice	Sailing Ship	Howth, Co Dublin, on shore	W11864
1848	Aston	Unknown	Howth, Co Dublin, off	W00867
1848	Ann & Susan	Unknown	Dublin, River Liffey, Great N Wall	W01151
1848	Fitzhenry	Sloop	Dublin Harbour, River Liffey	W01209
1848	Mary Ann	Unknown	Dun Laoghaire Harbour, pier	W01848
1848	Mary Ann	Sailing Ship	Dún Laoghaire Harbour, Co Dublin	W06494
1849	Ippepanda/Ippepandi	Unknown	Dublin, N side of the channel	W01229
1849	Unknown	Unknown	Kish Bank, Co Dublin, lightship, 3 leagues SE by S	W01611
1849	Unknown	Schooner	Kish Bank, Co Dublin	W01612
1849	Unknown	Unknown	Kish Bank, Co Dublin	W01613
1849	Unknown	Unknown	Kish Bank, Co Dublin	W01614
1849	Friendship	Unknown	Dún Laoghaire, Co Dublin	W01792



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1849	Blazer	Yacht	Dublin	W01985
1849	Dream	Yacht	Dublin	W01997
1849	Simpson / Simson	Unknown	Dublin Bay, Baily Lighthouse, 18 miles W by N	W02088
1849	Unknown	Schooner	Dublin, off	W14896
1850	Unknown	Unknown	Howth, Co Dublin, off	W00942
1850	Unknown	Schooner	Howth, Co Dublin, near	W00945
1850	Unknown	Schooner	Kish Bank, Co Dublin, lightship to Howth, between	W02177
1850	Unknown	Ship	India Bank	W02760
1850	Anne	Unknown	Dublin	W11946
1850	Tarifa	Unknown	Kish Bank, Co Dublin	W11996
1850	Unknown	Vessel	Kish Light Ship and Howth, inside	W15278
1851	Birmingham (SS)	Steamship	Dublin Harbour, River Liffey, outside the breakwater	W01162
1851	Rose	Brigantine	Wicklow Head Light, 10 miles W by N, S of the Codling bank / off Arklow Bank	W02858
1851	Unknown	Schooner	India Bar, near Wicklow	W11919
1851	Xarifa or Zarifi	Brig	Kish Bank, Co Dublin (struck)	W11955
1851	Newport	Schooner	Dublin, River Liffey	W11957
1851	Jessie Maria	Unknown	Dublin, St. John's Quay	W11958
1851	Senhouse	Unknown	Dublin, River Liffey, Poolbeg lighthouse	W11959
1851	Emma	Smack	Dublin, Sir John Rogerson Quay (grounded)	W11960
1851	Times	Steamship	Dublin, River Liffey, Pigeon House, off (ashore)	W11964
1851	James Wright	Unknown	Kish Bank, Co Dublin (grounded)	W11965
1851	Three Brothers	Smack	Dublin, near	W11967
1851	Times	Steamship	Dublin, River Liffey, Pigeon House, (aground)	W11969
1851	Belle Kate	Barque	Dublin, River Liffey, Pigeon House, Ringsend (aground)	W11971
1852	Antelope	Unknown	Dublin, River Liffey, Ringsend Point	W01155
1852	Citizen (SS)	Steamship	Dublin, River Liffey, Pigeon House, near	W01177
1852	Lord Chelsea	Smack	Dublin, Sir John Rogerson Quay	W01256



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1852	Smyrna	Brig	Dublin, River Liffey, Poolbeg lighthouse, rocks near	W01327
1852	Unknown	Lighter	Dublin Harbour, River Liffey, opposite the revenue station at the S wall	W01450
1852	Charlotte	Unknown	Dublin Bay	W01472
1852	John Hawkes	Brig	Dublin Bay, between Kish Bank and Dun Laoghaire	W01488
1852	Argyle	Unknown	Dun laoghaire Harbour	W01743
1852	Argyle	Schooner	Dun Laoghaire Harbour, E Pier	W01744
1852	Emma	Smack	Killiney, Co Dublin, beach	W01779
1852	Sarah Jane	Schooner	Corig Rocks, Dalkey Sound	W01883
1852	Unknown	Schooner	Dun Laoghaire Harbour	W01931
1852	Betsey / Betsy	Brig	Bray Head, Co Wicklow, 1 mile from	W02227
1852	Lady Harriet(t)	Schooner	Greystones / off Bray Head / Drummond's Hill, near Dublin	W02248
1852	New Valiant	Schooner	Bray Head, Co Wicklow	W02257
1852	Queen	Smack	Bray Head, Co Wicklow	W11928
1852	Astrea	Unknown	Dún Laoghaire, Co Dublin	W11931
1852	Young Valiant	Schooner	Bray Head, Co Wicklow (stranded)	W11941
1852	Visitor	Lifeboat	Dublin Bay (?)	W15318
1852	Betsey	Brig	Bray Head, 1M off	W16141
1852	Wolf	Unknown	Dun Laoghaire Harbour	W18461
1853	Unknown	Unknown	Sutton, Co Dublin, off	W01124
1853	Esther & Sophia	Brig	Kish Bank, Co Dublin	W01568
1853	Unknown	Unknown	Kish Bank, Co Dublin, lightship, 9 miles E of	W01615
1853	Unknown	Unknown	Kish Bank, Co Dublin, lightship, E	W01616
1853	Dahlia	Smack	Dun Laoghaire	W01768
1853	Victoria	Schooner	Dun Laoghaire Harbour entrance	W01894
1853	Unknown	Sloop	Dun Laoghaire Harbour, W entrance	W01932
1853	Unknown	Unknown	Kish Bank, Co Dublin, lightship and the Baily, bearing SE, midway between	W02179



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1853	Unknown	Barque	Kish Bank, Co Dublin, 20 miles E / Baily Lighthouse bearing W by N, 20 miles	W02180
1853	Ocean	Schooner	Kish Bank, Co Dublin (stranded)	W11985
1853	Times	Steamship	Dublin, River Liffey, damaged in	W11987
1853	Euphemia	Unknown	Kish Bank, Co Dublin (struck on)	W11998
1853	Cherokee	Unknown	Kish Bank, Co Dublin (struck on)	W12000
1854	Edward & Margaret	Schooner	Dublin, River Liffey, N Bull	W00991
1854	Hibernia (SS)	Steamship	North Bank, outside the Breakwater, North Bull	W01012
1854	Scotland	Barque	Dublin, River Liffey, N Bull	W01051
1854	Jessie Cook	Smack	Dublin, River Liffey	W01239
1854	Prosperous	Smack	Dublin, River Liffey, Pigeon House, near	W01303
1854	Scotland	Unknown	Kish Bank, Co Dublin	W01587
1854	Wintammoyh	Unknown	Dun Laoghaire to Boston	W02107
1854	Saxon	Barque	Kish Bank, Co Dublin (stranded)	W11978
1854	Queen	Unknown	Dublin, River Liffey, Great N Wall (struck on)	W12002
1854	Unknown	Barque	North Bull	W12003
1854	Robert and Margaret	Unknown	Kish Bank, Co Dublin (stranded)	W12004
1854	Emperor	Unknown	Kish, off	W15362
1854	Queen	Brig	North Bull	W15375
1855	Pioneer	Unknown	Dublin, River Liffey, N Bull	W01042
1855	Emily Maria	Flat	Dublin Port, River Liffey	W01200
1855	Eleanor	Brig	Kish Bank, Co Dublin	W01565
1855	Enterprise	Barque	Codling Bank	W01567
1855	Wallington / Wellington	Brig	Kish Bank, Co Dublin	W01596
1855	Unknown	Unknown	Kish Bank, Co Dublin	W01617
1855	Elizabeth	Schooner	Dun Laoghaire Harbour	W01775
1855	Rose in June	Smack	Dun Laoghaire Harbour, W Pier	W01879
1855	Victoria	Schooner	Dalkey Island, Co Dublin, abreast of the Muglins	W01895



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1855	Unknown	Unknown	Dun Laoghaire, N of	W01933
1855	Jane Lovett	Unknown	Dun Laoghaire Harbour	W15495
1855	Unknown	Unknown	Kish Bank	W16014
1856	Nona	Unknown	Dublin, River Liffey, off the N Wall Lighthouse	W01286
1856	Seaflower	Unknown	Dublin, River Liffey, Ringsend, off	W01321
1856	Trawler No. 45	Trawler	E Pier, Dublin Harbour	W01341
1856	Usk	Unknown	Dublin, River Liffey	W01349
1856	Robert and Mary	Sloop	Dun Laoghaire, outside the E Pier	W01878
1856	Virtue	Schooner	Dun Laoghaire Harbour	W01897
1856	Unknown	Schooner	Bray, Co Wicklow	W02289
1856	Unknown	Schooner	Bray, Co Wicklow	W02290
1856	Unknown	Collier	Bray Head, Co Wicklow, off	W02291
1856	Unknown	Collier	Bray Head, Co Wicklow, off	W02292
1856	Greyhound	Unknown	Dublin, West Pier	W12016
1856	Eliza	Unknown	Kish Bank, Co Dublin	W12017
1856	No. 45	Trawler	Dublin, East Pier	W15574
1856	Unknown	Unknown	Bray, off	W16494
1856	Unknown	Unknown	Bray, off	W16495
1857	Unknown	Unknown	Dublin Bay, Baily Light, off	W00946
1857	Unknown	Unknown	Dublin, off	W02182
1857	Trevannance	Schooner	Howth Head, Co Dublin, 28 miles from	W03014
1857	Lexington	Barque	Killiney, Brandon Strand	W05770
1857	Vigilante	Schooner	Killiney, Brandon Strand	W06071
1857	Hercules	Unknown	Kish Bank, Co Dublin, off	W12018
1858	Weser	Unknown	Howth, Co Dublin / N side of Baldoyle	W00812
1858	Unknown	Unknown	Dublin Fairway, River Liffey	W01451
1858	Unknown	Unknown	Dublin Bay	W01530



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1858	France et Brazil / Brezil	Unknown	Kish Bank, Co Dublin	W01570
1858	Unknown	Ship	Codling Bank buoy, 2 miles S	W01618
1858	Unknown	Ship	Codling Bank buoy, 2 miles S	W01619
1858	Aghi Apostoli	Brig	Dun Laoghaire Harbour	W01740
1858	Artemis	Brig	Dun Laoghaire Harbour	W01745
1858	Louisa	Unknown	Dun Laoghaire, Old harbour	W01829
1858	Manchester	Unknown	Dun Laoghaire	W01832
1858	Unknown	Unknown	Killiney Watch-house, 0.25 mile to the W	W01934
1858	Unknown	Ship	Kish Bank, Co Dublin, lightship, 8-9 miles NE	W02183
1858	Unknown	Ship	Dublin, off	W02184
1858	Unknown	Unknown	Irish Bank, Dublin	W02185
1858	Unknown	Brig	Bray Head, Co Wicklow	W02293
1858	Brigand (SS)	Steamship	Wicklow to Kish Bank	W02915
1858	Cheval de Troie	Unknown	Bray, Co Wicklow, beach (stranded)	W12020
1858	No. 1 (SS)	Dredger	Dublin, River Liffey	W15921
1859	Clymene	Unknown	Kish Bank, Co Dublin	W12045
1860	Martha Grace	Schooner	Dublin, River Liffey, Pigeon House, opposite	W01268
1860	Thomas Hand	Unknown	Dublin, back of the Cast Pier	W01338
1861	Maid of the Mist (SS)	Schooner	Howth Harbour, Co Dublin	W00895
1861	Unknown	Barque	Howth Harbour, Co Dublin	W00950
1861	Unknown	Brig	Howth Harbour, Co Dublin	W00951
1861	Lady Mary	Brigantine	Dublin, River Liffey, Poolbeg lighthouse	W01246
1861	Hero	Brig	Dublin Bay	W01484
1861	Unknown	Schooner	Dublin Bay, Burford Bank, off	W01531
1861	Badger	Cutter	Dun Laoghaire Harbour, near	W01747
1861	Caroline	Unknown	Dun Laoghaire Harbour	W01753
1861	Clans	Unknown	Dun Laoghaire Harbour	W01762



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1861	Clyde	Schooner	Dun Laoghaire, between the Coal Quay and Royal Irish Yacht Club	W01763
1861	Ellen	Unknown	Dun Laoghaire Harbour	W01778
1861	Helen	Unknown	Dun Laoghaire Harbour	W01801
1861	Helen Irvine	Unknown	Dun Laoghaire Harbour	W01802
1861	Hero	Unknown	Dun Laoghaire Harbour	W01807
1861	Industry	Schooner	Dún Laoghaire Harbour, Co Dublin	W01809
1861	King Olive / Olave	Unknown	Dun laoghaire Harbour	W01820
1861	Leven	Collier	Dun Laoghaire Harbour, near the Coastguard station	W01823
1861	Lively	Unknown	Dun Laoghaire Harbour	W01827
1861	Mary	Schooner	Sandycove, Co Dublin, Burdett Avenue, off	W01844
1861	Mary	Unknown	Sandycove, Co Dublin	W01845
1861	Moses	Unknown	Dun Laoghaire Harbour, Great W Yacht Club	W01859
1861	Neptune	Brig	Dún Laoghaire Harbour, Co Dublin, outside the E pier	W01862
1861	Onyx	Unknown	Dun Laoghaire Harbour, E Pier	W01865
1861	Ranger	Unknown	Dun Laoghaire	W01874
1861	Royal Sovereign	Unknown	Dun Laoghaire Harbour, near	W01880
1861	Sylph	Schooner	Dun Laoghaire Harbour	W01889
1861	Wanderer	Collier	Dun Laoghaire Harbour, off	W01898
1861	Wanderer	Schooner	Dun Laoghaire	W01899
1861	Unknown	Smack	Dun Laoghaire Harbour, near the coal quay	W01935
1861	Unknown	Smack	Dun Laoghaire Harbour, near the coal quay	W01936
1861	Unknown	Unknown	Dun Laoghaire Harbour, outside E pier	W01937
1861	Unknown	Unknown	Dun Laoghaire Harbour, outside E pier	W01938
1861	Unknown	Smack	Killiney, Co Dublin	W01939
1861	Unknown	Brig	Dalkey Sound, Co Dublin	W01940
1861	Unknown	Unknown	Killiney, Co Dublin, beach	W01941
1861	Unknown	Brig	Dalkey Sound, Co Dublin	W01942



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1861	Unknown	Brig	Killiney, Co Dublin	W01943
1861	Unknown	Unknown	Dalkey Sound, Co Dublin	W01944
1861	Unknown	Boat	Dalkey Sound, Co Dublin	W01945
1861	Unknown	Unknown	Dun Laoghaire Harbour	W01946
1861	Unknown	Unknown	Dun Laoghaire Harbour	W01947
1861	Unknown	Unknown	Dun Laoghaire Harbour	W01948
1861	Unknown	Unknown	Dun Laoghaire Harbour	W01949
1861	Unknown	Unknown	Dalkey Island, Co Dublin	W01950
1861	Unknown	Unknown	Dun Laoghaire, Co Dublin, Scotsman Bay, E of	W01951
1861	Unknown	Unknown	Killiney, Co Dublin, beach	W01952
1861	Endeavour	Brig	Bray, Co Wicklow, Strand, under the wall at Cumming's Coal Yard	W02233
1861	Industry	Unknown	Bray Head, Co Wicklow	W02245
1861	Unknown	Unknown	Bray, Co Wicklow, off	W02295
1861	Unknown	Unknown	Bray Head, Co Wicklow	W02296
1861	Unknown	Unknown	Bray Head, Co Wicklow	W02297
1861	Unknown	Unknown	Bray Head, Co Wicklow	W02298
1861	Unknown	Unknown	Bray Head, Co Wicklow	W02300
1861	Unknown	Unknown	Bray Head, Co Wicklow	W02301
1861	Lune	Schooner	Dublin Bay to Calf of Man. Between	W02977
1862	Unknown	Ship	Dublin Bay, Baily Lighthouse, off	W00952
1862	Colleen Bawn	Barque	Dublin, N Bull, near Sutton	W00983
1862	Adonis (SS)	Screw Steamer	Wicklow, Bray approximately 6 miles E of, SE of Muglins	W01555
1862	Saline	Unknown	Dublin Bay, Baily, a few miles E	W02083
1862	Crisis	Barque	Kish Bank, Co Dublin	W02672
1862	China	Unknown	Kish Bank, Co Dublin	W12354
1862	Jane	Brig	Liffey River, Dublin Harbour	W17838
1863	Trial	Brig	Dublin, River Liffey, entrance	W01342



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1863	Nimrod	Unknown	Dublin, S Bull	W01672
1863	Jessie M'Gaskin	Unknown	Dun Laoghaire Harbour, beside the W pier	W01817
1863	Unknown	Sloop	Dun Laoghaire Harbour, off	W02186
1863	Unknown	Schooner	Bray, Co Wicklow, beach	W02302
1863	Unknown	Ship	India Bank, 0.5 mile SW of the S Buoy	W02767
1863	Unknown	Unknown	Bray Head	W16515
1864	Shamrock	Sloop	Muglins, 2-3 miles NE	W01508
1864	Sailor's Bride / Pride	Barque	India Bank	W02728
1864	Unknown	Unknown	Bray, Co Wicklow to Wicklow Head	W02888
1865	General Havelock	Tug	Dublin, River Liffey	W01215
1865	Unknown	Unknown	Kish Bank, Co Dublin, lightship, 5 miles WNW	W02188
1865	Hector	Unknown	Codling Bank, off Wicklow Head	W12082
1865	Unknown	Unknown	Bray Head and Greystones, along	W16517
1866	Ino	Schooner	Howth Harbour, Co Dublin	W00885
1866	Salus	Unknown	Dublin, S Bank	W01318
1866	M.B.	Unknown	Kish Bank, Co Dublin, about 2 miles S of the lightship	W01577
1866	Unknown	Unknown	Dublin & Irish Channel	W02189
1866	Unknown	Brigantine	Howth, Co Dublin, about 10 miles E by S	W02190
1866	Mary Sweet	Brigantine	Kish Bank ?	W18166
1867	Sir Robert Campbell	Brig	Howth, Co Dublin	W00914
1867	Otway	Unknown	Dublin, N Bull, Great N Wall	W01293
1867	Lizzie	Lugger	Dublin Bay, 3 miles off the Baily light	W01490
1867	Catherine Porter	Brigantine	Kish Bank, Co Dublin	W01559
1867	Mary Porter	Schooner	Kish Bank, Co Dublin	W01580
1867	Unknown	Sloop	Kish Bank, Co Dublin, near	W01620
1867	Tavares Bastos (SS)	Steamship	Dublin, S Bull, Salthill Station	W01689
1867	Unknown	Schooner	Howth, Co Dublin, Banks	W02191



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1867	Unknown	Brigantine	Bray, Co Wicklow	W02304
1867	Mountaineer	Schooner	South Bull	W18170
1867	Pequot	Unknown	Dublin Bay	W18286
1868	Helen	Brigantine	Sutton, Co Dublin, strand	W01010
1868	Blue Vein	Schooner	Dublin to Bray, between	W01986
1868	Leinster	Cutter	Howth, Co Dublin to Lambay	W02038
1868	Adalaide / Adelaide	Trawler	Dublin Harbour, Liffey River	W18294
1869	British Lion	Unknown	Kish Bank, Co Dublin	W01558
1869	Unknown	Steamship	Kish Bank, Co Dublin, off	W01621
1869	Unknown	Brigantine	Kish Bank, Co Dublin, off	W01622
1869	Betsey	Unknown	Muglins Rock	W01750
1869	Mary	Unknown	Dun Laoghaire Harbour, outside	W01846
1869	Unknown	Unknown	Bray, Co Wicklow, Strand	W02305
1869	Unknown	Collier	Bray, Co Wicklow, River Dargle	W02306
1869	Modesty	Ship	Codling Bank, 18 nautical (?) miles SE	W02849
1869	Marina	Brigantine	Bray Head, Co Wicklow and Baltimore, between	W08590
1869	Oneota	Unknown	Dun Laoghaire Harbour, East Pier, bank of	W18310
1870	Capella	Schooner	Dublin Bay, Baily Lighthouse	W00871
1870	Trusty	Brig	Dublin, N Bull, inside the Perch	W01059
1870	Union	Brigantine	Dublin	W01348
1870	Unknown	Schooner	Dublin Bay	W01534
1870	Unknown	Unknown	Kish Bank, Co Dublin, off	W01623
1870	Unknown	Schooner	Kish Bank, Co Dublin, lightship, off	W01624
1870	Admiral	Trawler	Dun Laoghaire Harbour, rocks near the W pier	W01736
1870	Adventurer	Brig	Dun Laoghaire, near the Coastguard Station	W01738
1870	Favourite	Brig	Dun Laoghaire Harbour, under the coastgaurd station	W01787
1870	Unknown	Schooner	Dublin	W02192



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1870	Elizabeth	Schooner	Bray, Co Wicklow, beach	W02231
1870	Kingfisher	Barque	Dun Laoghaire Harbour, E pier, off	W16529
1870	Agenora / Agenore	Brigantine	Dublin Bay, S Bank	W16534
1870	Unknown	Brigantine	Kish Bank, off	W17051
1871	Isabella	Lugger	Howth, Co Dublin, 5 miles from	W02031
1871	Unknown	Schooner	Dublin Bay, Baily Lighthouse, 2 miles SE	W02193
1871	Libero	Brig	Dun Laoghaire Harbour	W16636
1871	Admiral	Trawler	Dublin	W16637
1871	Unknown	Ship	Bray Bank	W17082
1872	Dispatch	Smack	Howth Harbour, Co Dublin	W00876
1872	Emily	Lugger	Howth, Co Dublin, back of the pier	W00880
1872	Conductor	Schooner	Dublin, River Liffey, N Bull	W00985
1872	Murton (SS)	Steamship	Dublin, River Liffey, N Bull	W01032
1872	Lilly	Schooner	Kish Bank, Co Dublin, N end	W01576
1872	Unknown	Unknown	Codling Bank	W01625
1872	Mariette	Unknown	Dun Laoghaire Harbour, under the coast guard station	W01841
1872	Sally Ann	Unknown	Dun Laoghaire Harbour	W01882
1872	Telegraph	Unknown	Dun Laoghaire Harbour, back end of the W pier	W01890
1872	Sily	Schooner	Kish Bank	W15817
1872	Rebecca	Schooner	Dublin, Liffey	W16691
1873	Norry Kirwan	Unknown	Sutton, Co Dublin	W01036
1873	Catherine	Smack	Dublin, River Liffey	W01171
1873	Mary Jessie	Smack	Dublin, River Liffey	W01276
1873	Rosa	Unknown	Dublin, River Liffey, opposite the Custom House	W01311
1873	Diligence	Trawler	Dun Laoghaire	W01769
1873	Margaret	Schooner	Dun Laoghaire	W01833
1873	Pimorrero	Barque	Bray Harbour, N of	W01870



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1873	Pensiero	Unknown	Bray, Co Wicklow, River Dargle	W02259
1873	Countess Fortescue	Dandy	Dublin and Preston, between	W12201
1873	James	Schooner	Dublin N Bull	W16727
1874	Hampton	Brig	Dublin, North Bull, Sutton	W01005
1874	Rainbow	Smack	Dublin, River Liffey, Poolbeg lighthouse	W01307
1874	Unknown	Unknown	Dublin Bay, Clontarf Station	W01452
1874	St. Michael	Ship	Bray Head, Co Wicklow or Hogs Head, Derrynane	W05915
1874	Cuban	Brig	Dublin and Genoa, between	W12269
1874	Alonso (SS)	Steamship	Poolbeg Lighthouse	W16804
1874	Unknown	Schooner	Muglins	W17137
1875	Ernest	Ketch	Dublin Bay, Baily, off	W00881
1875	Unknown	Sloop	Dublin Bay, Baily Lighthouse, off	W00955
1875	Unknown	Schooner	Dublin, River Liffey, N Bull	W01127
1875	Edith (SS)	Steamship	Dublin, between the City of Dublin Company's jetty and breakwater head	W01193
1875	Magnet (SS)	Steamship	Dublin, River Liffey, Pigeon House	W01259
1875	Olga	Yacht	Dublin Bay	W01501
1875	Jane & Sarah	Unknown	Dun Laogharie, Old Harbour	W01815
1875	Hebe	Schooner	Dublin and Glasgow, between	W12213
1876	Ellen	Dandy	Howth, Co Dublin	W00879
1876	Captain Cook (SS)	Steamship	Dublin, River Liffey, Ringsend dock, W side of	W01169
1876	Unknown (SS)	Steamship	Kish Bank, Co Dublin	W01626
1876	Favourite / Favorite	Schooner	Muglins / ¾ mile E. of Dalkey Island	W01788
1876	Unknown	Unknown	Muglins	W01953
1876	Ann Griffith	Schooner	Bray, Co Wicklow, N of	W02226
1876	Heroine	Unknown	Bray, Co Wicklow	W02244
1876	Mary and Joseph	Yawl	Dún Laoghaire Harbour, Co Dublin	W12212
1876	Leonie	Brig	Bray Strand, off	W12240



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1876	Princess Royal	Lifeboat	Bray Strand, Co Wicklow, ¾ of a mile east of	W12241
1876	Minerva (SS)	Steamship	Dublin	W16874
1877	Unknown	Unknown	Dublin Bay, Kish Light bearing ESE about 1.5 miles	W01535
1877	Unknown (SS)	Steamship	Bull wall, Clontarf, abreast of Poolbeg lighthouse	W17145
1878	Olinka	Brig	Kish Bank, Co Dublin, 2 miles S of Kish Lightship	W01584
1879	North Sea	Schooner	Howth, Co Dublin, spit of	W00907
1879	No. 6 (SS)	Steamship	Sutton, Co Dublin	W01054
1879	Alice Woods	Brigantine	Dublin Bar, N Bull	W01149
1879	Florence Nightingale	Schooner	Dublin, N Bank	W01210
1879	Liverpool (SS)	Steam Tug	Dublin Bay, Burford Bank, outside	W01489
1879	Admiral (SS)	Steam Tug	Dublin	W01971
1880	Brothers	Brigantine	Dublin Bay, Baily Light / Lambay, off	W00869
1880	Vigilant	Trawler	Dublin Bay, Baily Light, near	W00919
1880	Annie Elizabeth/Mary Elizabeth	Barque	Dalkey, Co Dublin, near Loreto Convent	W01742
1880	Eliza Benyon	Ketch	Dun Laoghaire Harbour	W01776
1880	Esperanza	Yacht	Dun Laoghaire Harbour	W01780
1880	Gannet	Cutter	Dun laoghaire Harbour	W01793
1880	Agnes	Brigantine	Bray Head, Co Wicklow	W02221
1880	Ellen Mary	Schooner	Bray Strand,	W02232
1880	Carn Brea	Schooner	Dungeness, Kent, and Dublin, between	W12308
1880	Robert Brown	Schooner	Dublin Bay, Shelly Bank, off the Bailey Lighthouse	W12313
1881	Lurline/Lubline	Smack Yacht	Howth Harbour, Co Dublin, Ruin Reef, 1 mile from / Ireland's Eye, S of	W00894
1881	3500	Boat	Dublin Bay, Baily Light, 0.5 mile S by W	W00956
1881	George H. Oulton	Ship	Dublin, N Bull, Sutton	W01002
1881	Unknown	Unknown	Dublin, River Liffey, N Bull	W01128
1881	Jane	Brig	Dublin Bar	W01235



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1881	Perseverance	Trawler	Dublin, River Liffey	W01296
1881	Unknown	Sloop	Dublin, W Pier	W01453
1881	Falcon	Lugger	Dun Laoghaire Harbour, entrance to	W01785
1881	Unknown	Unknown	Kish Bank, Co Dublin, 9 miles outside	W02194
1881	Unknown	Boat	Dublin Bay, Baily Lighthouse, ½ mile S. by W. of	W12317
1881	Unknown	Hobble	Dublin Harbour, off	W17340
1882	Elizabeth	Brig	Baldoyle Bank, Dublin Bay	W00752
1882	Electra	Schooner	Dublin, River Liffey, N Bull	W00992
1883	Fanny	Cutter	Dublin Bar buoy, off/Howth Bailey near	W01206
1883	Elaine	Brigantine	Codling Bank	W01564
1883	Glance	Smack	Killiney Bay, Co Dublin	W01795
1883	Bacalieu	Schooner	Dublin and Antwerp, between	W12344
1883	Lady Eglinton (SS)	Unknown	Dublin Harbour, River Liffey	W17414
1883	Captain McClintock	Steamship	Dublin Harbour, River Liffey	W17415
1884	Betties	Schooner	Dun Laoghaire	W01751
1884	Celt	Cutter	Dun Laoghaire Harbour, alongside the quay	W01757
1884	Edith	Brigantine	Dun Laoghaire pier	W01773
1885	Crusader	Trawler	Dublin, River Liffey	W01188
1885	Joanna Eliza Furlong	Schooner	Dublin Bay, Clontarf, 1.5 miles E of N Bull Wall	W01240
1885	Unknown	Unknown	Bray, Co Wicklow, beach, off	W02307
1885	Unknown	Unknown	Bray, Co Wicklow, beach, off	W02308
1885	John Parry	Schooner	Bray	W17546
1886	Despatch	Smack	Dublin, River Liffey entrance, N Bull	W00987
1886	Elizabeth	Schooner	Dublin, River Liffey, Alexandra Basin, W of the concrete wall	W01197
1886	Eva	Smack	Dun Laoghaire Pier Head, 0.5 mile off	W01782
1886	Gemini	Smack	Howth, Co Dublin, Battery, c.2 miles off	W02020
1886	Stuart (SS)	Screw Steamer	Dun Laoghaire Harbour	W17578



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1886	No. 3	Hopper Barge	North Bull	W17584
1887	Lighter 42 B	Lighter	Dalkey Sound, Co Dublin	W01825
1887	Queen Bee	Cutter	Dun Laoghaire Harbour, 0.5 mile N	W01872
1887	Revivalist	Cutter	Dun Laoghaire Harbour, entrance	W01876
1887	St. Peter	Sloop	Howth, Co Dublin, c.23 miles ENE of	W02081
1887	Robert	Brigantine	Bray, Co Wicklow, River Dargle, mouth of	W02262
1888	Broomielaw	Schooner	Dublin, River Liffey, N Bull	W00979
1888	Inchbroom	Schooner	Dublin Bar, Co Dublin	W01228
1888	Lighter No. 14	Lighter	Dublin Bay, Clontarf, near	W01249
1888	Ruby	Unknown	Kish Bank, Co Dublin, off	W01586
1888	Perseverance	Cutter	Sandycove, Co Dublin / Bullock Harbour, rocks close to	W01869
1888	Joseph	Yawl	Bray, Co Wicklow, off	W02247
1888	Nicolino	Barque	Dublin Bay, Burford Bank, off	W12718
1888	Amicus	Barque	Kish Bank, Co Dublin, lightship, 6 miles WSW of	W12720
1889	Saxon	Trawler	Dublin, River Liffey, between buoys 2 and 3	W01319
1889	Mary Ann	Schooner	Bray Beach, Co Wicklow	W02253
1890	Countess	Yawl	Dublin, River Liffey, Ringsend	W01187
1890	Jane Doull / Soull / Soule	Schooner	Dublin, River Liffey, Alexandra Basin, W of the concrete wall	W01237
1890	Pelican	Trawler	Dublin, River Liffey, Ringsend	W01294
1890	St. Patrick	Trawler	Dublin, River Liffey	W01315
1890	Unknown	Lugsail	Dun Laogaire to Poolbeg Light, Dublin Bay	W01536
1890	Unknown	Trawler	Kish Bank, Co Dublin, lightship, off	W01627
1890	Friends	Dandy	Dublin, Nose of Howth, Dublin Bay, c.3 miles SE of	W12703
1891	Corisande (SS)	Iron Steam Yacht	Howth Harbour, Co Dublin	W00875
1891	Mary Ann	Yawl	Howth Harbour, Co Dublin	W00898
1891	Mary Jane	Yawl	Howth Harbour, Co Dublin	W00900
1891	Neptune	Fishing boat	Dublin, River Liffey	W01284



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1891	Rat	Sailing Boat	Dublin, River Liffey, opposite Halpin's Pond	W01308
1891	Shipwright	Trawler	Dublin, River Liffey, near Pigeon House Wall / Ringsend Pier	W01323
1891	Wales Queen	Unknown	Codling Bank, 4 miles NE	W01595
1891	Sarah Rourke	Trawler	Dun Laoghaire Harbour	W01885
1891	Ariel	Cutter	Dublin, near(?)	W01980
1891	Kate	Schooner	Kish Bank, Co Dublin, lightship, c. 4 miles E by S	W02033
1891	Maggie	Brigantine	Kish Bank, Co Dublin, lightship, 10 miles ESE / Bailey Lighthouse, 23 miles E	W02046
1891	Wanderer	Barque	Codling Bank, Irish Sea, 25 miles SW of	W12684
1892	Gazelle	Trawler	Dublin, River Liffey / Pigeon House Wall	W01214
1892	Valborg	Barque	Dublin, River Liffey, Alexandra Basin, entrance	W01350
1892	Unknown	Lighter	Dublin, River Liffey, N Wall	W01455
1892	Glenavon	Unknown	Howth, Co Dublin, Bailly / Kish Bank	W01571
1892	Wave Queen	Barque	Codling Light Vessel, around 4 miles NE	W01597
1892	Unknown	Unknown	Kish Bank, Co Dublin	W01628
1892	Civil Service No. 7	Lifeboat	Dun Laoghaire Harbour, W Pier	W01761
1892	Gwendoline (SS)	Yacht	Dun Laoghaire Harbour, Entrance	W01797
1892	Seek	Lugger	Dun Laoghaire Harbour, W Pier	W01886
1892	Unknown	Unknown	Dublin, offshore bank	W02196
1892	Unknown (SS)	Steamship	Dublin, off / Kish Bank (?)	W02197
1892	Unknown	Unknown	Kish Bank, Co Dublin, lightship, 2 miles W	W02198
1892	Mermaid	Cutter	Dublin, River Liffey, Co Dublin, No.2 Buoy, abreast of	W12668
1892	Alert	Boat	Bailey Light, Co Dublin, 1 mile E of	W12681
1892	Leak	Smack	Dun Laoghaire Harbour	W14808
1892	John Williams	Smack	Dun Laoghaire Harbour	W14809
1892	Unknown	Boat	Dun Laoghaire	W15085
1892	Unknown	Unknown	Kish Lightship, 2M W of	W15246
1892	Unknown	Ship	Kish Bank	W15248



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1893	Alice Maria	Lugger	Howth Harbour, Co Dublin	W00865
1893	Fanny	Jigger	Dublin, River Liffey / near No. 3 Buoy	W01207
1893	General Havelock (SS)	Wooden Steam Tug	Dublin, River Liffey, Alexandra Basin	W01216
1893	Merry Lass	Trawler	Dublin	W14856
1893	Winnie (SS)	Steamship	No. 6 Buoy, on the bank / Poolbeg	W15028
1894	Cloud	Unknown	Dublin, River Liffey, Dodder, below Ringsend Bridge, E breakwater	W01180
1894	Club Boat	Unknown	Dublin, River Liffey, Dodder, below Ringsend Bridge, E breakwater	W01181
1894	Comet	Trawler	Dublin, River Liffey, Alexandra Basin, W of Gouldings, to the W of the concrete wall, E breakwater	W01182
1894	Eliza	Hacker	Dublin, River Liffey, Alexandra Basin, Block Wharf, E breakwater	W01196
1894	Erne	Trawler	Dublin, River Liffey, Alexandra Basin, W of Gouldings	W01203
1894	Fishing boat	Unknown	Dublin, River Liffey, Dodder River	W01208
1894	Henry Curwen	Brigantine	Dublin, River Liffey / S side	W01221
1894	Jty	Trawler	Dublin, River Liffey, Dodder, below Ringsend Bridge, E breakwater	W01243
1894	Lea	Boat	Dublin, River Liffey, Alexandra Basin, W of Gouldings	W01248
1894	Little Harry	Trawler	Dublin, River Liffey, Dodder, below Ringsend Bridge / E breakwater	W01251
1894	Maid of the Mist	Schooner	Dublin, River Liffey, Dodder, Block Wharf	W01260
1894	Margaret	Schooner	Dublin, River Liffey, Alexandra Basin, W of Gouldings, E breakwater	W01261
1894	Margaret & Anne	Hacker	Dublin, River Liffey, Alexandra Basin, Block Wharf, E breakwater	W01262
1894	Mary	Trawler	Dublin, River Liffey, Alexandra Basin, Block Wharf, E breakwater	W01272
1894	Orion	Trawler	Dublin, River Liffey, Alexandra Basin, W of the concrete wall	W01292



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1894	Racer	Trawler	Dublin, River Liffey, Alexandra Basin, Block Wharf, E breakwater	W01306
1894	Relief	Unknown	Dublin, River Liffey, Dodder, Block Wharf	W01310
1894	Salmon boat	Smack	Dublin, River Liffey, Dodder, below Ringsend Bridge, E breakwater	W01317
1894	Swift	Sloop	Dublin, River Liffey	W01332
1894	Swift	Trawler	Dublin, River Liffey, Alexandra Basin, on the yard slip	W01333
1894	Wave	Stone hacker	Dublin, River Liffey, Alexandra Basin, W of Gouldings, E breakwater	W01354
1894	Whitehorse	Smack	Dublin, River Liffey, Dodder, below Ringsend Bridge, E breakwater	W01356
1894	Unknown	Unknown	Dublin, River Liffey, Dodder	W01456
1894	Lizzie	Cutter	Kish Bank, Co Dublin, lightship, 3 miles NE / 4 miles ESE of Baily Light	W02043
1894	Mary Ann	Schooner	Dublin, Tolka Quay, Chemical Works	W17231
1895	Unknown	Sailing Boat	Dublin, River Liffey, Poolbeg lighthouse, 200 yards inside	W01457
1895	Civil Service No. 7	Lifeboat	Dun Laoghaire Harbour W Pier, 1 mile off, S Bull	W01643
1895	Palme	Barque	Seapoint, Co Dublin, site of old Salthill Hotel, near	W01673
1895	Unknown (SS)	Steamship	Dublin, Wicklow coasts	W03094
1895	No Name	Sailing Boat	Dublin, River Liffey, Poolbeg lighthouse, 200 yards inside	W12642
1895	Francoloen	Ship	Dublin Bay, Blackrock, off	W15041
1895	Unknown	Unknown	Dublin coasts	W15257
1896	Ben Nevis (SS)	Iron Steamship	Dublin, River Liffey, Poolbeg lighthouse	W01159
1896	Thomas	Cutter	Dublin, River Liffey, Horseshoe Light	W01336
1896	Marsden (SS)	Steamship	Dublin Bay	W01494
1896	Firth of Solway	Barque	Kish Bank, Co Dublin, lightship, 8 miles SE, Near Bray Head	W02013
1896	Unknown	Smack	N Burford Buoy, SW $\frac{3}{4}$ W, and Bailey Light NW $\frac{1}{4}$ W	W02200
1896	Unknown	Smack	N. Burford Buoy SW $\frac{3}{4}$ W / Bailey Light NW $\frac{1}{4}$ W	W15254



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1897	Challenger	Cutter	Dalkey Island, Co Dublin	W01758
1897	Liffey	Smack	Dun Laoghaire Harbour, E Pier entrance, Co Dublin	W01824
1897	No Name	Sailing Boat	Howth, Co Dublin, off	W12618
1898	Linnet	Dandy	Howth, Co Dublin	W00892
1898	Maggie	Yawl	Kish Bank, Co Dublin, lightship, near	W01578
1898	Emerald	Ketch	Dublin, River Liffey, Pigeon House Fort, near	W12603
1898	Aroon	Yawl	Killiney Bay, Co Dublin	W12606
1898	Maggie	Dandy	Dublin Bay	W12622
1899	Admiral	Trawler	Dublin, River Liffey, Alexandra Basin, Block Wharf	W01146
1899	Brunette	Schooner	Dublin, River Liffey, Alexandra Basin, Block Wharf	W01168
1899	Citizen	Trawler	Dublin, River Liffey, Alexandra Basin, Block Wharf	W01178
1899	Commodore	Trawler	Dublin, River Liffey, Alexandra Basin, Block Wharf	W01186
1899	Crusader	Trawler	Dublin, River Liffey, Alexandra Basin, Block Wharf	W01189
1899	Emerald	Trawler	Dublin, River Liffey, Alexandra Basin, Block Wharf	W01199
1899	Gannet	Trawler	Dublin, River Liffey, Alexandra Basin, Block Wharf	W01213
1899	Lilly	Trawler	Dublin, River Liffey, Alexandra Basin, Block Wharf	W01250
1899	May	Unknown	Dublin, River Liffey, Alexandra Basin	W01277
1899	Merry lass	Trawler	Dublin, River Liffey, Alexandra Basin, W of the concrete wall	W01280
1899	No. 4	Unknown	Dublin, River Liffey, Alexandra Basin, Block Wharf	W01285
1899	Ondine	Trawler	Dublin, River Liffey, Alexandra Basin, Block Wharf	W01291
1899	Sea Searcher	Trawler	Dublin, River Liffey, Alexandra Basin, Block Wharf	W01322
1899	Waterlily	Trawler	Dublin, River Liffey, Alexandra Basin, Block Wharf	W01353
1899	Mabel	Lugsail	Dun Laoghaire Harbour, outside entrance	W01830
1899	No Name	Boat	Dublin Bay, Co Dublin.	W12595
1899	Morecambe Belle	Schooner	Dún Laoghaire Harbour, Co Dublin, entrance to	W12604
1899	Alert	Yawl	Dun Laoghaire	W15050
1899	Unknown	Unknown	Kish Lightvessel, 4M ENE	W15262



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1900	Christiana	Trawler	Dublin, River Liffey, Ringsend	W01176
1900	Greyhound	Ketch	Dublin, River Liffey, Ringsend Basin	W01219
1900	Unknown	Trawler	Dublin, River Liffey, Ringsend Basin	W01458
1900	Unknown	Trawler	Dun Laoghaire Harbour, end of the E Pier	W01955
1901	Peep of Day	Yawl	Howth Harbour, Co Dublin	W00909
1901	Unknown	Fishing boat	Howth, Co Dublin, near	W00957
1901	Unknown	Boat	Howth, Co Dublin, near	W00958
1901	Unknown	Lugger	Howth, Co Dublin, off	W00959
1901	Express	Schooner	Dun Laoghaire Harbour	W01783
1901	Flora	Coast Guard Cruiser	Dun Laohaire Harbour, near Coastguard Station	W01789
1901	Hampton	Barquentine	Dublin, Salthill Railway Station/3 miles N. of Dun Laoghaire	W01798
1901	Jane	Schooner	Dun Laoghaire Coastguard Station, rocks	W01813
1901	Margaret Elizabeth	Schooner	Dun Laoghaire Harbour, near the Coastguard Station	W01836
1901	Milbay	Ketch	Dun Laoghaire Harbour, entrance to Coastguard Depot	W01854
1901	Octopus	Schooner	Dun Laoghaire	W01863
1901	Sarah Rourke	Smack	Dun Laoghaire, new quay	W01884
1901	Unknown	Unknown	Dun Laoghaire Harbour	W01956
1901	Unknown	Unknown	Dun Laoghaire Harbour	W01957
1901	Unknown	Unknown	Dun Laoghaire Harbour	W01958
1901	Unknown	Unknown	Killiney, Co Dublin / Greystones	W01959
1901	Ebenezer	Cutter	Dublin Bay, Baily Light, c. 8 miles ENE / About 6 miles NE of Dublin Bay	W02000
1901	James	Schooner	Dun Laoghaire Harbour	W16797
1901	Octavius	Schooner	Dun Laoghaire Harbour/Coal Quay	W16847
1902	Janie	Yawl	Sutton, Co Dublin, coastguard Station, 1 mile S of	W01018
1902	Albatross (Kish Lightship)	Light Ship	Kish Bank, Co Dublin	W01556
1902	Unknown (SS)	Steam Trawler	Kish Bank, Co Dublin, lightship, off	W01631



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1902	Harold (SS)	Collier	Dublin, 30 miles off	W02025
1903	Nannie	Lugger	Howth, Co Dublin, W Pier	W00903
1903	Unknown	Sailing Boat	Dublin Bay, Baily Light, ENE of/ 30 miles ENE of	W00960
1903	Unknown	Sailing Boat	Dublin Bay, Baily Light, ENE	W00961
1903	Unknown	Unknown	Dublin, River Liffey, Alexandra Basin	W01459
1903	Industry	Trawler	Dublin Bay	W01487
1903	Unknown	Unknown	Dublin, River Liffey, Poolbeg, c. 4 miles E by S	W01537
1903	Unknown	Trawler	Dublin, River Liffey, Poolbeg lighthouse, W by N about 4-4.5 miles, Howth Pier Light, just clearing Nose of Howth	W01538
1903	Unknown	Ship	N Burford Buoy, near	W01539
1903	Unknown	Unknown	Dublin Bay, Baily Light, 10 miles SE of	W02202
1903	Unknown	Boat	Bray Head, Co Wicklow, off	W02309
1903	Gael	Sailing Boat	Bray Head, Co Wicklow, 1M NW	W05681
1903	Confido	Ketch	Sutton Creek, Co Dublin/Dockyard, Dublin Harbour	W12576
1903	Unknown	Unknown	Poolbeg light, 4-4.5M E by S of	W15824
1903	Kilkeel	Ketch	The Tipping, Dublin, opposite	W16946
1904	Unknown	Ship	Codling Bank	W01632
1904	Lady Cairns	Ship	Kish Lightship, 25 miles E of	W02035
1904	Maid of Howth	Lugsail	Howth, Co Dublin, near	W12564
1904	Emily Mary	Unknown	Dun Laoghaire to ?, en route	W17031
1904	Clonallon	Steamship	Swansea to Dublin, en route	W17032
1905	Unknown	Lighter	Dublin, River Liffey	W01460
1905	Donegal Castle (SS)	Steamship	North Bull	W17034
1906	Sea Swallow	Smack	Dublin, River Liffey, near No 6 Buoy	W12555
1907	No. 619	Barge	Howth, Co Dublin, W pier, rocks outside	W00906
1907	Esmeralda	Schooner	Kish Bank, Co Dublin, lightship, 10 miles S by W	W02005
1907	Unknown	Schooner	Kish Bank, Co Dublin, lightship, 10 miles S by W	W02204
1907	Unknown	Scow	Dublin Bay, Baily, SW ½ W, Lambay WNW	W02205



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1908	Unknown	Unknown	Dublin, River Liffey, N Bull	W01129
1908	Argo (SS)	Iron Steamship	Dublin, River Liffey, around 20ft from the Quay Wall	W01156
1908	Mary	Lugsail	Dublin Bay, Baily Lighthouse, around 1 mile NE	W02052
1908	Wavelite	Unknown	Dublin, Irish Sea	W02102
1909	Naomi	Cutter	Dublin, River Liffey, Poolbeg lighthouse, entrance to	W01282
1909	Poseidon	Barque	Dublin, River Liffey, Pigeon House, near, Fort Merrion / Shally Banks, S of ESB power station at Poolbeg	W01675
1909	Lilly	Fishing boat	Killiney Railway Station, c. 600 yards N	W01826
1909	Unknown	Unknown	Coast of Dublin	W17287
1909	Unknown	Yacht	Kish Lighvessel, 1/2 a mile S. of	W17288
1909	Gem (SS)	Steamship	North Bank, Dublin	W17289
1909	Unknown	Fishing boat	Bray off	W17299
1910	Gem	Cutter	Dun Laoghaire Coastguard Station	W01794
1910	Mary Ann	Smack	Dun Laoghaire, abreast of the Coastguard Station	W01849
1910	Vigo	Cutter	Dun Laoghaire	W01896
1910	Unknown	Motor Boat	Bray Harbour	W02310
1910	Unknown	Unknown	Kish Bank and the Irish coast, between	W14590
1910	Unknown	Ship	Bray Head, Valentia, 4M SW of	W14707
1911	Unknown	Trawler	Dublin	W02206
1911	Unknown	Trawler	Dublin	W02207
1912	Erin (MV)	Motor Boat	Dublin Bay	W01478
1912	Zelia (SS)	Steel Steamship	Howth Head, Co Dublin, c. 15 miles E / off the Baily Light	W02109
1914	Camwy (SS)	Barque	Dublin	W14618
1915	Amy	Yawl	Howth Harbour, Co Dublin, end of Pier	W00866
1915	Mary Immaculate	Unknown	Howth, Co Dublin	W00899
1915	St. Catherine	Ketch	Howth Harbour, Co Dublin	W00913
1915	Africa	Unknown	Dun laoghaire, 1.5 miles off	W01739
1915	Industry	Cutter	Dun Laoghaire, outside the pier	W01810



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1915	Inveresk	Barque	Sandycove Point, Co Dublin, rocks off	W01811
1915	June Rose	Schooner	Dun Laoghaire Harbour	W01819
1917	Granuaile	Ketch	Dun Laoghaire Harbour, between the yacht club and Irish Light works	W01796
1917	Mizpah	Smack	Dun Laoghaire, under the Coastguard station	W01856
1918	Westphalia	Unknown	Dublin, N of	W02103
1918	Mary Fanny	Ketch	Codling Bank Light Vessel, 14 mile SE	W02845
1918	Rathmore (SS)	Steamship	Kish Bank, Co Dublin, lightship, 4 miles E	W12477
1918	Nora (SS)	Steamship	Kish Bank, Co Dublin, lightship, 1 mile S	W12493
1919	F. 150	Motor Boat	Howth, Co Dublin, 17 miles E	W02009
1922	Suir (SS)	Steamship	Dublin, River Liffey, S quays	W01330
1922	Unknown	Unknown	Codling Lighthouse, 10 miles SSE of	W15412
1924	Trustful (SS)	Steam Trawler	Bray Head, Co Wicklow, 5 miles ESE	W02265
1924	Iolanthe	Yacht	Dun Laoghaire Harbour	W15620
1926	Marie Celine (SS)	Ketch	Bray, Co Wicklow, 300 yards N of Harbour	W02250
1926	Unknown	Hobble	Dublin Bay	W15773
1927	Unknown	Barge	Dublin, River Liffey	W01461
1928	Helping (MV)	Motor Fishing Vessel	Dun Laoghaire to Skerries Bay, en route	W15802
1929	Lady Munster (SS)	Steamship	Dublin Bay, North Bar buoy entrance	W15910
1931	Unknown	Fishing boat	Dublin Fairway, River Liffey, entrance to the Royal Canal and the Ringsend Gut	W01462
1931	Unknown	Fishing boat	Dublin Fairway, River Liffey, entrance to the Royal Canal and the Ringsend Gut	W01463
1931	Unknown	Fishing boat	Dublin Fairway, River Liffey, entrance to the Royal Canal and the Ringsend Gut	W01464
1931	Helly	Yacht	Dun Laoghaire Harbour	W01803
1931	Margaret	Yacht	Dun Laoghaire Harbour	W01834
1931	Mary Rosaleen (MV)	Dandy	Bray Head, Co Wicklow, off	W02254



Year of Loss	Wreck Name	Classification	Place of Loss	Wreck No
1933	Unknown	Fishing boat	Howth Harbour, Co Dublin	W00962
1933	Unknown	Fishing boat	Howth Harbour, Co Dublin	W00963
1933	Unknown	Fishing boat	Howth Harbour, Co Dublin, Co Dublin	W00964
1933	Cynthia (SS)	Paddler Steamer	Dun Laoghaire Harbour, W pier	W01767
1934	Jealous of Me	Hobble	Dublin, River Liffey, Poolbeg lighthouse	W01238
1934	Unknown	Unknown	Dublin Bay	W01541
1934	Unknown	Unknown	Dublin Bay	W01542
1934	Quita	Unknown	Dun Laoghaire Harbour	W01873
1934	Unknown	Yacht	Dun Laghaire Harbour, alongside the E Pier	W01963
1934	Unknown	Yacht	Dun Laghaire Harbour, alongside the E Pier	W01964
1934	Unknown	Yacht	Dun Laghaire Harbour, alongside the E Pier	W01965
1934	Kutsoon	Yacht	Dun Laoghaire	W14300
1936	Erne	Sloop	Bray, Co Wicklow, seafront	W02236
1938	Alcazar	Trawler	Kish Bank, Co Dublin, lightship, vicinity of	W01557
1939	Irish Mollie	Yacht	Dublin Bay, Clontarf Baths	W01230
1939	Eumaeus (SS)	Steamship	Kish Bank, Co Dublin, Buoy No.3, near	W01569
1939	Mabel	Sailing Boat	Dun Laoghaire harbour	W01831
1940	Killaloe	Tug	Dublin, River Liffey, Ringsend Canal Basin	W01244
1945	Esme	Yacht	Dublin, River Liffey, Alexandra Basin	W01204
1950	Antelope	Ship	Dublin, Dollymount	W00970
Unknown	Unknown	Trawler	Dublin Bay, Burford Bank, E side	W01546
Unknown	Unknown	Unknown	Killiney, Co Dublin, beach	W01954
Unknown	No Name	Lugsail	Dún Laoghaire, Co Dublin and Poolbeg Light, Dublin Bay, between	W12708
Unknown	Mouse	Schooner	Dun Laoghaire Harbour	W15038
Unknown	Unknown	Brig	Dun Laoghaire Harbour, 1M E of	W16177



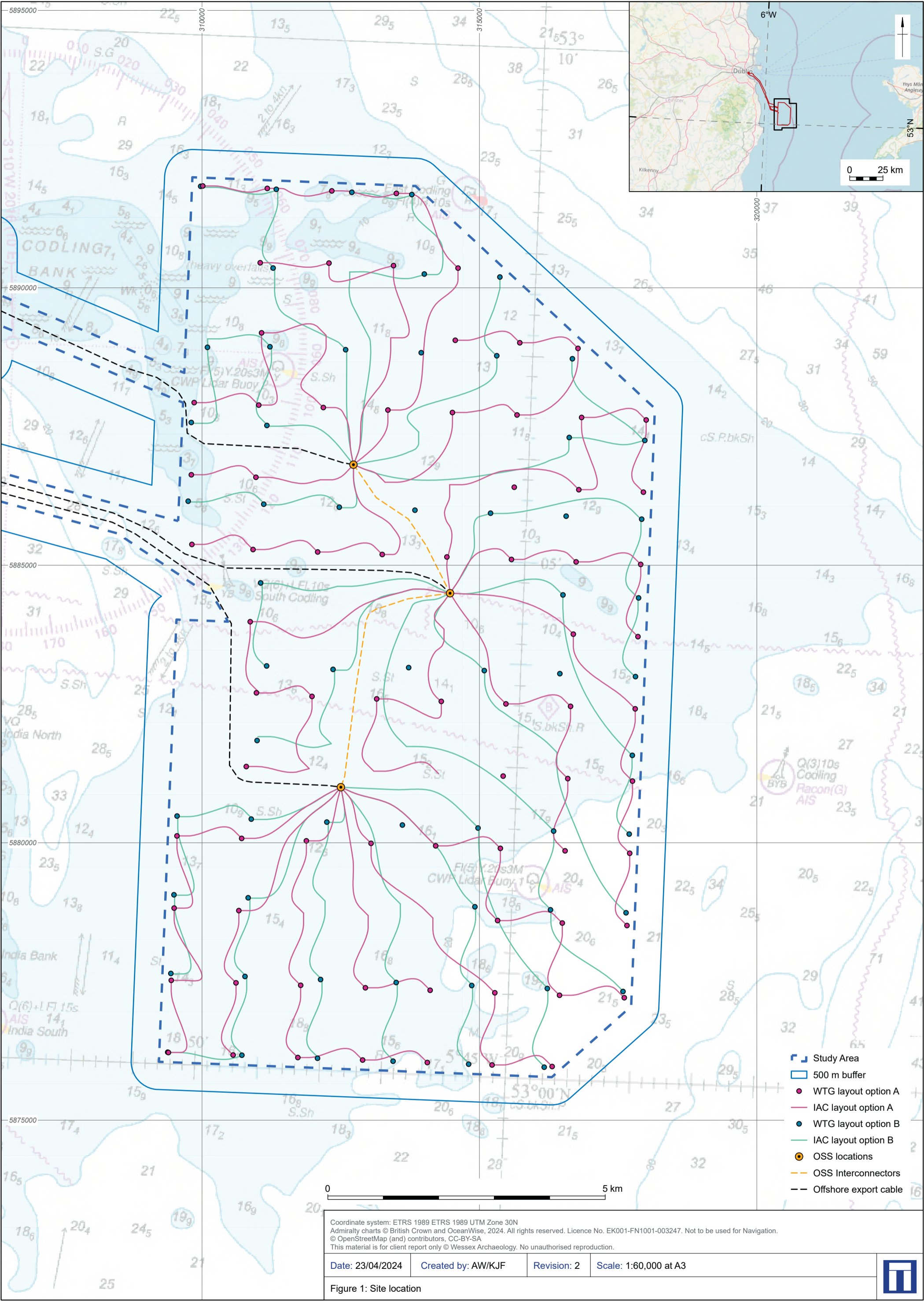
## Annex 10: Intertidal Heritage Assets

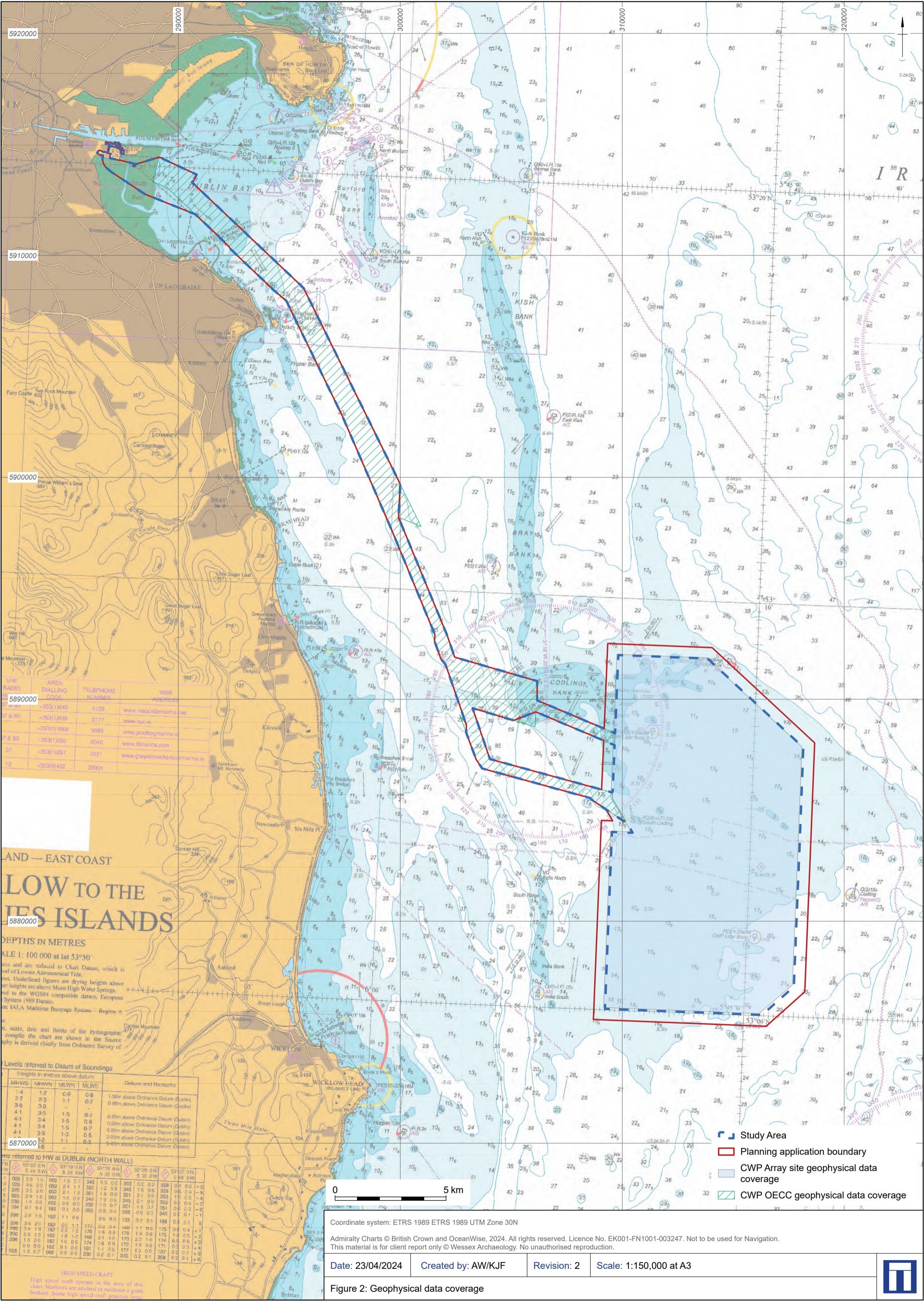
WA ID	Site Type	Description	Easting (ETRS89 UTM30N)	Northing (ETRS89 UTM30N)	External Reference
1001	Findspot	Carvel built hull	287519.3	5913967.74	
1002	Findspot	Oak Framing Element (futtock?)	287544.91	5913884.14	
1003	Findspot	Oak Supporting Timber - probably a knee	287509.45	5913941.44	
1004	Findspot	Truncated (?) pine timber under sea armour with iron fixing & coating	288094.48	5914541.49	
1005	Findspot	Possible weir across main channel	286888.42	5914341.4	
1006	Metal detecting anomaly	BH-01	288347.054	5914543.277	
1007	Metal detecting anomaly	BH-01	288352.906	5914573.317	
1008	Metal detecting anomaly	BH-01	288352.478	5914576.552	
1009	Metal detecting anomaly	BH-01	288344.667	5914572.810	
1010	Metal detecting anomaly	BH-01	288344.147	5914572.358	
1011	Metal detecting anomaly	BH-01	288316.434	5914572.810	
1012	Metal detecting anomaly	BH-02	288125.193	5914492.822	
1013	Metal detecting anomaly	BH-02	288112.113	5914488.224	
1014	Metal detecting anomaly	BH-02	288109.629	5914474.822	
1015	Metal detecting anomaly	BH-02	288132.776	5914514.174	
1016	Metal detecting anomaly	BH-05	287687.962	5913768.040	
1017	Metal detecting anomaly	BH-05	287681.998	5913786.761	
1018	Metal detecting anomaly	BH-05	287715.085	5913794.491	
1019	Metal detecting anomaly	BH-05	287715.403	5913766.050	
1020	Wreck	Ringsend Wreck	288385.7	5914387	NMS_W01734; NMS_W11571; NMS_W11570
1021	Redeposited Ship Timbers	Ringsend Wreck	288299.1	5914479	NMS_W11566

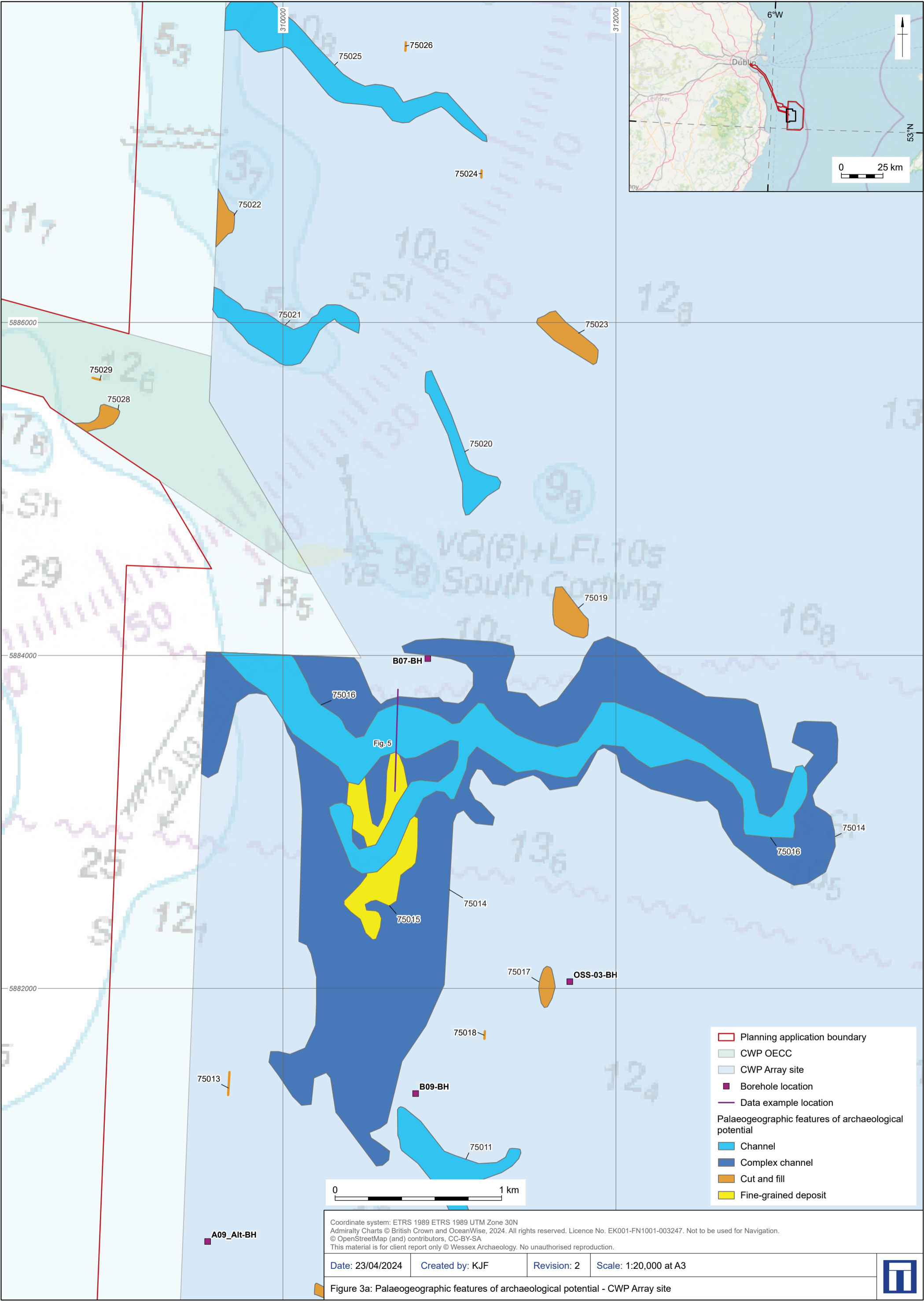


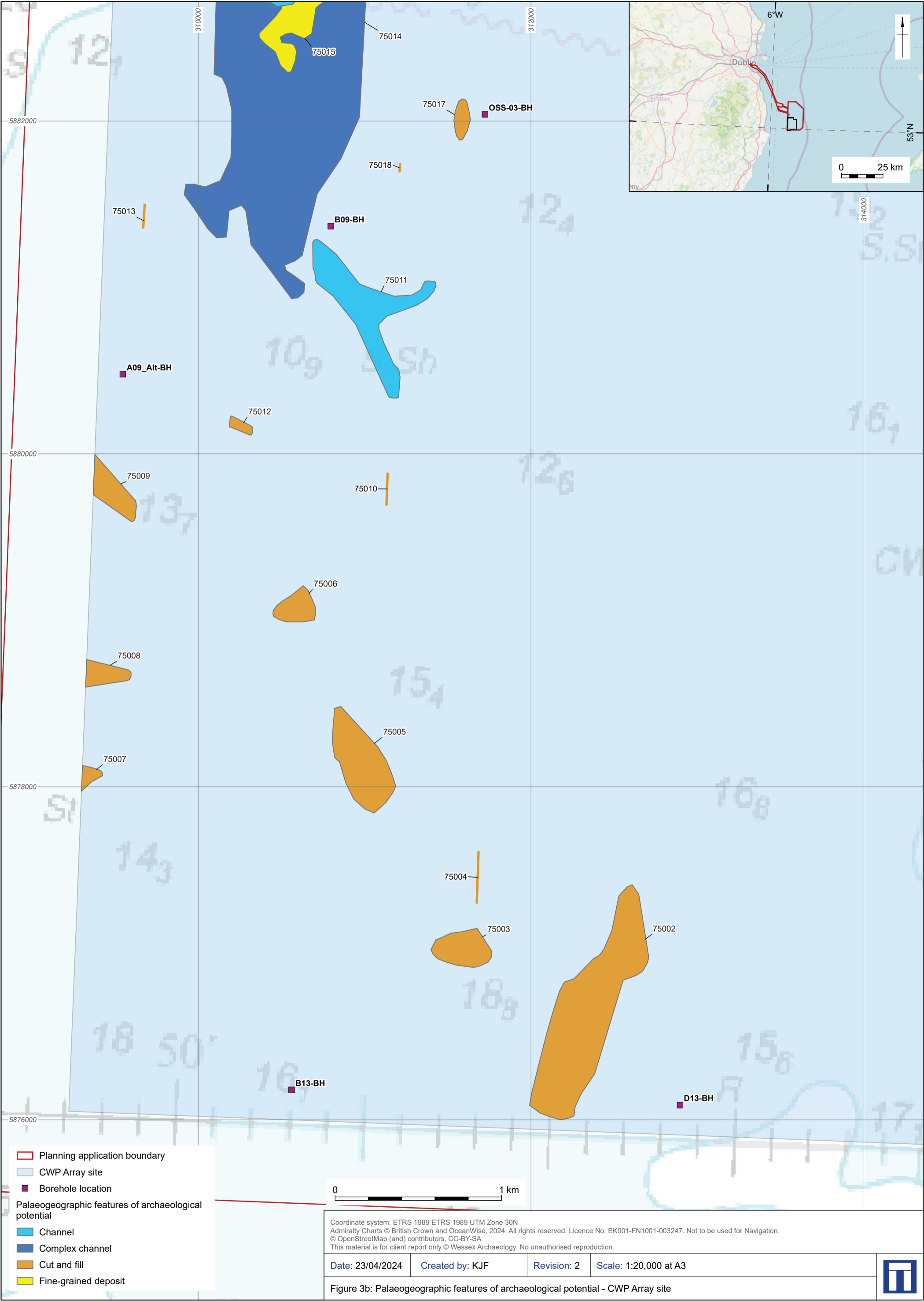
WA ID	Site Type	Description	Easting (ETRS89 UTM30N)	Northing (ETRS89 UTM30N)	External Reference
1022	Redeposited Ship Timbers	Ringsend Wreck	288285.8	5914481	NMS_W11567
1023	Redeposited Ship Timbers	Ringsend Wreck	288275.13	5914479.95	NMS_W11568
1024	Redeposited Ship Timbers	Ringsend Wreck	288258.44	5914479.58	NMS_W11569

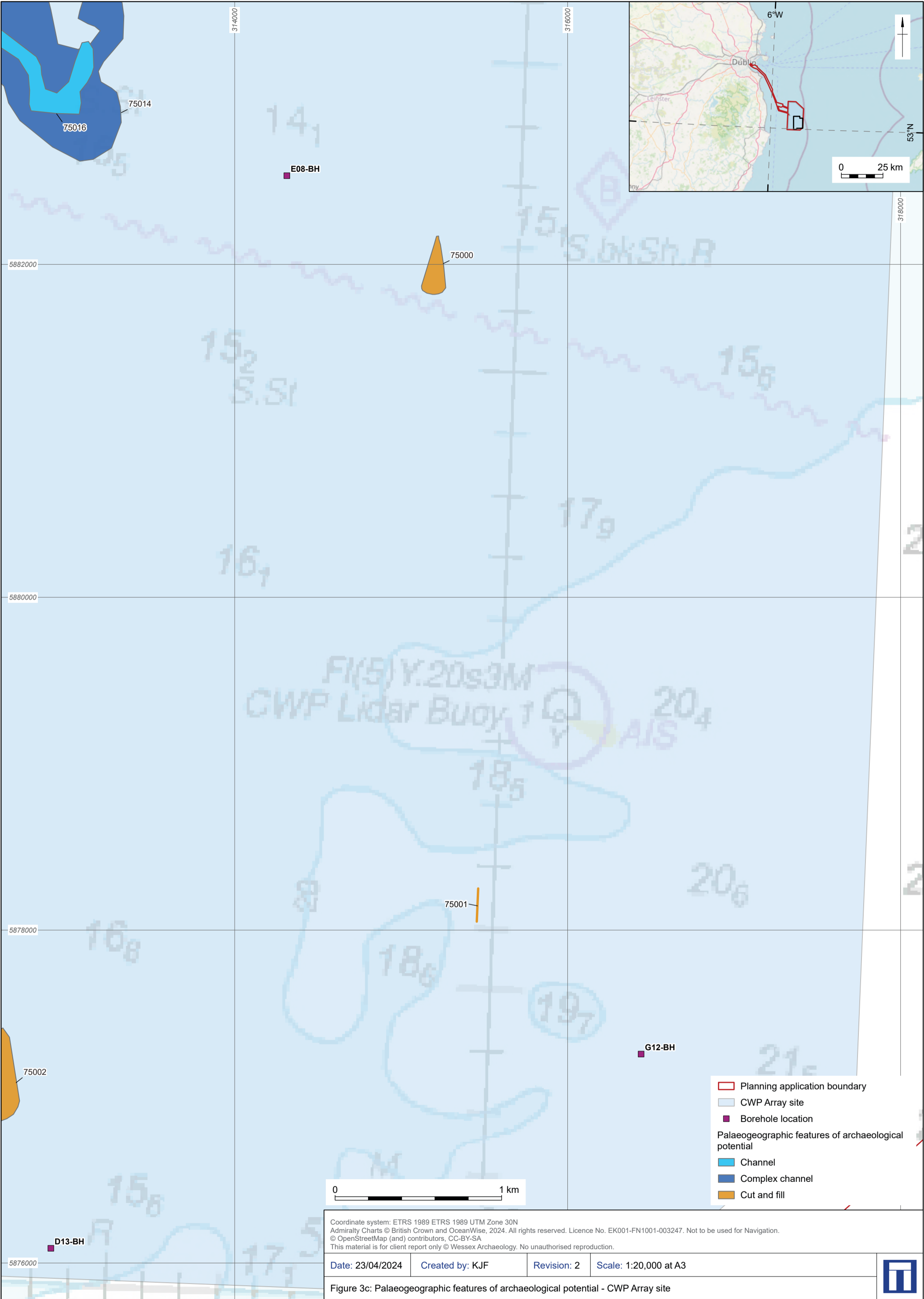


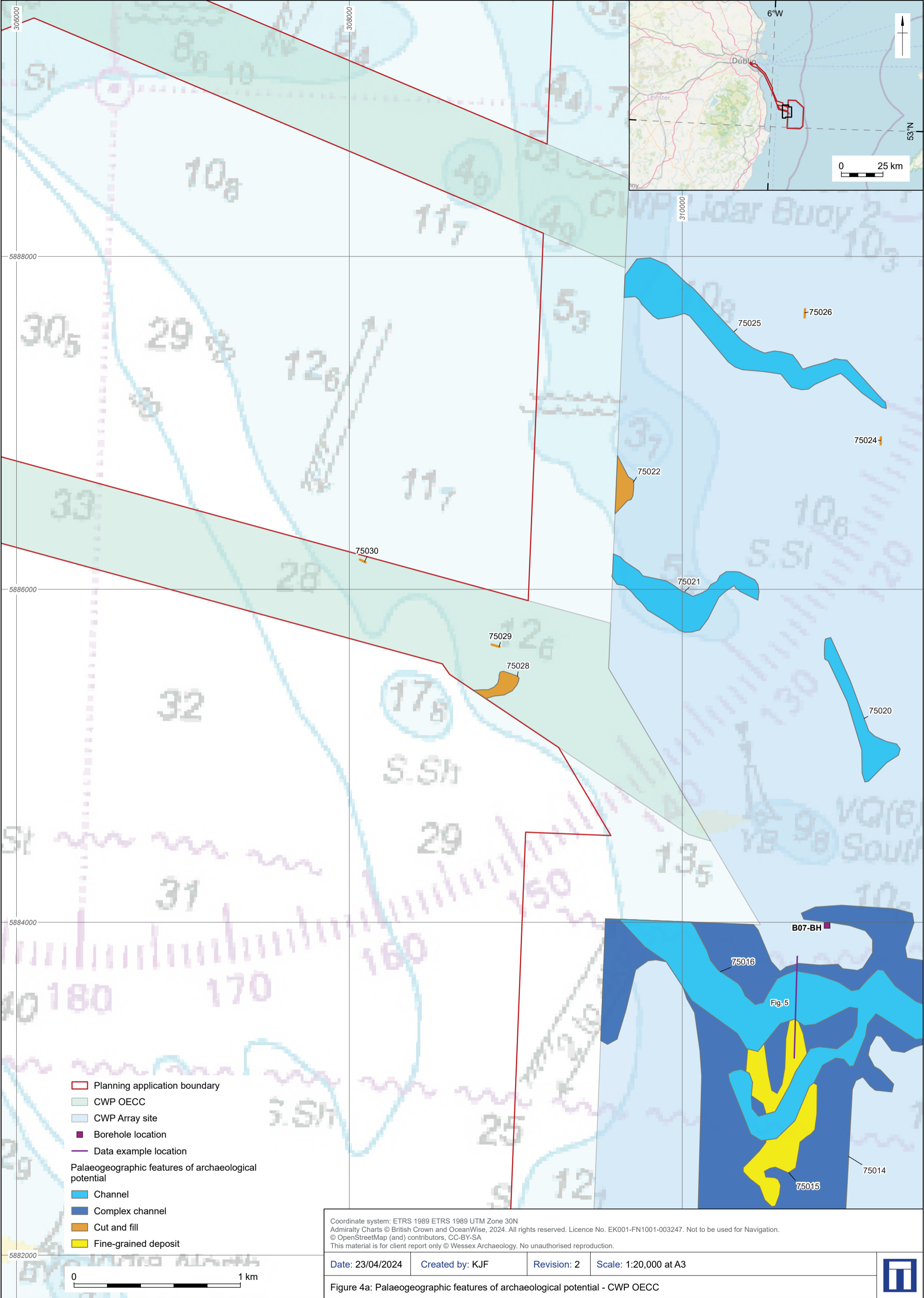


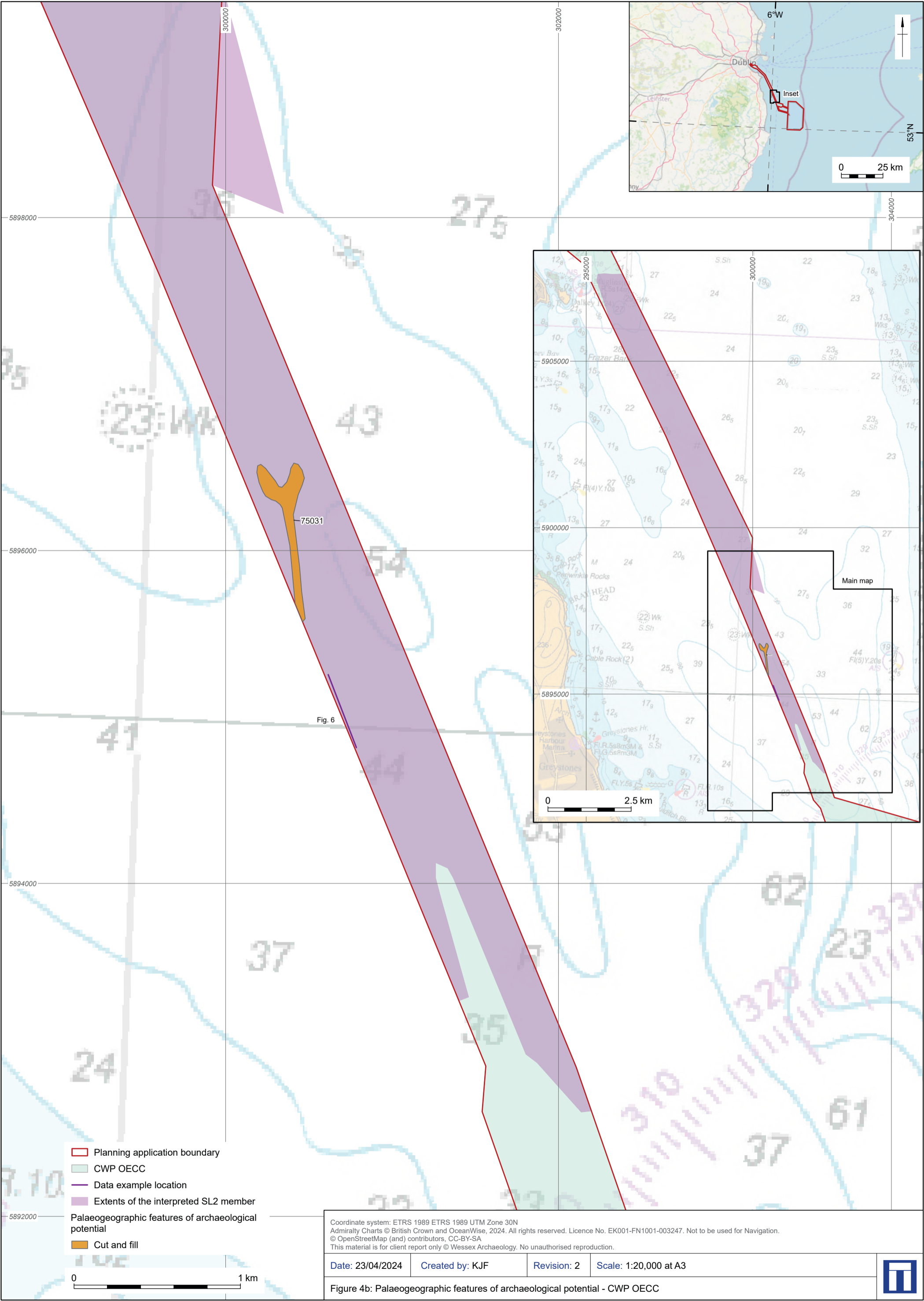


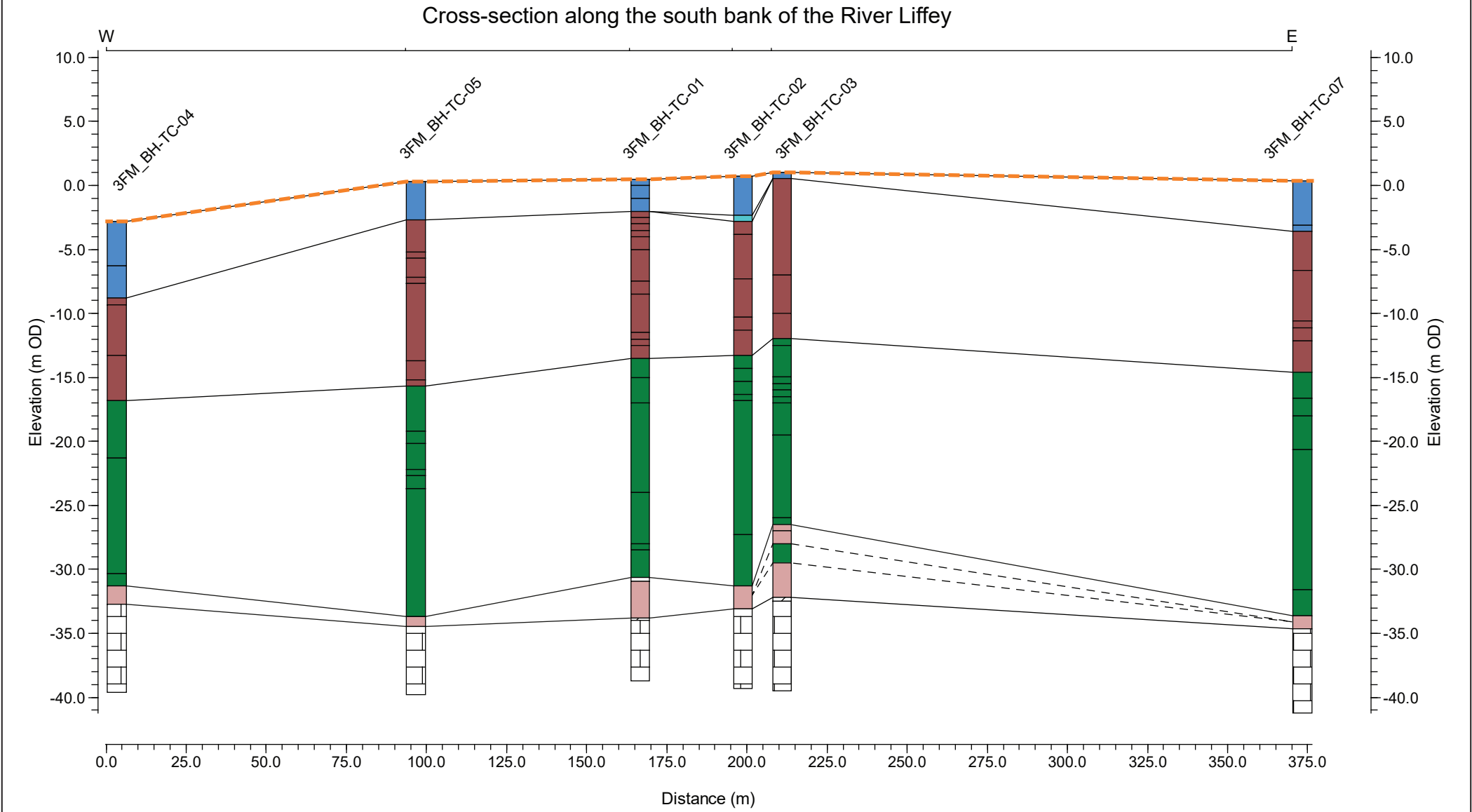
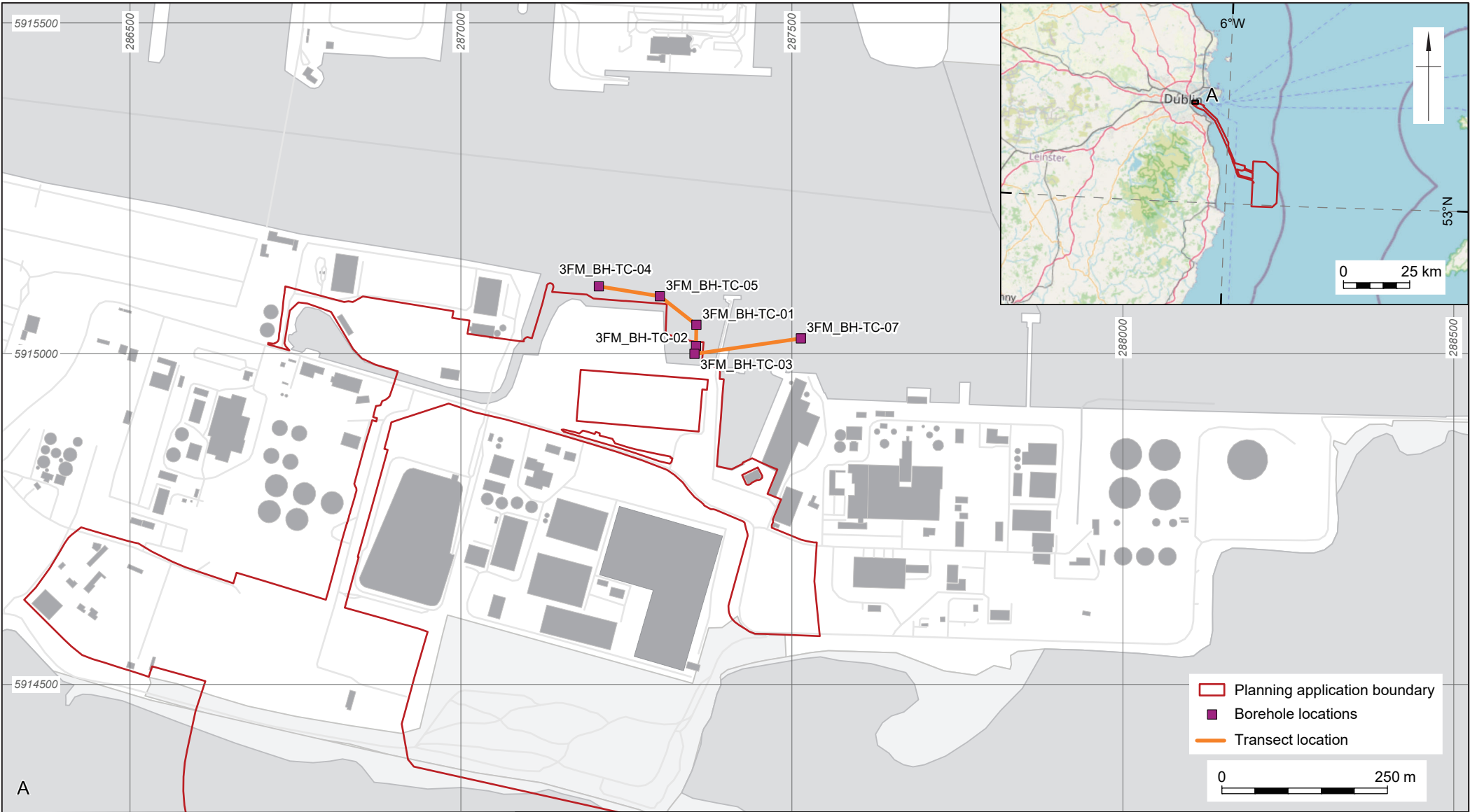












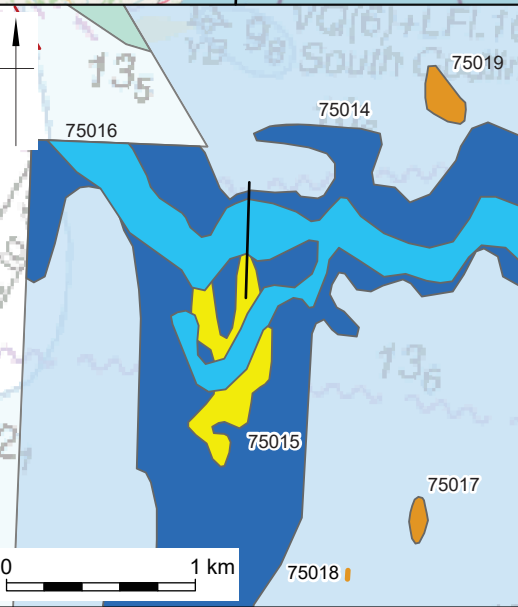
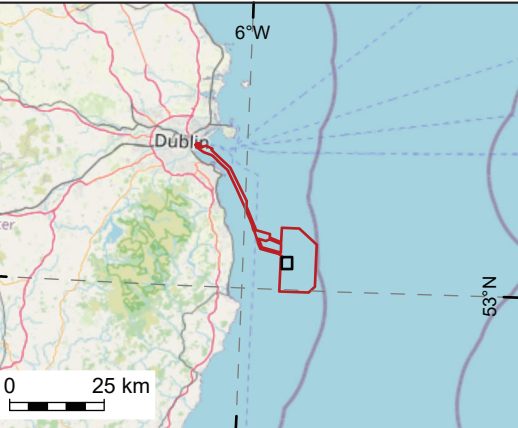
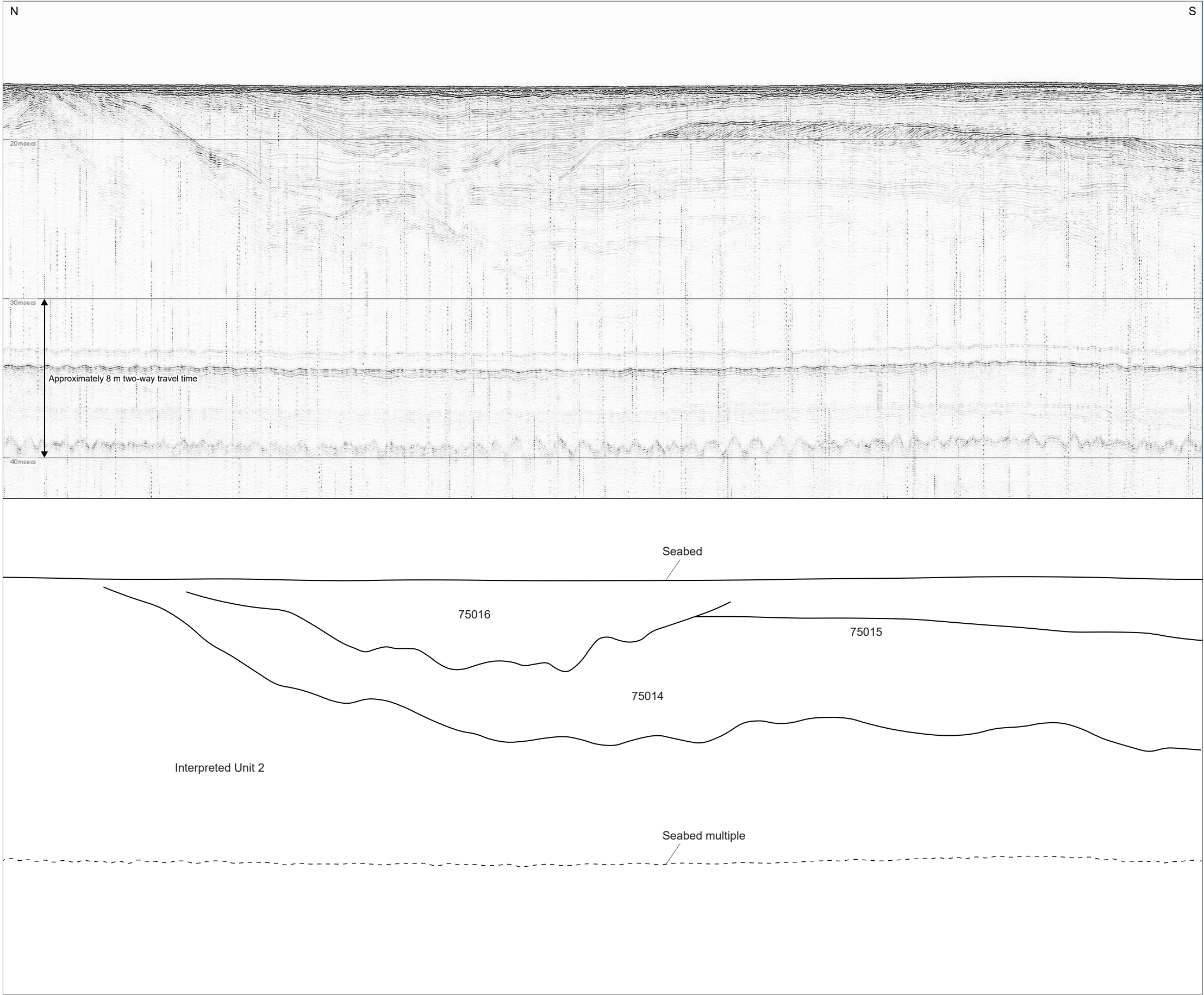
Stratigraphy	
	Estuarine alluvium
	Reworked alluvium
	Upper glaciofluvial
	Lower glaciofluvial
	Glacial till
	Bedrock
	N/A

Coordinate system: ETRS 1989 UTM Zone 30N  
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Figure 4c: Palaeogeographic features of archaeological potential – adjacent to proposed onshore substation site, south bank of the River Liffey



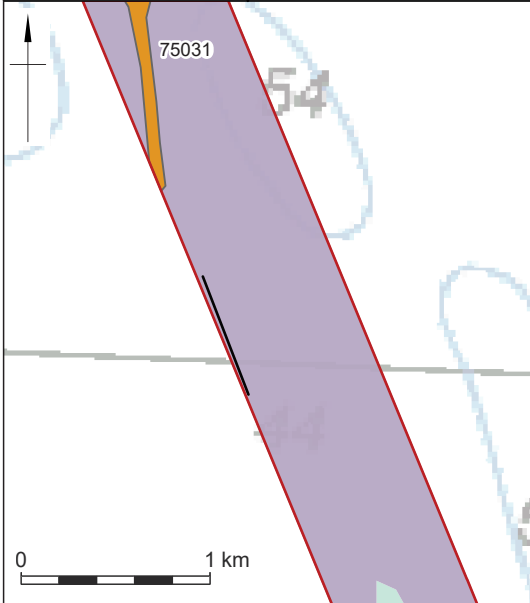
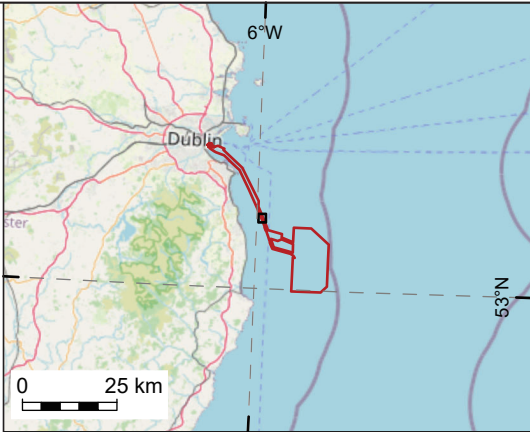
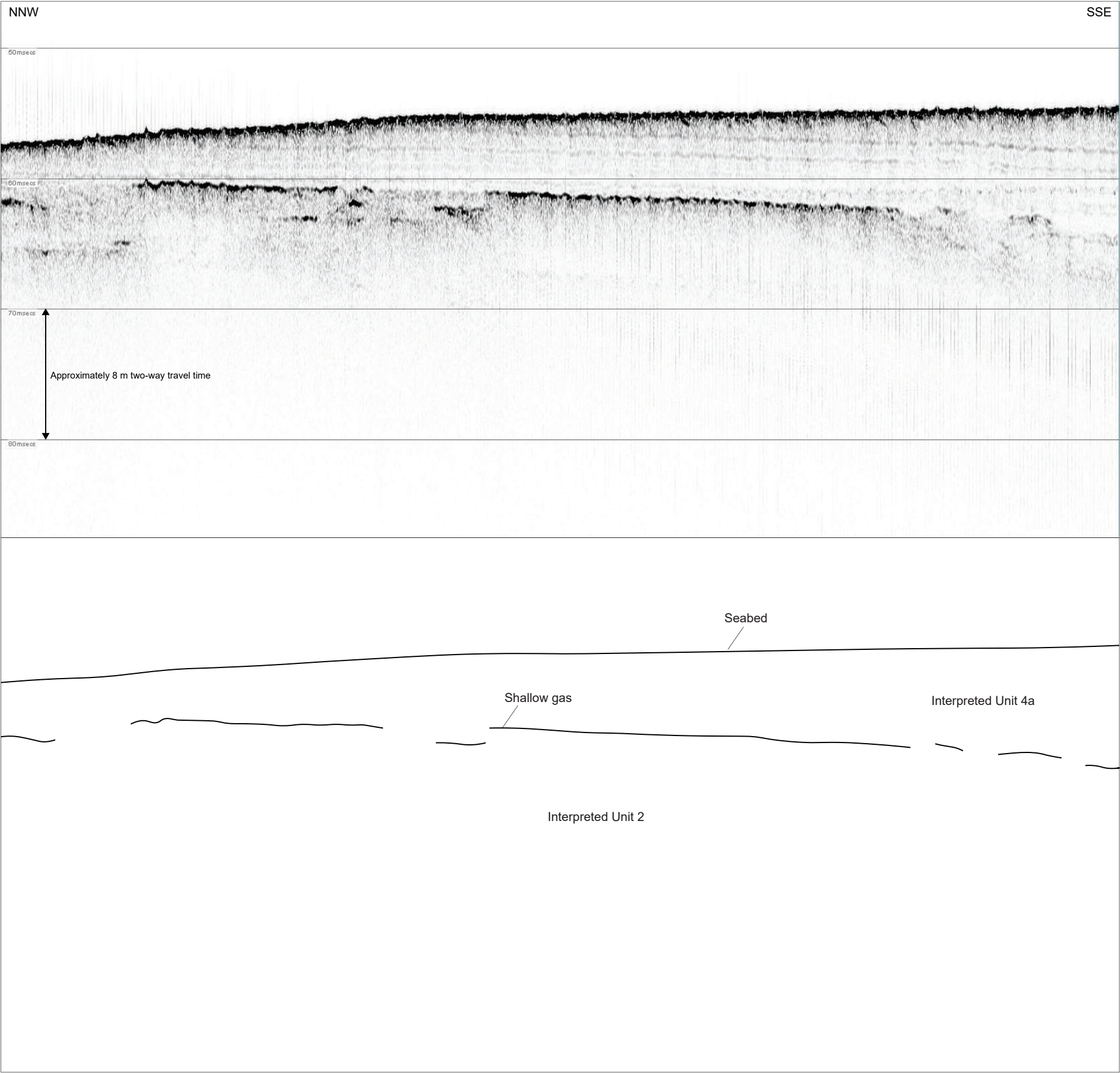


- Planning application boundary
- CWP OECC
- CWP Array site
- Data example location
- Palaeogeographic features of archaeological potential
  - Channel
  - Complex channel
  - Cut and fill
  - Fine-grained deposit

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Scale: Inset 1:40,000 at A3	Revision: 2	

Figure 5: Palaeogeographic feature data example – 75014-75016

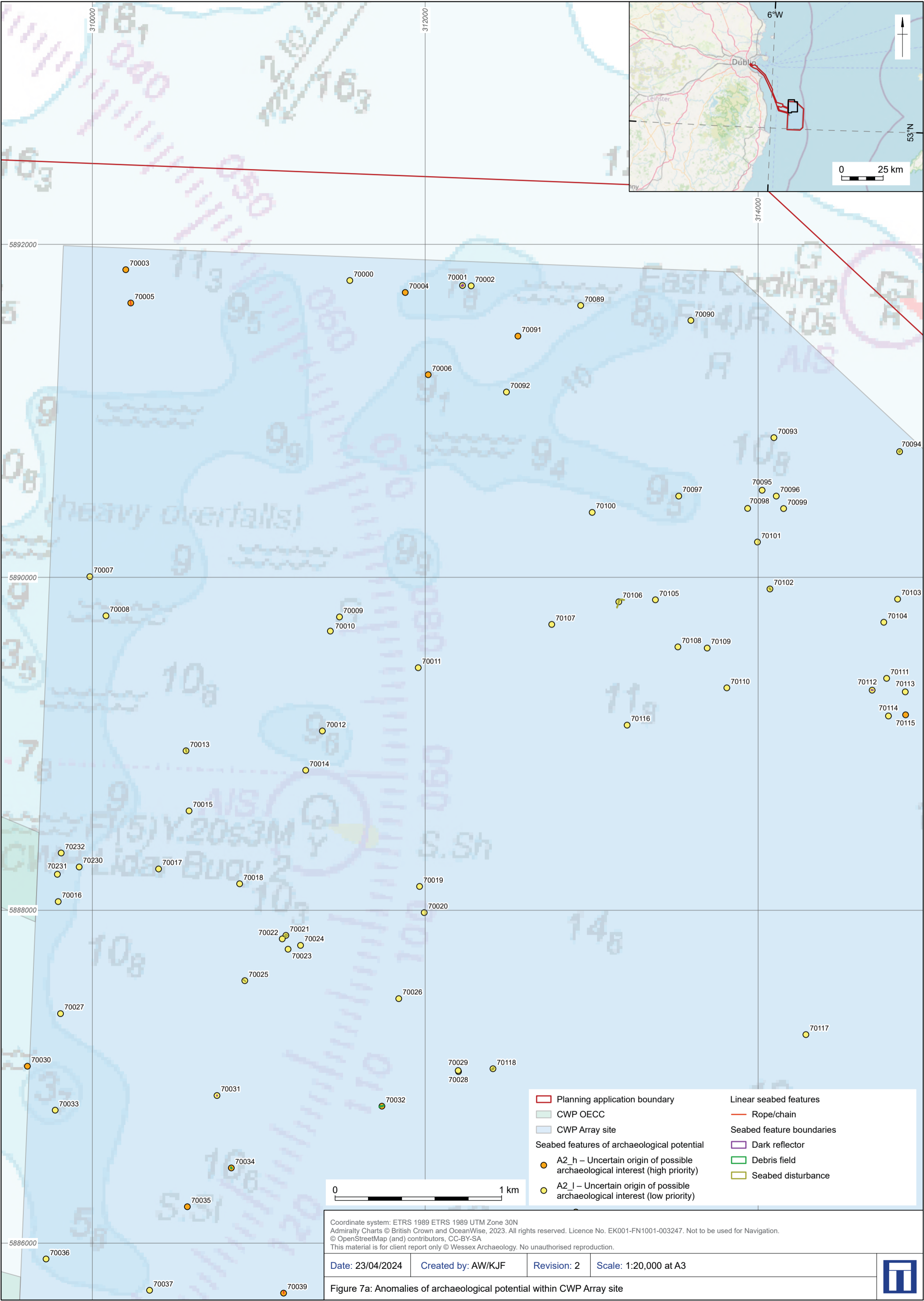


- Planning application boundary
- CWP OECC
- Data example location
- Extents of the interpreted SL2 member
- Palaeogeographic features of archaeological potential
- Cut and fill

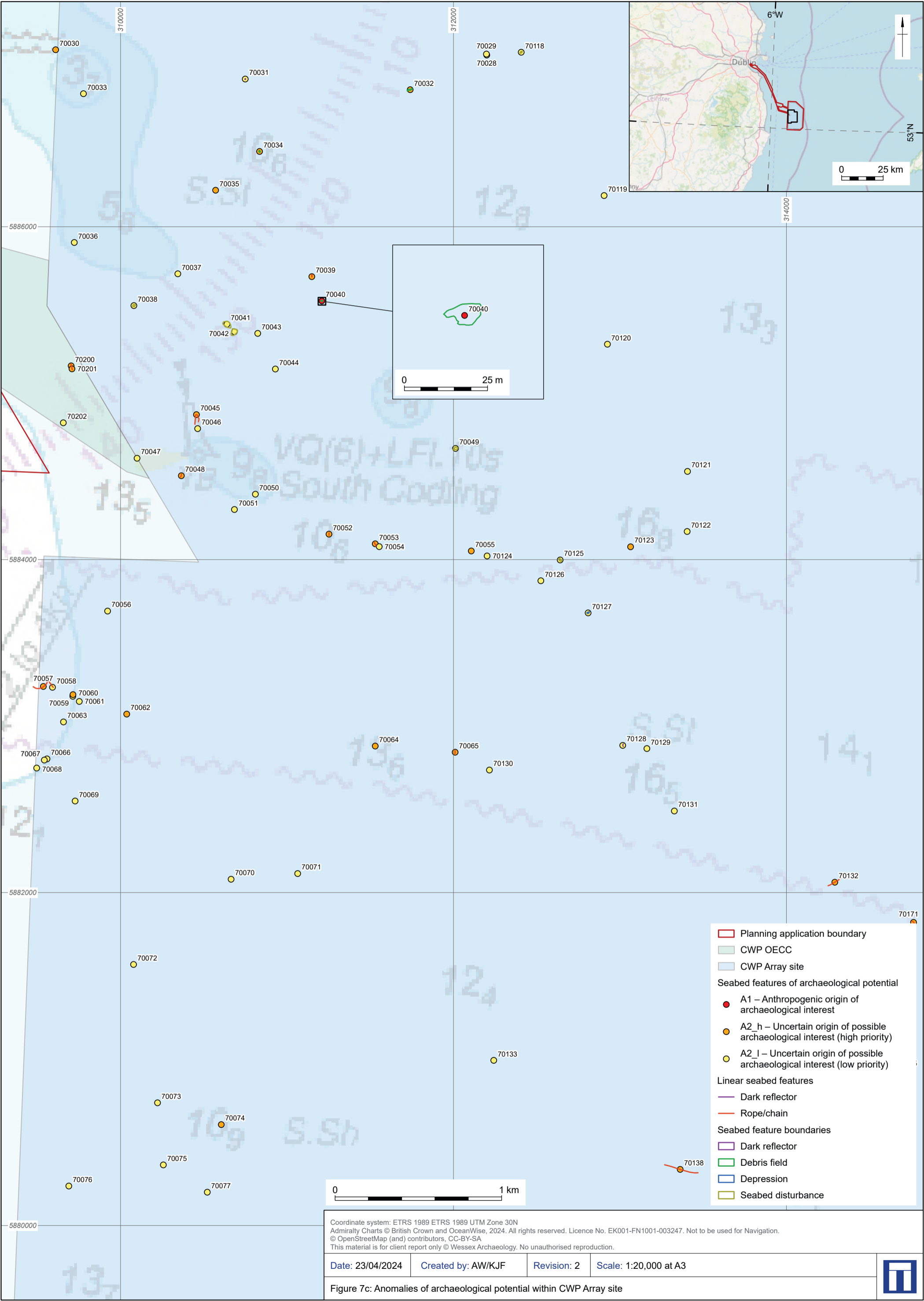
Coordinate system: ETRS 1989 UTM Zone 30N.  
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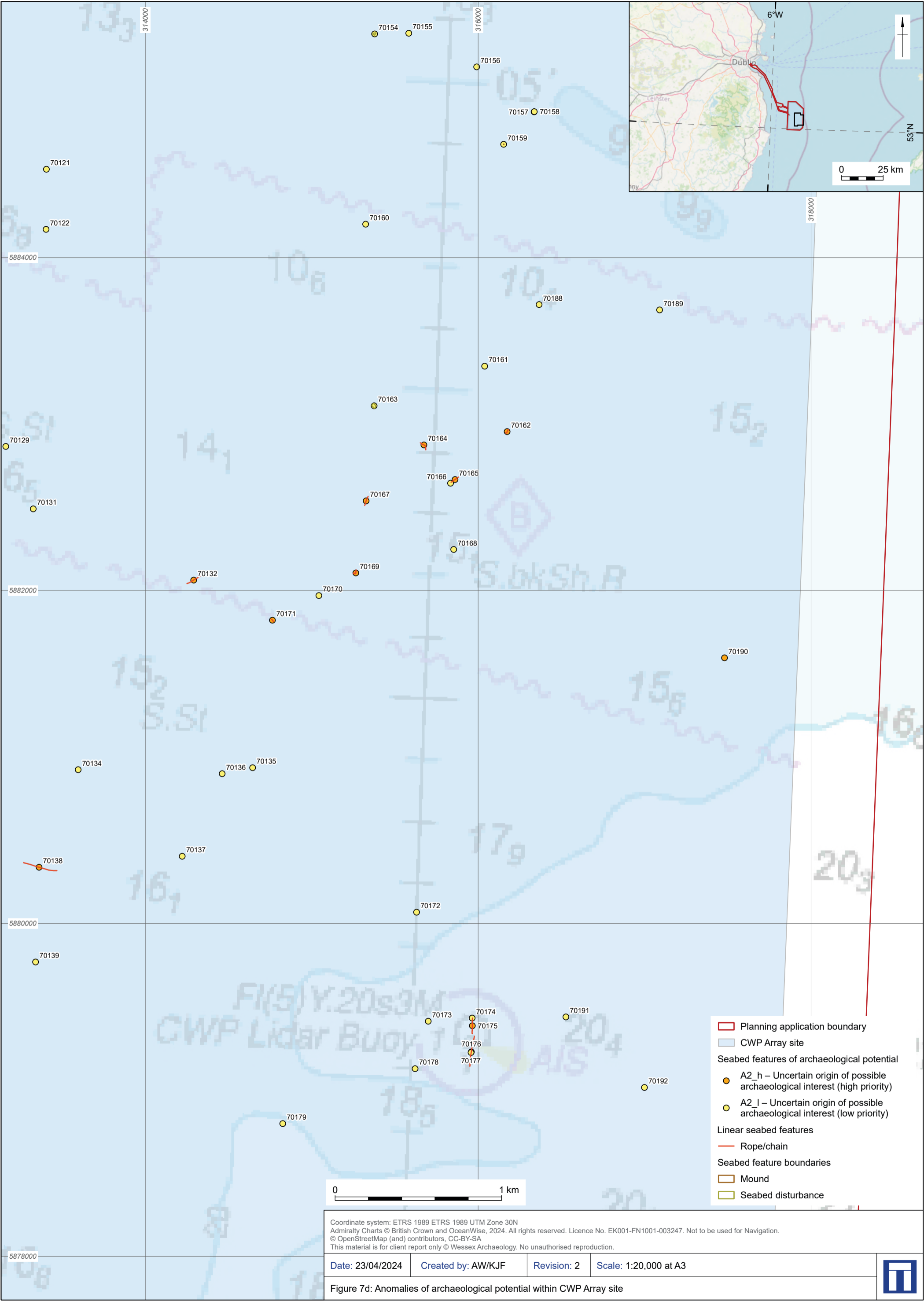
Created by: KJF	Date: 22/04/2024	
Scale: Inset 1:40,000 at A3	Revision: 2	

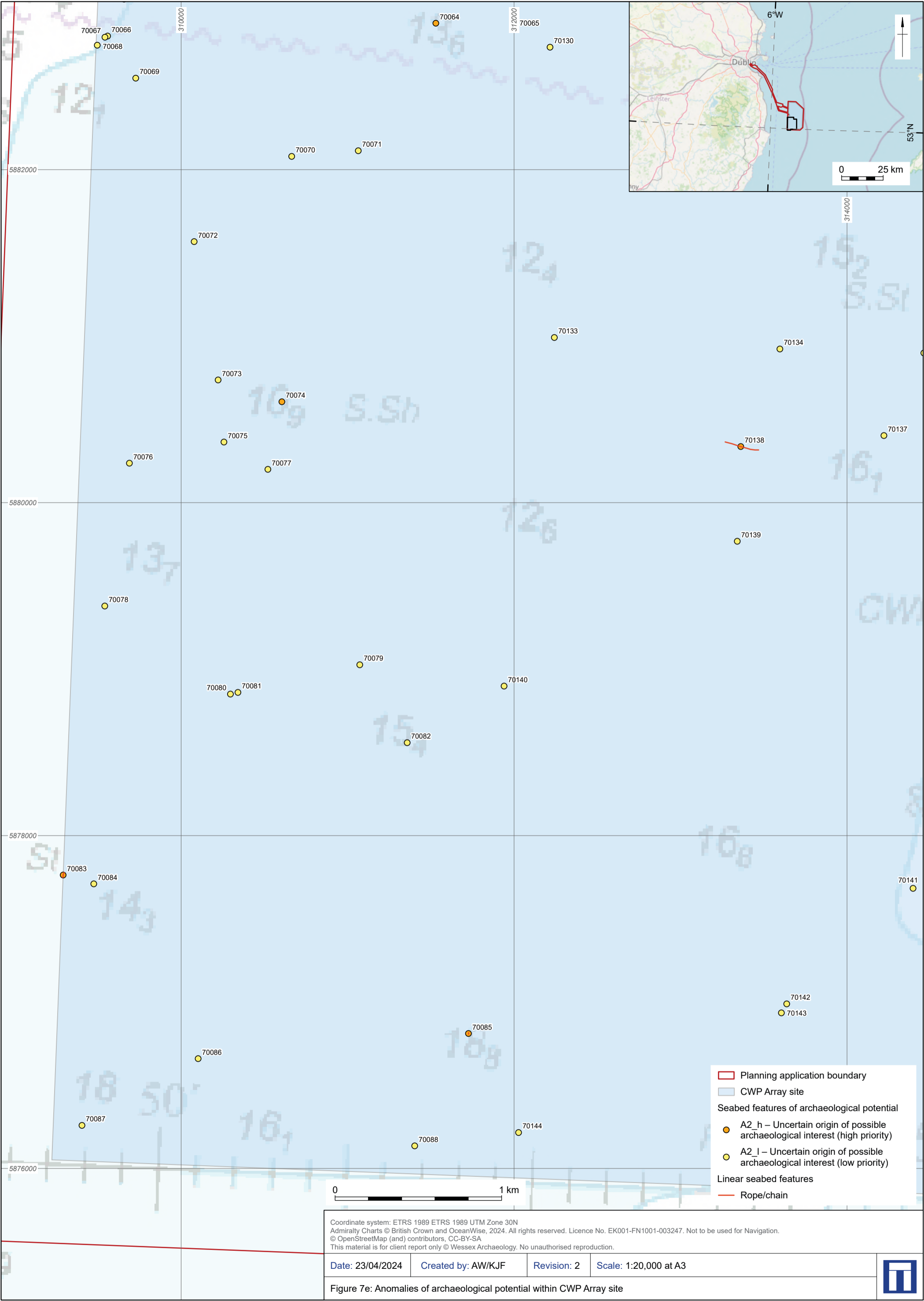
Figure 6: Palaeogeographic feature data example – Interpreted SL2 member

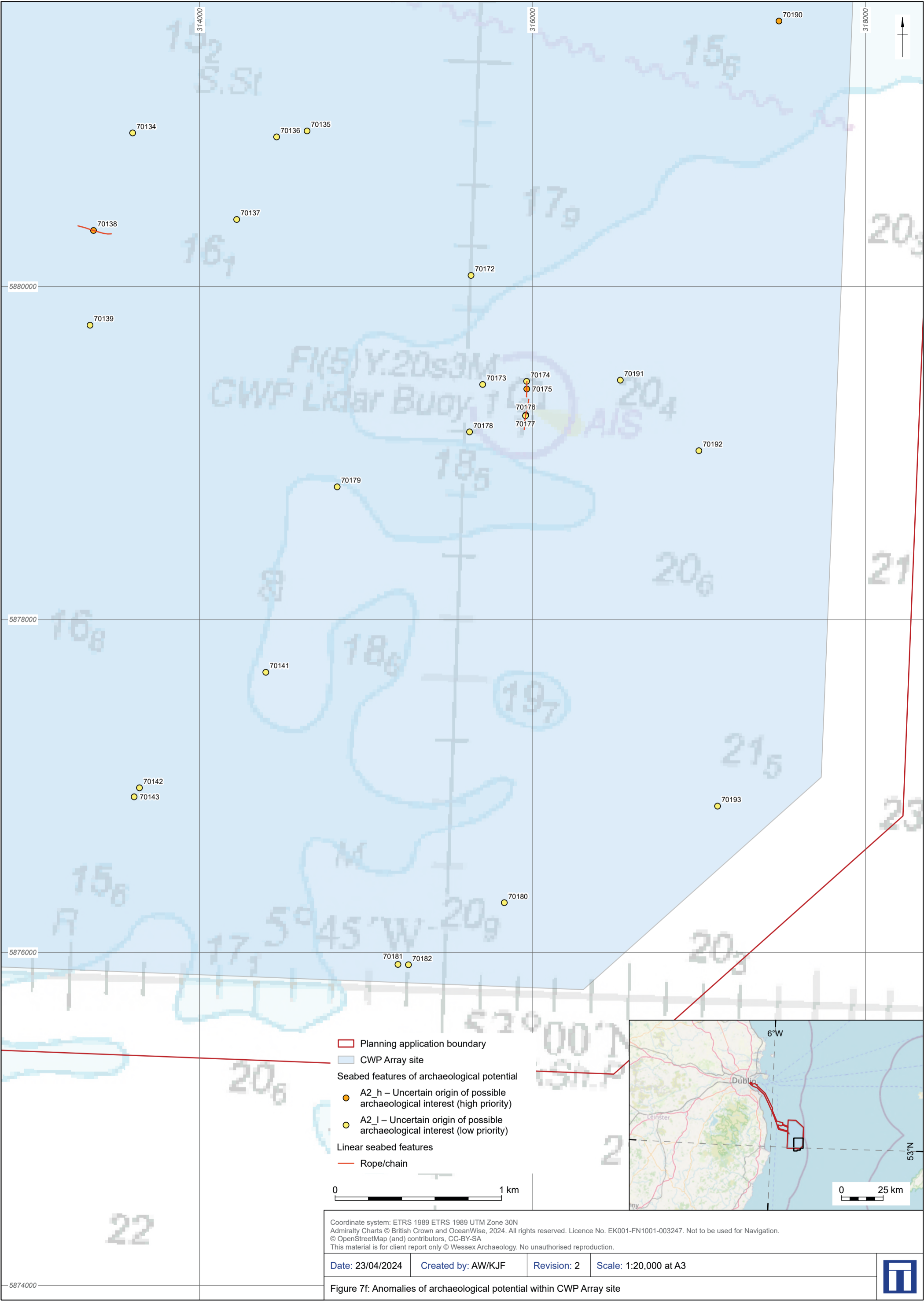


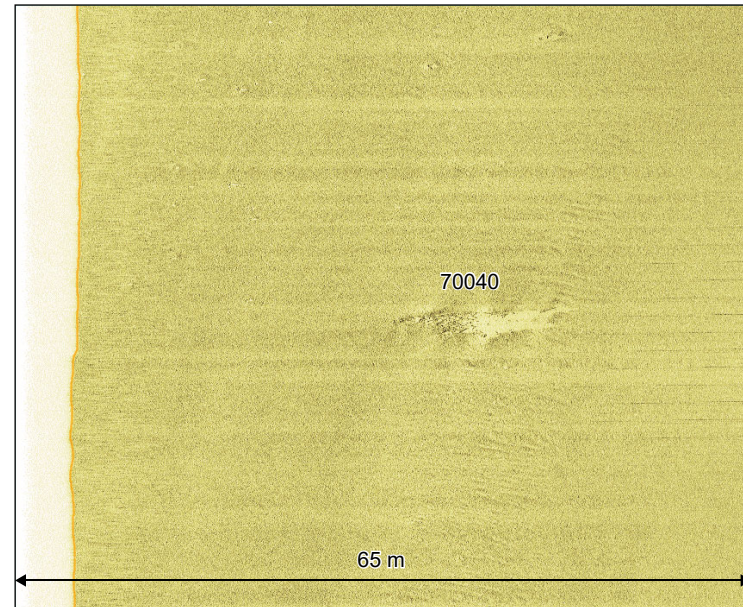








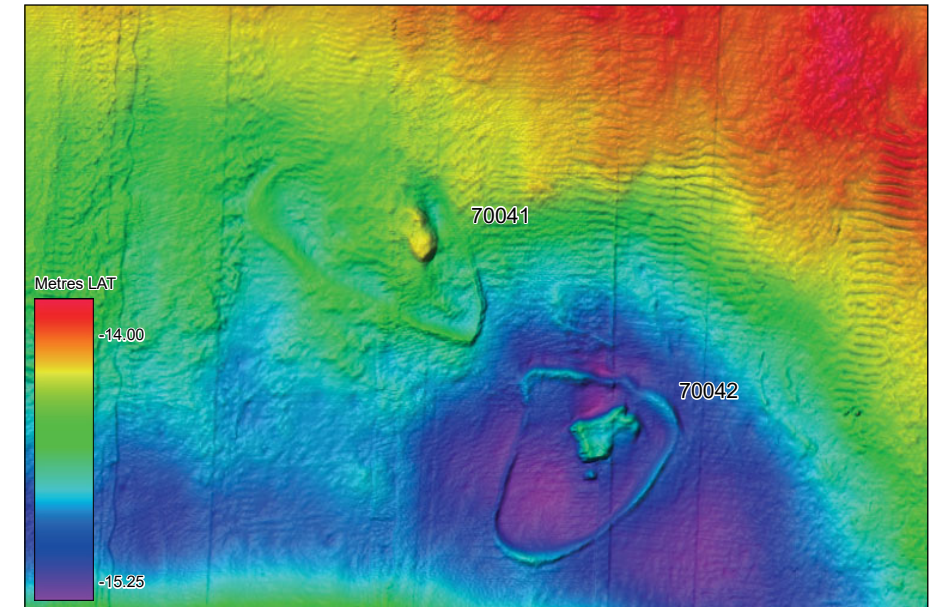




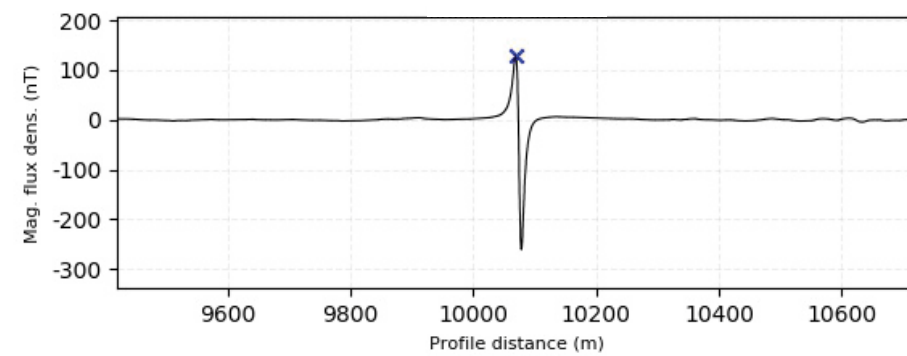
Sidescan sonar waterfall image showing debris field anomaly **70040** (Figure 7c), measuring 23.5 x 18.5 x 0.6 m



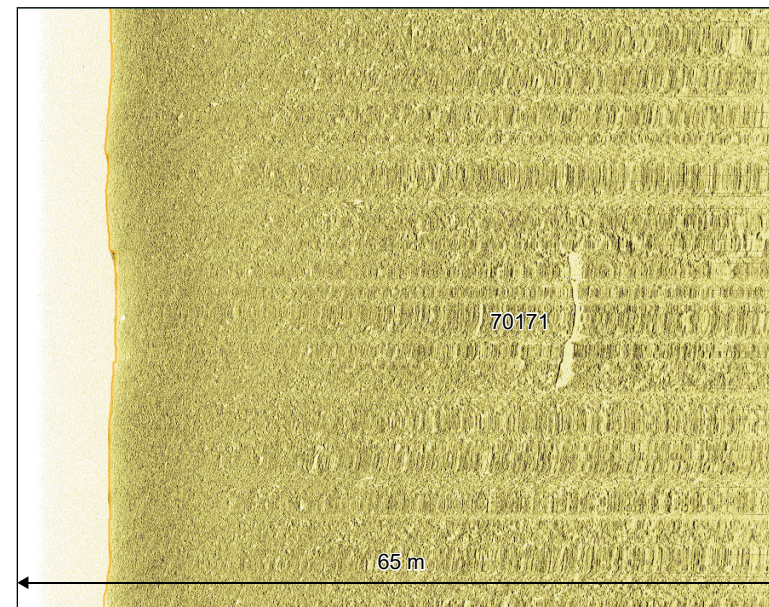
Gridded multibeam echosounder image showing debris field anomaly **70040** (Figure 7c), x1 vertical exaggeration



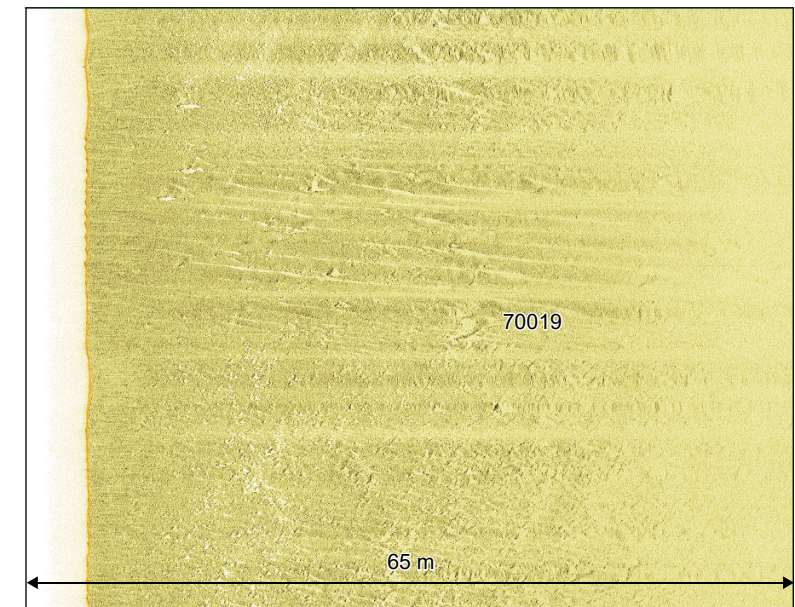
Gridded multibeam area of seabed disturbances **70041** and **70042** (Figure 7c) (measuring 54.8 x 48.8 m and 45.4 x 35.2 m), x1 vertical exaggeration



Magnetometer profile image of debris field **70040** (Figure 7c), (measuring 389 nT)



Sidescan sonar waterfall image showing rope or chain anomaly **70171** (Figure 7d), measuring 11.5 x 0.5 x 0.2 m



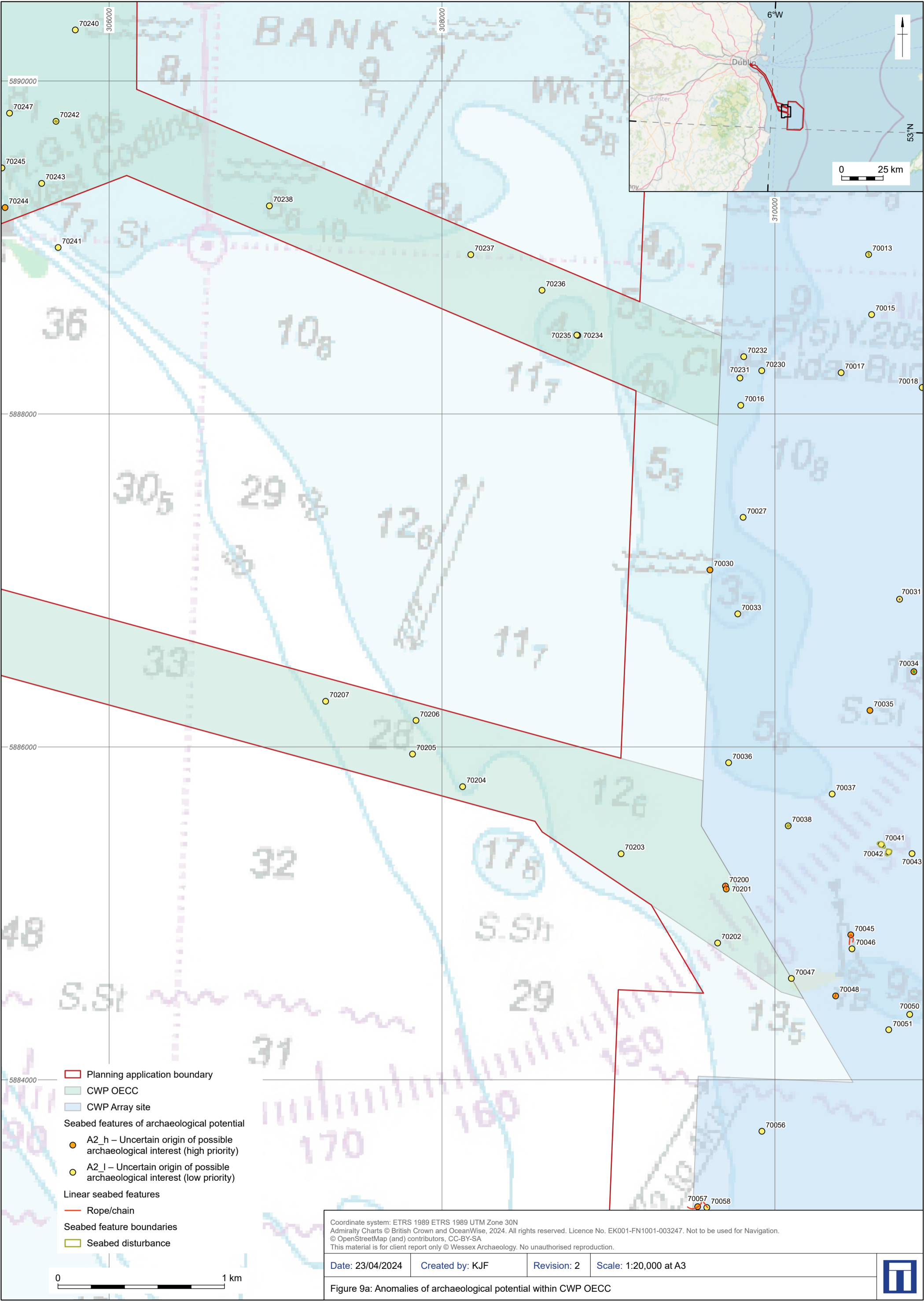
Sidescan sonar waterfall image showing dark reflector anomaly **70019** (Figure 7a), measuring 7.9 x 1.0 x 0.2 m

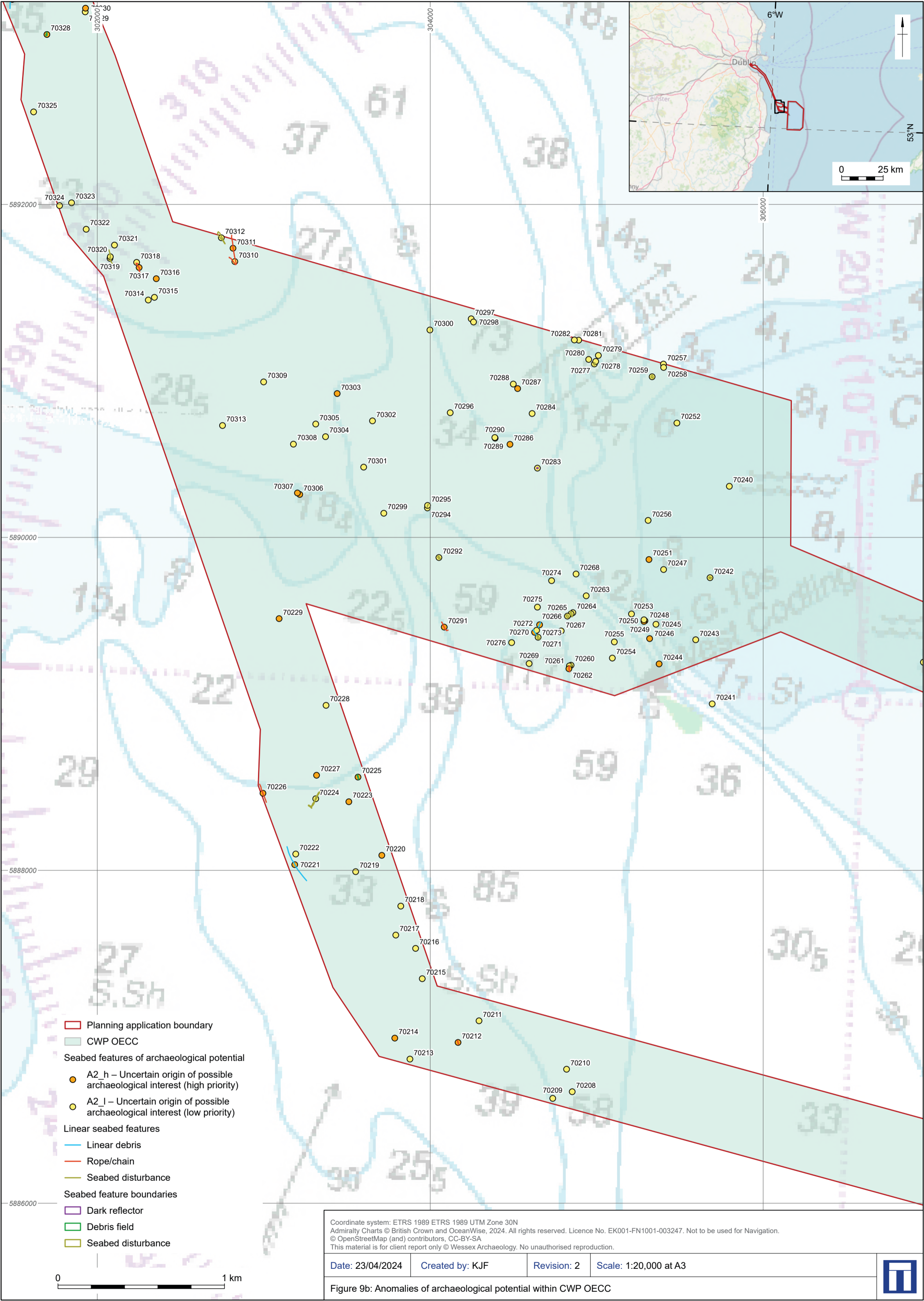
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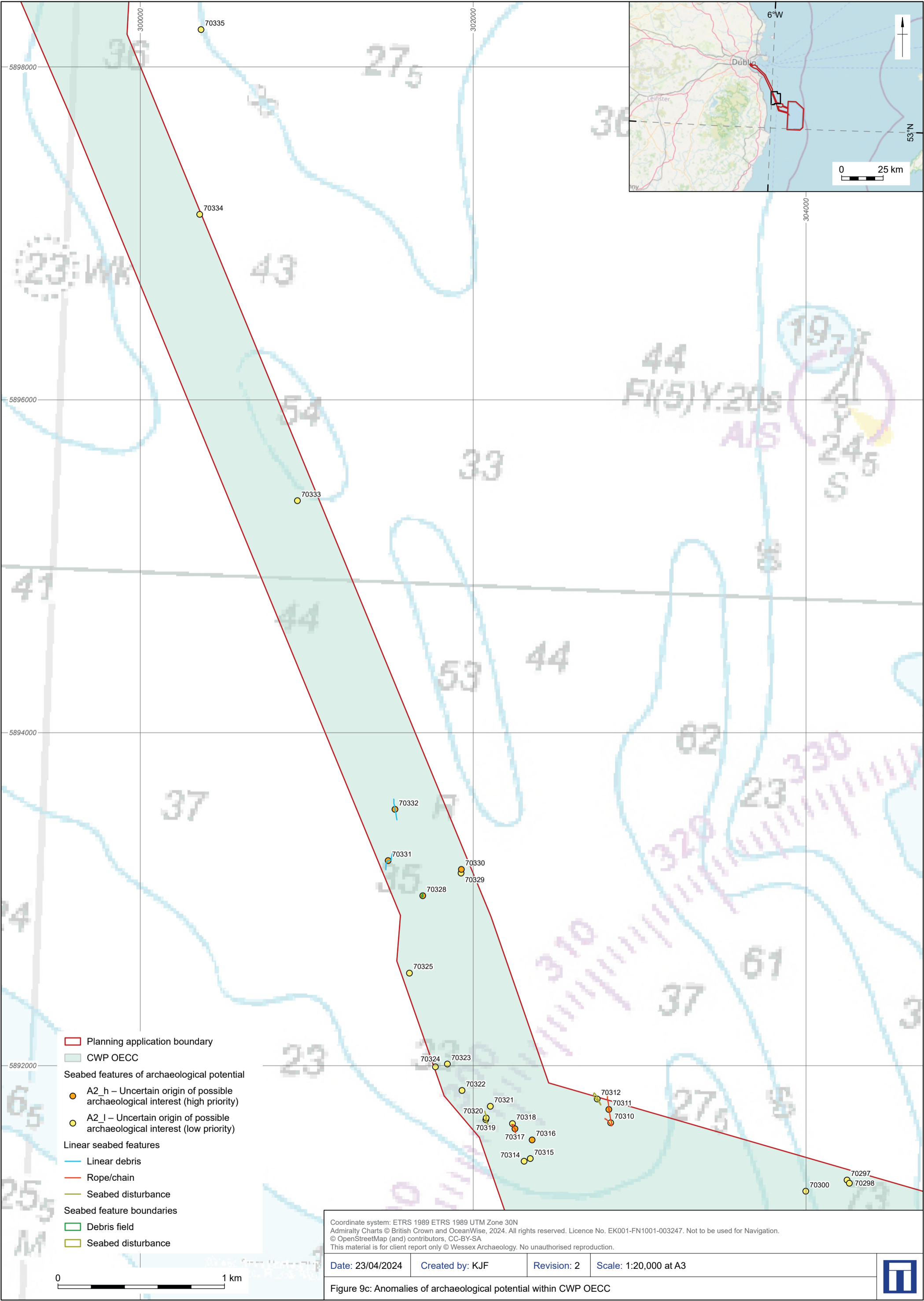
Date: 24/04/2024 Created by: KJF Revision: 2 Scale: Not to scale at A3

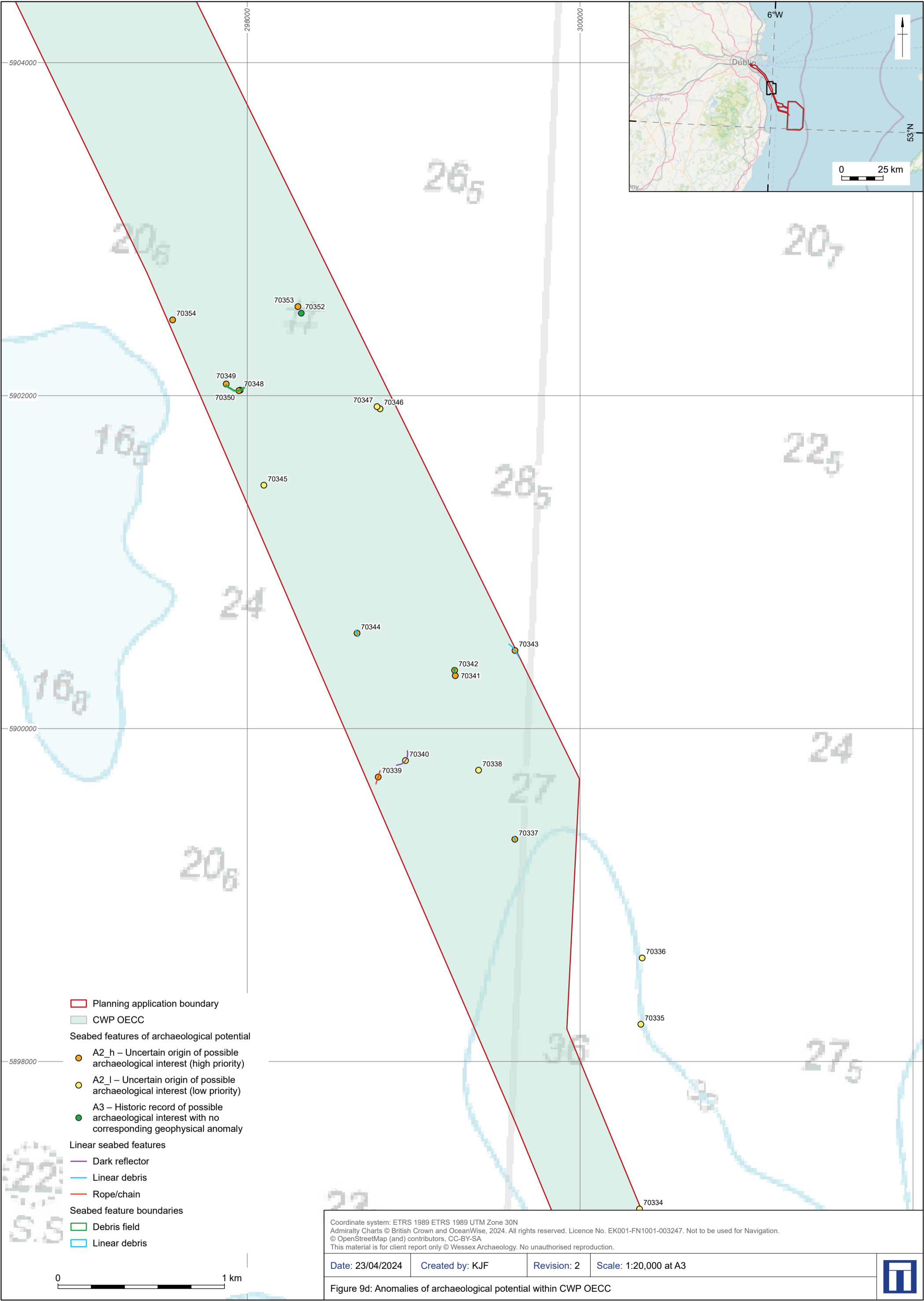
Figure 8: Data examples of seabed features for the CWP Array site

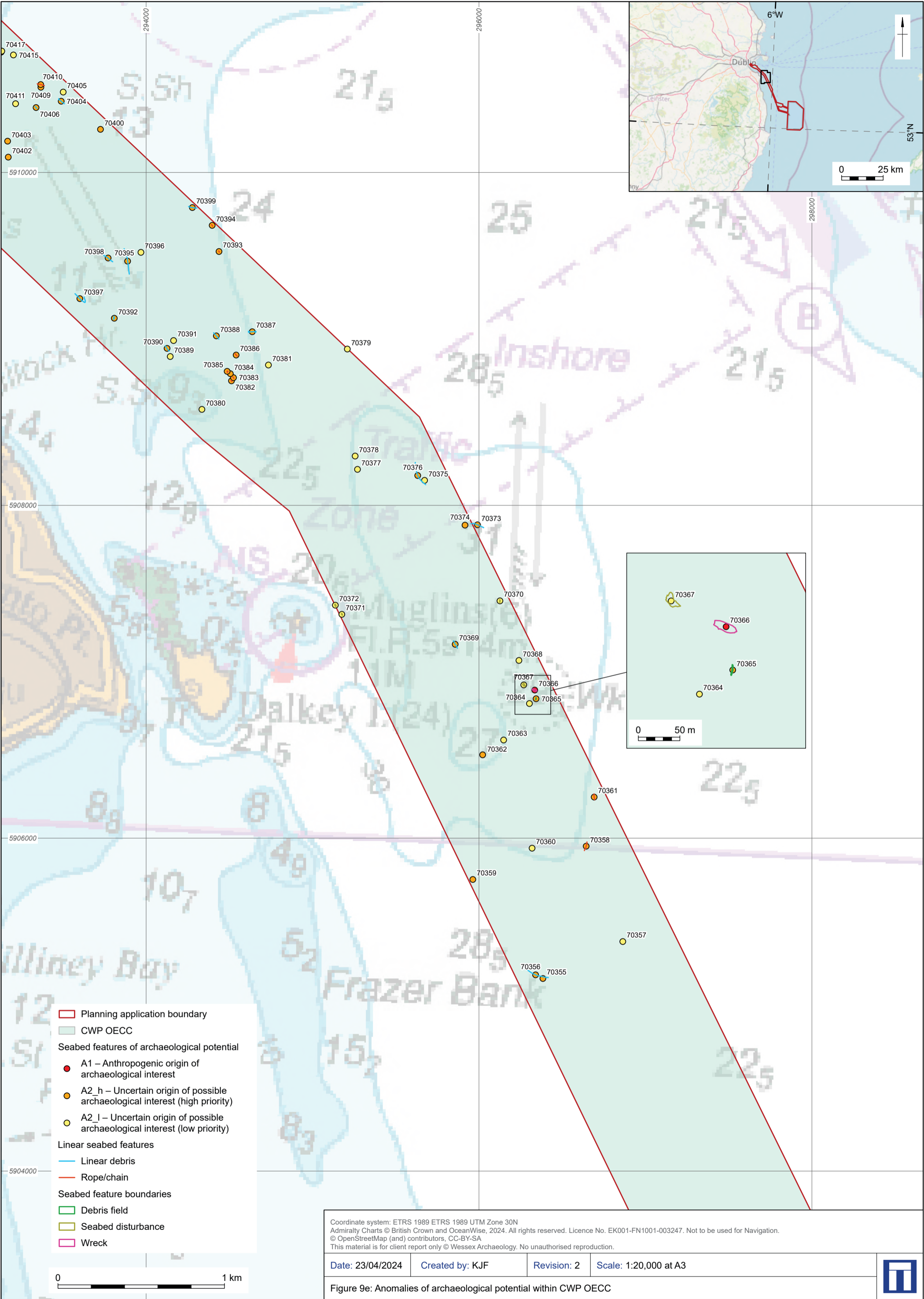




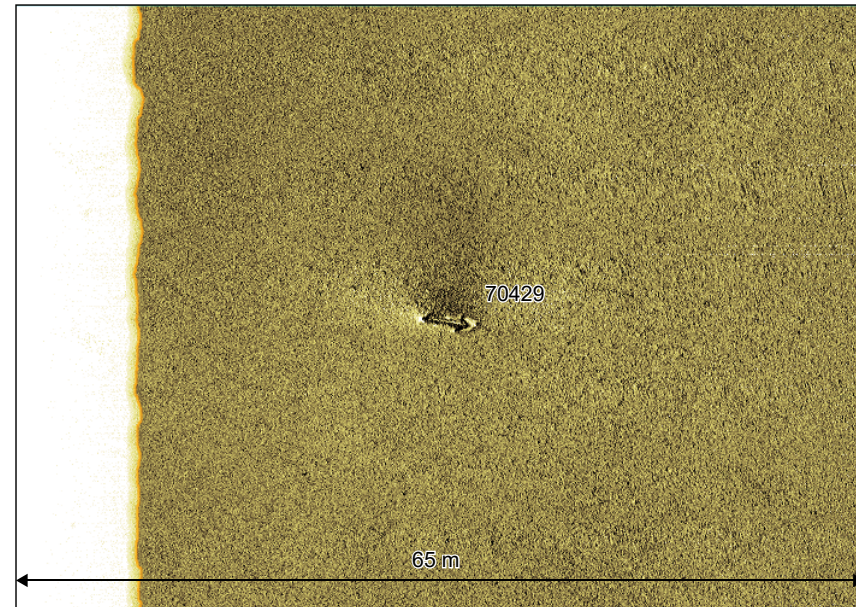




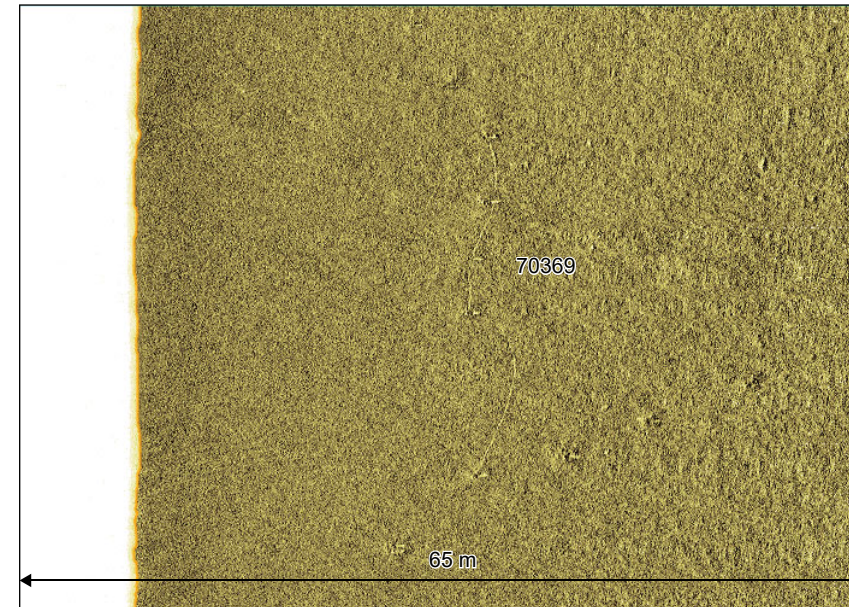




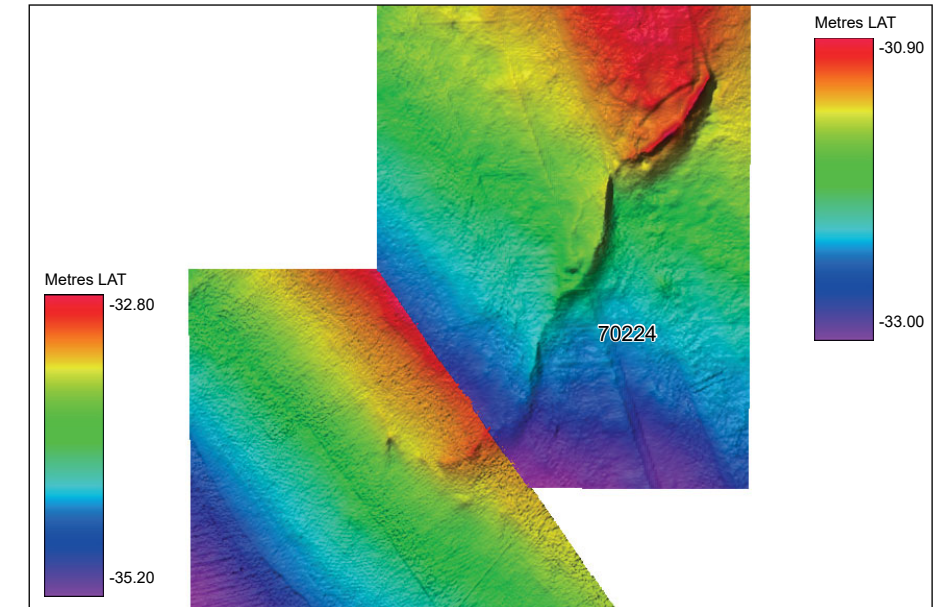




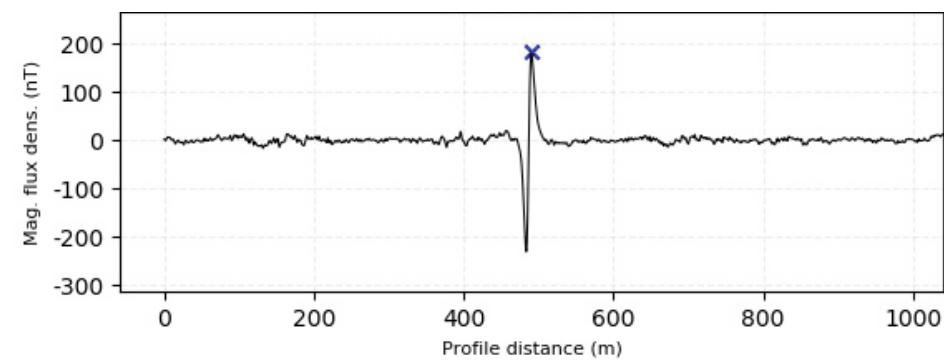
Sidescan sonar waterfall image showing debris anomaly **70429** (Figure 9f), measuring 5.0 x 1.8 x 0.3 m



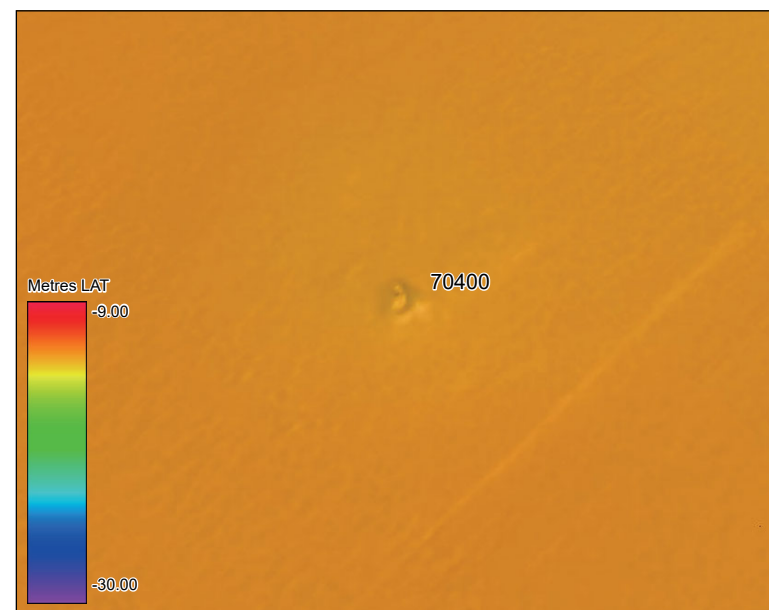
Sidescan sonar waterfall image showing linear debris anomaly **70369** (Figure 9e), measuring 53.2 x 0.3 x 0.1 m



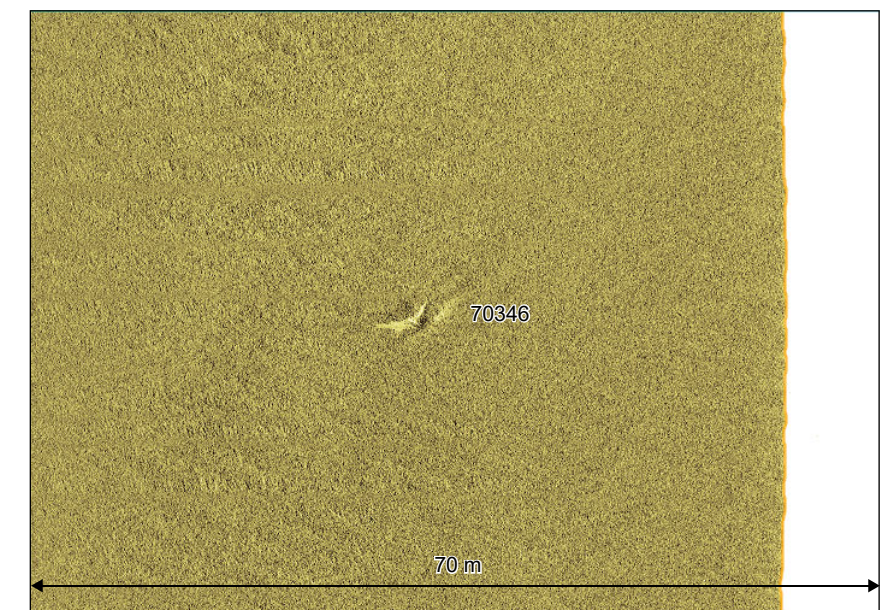
Gridded multibeam echosounder image of seabed disturbance **70224** (Figure 9b), measuring 28.3 x 14.3 x 0.3 m, x1 vertical exaggeration, as observed over two separate data sets



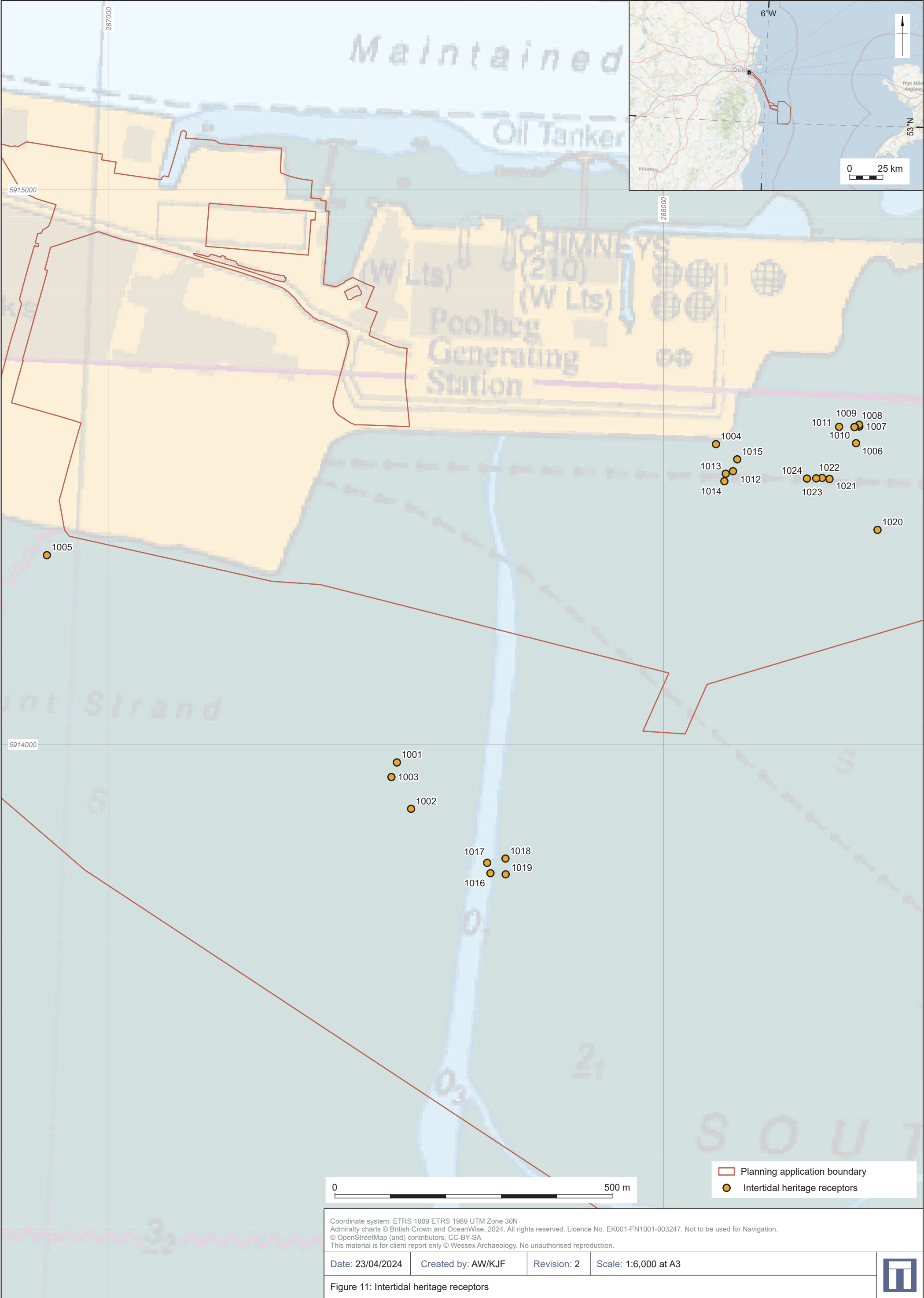
Magnetometer profile image of magnetic anomaly **70420** (Figure 9f), (measuring 413 nT)



Gridded multibeam echosounder image showing debris anomaly **70400** (Figure 9e), measuring 2.5 x 1.8 x 0.2 m, x1 vertical exaggeration



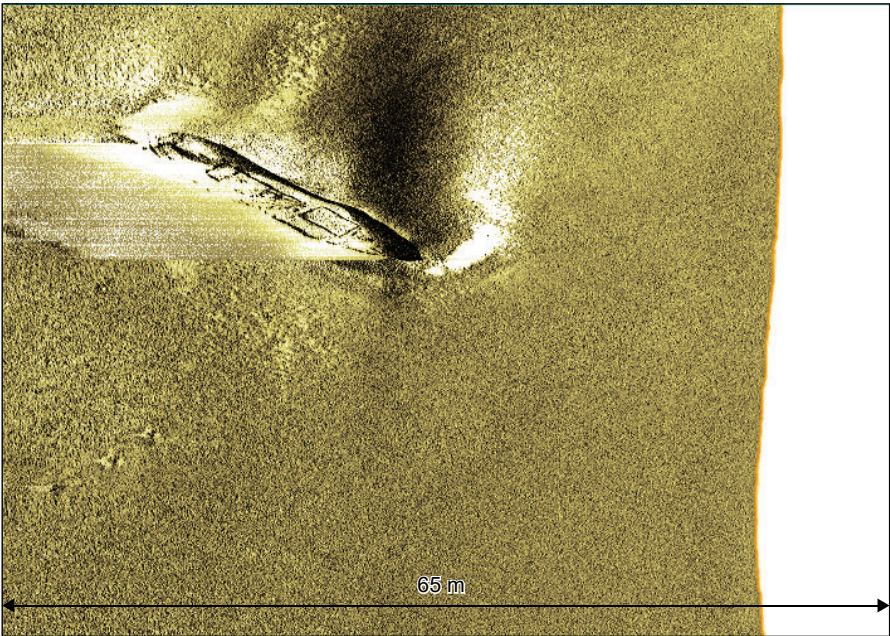
Sidescan sonar waterfall image showing dark reflector anomaly **70346** (Figure 9d), measuring 7.2 x 1.6 x 0.8 m



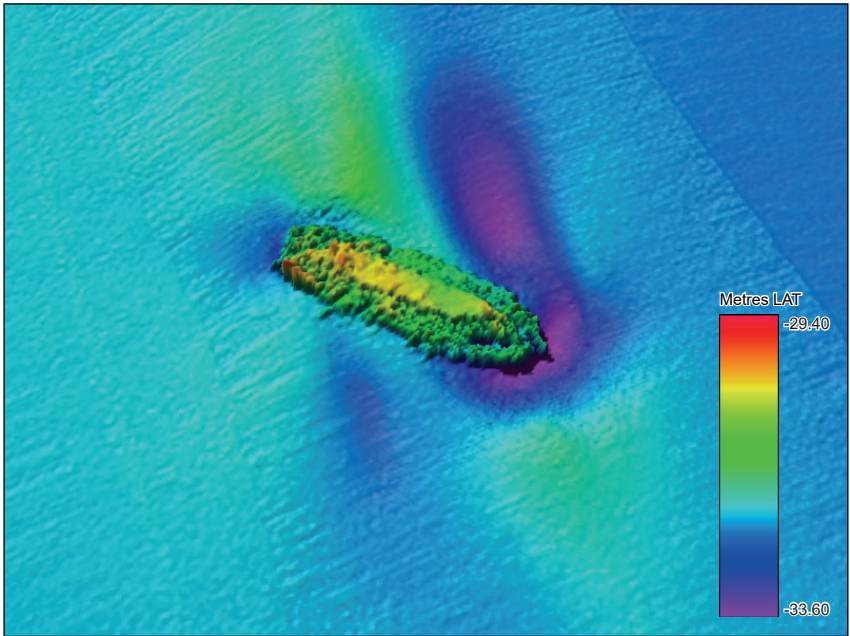
T:\Projects\260890\Graphics\_Official\Rep figs\Technical report\2023\_03\_17

ID 70366 – HMS *Guide Me II* – UKHO 6943

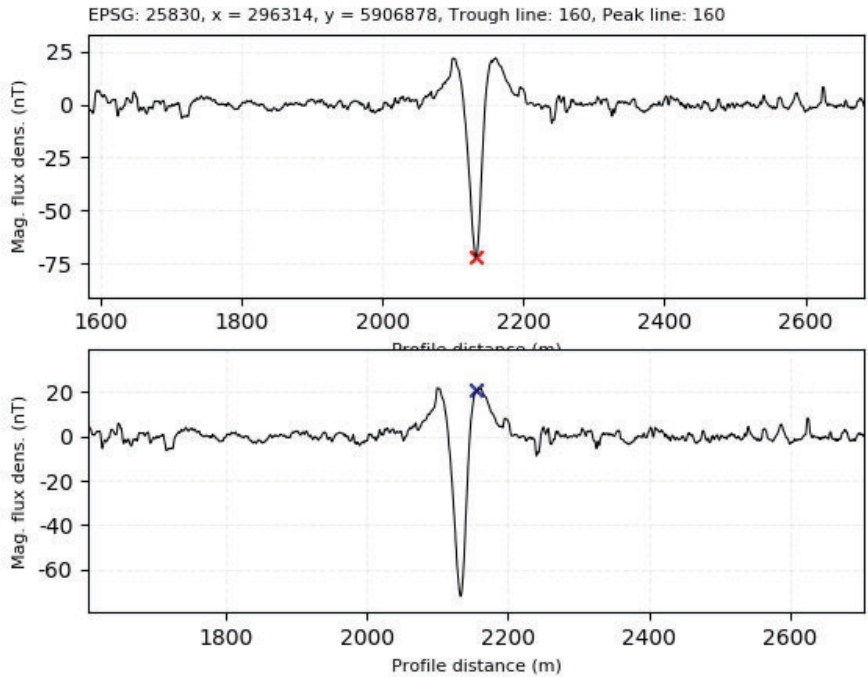
Location		296335 E 5906890 N	Area	P2; OECC
Archaeological Importance		High		
Geophysical survey dimensions and notes		Anomaly 70366 is interpreted as a wreck, oriented approximately north-west to south-east, situated towards the north-west extents of the P2 section of the CWP OECC. It corresponds with the charted UKHO record for HMS <i>Guide Me II</i> (6943), also recorded by the NMS (1474, W01482).		
		Identified in the SSS data as a distinct elliptical dark reflector with tall bright shadow measuring 31.5 x 7.1 x 3.2 m, interpreted as a generally intact hull outline with a more pointed end visible at the south-east indicating the bow, and a more angular end at the north-west, indicating the stern. Some taller central shadow and the presence of internal long, linear dark reflectors indicating angular outlines suggest the remains of superstructure and implies the vessel is standing upright. Some surrounding scour is visible at each end and some sediment build-up is visible along both sides.		
		Identified in the MBES data at a general depth of -29.3 m as a distinct elliptical mound with a smooth central ridge but no obvious upstanding superstructure visible. Deeper, flared scouring is visible at the south-east end of the wreck.		
		The wreck is associated with a medium negative monopole (measuring 93 nT) identified in the Mag. data to the south-west, indicating some ferrous material is present within the vicinity, but the extents of this wreck were not directly covered by the Mag. data and so this response is likely to be a minimum.		
Build	Type	British fishing vessel		
	Construction	Built 1907 one boiler, compound extension engine, single shaft. Converted to armed patrol vessel in 1915		
	Dimensions (m)	26.2 x 5.5 x 2.7 m		
	Shipyard	Hall, Russel & Co.		
Loss	Cause	Sunk following collision (29/08/1918) with SS <i>Glengariff</i>		
Extent of Survival		The UKHO record reports that the wreck was located by divers in 1990 and a naval gun with a loaded shell was recovered and the shell cleared. A ship's bell was also found.		
		The wreck itself was reported to be virtually complete with part of the wheelhouse remaining.		
		The wreck was surveyed in 2007 with recorded measurements as 28.5 x 5.5 x 3.0 m and notes of collision damage visible on the port side, and again in 2011 with recorded measurements of 27.0 x 5.0 x 2.0 m. It was last reportedly surveyed in 2016.		
		The apparent increase in all dimensions (including height) may indicate the wreck is becoming more exposed, rather than spread due to structural collapse.		
		The surrounding scour indicates mobile sediments in the area and so there is potential for surrounding debris to be buried in the vicinity.		



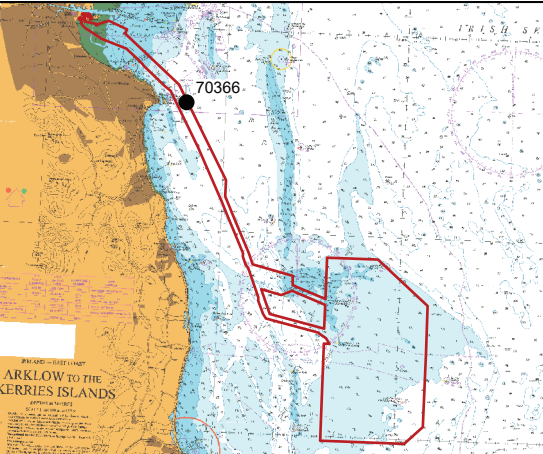
SSS waterfall image of wreck **70366**, 31.5 x 7.1 x 3.2 m, facing north-west



Multibeam echosounder image of wreck **70366**, facing north, x1 vertical exaggeration



Magnetic profile associated with wreck **70366**, measuring 93 nT



Planning application boundary  
0 10 km

Coordinate system: ETRS89 UTM Zone 30N

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Sheet 1





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