

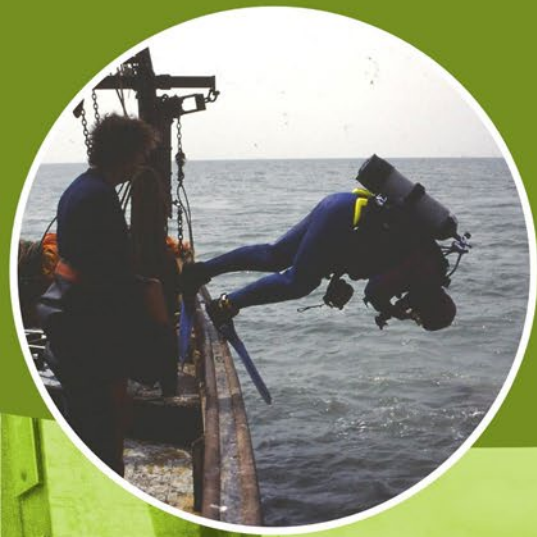
MaresConnect Interconnector

*Rapid marine archaeological desk-
based assessment for Irish and UK
(Welsh) waters*

for
Intertek Metoc

CA ref: 2300604

December 2024



MaresConnect Interconnector

Rapid marine archaeological desk-based assessment for Irish and UK
(Welsh) waters

Coracle project number: 230604

Coracle report number: 230604.1

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date	December 2024
issue	1.0

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SUMMARY

Project name: MaresConnect Interconnector

Coracle Archaeology were commissioned by Intertek Metoc to provide marine archaeological support, including this rapid marine archaeological desk-based assessment, for the MaresConnect Interconnector. This is a proposed 750 megawatt interconnector cable, linking the electricity transmission networks of Ireland and Great Britain, with landfall locations in County Dublin and north Wales. The cable route above the mean high-water mark in both jurisdictions is beyond the remit of this report.

This rapid marine desk-based assessment has been produced to support proposed geophysical and geotechnical surveys associated with the proposed development. It presents a summary of the marine cultural heritage located in proximity to the proposed development in both Irish and UK waters, including the entirety of the Foreshore Licence and Maritime Usage Licence areas (Ireland), and a wider study area centred on the Marine Licence corridors (Wales). This facilitates a broader assessment of the density of marine heritage assets in proximity to the proposed development, and provides an indication of the potential to encounter unknown and unexpected archaeological sites and features while undertaking project-specific activities. This assessment will be used:

- to summarise the nature of the cultural resource in the application area;
 - to outline the archaeological potential of the marine environment;
 - to aid in the identification of seabed anomalies that may have been detected during the marine geophysical surveys; and
- to inform sampling strategies for future geotechnical investigations and benthic surveys, including survey locations.

This assessment has established that there are 58 recorded cultural heritage assets located within the Foreshore Licence and Marine Usage Licence areas in Irish waters, including 40 wrecks, four obstructions, two unknown anomalies and 12 sites and monuments. Of these, 26 wrecks are classified as live. A further 452 reported losses are recorded in the Foreshore Licence

area. These wrecks have no spatial coordinates attached to them, and should not be seen as indicative of the presence or absence of physical remains. These records are included to highlight the potential for encountering wrecks that have been reported in the past, but for which there is presently no material evidence to substantiate their existence. The confirmation of the existence or otherwise of many of these sites must await further investigation, including the archaeological assessment of marine geophysical survey data.

A total of 132 cultural heritage assets were identified from the Ireland-UK median line to mean high water springs at the proposed landfall locations on the north Wales coast. This includes 100 wrecks, five aircraft, two submerged forests, two obstructions, one seabed anomaly, one maritime named location, two anchorages, 12 findspots and seven monuments. Of the 100 wrecks, 15 are considered live and six dead, while the status of 11 is unknown. The remaining 68 wrecks are reported losses, the existence of which cannot be verified at present. None of the wrecks are designated and none of the monuments are scheduled.

The relative density of known and located wrecks in proximity to the proposed development in both Irish and UK jurisdictions suggests that the potential to encounter unexpected cultural remains during future works associated with the proposed development should be considered moderate. This will be reassessed following the archaeological review of project-specific marine geophysical survey data.

Large parts of the study area in both Welsh and Irish waters were subaerially exposed and available for human occupation at times during the Quaternary. The preservation of associated palaeo-landscape, palaeo-environmental and archaeological evidence, however, has been heavily compromised by glacial and marine erosion over large zones of the seabed in proximity to the proposed development. Exceptions include the Welsh nearshore area, where the presence of historically significant submerged forests and peat deposits at the proposed landfall locations suggests that the proposed development has the potential to impact palaeo-environmental deposits of archaeological significance. Similar evidence from Irish waters in the vicinity of the proposed development is not presently known, but cannot be discounted as this type of evidence is being encountered increasingly. Potential impacts to these types of deposits, and mitigation strategies, will be outlined as the project progresses.

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LIST OF ACRONYMS USED IN THE TEXT

ADS	Archaeology Data Service
AEZ	Archaeological exclusion zones
BAI	Bedded and Infill members
BGS	British Geological Survey
BIIS	British Irish Ice Sheet
BP	Before present
BPSL	Before present sea level
CA	Coracle Archaeology
CBF	Cardigan Bay Formation
CF	Chaotic Facies
CIfA	Chartered Institute for Archaeologists
CPAT	Clwyd Powys Archaeological Trust
CPT	Cone penetrometer test
CSC	Cable survey corridor
DBA	Desk-based assessment
DDC	Detection device consent
ECC	Export cable corridor
EEZ	Exclusive Economic Zone
EIAR	Environmental Impact Assessment Report
EMODnet	European marine observation and data network
EPA	Environmental protection Agency
EPSG	European Petroleum Survey Group
FBF	Caernarfon Bay Formation
FII	Incision Infill member
FLAA	Foreshore Licence application area
GI	Geotechnical investigations
GIA	Glacio-isostatic adjustment
GMSL	Global mean sea level
GPS	Global positioning system
grt	Gross registered tonnage
IAI	Institute of Archaeologists of Ireland
ICOMOS	International Council of Monuments and Sites
INFOMAR	Integrated mapping for sustainable development
ISB	Irish sea basin
ISIS	Irish Sea Ice Stream
LAT	Lowest astronomical tide
LGM	Last glacial maximum
LT	Lower Till
LU	Lower Unstratified
MARA	Maritime Area Regulatory Authority
MBES	Multibeam echosounder
MEDIN	Marine environment data information network
MHWM	Mean high water mark
MHWS	Mean high water springs

MIS	Marine isotope stage
MSG	Mega scale glacial lineations
MSL	Mean sea level
MUL	Maritime usage licence
MW	Megawatt
NIAH	National Inventory of Architectural Heritage
nm	Nautical miles
NMI	National Museum of Ireland
NMS	National Monuments Service
NMW	National Museum of Wales
NPRN	National primary reference number
NRW	Natural Resources Wales
nT	nanoTesla
OWF	Offshore wind farm
PF	Prograded Facies
PMRA	Protection of Military Remains Act
PRN	Primary reference number
RCAHWW	Royal Commission on the Ancient and Historical Monuments of Wales
RMP	Record of Monuments and Places
RSL	Relative sea level
SBP	Sub-bottom profiler
SMR	Sites and Monuments Record
SSS	Sidescan sonar
STG	St George's Channel Formation
UAU	Underwater Archaeology Unit
UKHO	United Kingdom Hydrographic Office
UT	Upper Till
UTM	Universal Transverse Mercator
WAT	Welsh Archaeological Trust
WCPP	West Coast Palaeo-landscapes project
WCS	Worst case scenario
WIID	Wreck inventory Of Ireland database
WIS	Western Irish Sea Formation
WSA	Wider study area

1. INTRODUCTION

Outline

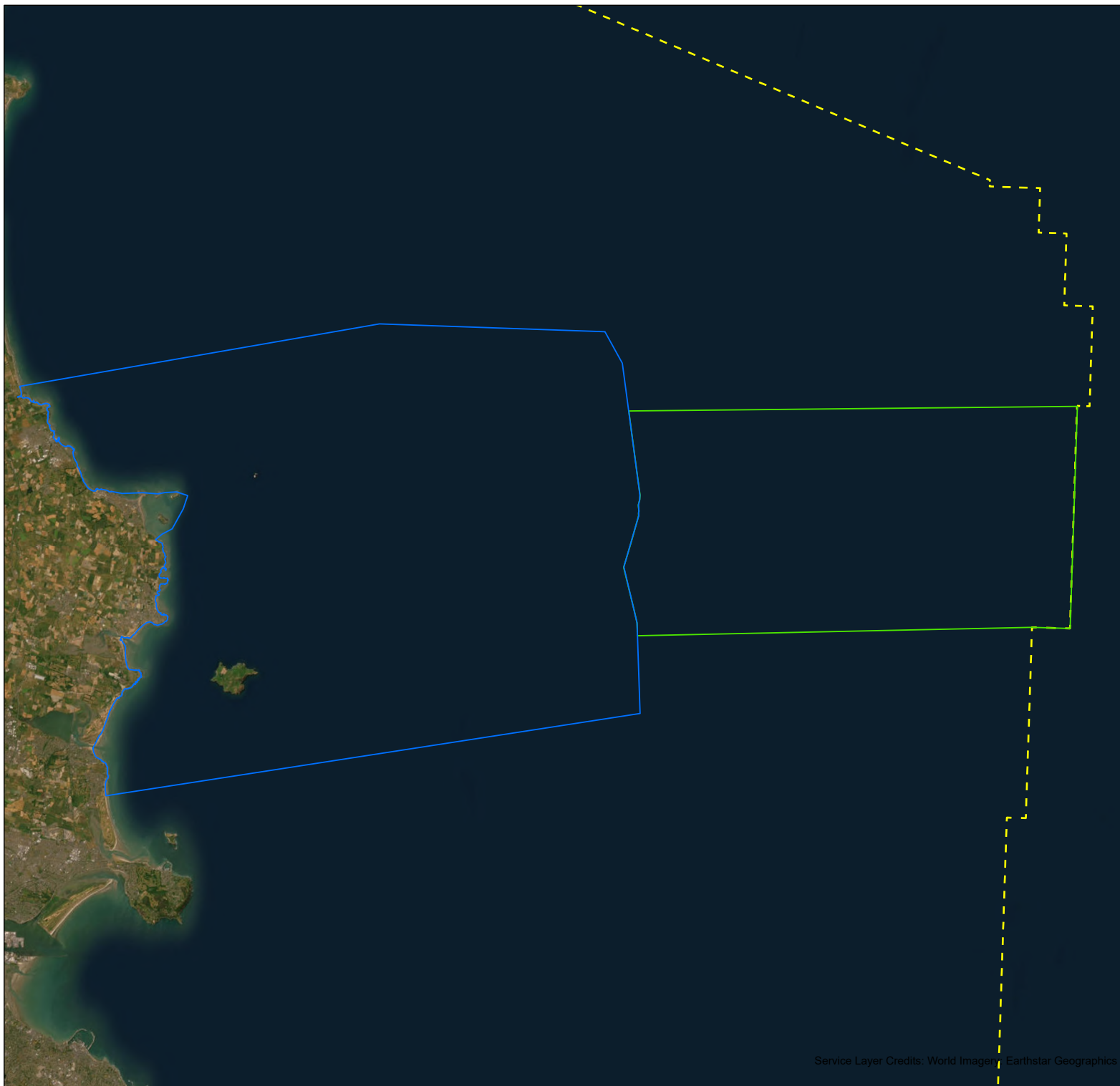
- 1.1. Coracle Archaeology were commissioned by Intertek Metoc to provide marine archaeological support services, including this rapid archaeological desk-based assessment, for the MaresConnect Interconnector (henceforth the proposed development). This is a proposed 750 megawatt (MW) interconnector cable connecting the electricity transmission networks of Ireland and Great Britain, with landfall locations in County (Co.) Dublin and north Wales.
- 1.2. This desk-based assessment has been prepared in support of initial marine surveys and site investigations in both Irish and UK waters. These surveys will be used for subsequent route planning, design and engineering purposes. This will include the collection of multibeam echosounder (MBES), sidescan sonar (SSS), magnetometer and sub-bottom profiler (SBP) datasets..
- 1.3. Following the collection of geophysical survey data, and on the basis of the results of the geophysical survey, a preferred route will be selected. Geotechnical investigations (GI) and benthic sampling will then be conducted along this preferred route. GIs will include the collection of vibrocores and cone penetrometer tests (CPTs) from the seabed below mean low water (MLW) and boreholes at the selected landfall locations. The number and location of sampling stations will be determined once the geophysical survey data has been assessed.
- 1.4. This rapid DBA is based on *Standard and Guidance for Historic Environment Desk-Based Assessment* published by the Chartered Institute for Archaeologists (CIfA, 2014) and adheres to the Institute of Archaeologists of Ireland (IAI) codes of conduct for archaeological assessment (2006). It records known sites and features of cultural heritage significance within, and in proximity to, the project areas that have the potential to be impacted by the proposed development.
- 1.5. The significance of each asset, and the potential impact of the proposed development upon them, will be evaluated more fully as the project progresses. This will include a more detailed marine archaeological desk-based assessment (DBA) following final route

selection. The cable route above mean high-water springs (MHWS) is beyond the remit of this report.




- 1.6. For Irish waters, an Investigative Foreshore Licence application was submitted to the Department of Housing, Local Government and Heritage (DHLGH) for the proposed development (application number **FS007635**), and was granted subsequently. The application included a detailed schedule of survey works (Intertek 2023a) and a non-statutory environmental report (Intertek 2023b). A Maritime Usage Licence (MUL) application (**MUL240008**) was also submitted to the Maritime Area Regulatory Authority (MARA), covering the area from the 12 nautical mile (nm) limit (the edge of the Foreshore Licence Area) to the Ireland-UK median line. The Foreshore Licence application area (FLAA) and MUL area are shown in Figure 1.
- 1.7. In UK waters, a Marine Licence was granted by Natural Resources Wales (NRW; licence number **CML2331**), for marine surveys and site investigations, under the terms of the Marine and Coastal Access Act 2009. The licenced area includes a number of survey corridors, from MHWS on the north Wales coast to the Ireland-UK median line. The licenced areas in UK waters are shown in Figure 2.

Location and context

- 1.8. Depending on final route selection, the proposed development will run for c. 170km between the coast of Co. Dublin and north Wales. This includes c. 56km in Irish waters. Five possible landfall locations for the interconnector cable are included within the FLAA, which extends from MHWS at North Skerries to MHWS at Portmarnock (Figure 3), and out to the 12 nm limit, an area of c. 731 km². Potential 'landfall zones' in Co. Dublin include Ardgillan, Balcarrick, Loughshinny, Robswalls and Rush. The MUL extends a further c. 26 km from the 12nm limit to the edge of the Exclusive Economic Zone (EEZ), encompassing an area of c. 330 km².
- 1.9. The proposed development will then continue into the UK EEZ and territorial waters for c. 114km, making landfall on the coast of north Wales. Three potential landfall locations have been selected, between Pensarn (Abergele) and Rhos-on-Sea (Figure 4).



LEGEND:

-  MaresConnect Foreshore Licence area
-  MaresConnect MUL area
-  Ireland-UK median line

GEODETTIC INFORMATION:



Coordinate System: WGS 1984 Complex UTM Zone 30N
Projection: Transverse Mercator
Datum: WGS 1984
false easting: 500,000.0000
false northing: 0.0000
central meridian: -3.0000
scale factor: 0.9996
latitude of origin: 0.0000
Units: Meter



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PROJECT TITLE:

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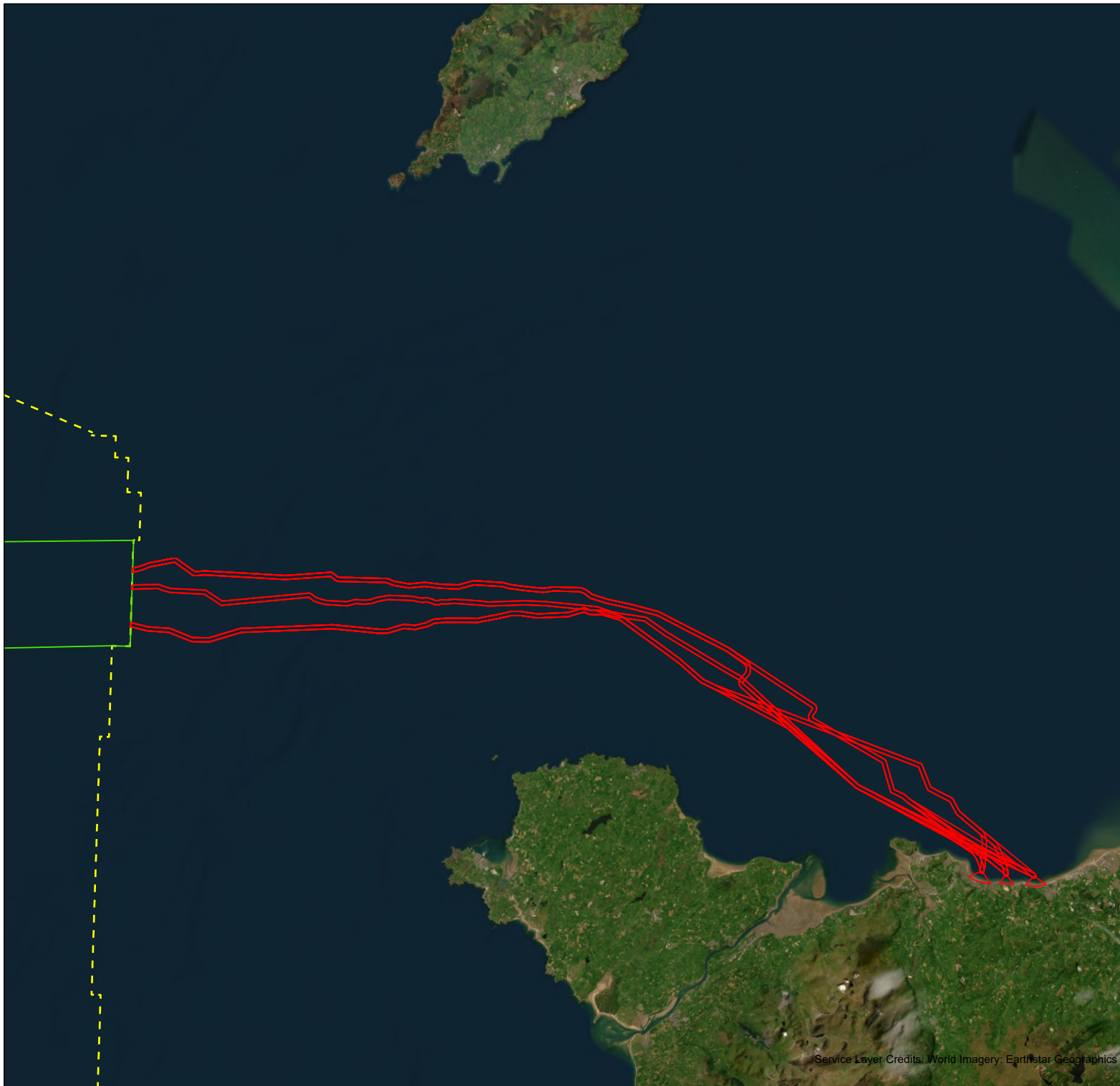
FIGURE TITLE:

FLAA and MUL areas (Ireland)

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CHECKED BY: KW
APPROVED BY: MW

PROJECT NO.
230604

FIGURE NO.
1



LEGEND:

- MaresConnect marine licenced areas
- MaresConnect MUL area
- Ireland-UK median line

GEODETTIC INFORMATION:



Coordinate System: WGS 1984 Complex UTM Zone 30N
Projection: Transverse Mercator
Datum: WGS 1984
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false northing: 0.0000
central meridian: -3.0000
scale factor: 0.9996
latitude of origin: 0.0000
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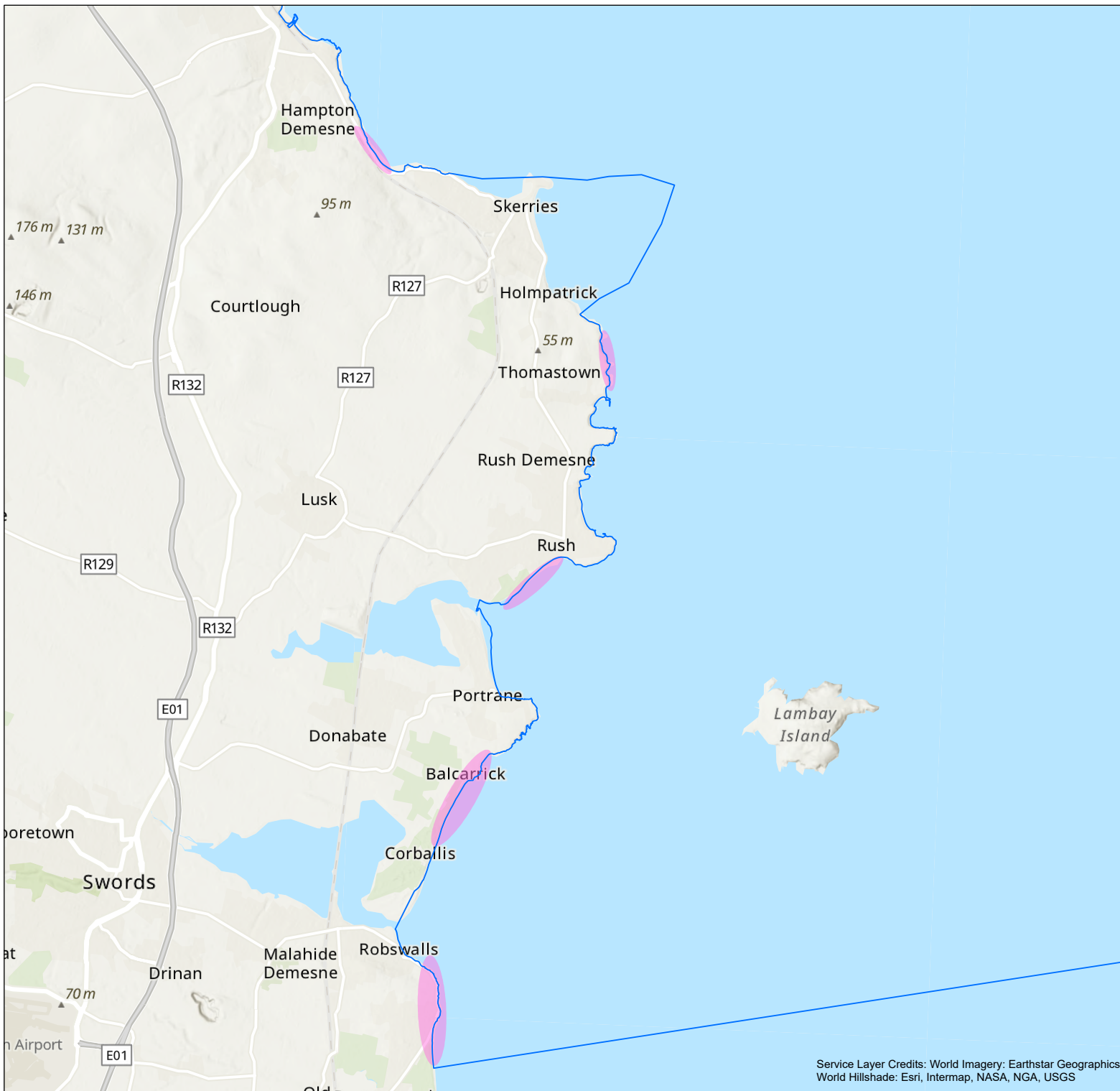
FIGURE TITLE:

Licensed areas (Wales)



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APPROVED BY: MW

PROJECT NO.
230604

FIGURE NO.
2



LEGEND:

-  MaresConnect Foreshore Licence area
-  Possible landfall locations (Ireland)

GEODETTIC INFORMATION:

0 5 Kilometers

Coordinate System: WGS 1984 Complex UTM Zone 30N
Projection: Transverse Mercator
Datum: WGS 1984
false easting: 500,000.0000
false northing: 0.0000
central meridian: -3.0000
scale factor: 0.9996
latitude of origin: 0.0000
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FIGURE TITLE:

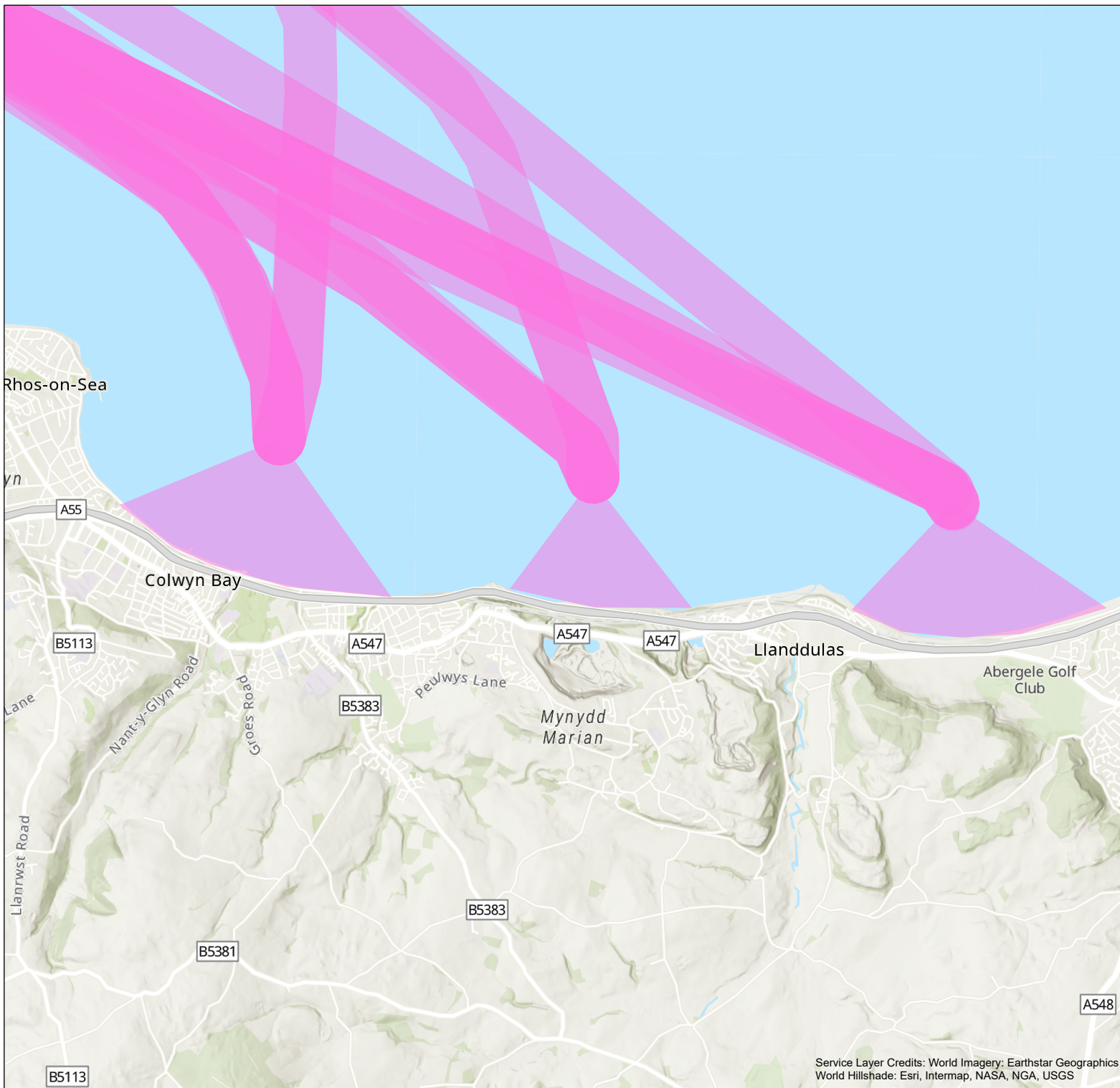
Potential landfall locations (Ireland)

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CHECKED BY: KW
APPROVED BY: MW

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230604

FIGURE NO.
3

Service Layer Credits: World Imagery: Earthstar Geographics
World Hillshade: Esri, Intermap, NASA, NGA, USGS



LEGEND:

Possible landfall locations (Wales)

GEODETTIC INFORMATION:

0 2.5 Kilometers

Coordinate System: WGS 1984 Complex UTM Zone 30N
Projection: Transverse Mercator
Datum: WGS 1984
false easting: 500,000.0000
false northing: 0.0000
central meridian: -3.0000
scale factor: 0.9996
latitude of origin: 0.0000
Units: Meter

N



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PROJECT TITLE:

MaresConnect Interconnector

FIGURE TITLE:

Potential landfall locations (Wales)

DRAWN BY: DG
CHECKED BY: KW
APPROVED BY: MW

PROJECT NO.
230604

FIGURE NO.
4

Service Layer Credits: World Imagery: Earthstar Geographics
World Hillshade: Esri, Intermap, NASA, NGA, USGS

- 1.10. At present, cable route options are based on desk-based assessments using extant non-project-specific data. Following completion of the initial surveys, a preferred cable route will be selected for further licensed site investigations, including GIs. These data will be used for route design and engineering purposes, and as part of any future marine licence applications in both jurisdictions.
- 1.11. Future consent applications will include a more detailed DBA and a full archaeological review of marine geophysical and geotechnical survey data for the selected route in Irish and UK waters. For the purposes of this rapid desk-based assessment, and following the precautionary principle, it is assumed that geophysical surveys and GIs may be undertaken anywhere within the licensed areas. This is considered a worst-case scenario (WCS).

2. AIMS AND OBJECTIVES

- 2.1. The aim of this rapid desk-based assessment is to provide a summary of known and potential cultural heritage receptors within the licenced areas. In Ireland, this includes both the FLAA and MUL areas. In UK waters, this includes the c. 500m wide cable survey corridors (CSC), and a wider study area (WSA), extending a further 750m either side of the licensed CSCs (Figure 2). As the FLAA and the MUL areas are already considerably larger than the footprint of the proposed development, no additional buffer was considered necessary for Ireland.
- 2.2. The objectives of this assessment are:
- to set out the statutory, planning and policy contexts relating to the historic environment in both Irish and UK (Welsh) waters;
 - to provide a summary of the marine historic environment within the licenced areas, based on existing archaeological records and secondary sources; and
 - to highlight, from existing archaeological records, known heritage assets within the application area that may be impacted by the proposed development, with particular reference to:
 - shipwrecks, crashed aircraft and wreck material;

- submerged prehistoric landscapes, sites and artefacts;
- assets of any period located in the intertidal zone; and
- areas of archaeological potential.

3. LEGISLATIVE FRAMEWORK AND GUIDANCE

3.1. As the scope of this rapid DBA encompasses both Irish and UK territorial waters (Wales) and EEZs, this assessment takes account of the following national and international legislative procedures and guidelines:

Ireland

- Historic and Archaeological Heritage and Miscellaneous Provisions Act (2023). This was signed into law on 13 October 2023, though has yet to be fully enacted. The Act is intended to replace the existing National Monuments Act (1930-2014); under the National Monuments (Amendment) Act 1987, any wreck over 100 years old, or any archaeological object found underwater, regardless of age or location is afforded automatic protection. Survey, diving or other interference with these wrecks or objects is expressly forbidden except under licence. This will remain unchanged under the new legislation. The new Act, once fully in force, will also enable the State to ratify the 2001 UNESCO Convention on the Protection of the Underwater Cultural Heritage;
- National Heritage Act (Ireland) 1995;
- Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous) Provisions Act, 1999;
- Maritime Area Planning Act 2021;
- Merchant Shipping (Salvage and Wreck) Act 1994; and
- Foreshore Act 1993.

3.2. This assessment follows appropriate national principles and guidance, including *Framework and principles for the protection of the archaeological heritage* (Government of Ireland 1999) and *Guidelines on the information to be contained in Environmental Impact Assessment Reports* (Environmental Protection Agency (EPA), 2022). It has been completed in compliance with the requirements of both the new Maritime Area Planning Act 2021 and the new Monuments and Archaeological Heritage Bill. Both a detection device consent (DDC) and a licence to dive / survey application have been submitted to the licensing section of the National Monuments Service (NMS) for the proposed development.

UK (Wales)

- Protection of Wrecks Act 1973;
- Protection of Military Remains Act 1986;
- Historic Environment (Wales) Act 2016;
- The Planning (Listed Buildings and Conservation Areas; Wales) Regulations 2012;
- Planning Policy Wales (2017); and
- National Heritage Act 2002;
- Marine and Coastal Access Act 2009;
- Merchant Shipping Act 1995;
- Burial Act 1857;
- Ancient Monuments and Archaeological Areas Act 1979;
- Welsh National Marine Plan 2019 (especially Objective 7; policies SOC_05-07); and
- UK Marine Policy Statement (HM Government 2011).

- 3.3. It is important to note that the remit of the Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW) extends beyond the 12nm limit, to the edge of the UK EEZ.
- 3.4. This rapid DBA has been compiled in accordance with industry best practice and the relevant marine historic environment guidance for Wales and the UK. These include:
- Chartered Institute for Archaeologists (CIfA) guidelines: *Standard & guidance for archaeological desk-based assessment* (2014);
 - Managing the marine historic environment of Wales, Cadw (2020);
 - Technical Advice Note 24: the historic environment, Welsh Government (2017);
 - The marine historic and natural environment marine area statement, Natural Resources Wales (NRW) and the RCAHMW (2022);
 - Heritage impact assessment in Wales, Cadw (2017a);
 - Setting of historic assets in Wales, Cadw (2017b);
 - Conservation principles for the sustainable management of the historic environment in Wales, Cadw (2011);
 - Joint Nautical Archaeology Policy Committee (JNAPC) *Code of practice for seabed development* (1998);
 - COWRIE Historic environment guidance for the offshore renewable energy sector (2007);
 - COWRIE Guidance for assessment of cumulative impacts on the historic environment from offshore renewable energy (2008);
 - COWRIE Guidance for offshore geotechnical investigations and historic environment analysis: guidance for the renewable energy sector (2011);
 - Offshore renewables protocol for archaeological discoveries, the Crown Estate and Wessex Archaeology (2014); and

- Archaeological written schemes of investigation for offshore wind farm projects, the Crown Estate and Wessex Archaeology (2021).

International

3.5. In addition to nationally specific legislation, this assessment takes account of a number of international legislative procedures and guidelines. These include:

- European Convention on the Protection of the Archaeological Heritage (Valetta) 1992;
- UNESCO Convention on the Protection of the Underwater Cultural Heritage (2001);
- United Nations Convention on the Law of the Sea (UNCLOS) 1982;
- International Council of Monuments and Sites (ICOMOS) Charter on the Protection and Management of Underwater Cultural Heritage (1996) (the Sofia Charter);
- Council of Europe Convention on the Protection of Architectural Heritage of Europe (the 'Granada Convention') ratified by Ireland in 1997;
- The European Convention of the Archaeological Heritage of Europe (Revised) 1992; and
- The World Heritage Convention.

4. METHODS AND DATA SOURCES

Geographical scope

4.1. This rapid DBA assesses the licenced area for the proposed development in both Irish and UK (Welsh) waters (Figures 1 and 2). The route of the proposed development above MHWS in both jurisdictions is beyond the remit of this report.

- 4.2. For UK waters, the scope includes a WSA extending c. 750m either side of the licensed CSCs. The licensed area extends from MHWS at three potential landfall locations between Pensarn and Rhos-on-Sea on the north Wales coast to the Ireland-UK median line, a distance of c. 114km.
- 4.3. For Irish waters, the FLAA extends from MHWS at North Skerries to MHWS at Portmarnock in the south, and out to the 12nm limit. This includes five potential 'landfall zones' in Co. Dublin, at Ardgillan, Balcarrick, Loughshinny, Robswalls and Rush. The MUL area extends from territorial waters to the Ireland-UK median line, a distance of c. 26 km.
- 4.4. In UK waters, geophysical survey will be undertaken along the licensed cable corridors. In Ireland, surveys will be focused upon a number of potential routes within the licensed areas. Following initial review of the geophysical survey data, it is anticipated that one preferred route and one landfall location on either side of the Irish Sea will be selected for GIs. Adopting the precautionary principle, and in accordance with a WCS, this rapid DBA assumes that survey, sampling and GIs will occur throughout the licensed areas.

Sources

- 4.5. This rapid baseline assessment includes a documentary and cartographic search to locate all known heritage assets within the application area. Sources utilised include:

Ireland

- the NMS Wreck Viewer;
- the Wreck Inventory of Ireland database (WIID);
- information held on the Record of Monuments and Places (RMP) website, maintained by the NMS;
- Archaeology Survey of Ireland dataset, including the Sites and Monuments Record (SMR) and the National Inventory of Archaeological Heritage (NIAH)
- information held by Integrated Mapping for the Sustainable Development of Ireland's Marine Resources (INFOMAR);

- National Museum of Ireland (NMI) archives; and
- National Library of Ireland (for historic charts and maps only).

UK (Wales)

- RCAHMW National Monuments Records of Wales (NMRW);
- Heneb, Trust for Welsh Archaeology Historic Environment Records (HER);
- Cadw's Register of Historic Landscapes;
- records held by the National Museum of Wales (NMW); and
- records held by the Archaeology Data Service (ADS).

International

- records of wrecks and obstructions as held by the United Kingdom Hydrographic Office (UKHO);
- UKHO review of cartography, historic charts and sailing directions;
- Marine Environment Data Information Network (MEDIN);
- British Geological Survey regional guide and previous work in the area;
- European Marine Observation and Data Network (EMODnet);
- readily accessible published sources and grey literature (e.g. results from previous studies); and
- Wrecksite.eu website.

4.6. This assessment includes all known and potential maritime cultural heritage assets identified during this assessment, as detailed in the tables and figures below. For ease of identification, records were assigned a unique Coracle Archaeology number, using the abbreviation (**CA**). Records **CA1ff** are located in Irish waters, **CA500ff** in UK waters.

5. BASELINE ENVIRONMENT

- 5.1. The following sections outline the nature of the existing environment, including a discussion of the palaeo-environment and recorded marine cultural heritage. The palaeo-environment section is, out of necessity, focused on large areas of the seabed. It therefore describes the palaeo-environment in proximity to the proposed development in its entirety, from the coast of Co. Dublin to the coast of north Wales. In contrast, discussions of recorded marine cultural heritage focus on the licensed areas and WSA, divided into Irish and Welsh jurisdictions.

Palaeo-environment

- 5.2. The global climate has fluctuated significantly throughout the last 2.5 million years (the Quaternary period, encompassing the Pleistocene and Holocene epochs). In northwest Europe, this was typified by transitions between long cold glacial periods, characterised by extensive ice sheets and low sea level, and warm interglacial periods, characterised by high sea level and small or absent ice sheets.
- 5.3. In the Irish / British Quaternary terminology, the most recent glacial period is referred to as the Midlandian / Devensian respectively. This ran from c. 115,000-11,500 before present (BP), corresponding to Marine Isotope Stage (MIS) 5d to MIS2, before transitioning into the comparatively warm climate of the present interglacial: the Holocene, or MIS1. The peak, or maxima, of the Midlandian / Devensian glaciation took place between c. 25-18,000 BP, an interval commonly referred to as the Last Glacial Maximum (LGM).
- 5.4. This section provides an overview of the Quaternary palaeo-environment around the Irish Sea Basin (ISB), in proximity to the proposed development. It focuses first on the fragmentary evidence that predates the LGM, then discusses the regional effects of the Midlandian / Devensian glaciation and its aftermath.

Pre-LGM (MIS12 to 3)

- 5.5. The precise timing and extent of pre-MIS2 glaciation and accompanying changes in relative sea level (RSL) are unclear for the ISB, primarily owing to a lack of evidence. The relevant geological units for these older periods are often buried deeply and thus

difficult to access, or have been removed by the erosive effects of the most recent glaciation.

- 5.6. It is likely, however, that the majority of the ISB was ice-covered during the pre-LGM glacial maxima, which occurred during MIS12 (Anglian glaciation) and MIS6 (Munsterian / Wolstonian glaciation). Indeed, most of Ireland and central and northern Britain were glaciated during these periods, though Ireland currently has no correlative stage for the MIS12 glaciation (Knight *et al.* 2004). This does not mean that it escaped glaciation, particularly given that ice extended as far south as southern England (Sejrup *et al.* 2005); it is more likely that the evidence has been removed or buried by the succeeding MIS6 and MIS2 glaciations.
- 5.7. Key geological deposits linked to pre-LGM ice advance within the ISB include the Cardigan Bay Formation (CBF) Lower Till (LT) member and the Caernarfon Bay Formation (FBF) Lower Unstratified (LU) member, both of which are interpreted as subglacial diamicton and tentatively correlated with the MIS6 and MIS12 glaciations respectively. A series of deep incisions cut into the CBF-LT and FBF-LU are thought to have been produced by glacial processes post-dating initial ice advance and deposition of subglacial sediment. Overlying and sometimes infilling these incisions are sediments likely deposited during deglaciation. These comprise the St George's Channel Formation (STG), glaciomarine muds that lie between the FBF and CBF, and other members within the CBF and FBF, including the CBF Bedded and Infill members (BAI), and the FBF Incision Infill (FII) member (Jackson *et al.* 1995; Mellet *et al.* 2015).
- 5.8. The pre-LGM glacial deposits appear to be thicker and more prevalent to the south and northeast of the study area (BGS and GSI 1990; Jackson *et al.* 1995). The seabed between north Wales and Dublin comprises mainly Devensian / Midlandian deposits (e.g. Western Irish Sea Formation (WIS), CBF Upper Till (UT)), with older sediments limited to buried deposits on the flanks of the Lambay Deep and a zone of outcropping CBF-LT to the west of Anglesey (see BGS and GSI 1990: Section 1).
- 5.9. It is also possible that periods of ice expansion took place during shorter cold intervals (stadials) between the main glacial maxima, such as MIS4 (c. 71-57,000 BP), a stadial

intervening between the warm MIS5e interglacial (c. 125-115,000 BP) and the MIS2 glacial maxima. Indeed, it has been hypothesised that MIS4 could have seen significant glaciation in western Britain and Ireland, with ice as far south as Lundy Island in the Bristol Channel, thick ice cover over the Welsh mountains and sufficiently thick ice in the south of Ireland to cause isostatic depression and high RSL. This resulted in the formation of the Courtmacsherry raised beach (Co. Cork), which has been dated to c. 77-36,000 BP (Scourse 2024).

- 5.10. Evidence of habitable palaeo-landscapes from the temperate phases between glacials and stadials is relatively sparse around the ISB. Even on land, such deposits are rare owing to the erosive effects of the last glaciation. In Ireland, only a handful of sites with interglacial or interstadial palynological evidence exist, and these are concentrated in the west and south (Coxon *et al.* 2017). The site closest to the study area is Knocknacran, c. 75km northwest of Dublin, where organic deposits from an interglacial, possibly MIS5e, have accumulated in a karstic depression.
- 5.11. In north Wales, pre-MIS2 palaeontological material has been found in multiple cave sites in the Vale of Clwyd, which lies several kilometres east of the proposed cable landfall. It is notable that this includes two cave sites with archaeological material which predate the MIS2 glaciation; Pontnewydd cave, which has Neanderthal remains and stone tools from MIS7 (c. 225,000 BP), and the adjoining caves of Ffynnon Beuno and Cae Gwyn, which have Neanderthal and early modern human lithics dating from MIS3 (c. 35-45,000 BP; Dinnis and Ebbs 2013).
- 5.12. The existence of remnants of pre-MIS2 submerged palaeo-landscapes within the study area is, however, unclear. No temperate phase organic deposits or clearly subaerially deposited sediments predating MIS2 have been sampled within, or close to, the study area. In addition to preservation issues, the existence of such palaeo-landscape evidence would have been contingent on land exposure during the restricted time window after deglaciation, but before RSL rose to its interglacial maxima.
- 5.13. That such palaeo-landscapes existed somewhere in the ISB is highly likely; MIS4 and MIS3 palaeontological evidence from Ireland demonstrates multiple mammal species

which were also present in Britain (Woodman *et al.* 1997; Monaghan 2017), thus suggesting a terrestrial connection between the two landmasses prior to the MIS2 glaciation. Whether remnants of these palaeo-landscapes have survived the MIS2 glaciation and RSL rise is uncertain presently for both Welsh and Irish waters.

LGM to Holocene (MIS2 to 1)

- 5.14. Renewed ice sheet growth around the ISB is believed to have begun at c. 30,000 BP with the southwards expansion of ice from Scotland and northeast Ireland, and by c. 29,000 BP, from ice originating in north Wales (Clark *et al.* 2022: optimum ice model). By c. 28,000 BP, most of the northern part of the ISB is likely to have been ice covered, with complete coverage by c. 27,000 BP.
- 5.15. Ice in this area is considered to be part of the Irish Sea Ice Stream (ISIS); a tongue of ice which rapidly flowed southwest from the main accumulation centres over northern Britain and Ireland and eventually reached the Celtic Sea shelf edge by c. 26,000 BP. This extension was relatively short lived; by c. 24,000 BP, ice had retreated from the shelf edge back into the ISB, where retreat continued at a slower rate. It is likely that the study area was deglaciated between c. 21-20,000 BP. Thereafter, the ice margin remained predominantly north of the Isle of Man, with minor oscillations (Chiverrell *et al.* 2018; Scourse *et al.* 2021).
- 5.16. Evidence of ice cover in the ISB during this period is extensive, and includes both glacial landforms and sediments. Landforms within the study area are best represented by a zone between Anglesey and the Isle of Man, traversed by the proposed development. A range of buried and exposed landforms, including drumlins, mega-scale glacial lineations (MSGL), moraines, flutes, subglacial channels, iceberg scour marks and eskers are present here and provide evidence for the growth, development and retreat of the ISIS (Van Landeghem *et al.* 2009; Van Landeghem and Chiverrell 2020).
- 5.17. Glacial landforms have also been identified on the western side of the ISB, including subglacial tunnel valleys, eskers, iceberg scour marks and moraines (Coughlan *et al.* 2019; Michel *et al.* 2023). Of these, a potential tunnel valley represented by the Lambay

Deep and associated meltwater channels cut across the study area (Arosio *et al.* 2023; Michel *et al.* 2023).

- 5.18. The widespread presence of the ISIS is also evident in the glacial deposits that form the majority of the Quaternary sequence in the ISB. Key Devensian / Midlandian deposits are the WIS, which includes multiple facies evidencing glaciomarine, glaciolacustrine and proglacial sedimentation, and the Cardigan Bay Formation Upper Till member (CBF-UT). The latter is composed of subglacial diamicton (Jackson *et al.* 1995; Mellet *et al.* 2015). Outcropping or subcropping units of the WIS (or local correlates thereof: Coughlan *et al.* 2019; Michel *et al.* 2023) form the majority of sub-seabed deposits in the Irish part of the study area, giving way to outcropping or subcropping CBF-UT in Welsh waters (Mellet *et al.* 2015).
- 5.19. In general, the lowest units of the MIS2 / Devensian / Midlandian glacial deposits (e.g. CBF-UT) and landforms represent initial ice expansion and deposition of subglacial sediments. In many cases, these appear to lie directly over the pre-Quaternary bedrock (BGS and GSI 1990: Section 1; Coughlan *et al.* 2019; 2020; Michel *et al.* 2023, Van Landeghen and Chiverrell 2020; Roberts and Howell 2021). Subsequent units of glacial sediment (e.g. WIS) then record deglaciation. It is notable that the majority of the evidence from the study area is suggestive of deglaciation in a watery (i.e. marine, lacustrine) setting. This implies that areas that became ice-free were initially water-covered and not subaerially exposed (Mellet *et al.* 2015; Michel *et al.* 2023, Van Landeghen and Chiverrell 2020).
- 5.20. The LGM was also the lowest point in an interval of lower-than-present global mean sea-level (GMSL), which ran from the last interglacial (MIS 5e, tentatively correlated with the Knocknacran Interglacial in Ireland (Coxon *et al.* 2017) and more securely with the Ipswichian Interglacial in Britain (Scourse 2024)) to the start of the Holocene at c. 11,500 BP. Throughout this interval (MIS5d-MIS2), GMSL was generally at 20-40m below present sea level (bpsl), reaching as low as 120-135m bpsl during the LGM (Siddall *et al.* 2008; Lambeck *et al.* 2014). This exposed large tracts of present-day seabed as land available for human occupation (Bailey and Flemming 2008). During the latter half of MIS2, a warming climate resulted in significant ice melt, causing GMSL to rise rapidly

from c. 16,500 BP onwards, flooding the exposed continental shelf (Lambeck *et al.* 2014).

- 5.21. In glaciated regions, such as the ISB, local RSL was controlled by both the changing volume of ocean water and glacio-isostatic adjustment (GIA): the vertical movement of the Earth's crust in response to changing ice and water loads. The net effect was a regional modification of the GMSL signal. Strongly glaciated areas were isostatically depressed below contemporary RSL by the weight of ice, resulting in high RSL and no or reduced land exposure. Conversely, areas towards the ice margins experienced a shorter interval of glaciation and reduced isostatic depression enabling longer, deeper RSL lowstands and greater land exposure (Bradley *et al.* 2011; Edwards and Craven 2017; Shennan *et al.* 2018).
- 5.22. Regional RSL and concomitant palaeo-geographic changes for MIS2 have been derived using models of GIA (Brooks *et al.* 2008; Bradley *et al.* 2011). The most recent published model (Bradley *et al.* 2023) suggests that the deepest RSL lowstand and maximal land exposure around the ISB occurred before the LGM at c. 36-30,000 BP (Figure 5a). Sea-level was roughly c. 70m bpsl, resulting in extensive shelf exposure, perhaps more so on the eastern side of the ISB due to a larger shallow gradient platform (Clark *et al.* 2022; Bradley *et al.* 2023).
- 5.23. The palaeo-shoreline is predicted to have been relatively stable until c. 30,000 BP, whereupon high RSL flooded the landscape. This is likely to have been caused by isostatic depression from the growing British-Irish ice sheet (BIIS). Between c. 29-26,000 BP, the palaeo-shoreline is reconstructed to have been close to its present-day equivalent, and eventually rose to a highstand above present with further depression and RSL rise.
- 5.24. After c. 22,000 BP, rapid and continued ice retreat resulted in isostatic rebound and a pattern of falling RSL around the ISB (Figure 5b). Variations in the rate of retreat and mass of the ice at a given point caused regional variations in palaeo-shoreline elevation. At c. 19,000 BP, RSL is modelled to have been above present levels at the proposed Irish landfall locations; at the Welsh landfalls, it is modelled to have been below present,

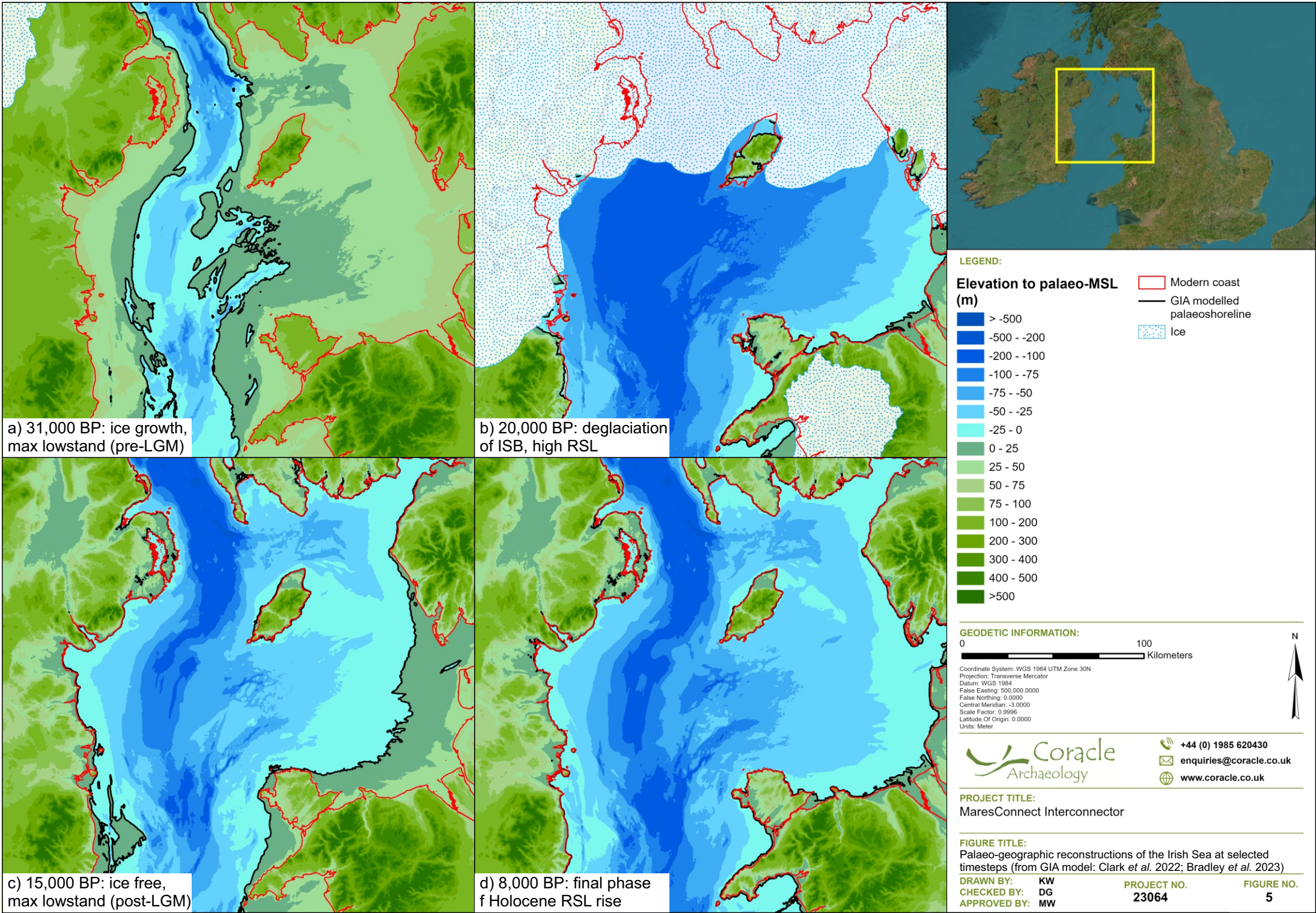
placing the palaeo-shoreline several kilometres seaward of the modern coast. RSL fall continued through the final part of MIS2 until it reached the maximum post-LGM lowstand at c. 15,000 BP (Figure 5c).

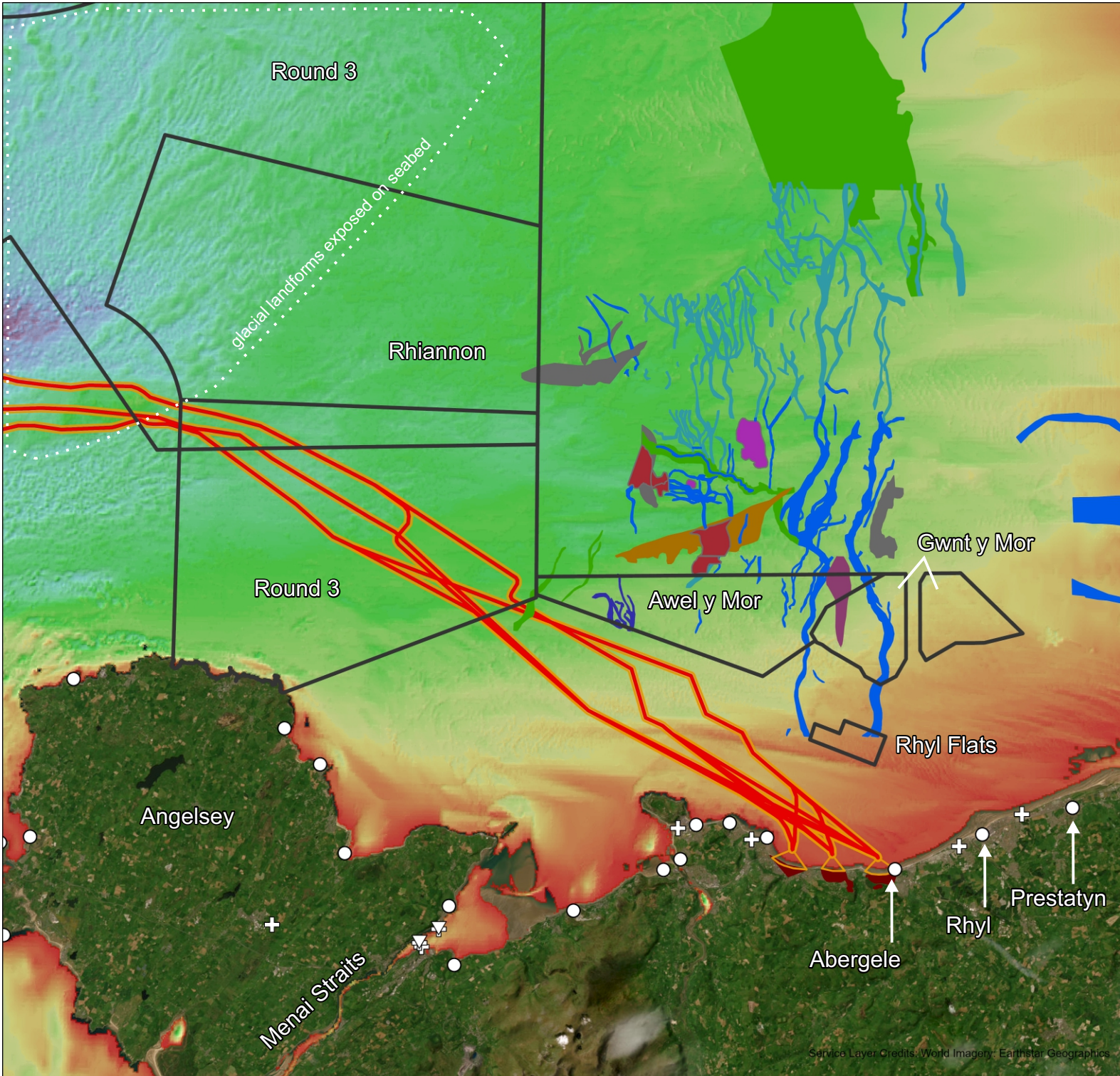
- 5.25. It should be noted that GIA models vary in their predictions of depth depending on input parameters such as ice sheet extents, thickness and the properties of the Earth's mantle and crust (Edwards and Craven 2017). Brooks *et al.* (2008), for example, suggest a lowstand of c. 45m bpsl for the Dublin area, whereas Bradley *et al.* (2023) suggest a shallower lowstand of c. 10m bspl. For north Wales, precise values of the post-LGM lowstand have not been published for older models; Brooks *et al.* (2008) suggest that the lowstand was below 30m bpsl. Bradley *et al.* (2023) suggest a more precise maximum lowstand of c. 30-32m bpsl.
- 5.26. Even the reduced values suggested by Bradley *et al.* (2023) are sufficient to result in significant seabed exposure during late MIS2 and into the early Holocene. At the Irish landfall, an RSL fall of c. 10m could have resulted in c. 0.5-4km of seabed exposure, depending on local gradient. At the Welsh landfall, up to c. 20km or more of seabed was potentially exposed beyond the present-day coast at the maximal lowstand, owing primarily to the shallower gradient.
- 5.27. Thereafter, rising RSL caused by reduced isostatic rebound coupled with rising GMSL resulted in rapid flooding of the exposed coastal landscapes. By c. 8,000 BP, RSL around Dublin is modelled to have been close to modern sea level (Figure 5d). For north Wales, this is believed to have occurred slightly later, likely around c. 6,000 BP (Bradley *et al.* 2023).
- 5.28. The GIA-modelled trend of steadily rising RSL during late MIS2 and the early Holocene in north Wales is supported by empirical evidence. A series of limiting dates from the north Welsh coast suggest that RSL was lower than c. 29m below modern mean sea level (MSL) at 12,600 BP. An additional 19 sea-level index points (SLIPS) track a rise in RSL from c. 24m below MSL at c. 11,200 BP to c. 1.6m below MSL by c. 5500 BP (Shennan *et al.* 2018). It is notable that several of these deeper samples come from buried peat and organic deposits submerged in the Menai Straits (Roberts *et al.* 2011).

- 5.29. For Dublin, there is presently no similar supporting empirical evidence for RSL rise; there are only six limiting dates in the British Isles sea-level database that show that RSL was not higher than 0.55-4m above MSL between c. 7800-3800 BP (Brooks and Edwards 2006; Shennan *et al.* 2018). These have been supplemented recently by dates retrieved from an intertidal peat from Bray, c. 25km south of Dublin, which suggests that RSL was still below present at c. 7600-7400 BP (see below and Collins 2023).

Indeed, there is an apparent mismatch between the predictions of the most recent GIA models and empirical data. The Bray intertidal peat suggests RSL in the general Dublin area was below present at c. 7500 BP, for example, whereas the Bradley *et al.* (2023) model indicates RSL at or near modern MSL at c. 8000 BP. Similarly, data from Wales suggests that RSL was at least c. 29m below MSL at c. 12,600 BP, whilst Bradley *et al.* (2023) model it to have been between 18-24m below MSL at 14-12,000 BP. This raises the possibility that although the general GIA and RSL trends modelled by Bradley *et al.* (2023) are likely to be reasonably accurate, the modelled duration and depth of the late MIS2-early Holocene lowstand may be slightly shorter and shallower than in actuality.

- 5.30. Notwithstanding these potential misfits, evidence of palaeo-landscapes which formed during the MIS2-early Holocene lowstand has been found in proximity to the proposed development in north Wales (Figure 6). Using three-dimensional (3D) seismic profiling to map buried deposits, the West Coast Palaeo-landscapes project (WCPP) identified a preserved palaeo-coastline and associated estuary, aligned approximately on the 40m lowest astronomical tide (LAT) contour, and located c. 8km northeast of the proposed development (Fitch and Gaffney 2011). Additional palaeo-landscape features identified within 10km of the proposed development include a series of north-south aligned palaeo-channels, a small delta and possible floodplain deposits (Fitch and Gaffney 2011). One of these latter floodplain deposits is mapped as intersecting the route of the proposed cable.
- 5.31. None of these palaeo-landscape features has been dated directly, though Fitch and Gaffney (2011) assigned generalised Late Glacial and Holocene ages; the palaeo-coastline, estuary, floodplains and delta are considered to be Holocene, while the large





LEGEND:

- Mares Connect routes
- Mares Connect MLA
- Mares Connect landfall
- Submerged forests, coastal peats (Bell 2007)
- Sea level data (Shennan et al. 2018)
- Sea-level index point
- Terrestrial limiting date
- EMODNET bathymetry (m MSL)

WCCP (Fitch & Gaffney 2011)

- Basin
- Channel
- Channel and floodplain
- Coastline
- Delta
- Estuary
- Floodplain
- High ground
- Tunnel valley

GEODETTIC INFORMATION:

0 20 Kilometers

Coordinate System: WGS 1984 UTM Zone 30N
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False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -3.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter

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PROJECT TITLE:
MaresConnect Interconnector

FIGURE TITLE:
Documented palaeo-landscape features and key sites, Wales

DRAWN BY: KW
CHECKED BY: DG
APPROVED BY: MW

PROJECT NO.
23064

FIGURE NO.
6

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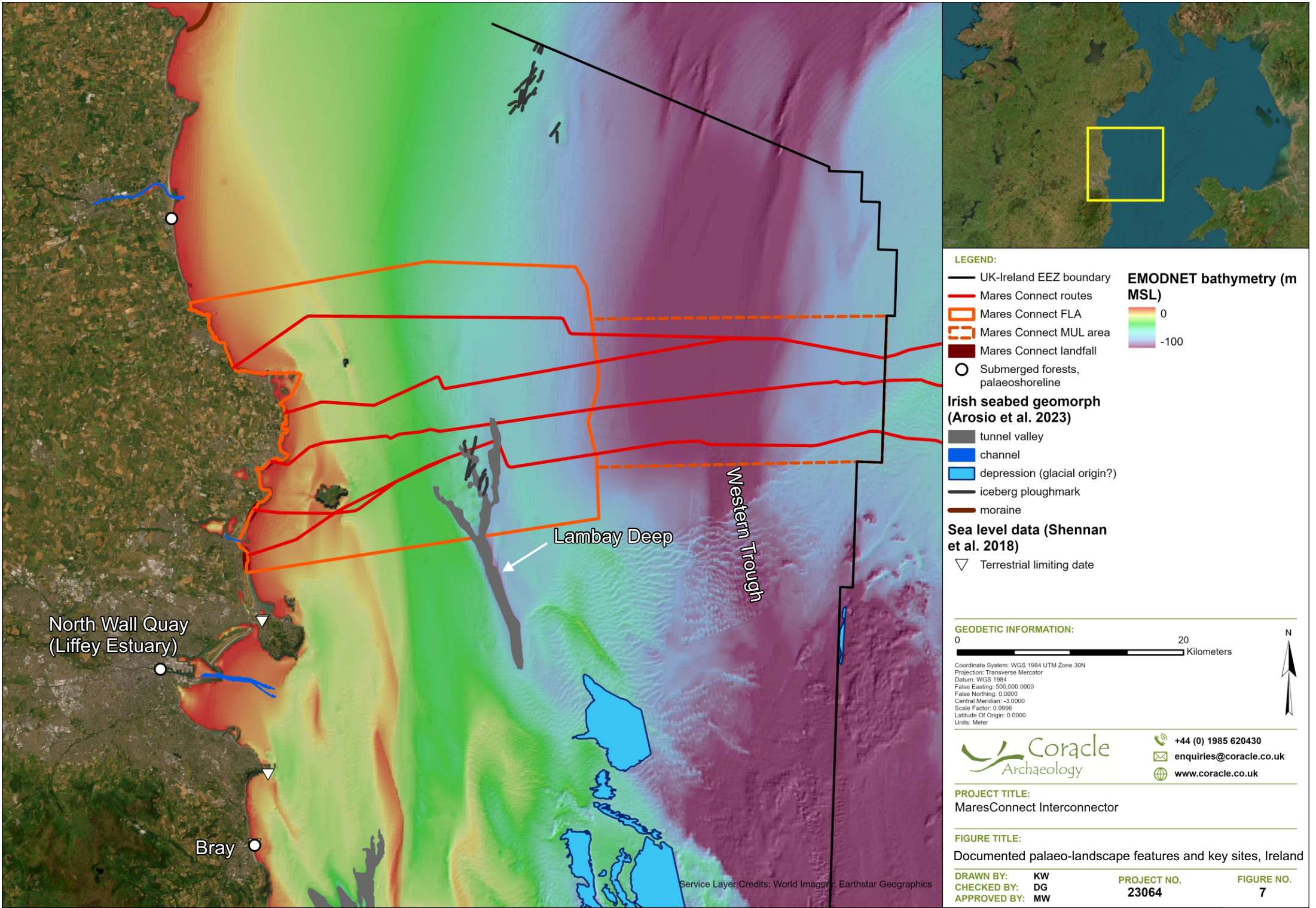
north-south running palaeo-channels are regarded as Late Glacial. It is important to note, however, that in the absence of geochronological data or palaeo-environmental assessment of geotechnical samples, these interpretations and dating remain somewhat speculative. It is noteworthy that the assignation to the Holocene of the palaeo-coastline and estuary located at c. 40m bpsl does not fit with the extant empirical data from north Wales, which suggests that RSL was c. 25m bpsl at the onset of the Holocene (Roberts *et al.* 2011; Shennan *et al.* 2018).

- 5.32. Palaeo-channel features have also been identified from geophysical investigations in support of the proposed Awel y Môr offshore wind farm (OWF), which lies c. 1.5km northeast of the licenced area in UK waters. Seismic profiles from this area show a complex array of small, cross-cutting channel features with relatively well-defined basal reflectors and acoustically transparent fills that cannot be traced laterally between neighbouring seismic lines (Unit 4: Wessex Archaeology 2021); these coincide with the deltaic system mapped by the WCPP.
- 5.33. This channel complex appears to lie above, and cuts into, a unit interpreted as glacial in origin, thus supporting the interpretation that it is late MIS2-early Holocene in age. Based on the north-south alignment of this system as mapped by the WCPP (see Fitch and Gaffney 2011), there is the possibility that associated tributaries could extend south to intersect the proposed development. Geotechnical site investigations conducted for Awel y Môr in summer 2022 should provide samples from these channel systems to establish their geoarchaeological potential.
- 5.34. Large palaeo-channels were also identified in the proposed export cable corridor (ECC) for Awel y Môr (Unit 5: Wessex Archaeology 2021). These may be the same, or part of, the large channel system identified by the WCPP which runs north-south from the Rhyl Flats OWF and also intersects the eastern part of the Awel y Môr array area and the Gwynt-y-Mor OWF. These palaeo-channels are thought to date to between the LGM and the Holocene marine transgression (Wessex Archaeology 2021) and, if their alignment continues, they could extend further south to intersect this proposed development.

- 5.35. Secure evidence of submerged palaeo-landscapes comes from the coast and intertidal zone of north Wales. Multiple sites in this area have intertidal peats / submerged forests exposed on the foreshore (Bell 2007; Figure 6), including the prospective landfall site at Abergele.
- 5.36. The only reported work on this deposit was undertaken by Bibby (1940), who suggested that the peat bed contained large quantities of *Phragmites australis* (common reed). The poorly preserved pollen assemblage also indicated a reed and sedge community with *Nymphaeaceae* (water lilies), indicative of standing open water, and *Chenopodiaceae* (goosefoots) suggesting local brackish communities. Woodland components included *Alnus* (alder), *Quercus* (oak), *Tilia cordata* (small-leaved lime) and *Corylus* (hazel), typical of a mid-Holocene sequence and comparable to pollen obtained from similar submerged forests at Rhyl (Bibby 1940) and Prestatyn (Armour-Chelu *et al.* 2007), c. 6km and 10km to the east respectively. The Rhyl submerged forest also contains an antler mattock which has been dated to 7590-7310 BP, while dates ranging from c. 6350-2150 BP have been obtained from coastal peat deposits buried slightly inland of the present shoreline at Prestatyn. Evidence of Mesolithic occupation has also been identified at Prestatyn, c. 400m inland of the peats and dating to c. 10150-9490 BP (Armour-Chelu *et al.* 2007).
- 5.37. In contrast, there is no definitive evidence of submerged palaeo-landscapes in proximity to the proposed development in Welsh waters, seaward of c. 40m water depth. The licenced area running north of Anglesey overlaps with areas investigated previously for the Round 3 Rhiannon / Celtic Array OWF, prior to its cancellation. Assessment of seismic profile and borehole data from this project identified two units of potential archaeological interest; Units 5b and 6, interpreted as glaciofluvial alluvium and glacial outwash sands respectively (Wessex Archaeology 2014a). Stage 3 geoarchaeological assessment of recovered samples, however, identified only sparse micro-palaeontological evidence, which suggested a high degree of reworking (Wessex Archaeology 2014b).
- 5.38. Moreover, the geophysical and geotechnical evidence from this area is suggestive of the presence of a well-preserved but predominantly glacial landscape, documenting

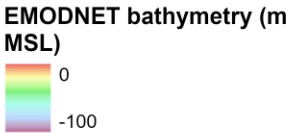
expansion and development of the ISIS and, subsequently, deglaciation in a marine setting. This is evidenced by geomorphological features, including iceberg scours (Van Landeghem and Chiverrell 2020). Large parts of this area were unlikely therefore to have been subaerially exposed post-deglaciation.

- 5.39. This pattern continues into the Irish sector of the study area. Based on GIA models, the deep water (>60m bpsl) of the Western Trough was not exposed after post-LGM deglaciation. Sediments here comprise thick deposits (tens of metres) of the WIS, principally its Prograded Facies (PF), interpreted as a Devensian / Midlandian deltaic to glaciomarine deposit. These are either outcropping or buried under modern seabed sediment. Underlying the PF is either the WIS Chaotic Facies (CF) or the WIS Formation B, both of which are interpreted as indicative of glacial deposition in a watery setting (i.e. glaciomarine / glaciolacustrine; Jackson *et al.* 1995; Mellet *et al.* 2015).
- 5.40. Closer to the Irish coastline, on the western platform of the ISB, assessment of geophysical data has thus far identified only landforms of glacial origin, such as tunnel valleys, subglacial meltwater channels, moraines and eskers, and deposits of glacial sediment (Figure 7). These features record initial ice growth in the form of subglacial till laid down over bedrock, followed by deglaciation. This was initially ice-proximal in a marine or lacustrine setting and then ice-distal, with further ice retreat and RSL rise (Coughlan *et al.* 2019; 2020; Michel *et al.* 2023). This suggests that the majority of the area is unlikely to have been subaerially exposed following deglaciation
- 5.41. Unlike north Wales, there are presently no documented submerged forests / intertidal peats at the proposed Irish landfalls. The closest known example is at Bray, c. 25km south of the proposed development (Figure 7). This comprises a layer of peat with *in-situ* tree stumps, first documented in the late 19th century (Praeger 1896).
- 5.42. Subsequent work has identified two layers of peat. The upper is located 0.6-0.8m below beach level and has been radiocarbon dated to 6396-6281 BP; the lower is located c. 0.6-2m below beach level, and dates to 7569-7431 BP (Collins 2023). Slightly closer to the study area (c. 15km away), in the Liffey Estuary, Dublin, excavations under reclaimed land at the North Wall Quay revealed a palaeo-shoreline at depth of c. 6.3m bpsl and



LEGEND:

- UK-Ireland EEZ boundary
- Mares Connect routes
- Mares Connect FLA
- - - Mares Connect MUL area
- Mares Connect landfall
- Submerged forests, palaeoshoreline



Irish seabed geomorph (Arosio et al. 2023)

- tunnel valley
- channel
- depression (glacial origin?)
- iceberg ploughmark
- moraine

Sea level data (Shennan et al. 2018)

- ▽ Terrestrial limiting date

GEODETTIC INFORMATION:



Coordinate System: WGS 1984 UTM Zone 30N
Projection: Transverse Mercator
Datum: WGS 1984
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -3.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter



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PROJECT TITLE:
MaresConnect Interconnector

FIGURE TITLE:
Documented palaeo-landscape features and key sites, Ireland

DRAWN BY: KW	PROJECT NO. 23064	FIGURE NO. 7
CHECKED BY: DG		
APPROVED BY: MW		

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buried under thick deposits of estuarine silts. Significantly, a complex of Mesolithic wooden fishtraps were identified on this palaeo-shoreline. These have been dated to 8100-7700 BP (McQuade and O'Donnell. 2007).

Potential for palaeo-landscape discovery

- 5.43. It is possible to make some observations regarding the potential for the identification of palaeo-landscape features during works associated with the proposed development, based on the extant data from the ISB. Now-submerged parts of the ISB were almost certainly subaerially exposed at times before and after the last (MIS2) glaciation. The erosive effects of glaciation suggest nevertheless that preservation of palaeo-landscape deposits predating the last glaciation is likely to be very limited, except perhaps in exceptional, localised circumstances. It is notable that, for much of the study area, the deepest Quaternary deposits are often subglacial tills associated with the last glaciation, laid down directly over bedrock (e.g. CBF-UT). Even where pre-MIS2 sediments have been preserved, these are of glacial origin (e.g. CBF-LT). On land, pre-MIS2 deposits have not been documented close to the Irish landfall, whilst in Wales, such deposits have only been identified in caves. Though the preservation of pre-MIS2 deposits on the continental shelf within the study area cannot therefore be discounted entirely, the potential is considered very low.
- 5.44. Preservation of palaeo-landscapes that formed after the LGM is, however, more likely. This has been confirmed for the Welsh inshore part of the study area (shallower than c. 40m below MSL) in the form of intertidal peats / submerged forests and buried landforms. The latter include palaeo-channels and possible palaeo-shorelines, deltas and estuaries. Similar deposits and landforms remain unconfirmed for the Irish study area, though it is unclear if this is owing to absence of evidence or a lack of research.
- 5.45. It is noteworthy nevertheless that preservation potential is not uniform across the study area. The central and deepest parts of the seabed straddling the UK-Ireland median line (deeper than c. 50m bpsl) are unlikely to have been subaerially exposed post-LGM; it is notable that much of the geological evidence from this zone shows deglaciation in a marine environment, followed by fully marine sedimentation. The likelihood of

encountering post-LGM palaeo-landscapes suitable for past human occupation in this area is considered therefore to be very low.

- 5.46. The bathymetry of the ISB, combined with the spatial pattern of RSL change, means that larger areas of the Welsh inshore region were subaerially exposed in late MIS2 and into the early Holocene. This area is shallower in gradient and is considered to have experienced a deeper lowstand compared to the Irish nearshore.
- 5.47. The presence of known palaeo-landscape sites and features adjacent to the study area at the proposed Welsh landfall locations suggests that the potential to encounter post-LGM palaeo-landscapes suitable for past human occupation in the Welsh inshore area is high. Geophysical and geotechnical data acquired by the proposed project may contribute to the wider mapping of these palaeo-landscapes, and provide further details and insights into patterns of palaeo-environmental change on the north Wales coast.
- 5.48. The identification and investigation of any submerged forest deposits at Abergele during works associated with the proposed development would enable the age and palaeo-environment of the site to be established. This would confirm whether these deposits are contemporary with Prestatyn, where Mesolithic activity (including middens) are found within the wetland sequence associated with peat beds and a palaeo-channel (Armour-Chelu *et al.* 2007), or Rhyl, where Mesolithic finds (e.g. the antler mattock) are known from the submerged forest. Sampling and mitigation strategies will be outlined in a project-specific written scheme of investigation, and as the project progresses. This will be submitted to the RCAHMW for review and comment in due course.
- 5.49. For the Irish coast and inshore, there is moderate potential of encountering deposits of palaeo-environmental interest. The shallower parts of the FLAA were almost certainly subaerially exposed after the LGM and into the early Holocene, and evidence has been preserved elsewhere on the Irish east coast (e.g. Bray, Liffey Estuary). Yet, there is currently no definitive submerged palaeo-landscape evidence from within the study area. It is possible that geophysical and geotechnical survey data acquired by the proposed development may contribute to filling this knowledge gap.

Recorded marine cultural heritage

- 5.50. The following section describes the recorded marine cultural heritage in proximity to the proposed development, as found in the relevant national and international databases described above. For ease of review, it is split into Irish and UK (Welsh) jurisdictions.

Limitations of data

- 5.51. One of the greatest limitations when researching known and potential marine cultural heritage is the difficulty of locating and / or accurately identifying recorded maritime losses. For many losses, the location of the sinking of the vessel comprises a general area description, such as '16 miles east of Lambay' or lost 'eight miles east of Point Lynas', which is not useful practically for the purposes of accurate assessment, except to indicate that potential exists to encounter unrecorded cultural remains. This is particularly true of ships that ran aground on the foreshore, where salvage and poor survival of remains in such a high-impact environment makes locating losses especially problematic.
- 5.52. Recorded maritime losses are also heavily biased towards the 19th and 20th centuries, when more comprehensive records of losses were compiled. Many wrecks have been identified through sonar / geophysical survey, but this too presents difficulties; locations would have been recorded using a global positioning system (GPS), which until relatively recently was accurate to only 100m (Baird 2009; Satchell 2012), or by DECCA which could provide accuracy to only one kilometre.
- 5.53. The details for specific cultural heritage assets within the study area were acquired from the sources cited above (Section 4). These databases are each derived, in turn, from a variety of sources including various published lists of marine losses and marine surveys. Consequently, there are both overlaps and discrepancies between the datasets.
- 5.54. The project geographic information system (GIS) used World Geodetic System 1984 (WGS84) Universal Transverse Mercator (UTM) Zone 30N (European Petroleum Survey Group [EPSG] projection 32630). Geospatial data for the application area was supplied by the client in UTM30N. Conversely, geospatial data from the WIID, the NMS (SMR and NIAH), the RCAHWW NMRW and the UKHO were provided natively in WGS84 (EPSG

projection 4326). To confirm that spatial offsets observed between individual WIID, RCAHMW and UKHO records were not the product of projection / transformation issues, these three datasets were initially input into the GIS without geographic transformation from WGS84. Data from the Welsh Archaeological Trust (WAT) were transformed from Ordnance Survey Great Britain 1936 (OSGB36; EPSG projection 27700) into WGS84, using the transformation OSGB 1936 to WGS 1984 Petroleum (EPSG transformation 1314), which has a stated accuracy of $\pm 2\text{m}$ and then clipped to the application area. Following all quality control checks (QC), all geospatial data were then clipped to within the bounds of the WSA / MUL / FLAA and projected into UTM30N.

- 5.55. Wrecks and obstructions summarised below are generally referred to using the UKHO designations of 'live', 'dead' or 'lifted'. 'Live' refers to those where a location is known, which has been verified by recent surveys. 'Dead' refers to those that have been recorded as lost in a certain location, but which have not been detected by repeated, or the most recent, surveys. 'Lifted' refers to vessels that have been recorded as lost and then salvaged subsequently.
- 5.56. The tables and discussion below include all NMS, RCAHMW, WAT and UKHO records contained within the application area. Records of dead wrecks and obstructions are also included where relevant; although they may not have been detected in recent surveys, the recorded locations may still contain remains of cultural heritage interest. Given locational discrepancies, there is also a possibility that wrecks lie beyond previous search areas.
- 5.57. The old archaeological adage that 'absence of evidence is not evidence of absence' is pertinent here. In other cases, however, it is clear from the details of an entry that there is no reason to believe that there are now or ever have been archaeological remains in a particular location. These entries have also been included in the table and illustrations, and are used to emphasise marine archaeological potential.
- 5.58. The various datasets used in the compilation of this rapid DBA have been cross-referenced to remove duplicate entries and are presented in the tables below. For those mentioned in multiple datasets, the reference to each source is provided.

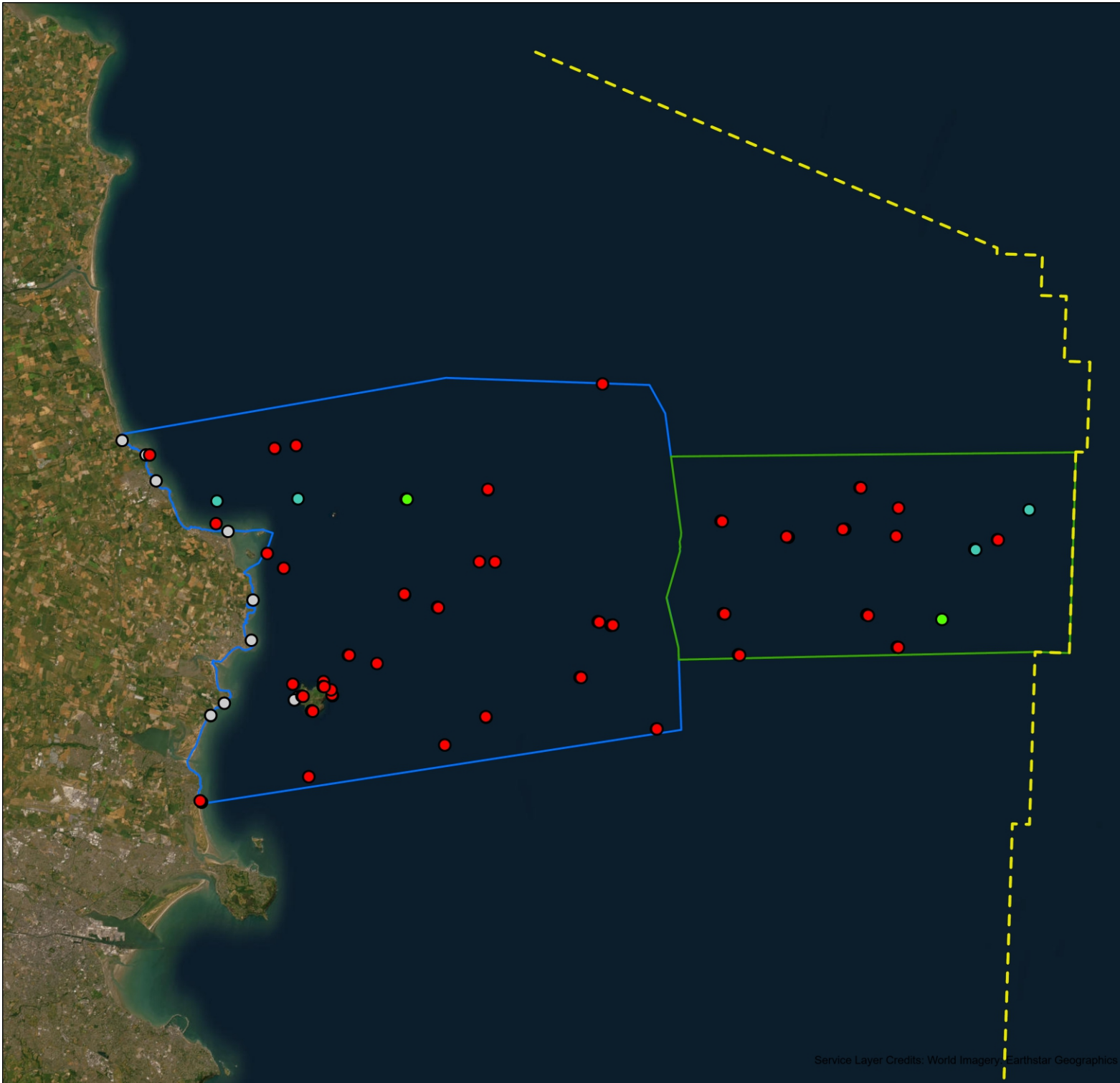
Ireland: sites of cultural heritage interest within the FLAA and MUL areas

- 5.59. A total of 58 cultural heritage assets are recorded within (Table 1). These include 40 wrecks, four obstructions, two unknown anomalies and 12 sites and monuments. The latter are either located in the intertidal zone, or close enough to the coastline to be potentially affected by wave action. For these records, a 100m buffer from the mean high water mark (MHWM) was used to account for the possible extension of a site beyond the single point coordinate provided in the various archaeological databases.
- 5.60. Of the wrecks, 26 are considered live, eight dead and one lifted; the status of the remaining five is unknown. The two unknown anomalies located within the application areas are listed in either the UKHO data or the WIID, though no further descriptions are provided. Cultural heritage assets located within the FLAA and MUL area are presented in Table 2 and Figure 8.

Table 1 Summary of cultural heritage assets in the MaresConnect FLAA and MUL areas

Type	Status	Count	Total
Wreck	Live	26	40
	Dead	8	
	Unknown	5	
	Lifted	1	
Obstruction	Live	3	4
	Dead	1	
Unknown anomalies	n/a	2	2
Sites and monuments	n/a	12	12
Total			58

- 5.61. It should be noted that, in the majority of instances, there is a discrepancy between the recorded positions of wrecks within the UKHO database and the WIID, often of tens of metres and occasionally greater than 1km. The offset is not standard, and is not an issue with the way that the data has been projected into the GIS (see above). Verification of the exact position of wrecks using the INFOMAR MBES data will be undertaken during the compilation of a complete desk-based assessment of the selected route as part of



LEGEND:

- MaresConnect Foreshore Licence area
- MaresConnect MUL area
- Ireland-UK median line

Asset type

- Anomaly
- Obstruction
- Site/Monument
- Wreck

GEODETTIC INFORMATION:

0 16 Kilometers

Coordinate System: WGS 1984 UTM Zone 30N
Projection: Transverse Mercator
Datum: WGS 1984
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -3.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter

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PROJECT TITLE:
MaresConnect Interconnector

FIGURE TITLE:
Heritage assets in the FLAA and MUL areas (Ireland)

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FIGURE NO.
8

the consenting process, and following review of project-specific marine geophysical survey data. Where there is a discrepancy, both positions are noted in Table 2 and Figures 8-10.

Table 2 Cultural heritage assets located within the FLAA and MUL areas (Ireland)

CA no.	Name	Type	Date	Status	Easting (UTM30N)	Northing (UTM30N)	Source & ref. no.
CA1	<i>Tayleur</i>	Wreck	1854	Live	301128	5931288	UKHO 6950
					301092	5931335	WIIID W00805
CA2	<i>Strathtay</i>	Wreck	1885	Live	300543	5932179	WIIID W00803
CA3	<i>County of Lancaster</i>	Wreck	1901	Live	304003	5933355	UKHO 7121
					304004	5933351	WIIIDW00748
CA4	<i>Marquis</i>	Wreck	1917	Live	334174	5942031	WIIID W02050
	<i>Peaceful Star or The Marquis</i>		1941 / 1917		334063	5942008	UKHO 7043
CA5	<i>Downshire</i> (possibly)	Wreck	1918	Live	311161	5944556	UKHO 7046
					311154	5944592	WIIID W01996
CA6	<i>Glenford</i> (possibly)	Wreck	1918	Live	344033	5941338	UKHO 7056
					344085	5941322	WIIID W02022
CA7	<i>Normandiet</i> (possibly)	Wreck	1918	Live	330530	5941512	WIIID W02061
	<i>U-1051 or Normandiet</i>		1945 / 1918		330428	5941536	UKHO 7106
CA8	<i>Polwell</i>	Wreck	1918	Live	305781	5937790	UKHO 7047
					305760	5937827	WIIID W02067
CA9	<i>Salaminia</i> (probably)	Wreck	1918	Live	326191	5942548	UKHO 7039
					326262	5942534	WIIID W02082
CA10	<i>St. Michan</i> (possibly)	Wreck	1918	Live	319103	5935811	UKHO 7041
					319215	5935838	WIIID W02078
CA11	<i>Shamrock</i>	Wreck	1918	Live	301035	5931654	WIIID W00800
CA12	Unidentified or <i>Peaceful Star</i>	Wreck	Unknown / 1941	Live	327319	5933916	UKHO 7032
	<i>Peaceful Star</i> (possibly)		1941		327399	5933892	WIIID W02065
CA13	<i>Rose Mystique</i>	Wreck	1957	Live	300529	5931875	UKHO 6951
					300596	5931854	WIIID W09983
CA14	<i>St. Ibor</i>	Wreck	1973	Live	311618	5939912	UKHO 7044
					310606	5939919	WIIID W10055
CA15	<i>Sharelga</i>	Wreck	1982	Live	337499	5941559	UKHO 7087

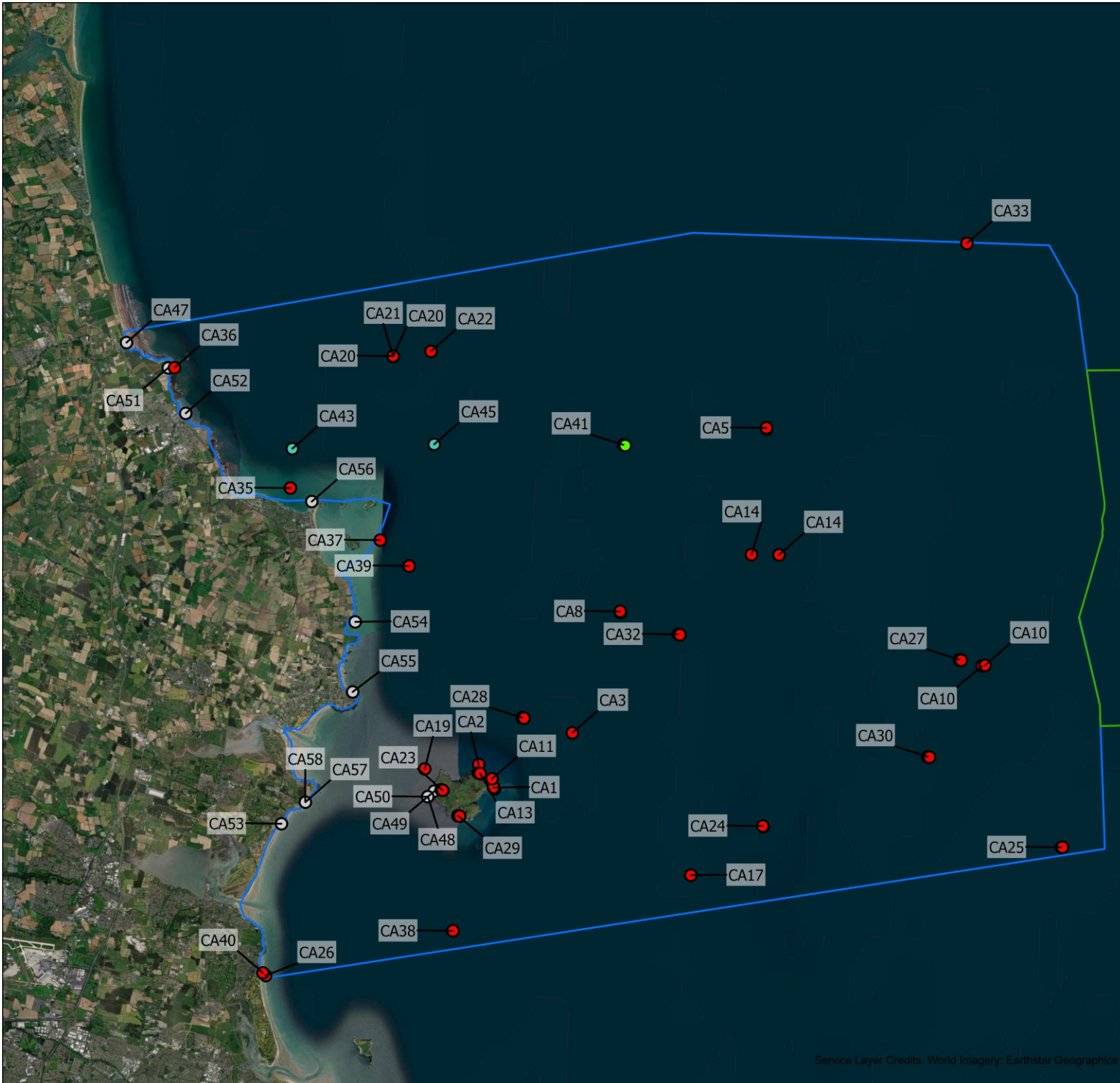
CA no.	Name	Type	Date	Status	Easting (UTM30N)	Northing (UTM30N)	Source & ref. no.
					337644	5943393	WIIID W10033
CA16	Wisemans	Wreck	1984	Live	335158	5944707	UKHO 7126
					335223	5944686	WIIID W11695
CA17	Benaiah	Wreck	1992	Live	308373	5928103	UKHO 7139
							WIIID W09459
CA18	Noranya	Wreck	2006	Live	335598	5936499	UKHO 68022
					335699	5936457	WIIID W09908
CA19	Atika	Wreck	2009	Live	298558	5932020	UKHO 73590
CA20	Unidentified	Wreck	Unknown	Live	297387	5947239	UKHO 6952
					297389	5947238	WIIID W00471/2
CA21	Unidentified	Wreck	Unknown	Live	297403	5947223	UKHO 69594
			Unknown		297389	5947238	WIIID W00471/2
CA22	Unidentified	Wreck	Unknown	Live	298783	5947415	UKHO 69592
							WIIID W00481
CA23	Unidentified	Wreck	Unknown	Live	299156	5931252	UKHO 6983
					299221	5931231	WIIID W10599
CA24	Unidentified	Wreck	Unknown	Live	311037	5929890	UKHO 7116
					311020	5929915	WIIID W02210
CA25	Unidentified	Wreck	Unknown	Live	322036	5929128	UKHO 7125
					322065	5929134	WIIID W02212
CA26	Unknown	Wreck	Unknown	Live	292686	5924401	WIIID W00861
CA27	Geraldine	Wreck	1918	Dead	318272	5936047	UKHO 7040
					318337	5936027	WIIID W02021
CA28	Nellie Esplin	Wreck	1924	Dead	302146	5933911	UKHO 7037
					302212	5933890	WIIID W00786
CA29	Vision	Wreck	1994	Dead	299780	5930297	UKHO 6982
					299845	5930276	WIIID W11676
CA30	Unidentified	Wreck	Unknown	Dead	317101	5932473	UKHO 7035
					317167	5932452	WIIID W02213
CA31	Unidentified	Wreck	Unknown	Dead	337562	5934416	UKHO 7038
					337627	5934394	WIIID W10281
CA32	Unidentified	Wreck	Unknown	Dead	307896	5936984	UKHO 7105
					307962	5936963	WIIID W02209
CA33	Unidentified	Wreck	Unknown	Dead	318543	5951395	UKHO 7108
CA34	Unidentified	Wreck	Unknown	Dead	326362	5936578	UKHO 7119
					326428	5936557	WIIID W02215
CA35	Lady Lorraine	Wreck	2006	Lifted	293608	5942373	UKHO 68166

CA no.	Name	Type	Date	Status	Easting (UTM30N)	Northing (UTM30N)	Source & ref. no.
CA36	<i>Bell Hill</i>	Wreck	1875	Unknown	289332	5946816	WIIID W00543
CA37	Unidentified	Wreck	Unknown	Unknown	296915	5940454	UKHO 81479
					296917	5940458	WIIID W18553
CA38	Unidentified	Wreck	Unknown	Unknown	299593	5926050	UKHO 81480
					299600	5926049	WIIID W18555
CA39	Unidentified	Wreck	Unknown	Unknown	297971	5939502	UKHO 81481
					297981	5939498	WIIID W18554
CA40	Unknown	Wreck	Unknown	Unknown	292586	5924502	WIIID W11141
CA41	Unidentified	Unknown	Unknown	Live	305881	5943968	UKHO 7048
					305946	5943946	WIIID W02216
CA42	Unidentified	Unknown	Unknown	Unknown	340446	5936200	UKHO 103084
CA43	Unidentified	Obstruction	Unknown	Live	293675	5943828	UKHO 68918
CA44	Unidentified	Obstruction	Unknown	Live	342571	5940735	UKHO 7045
					342629	5940690	WIIID W02217
CA45	Unidentified	Obstruction	Unknown	Live	298903	5943986	UKHO 71507
CA46	Unidentified	Obstruction	Unknown	Dead	346080	5943266	UKHO 7118
					346081	5943267	WIIID W10295
CA47	Passage tomb	Site / monument	Neolithic	n/a	287557	5947738	SMR ME028-021----
CA48	Midden	Site / monument	c. 1500	n/a	298677	5930996	SMR DU009-001004-
CA49	Burial ground	Site / monument	1470-1675	n/a	298908	5931197	SMR DU009-001009-
CA50	Burial ground	Site / monument	c. 1500	n/a	298665	5930995	SMR DU009-001003-
CA51	Newhaven harbour	Site / monument	Pre 1800s	n/a	289098	5946804	SMR DU002-015----
CA52	Balbriggan harbour	Site / monument	1761	n/a	289742	5945131	NIAH 11305018
CA53	Martello tower	Site / monument	1804-5	n/a	293275	5930000	SMR DU012-008----
							NIAH 11337001
CA54	Loughshinny harbour	Site / monument	c. 1830	n/a	295994	5937442	NIAH 11318007
CA55	Rush harbour	Site / monument	c. 1835	n/a	295897	5934860	NIAH 11324013
CA56	Skerries harbour	Site / monument	c. 1850	n/a	294388	5941874	NIAH 11311001

CA no.	Name	Type	Date	Status	Easting (UTM30N)	Northing (UTM30N)	Source & ref. no.
CA57	Holy well	Site / monument	n/a	n/a	294152	5930797	SMR DU012-007----
CA58	Cave	Site / monument	n/a	n/a	294152	5930797	SMR DU012-007001-

5.62. The 26 live wrecks include:

- RMS *Tayleur* (**CA1**), a British fully rigged iron clipper of 1750 gross registered tonnage (grt) owned and operated by the White Star Line. The vessel left Liverpool on its maiden voyage in January 1854, bound for Australia with 652 passengers and crew, and 4000 tons of cargo. The ship's rudder was undersized for its tonnage, the rigging was faulty and the iron hull interfered with the operation of the *Tayleur's* compasses; despite dropping two anchors, the vessel was forced onto rocks off the east coast of Lambay Island on 21 January with the loss of 380 lives (WIID W00805; wrecksite.eu);
- SS *Strathtay* (**CA2**), an iron steam ship of 270 grt, lost on rocks to the northeast of Lambay Island on 18 October 1885 (W00803; irishwrecksonline.net);
- the *County of Lancaster* (**CA3**), lost *en route* from Ayr to Dundalk in 1901 with the loss of eight lives. The cargo of coal is still intact (W00748);
- the *Marquis* or the *Peaceful Star* (**CA4**). The wreck is listed as the *Marquis* in the WIID (W02050), a British steamship sunk by German gunfire in 1917. Subsequent assessment of the dimensions of the wreck by Innes McCartney (2022) suggests that it is more likely to be the *Peaceful Star* (UKHO 7043), a fishing vessel bombed by German aircraft in March 1941. The UKHO charted position of the *Marquis* lies beyond the MUL area;
- SS *Downshire* (possibly; **CA5**), a British steamer of 368 grt built in 1905, sunk by gunfire from German submarine *U-61* on 21 September 1918 (W01996);



LEGEND:

- MaresConnect Foreshore Licence area
- MaresConnect MUL area
- Ireland-UK median line

Asset type

- Anomaly
- Obstruction
- Site/Monument
- Wreck

*duplicate positions shown and labelled separately if >100m apart

GEODETTIC INFORMATION:

0 10 Kilometers

Coordinate System: WGS 1984 UTM Zone 30N
Projection: Transverse Mercator
Datum: WGS 1984
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -3.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter

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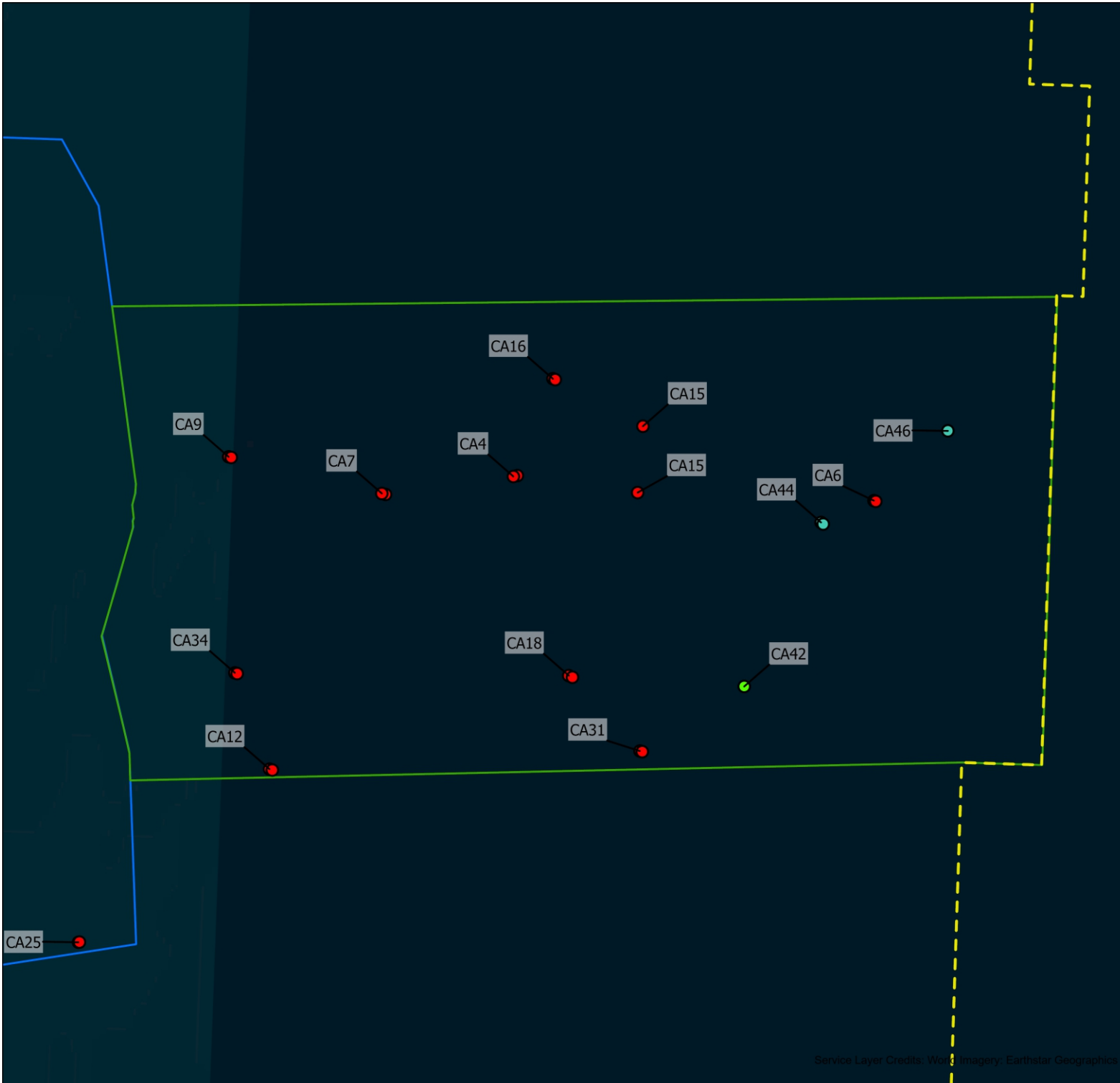
PROJECT TITLE:
MaresConnect Interconnector

FIGURE TITLE:
Heritage assets in the FLAA (Ireland)

DRAWN BY: KW
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PROJECT NO.
23064

FIGURE NO.
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LEGEND:

- MaresConnect Foreshore Licence area
- MaresConnect MUL area
- Ireland-UK median line

Asset type

- Anomaly
- Obstruction
- Site/Monument
- Wreck

*duplicate positions shown and labelled separately if >100m apart

GEODETTIC INFORMATION:

0 6 Kilometers

Coordinate System: WGS 1984 UTM Zone 30N
Projection: Transverse Mercator
Datum: WGS 1984
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -3.0000
Scale Factor: 0.9996
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PROJECT TITLE:
MaresConnect Interconnector

FIGURE TITLE:
Heritage assets in the MUL (Ireland)

DRAWN BY: KW
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PROJECT NO.
23064

FIGURE NO.
10

- SS *Glenford* (**CA6**), a British steamer of 494 grt, sunk by gunfire from a German submarine in 1918 (W02022);
- the *Normandiet* or *U-1051* (**CA7**). The wreck is charted as that of the *Normandiet* in the WIID (W02061), a British steamer of 1843 grt torpedoed by *U-91* in 1918. Analysis of the wreck as part of McCartney's *Echoes of the deep* project (2022) suggests that it is more likely to be the wreck of *U-1051* (UKHO 7106), torpedoed and sunk by HMS *Manners* on 26 January 1945. The UKHO charted position of the *Normandiet* lies beyond the MUL area;
- the *Polwell* (**CA8**), a British collier sunk by German submarine *U-96* in 1918 while *en route* from Troon to France with a cargo of coal (W02067);
- SS *Salaminia* (probably; **CA9**), a Greek steamship torpedoed and sunk by a German submarine in 1918 (W02082);
- a wreck tentatively identified in both the WIID and UKHO databases as the *St Michan* (**CA10**) or the *St Michael*, a British trawler sunk by *U-96* in 1918 (W02078);
- the *Shamrock* (**CA11**), a steamship that ran aground in 1918. The wreck lies in c. 10m of water (W00800);
- a wreck identified as the *Peaceful Star* in the WIID (W02065), lost in 1941. Assessment of the dimensions of the wreck suggests that it is too small to be the *Peaceful Star* (see **CA4**; McCartney 2022), and it has been reclassified by the UKHO as unidentified (**CA12**; 7032);
- the *Rose Mystique* (**CA13**), a French fishing trawler lost in a gale on 8 February 1957 (W09983);
- the *St. Ibor* (**CA14**), an Irish fishing trawler sunk off Skerries Harbour in heavy weather in October 1973 (W10055). The given positions of the wreck in the WIID and UKHO databases (7044) are more than 1km apart;
- the *Sharelga* (**CA15**), a fishing trawler that capsized on 18 April 1982 (W10033). The captain reported being towed at speed for a number of kilometres after the fishing nets became entangled with a mystery object, believed to be an active

submarine. The British Government subsequently accepted responsibility for the sinking (wrecksite.eu). The charted positions in the UKHO (7087) and WIID databases are c. 1.8km apart;

- the *Wisemans* (**CA16**), an Irish fishing vessel of 66 grt, sank while under tow on 11 March 1984 (W11695);
- the *Benaiah* (**CA17**), a British fishing vessel of 88 grt, sank while under tow in December 1992 (W09459);
- the *Noranya* (**CA18**), a British fishing vessel that caught fire and sank in July 2006 (W09908); and
- the *Atika* (**CA19**), a leisure yacht sunk off Lambay Island in 2009 (UKHO 73590).

- 5.63. Seven live wrecks are classified as unknown in the WIID and UKHO databases (**CA20-CA26**; see Table 2) but are protected nevertheless under Irish legislation. These have been located by either geophysical or diver surveys, but have yet to be identified.
- 5.64. A further eight wrecks located within the application areas are classified as dead, including *Geraldine* (**CA27**), *Nellie Esplin* (**CA28**) and *Vision* (**CA29**). The remaining dead wrecks are classified as unknown (**CA30-4**). The wreck of *Lady Lorraine* (**CA35**), a fishing vessel sunk in 2006 has been lifted; the status of the remaining five wrecks (**CA36-40**) is classified as unknown, and their positions should be seen as tentative at best. This will be reassessed following the archaeological review of marine geophysical survey data as part of subsequent consent applications.
- 5.65. A further 452 reported losses are recorded in the application areas of the proposed development. These losses have no associated spatial coordinates; the only spatial information recorded is their place of loss (e.g. Loughshinny, Skerries, Balbriggan) and their existence within the application area cannot be verified. For many of these losses, the location of the sinking of the vessel comprises a general description; as they have no spatial coordinates, they have not been assigned **CA** numbers. They are included

here merely to highlight the marine archaeological potential of the area. A full list sorted by place name can be found in Appendix A.

- 5.66. There are two unknown anomalies located within the application areas (**CA41-2**). One is considered by the UKHO to be live (**CA41**; UKHO 7048; WIID WO2216) while the status of the other is unknown (**CA42**; UKHO 103084). These will be reassessed following the archaeological review of marine geophysical survey data, should they be located in proximity to the selected route.
- 5.67. There are four obstructions located within the application areas. Of these, three are considered live (**CA43-5**) and one dead (**CA46**).
- 5.68. Twelve terrestrial archaeological sites and monuments are located within the application areas in the NIAH or in the sites and monuments record (SMR). All these sites are located either in the intertidal zone (i.e. below MHWS), or within the potential zone of wave action following assessment of their locations using high resolution satellite imagery. It should be noted that the zone of wave action is often higher on satellite imagery than is suggested by the high water mark provided by the Ordnance Survey Ireland. Identified sites include:
- a Neolithic passage tomb (**CA47**; SMR ME028-021----);
 - a midden dating to c. 1500, excavated on Lambay Island in 1995. Dating was based on a rimsherd of 'B' ware (**CA48**; DU009-001004-);
 - a burial ground / cemetery, located on Lambay Island in the intertidal zone. The burial ground was dated to 1470-1665 (**CA49**; DU009-001009-);
 - a multiple grave containing five young adult males and an adolescent, excavated on Lambay Island in 1995. The grave is believed to date to c. 1500 (**CA50**; DU009-001003-);
 - Newhaven harbour (**CA51**; DU002-015----), built pre 1800, and Balbriggan harbour (**CA52**; NIAH 11305018), built in 1761;
 - a Martello tower (**CA53**; SMR DU012-008----; NIAH 11337001), built c. 1805;

- Loughshinny (**CA54**; NIAH 11318007), Rush (**CA55**; 11324013) and Skerries harbours (**CA56**; 11311001), built in c. 1830, 1835 and 1850 respectively;
- a ritual site / holy well (**CA57**; SMR DU012-007----), known locally as the 'Chink well'; and
- a natural spring well located in a sea cave (**CA58**; DU012-007001-) and accessible at low tide.

Aviation remains

- 5.69. No records of aviation remains were identified in the Irish application area during searches undertaken for this baseline assessment. Given the imprecise nature of aircraft loss positional data and the ephemeral nature of any aircraft crash sites at sea, it is not possible to discount entirely the potential for aviation remains to be encountered during works associated with the proposed development. The possibility of doing so is therefore considered moderate. This will be reassessed following the archaeological review of marine geophysical survey data.

Wales: sites of cultural heritage interest within the wider study area

- 5.70. A total of 132 records were identified in the WSA in UK (Welsh) waters, including 100 wrecks, five aircraft, two submerged forests, two obstructions, one geophysical anomaly, one seascape / named maritime location, two anchorages, 12 findspots, and seven monuments (Table 3). Of the 100 wrecks, 15 are considered live, six dead, and 11 have an unknown status. The remaining 68 wrecks are reported losses, the existence of which has not been verified. Cultural heritage assets located within the WSA in UK waters are presented in Table 4 and Figures 11-15; where there is a discrepancy between recorded locations in different datasets, both are recorded.

Table 3 Summary of cultural heritage assets in the MaresConnect WSA area (UK)

Type	Status	Count	Total
Aircraft	Reported loss	5	5
Wreck	Live	15	100
	Dead	6	
	Unknown	11	
	Reported loss	68	
Submerged forest	N/A	2	2
Seabed anomaly	Unknown	1	1
Obstruction	Dead	2	2
Seascape / named location	N/A	1	1
Anchorage	N/A	2	2
Findspot	N/A	12	12
Monument	Extant	7	7
Total			132

- 5.71. One live wreck is recorded on the beach at Pensarn. The remains of a wooden vessel (**CA501**) were identified by a member of the public, and reported to the Clwyd Powys Archaeological Trust (CPAT). The vessel was surveyed by CPAT during low tide on 1 August 2019; it lies on a broadly even keel with futtocks of roughly equal height visible on both sides. The vessel lies in its own scour pool, making access difficult (see Duckers 2019).
- 5.72. At the time of survey, the visible hull remains measured c. 12.5m x 4.65m. The overall dimensions of the wreck are a close match to the documented loss of the *Endeavour*, blown ashore and lost at Abergele in 1854. Further survey and dendrochronological sampling of the wreck remains were recommended by CPAT, and it is possible that the latter will help to positively identify the wreck (primary reference number [PRN] 164091 and 164090; national primary reference number [NPRN] 271368 and 800048).



LEGEND:

- MaresConnect marine licenced areas
- wider study area (WSA)
- Ireland-UK median line

Asset type

- Aircraft
- Anchorage
- Anomaly
- Findspot
- Monument
- Named location
- Obstruction
- Reported loss
- Submerged forest
- Wreck

GEODETTIC INFORMATION:

0 30 Kilometers

Coordinate System: WGS 1984 UTM Zone 30N
Projection: Transverse Mercator
Datum: WGS 1984
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -3.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter

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PROJECT TITLE:
MaresConnect Interconnector

FIGURE TITLE:
Heritage assets in the wider study area (Wales)

DRAWN BY: KW
CHECKED BY: DG
APPROVED BY: MW

PROJECT NO.
23064

FIGURE NO.
11

Service Layer Credits: World Imagery: Earthstar Geographics

Table 4 Cultural heritage assets within the WSA (UK)

CA no.	Name	Type	Date	Status	Easting (UTM30N)	Northing (UTM30N)	Source and ref. no.
CA501	Unidentified Wreck, Pensarn Beach	Wreck	Post-medieval	Live	460594	5905342	NMRW NPRN 800048
							CPAT PRN 164090
CA502	Cork	Wreck	1918	Live	421194	5933243	NMRW NPRN 272119
					421199	5933250	UKHO 7363
CA503	Sea Gull	Wreck	1918	Live	394956	5940889	NMRW NPRN 240669
					394956	5940890	UKHO 7370
CA504	Hyacinth	Wreck	1924	Live	414171	5935808	NMRW NPRN 506764
					414180	5935816	UKHO 7355
CA505	Delfina	Wreck	1928	Live	428860	5924036	NMRW NPRN 272209
					428857	5924022	UKHO 7437
CA506	Vigsnes	Wreck	1945	Live	421490	5933424	NMRW NPRN 240199
					421480	5933423	UKHO 7361
CA507	Fin-ar-bed	Wreck	2001	Live	380134	5936704	UKHO 60302
CA508	Unidentified (slate barge A)	Wreck	Post-medieval	Live	446861	5912491	NMRW NPRN 506955
					446874	5912504	UKHO 8139
CA509	Glory / Vine (possibly) / Unidentified (slate barge B)	Wreck	Post-medieval	Live	450614	5912634	NMRW NPRN 240100
					450609	5912633	UKHO 8238
CA510	Unidentified	Wreck	Post-medieval	Live	409914	5939380	NMRW NPRN 518580
					409895	5939372	UKHO 7447
CA511	Unidentified	Wreck	Unknown	Live	457687	5907654	UKHO 8142
CA512	Unidentified	Wreck	Unknown	Live	459543	5906154	UKHO 8143
CA513	Unidentified	Wreck		Live	446222	5913208	

CA no.	Name	Type	Date	Status	Easting (UTM30N)	Northing (UTM30N)	Source and ref. no.
			Post-medieval				NMRW NPRN 506956
					446221	5913202	UKHO 8144
CA514	Unidentified	Wreck	Unknown	Live	436249	5916669	UKHO 8244
CA515	Unidentified	Wreck	Post-medieval	Live	436204	5917442	NMRW NPRN 506854
							UKHO 8245
CA516	<i>Nicola Faith</i>	Wreck	Unknown	Unknown	453524	5909614	UKHO 96894
CA517	<i>Susie Mo II</i> (possibly)	Wreck	2015	Unknown	455710	5908798	UKHO 91489
CA518	Unidentified	Wreck	Unknown	Unknown	388483	5940129	UKHO 103658
CA519	Unidentified	Wreck	Unknown	Unknown	392118	5939923	UKHO 103661
CA520	Unidentified	Wreck	Post-medieval	Unknown	452413	5906815	NMRW NPRN 800927
							UKHO 91185
CA521	Unidentified	Wreck	Post-medieval	Unknown	450120	5910695	NMRW NPRN 800925
							UKHO 91491
CA522	Unidentified	Wreck	Post-medieval	Unknown	436060	5922768	NMRW NPRN 800861
							UKHO 93231
CA523	Unidentified	Wreck	Post-medieval	Unknown	440699	5914851	NMRW NPRN 800918
							UKHO 93358
CA524	Unidentified	Wreck	Post-medieval	Unknown	449229	5911741	NMRW NPRN 800924
							UKHO 93502
CA525	Unidentified	Wreck	Post-medieval	Unknown	377835	5940406	NMRW NPRN 800350
							UKHO 99045
CA526	Unidentified	Wreck	Post-medieval	Unknown	404923	5940039	NMRW NPRN 800772

CA no.	Name	Type	Date	Status	Easting (UTM30N)	Northing (UTM30N)	Source and ref. no.
							UKHO 99228
CA527	Seabed Anomaly	Anomaly	Post-medieval	Unknown	369619	5941978	NMRW NPRN 525133
CA528	Submerged Forest, Rhos on Sea	Submerged forest	Mesolithic	n/a	450994	5906415	NMRW NPRN 524772
CA529	Submerged Forest, Abergele	Submerged forest	Neolithic	n/a	460975	5905320	NMRW NPRN 524722
CA530	Airspeed Oxford I L4656	Aircraft	Modern	Unknown	448463	5911909	NMRW NPRN 515454
CA531	Avro Anson I N9877	Aircraft	Modern	Unknown	398145	5938919	NMRW NPRN 515642
CA532	Avro Anson I N9917	Aircraft	Modern	Unknown	442444	5913524	NMRW NPRN 515644
CA533	Bristol Beaufort I Aw351	Aircraft	Modern	Unknown	452650	5906625	NMRW NPRN 515388
							CPAT PRN 130228
CA534	Avro Lancaster I Pb799	Aircraft	Modern	Unknown	442444	5913524	NMRW NPRN 506979
CA535	<i>Agenoria</i>	Reported loss	Post-medieval	n/a	414003	5938558	NMRW NPRN 271866
CA536	<i>Ann</i>	Reported loss	Post-medieval	n/a	450979	5906495	NMRW NPRN 524875
CA537	<i>Ann and Catherine</i>	Reported loss	Post-medieval	n/a	421080	5931000	NMRW NPRN 271876
CA538	<i>Ant</i>	Reported loss	Post-medieval	n/a	460768	5905238	NMRW NPRN 544282
CA539	<i>Antares</i>	Reported loss	Post-medieval	n/a	450945	5906698	NMRW NPRN 515976
CA540	<i>Betsey</i>	Reported loss	Post-medieval	n/a	451314	5906282	NMRW NPRN 271293

CA no.	Name	Type	Date	Status	Easting (UTM30N)	Northing (UTM30N)	Source and ref. no.
CA541	<i>Conway's Pride</i>	Reported loss	Post-medieval	n/a	458454	5905102	NMRW NPRN 271450
CA542	<i>Eagle</i>	Reported loss	Post-medieval	n/a	458348	5905014	NMRW NPRN 240576
CA543	<i>Eagle</i>	Reported loss	Post-medieval	n/a	459044	5904916	NMRW NPRN 525143
CA544	<i>Endeavour (1854)</i>	Reported loss	Post-medieval	n/a	460162	5905187	NMRW NPRN 271368
CA545	<i>Esther</i>	Reported loss	Post-medieval	n/a	447499	5912664	NMRW NPRN 271447
CA546	<i>Hecla</i>	Reported loss	Post-medieval	n/a	457426	5905232	NMRW NPRN 519089
CA547	<i>Hopewell</i>	Reported loss	Post-medieval	n/a	450951	5906597	NMRW NPRN 515977
CA548	<i>Kate</i>	Reported loss	Post-medieval	n/a	382350	5940187	NMRW NPRN 272077
CA549	<i>Maria</i>	Reported loss	Post-medieval	n/a	432991	5919890	NMRW NPRN 271404
CA550	<i>Mary Catherine</i>	Reported loss	Post-medieval	n/a	451124	5906607	NMRW NPRN 240063
CA551	<i>Mona</i>	Reported loss	Post-medieval	n/a	437507	5916023	NMRW NPRN 271166
CA552	<i>Newhaven</i>	Reported loss	Post-medieval	n/a	456649	5905163	NMRW NPRN 271555
CA553	<i>No.4 Pilot Boat</i>	Reported loss	Post-medieval	n/a	459240	5904928	NMRW NPRN 271731
CA554	<i>Ocean Queen</i>	Reported loss	Post-medieval	n/a	456389	5905098	NMRW NPRN 271362
CA555	<i>Pilot</i>	Reported loss	Post-medieval	n/a	451021	5906307	NMRW NPRN 271679

CA no.	Name	Type	Date	Status	Easting (UTM30N)	Northing (UTM30N)	Source and ref. no.
CA556	<i>Pride of Liverpool</i>	Reported loss	Post-medieval	n/a	419693	5929366	NMRW NPRN 272059
CA557	<i>Reddies</i>	Reported loss	Post-medieval	n/a	426848	5927536	NMRW NPRN 272035
CA558	<i>Richard</i>	Reported loss	Post-medieval	n/a	456241	5905077	NMRW NPRN 240577
CA559	<i>Rose</i>	Reported loss	Post-medieval	n/a	457687	5907653	NMRW NPRN 271629
CA560	<i>Speedwell</i>	Reported loss	Post-medieval	n/a	441558	5914503	NMRW NPRN 271502
CA561	<i>Thomas</i>	Reported loss	Post-medieval	n/a	459233	5904939	NMRW NPRN 271590
CA562	<i>Triton</i>	Reported loss	Post-medieval	n/a	454524	5907426	NMRW NPRN 271503
CA563	Unnamed Wreck	Reported loss	Post-medieval	n/a	451222	5906417	NMRW NPRN 240068
CA564	Unnamed Wreck	Reported loss	Post-medieval	n/a	442548	5914369	NMRW NPRN 240917
CA565	<i>Vine</i>	Reported loss	Post-medieval	n/a	459544	5906154	NMRW NPRN 271446
CA566	<i>Doon</i>	Reported loss	20th Century	n/a	457082	5905203	NMRW NPRN 271453
CA567	<i>City of Verviers</i>	Reported loss	Modern	n/a	457989	5905262	NMRW NPRN 271454
CA568	<i>Flatfish</i>	Reported loss	Modern	n/a	454624	5905315	NMRW NPRN 271456
CA569	<i>Llysfaen</i>	Reported loss	Modern	n/a	460551	5905511	NMRW NPRN 271451
CA570	<i>Princess</i>	Reported loss	Modern	n/a	451480	5906859	NMRW NPRN 271452

CA no.	Name	Type	Date	Status	Easting (UTM30N)	Northing (UTM30N)	Source and ref. no.
CA571	Unnamed Wreck	Reported loss	Modern	n/a	375350	5942548	NMRW NPRN 506758
CA572	Off Orme Head Maritime Named Location	Named location	Multiperiod	n/a	442444	5913524	NMRW NPRN 240595
CA573	<i>Adela</i>	Reported loss	Post-medieval	n/a	442444	5913524	NMRW NPRN 240596
CA574	<i>Albion</i>	Reported loss	Post-medieval	n/a	442444	5913524	NMRW NPRN 271675
CA575	<i>Alice</i>	Reported loss	Post-medieval	n/a	442444	5913524	NMRW NPRN 271571
CA576	<i>Ann</i>	Reported loss	Post-medieval	n/a	442444	5913524	NMRW NPRN 271725
CA577	<i>Britannia</i>	Reported loss	Post-medieval	n/a	442444	5913524	NMRW NPRN 524867
CA578	<i>Caroline</i>	Reported loss	Post-medieval	n/a	442444	5913524	NMRW NPRN 544233
CA579	<i>Catharine</i>	Reported loss	Post-medieval	n/a	442444	5913524	NMRW NPRN 271740
CA580	<i>Catherine</i>	Reported loss	Post-medieval	n/a	442444	5913524	NMRW NPRN 544288
CA581	<i>Deborah</i>	Reported loss	Post-medieval	n/a	442444	5913524	NMRW NPRN 524881
CA582	<i>Elizabeth and Mary</i>	Reported loss	Post-medieval	n/a	442444	5913524	NMRW NPRN 271694
CA583	<i>Fletcher</i>	Reported loss	Post-medieval	n/a	442444	5913524	NMRW NPRN 544276
CA584	<i>Glan Conway</i>	Reported loss	Post-medieval	n/a	442444	5913524	NMRW NPRN 525200
CA585	<i>Hero</i>	Reported loss	Post-medieval	n/a	442444	5913524	NMRW NPRN 271739

CA no.	Name	Type	Date	Status	Easting (UTM30N)	Northing (UTM30N)	Source and ref. no.
CA586	<i>Hms Thistle IV</i>	Reported loss	Post-medieval	n/a	442444	5913524	NMRW NPRN 271584
CA587	<i>James</i>	Reported loss	Post-medieval	n/a	442444	5913524	NMRW NPRN 271695
CA588	<i>Lark</i>	Reported loss	Post-medieval	n/a	442444	5913524	NMRW NPRN 271760
CA589	<i>Laura and Mary</i>	Reported loss	Post-medieval	n/a	442444	5913524	NMRW NPRN 271728
CA590	<i>Lively</i>	Reported loss	Post-medieval	n/a	442444	5913524	NMRW NPRN 525166
CA591	<i>Lytham</i>	Reported loss	Post-medieval	n/a	442444	5913524	NMRW NPRN 525554
CA592	<i>Mersey</i>	Reported loss	Post-medieval	n/a	442444	5913524	NMRW NPRN 524791
CA593	<i>Nancy</i>	Reported loss	Post-medieval	n/a	442444	5913524	NMRW NPRN 271392
CA594	<i>Skylark</i>	Reported loss	Post-medieval	n/a	442444	5913524	NMRW NPRN 525151
CA595	<i>Susanna</i>	Reported loss	Post-medieval	n/a	442444	5913524	NMRW NPRN 525177
CA596	<i>Trefriw Trader</i>	Reported loss	Post-medieval	n/a	442444	5913524	NMRW NPRN 240456
CA597	<i>Union</i>	Reported loss	Post-medieval	n/a	442444	5913524	NMRW NPRN 271425
CA598	<i>Union</i>	Reported loss	Post-medieval	n/a	442444	5913524	NMRW NPRN 271473
CA599	Unnamed Wreck	Reported loss	Post-medieval	n/a	442444	5913524	NMRW NPRN 271292
CA600	Unnamed Wreck	Reported loss	Post-medieval	n/a	442444	5913524	NMRW NPRN 271741

CA no.	Name	Type	Date	Status	Easting (UTM30N)	Northing (UTM30N)	Source and ref. no.
CA601	<i>Jessie Sinclair</i>	Reported loss	20th Century	n/a	442444	5913524	NMRW NPRN 544534
CA602	<i>Europa</i>	Reported loss	Modern	n/a	442444	5913524	NMRW NPRN 525553
CA603	<i>Thistle</i>	Reported loss	Modern	n/a	442444	5913524	NMRW NPRN 507234
CA604	<i>Derbent</i> (possibly)	Wreck	1917	Dead	421233	5927865	UKHO 66762
CA605	<i>Djerv</i>	Wreck	20th Century	Dead	378635	5938727	NMRW NPRN 272249
		Wreck			378561	5938754	UKHO 7367
CA606	<i>Clytie</i> (possibly)	Wreck	1905	Dead	421459	5930427	UKHO 7349
CA607	Unidentified	Wreck		Dead	357492	5935633	UKHO 7042
CA608	Unidentified	Wreck	Post- medieval	Dead	367708	5942733	NMRW NPRN 506759
					367635	5942758	UKHO 7049
CA609	Unidentified	Wreck		Dead	375350	5942548	UKHO 7371
CA610	Unidentified	Obstruction	Unknown	Dead	373046	5938899	UKHO 7368
CA611	Unidentified	Obstruction	Unknown	Dead	390905	5939596	UKHO 7463
							NMRW NPRN 506745
CA612	Pool off Penmaen Rhos	Anchorage	Post- medieval	n/a	456024	5905951	NMRW NPRN 518975
CA613	Rhos Bay Anchorage	Anchorage	Post- medieval	n/a	453281	5906847	NMRW NPRN 518929
CA614	Abergele anvil stone	Findspot	Prehistoric	n/a	461002	5905385	CPAT PRN 100485
CA615	Colwyn Beach Axe	Findspot	Neolithic	n/a	452553	5905397	CPAT PRN 100457
CA616	Old Colwyn, flat axe	Findspot	Bronze Age	n/a	453455	5905209	CPAT PRN 122112
CA617	Rhos-on-Sea brooch	Findspot	Roman	n/a	450796	5906592	CPAT PRN 106447
CA618	Old Colwyn, Radiate I	Findspot	Roman	n/a	453455	5905209	CPAT PRN 122108

CA no.	Name	Type	Date	Status	Easting (UTM30N)	Northing (UTM30N)	Source and ref. no.
CA619	Old Colwyn, Radiate II	Findspot	Roman	n/a	453455	5905209	CPAT PRN 122109
CA620	Old Colwyn, Radiate of Probus	Findspot	Roman	n/a	453455	5905209	CPAT PRN 122110
CA621	Old Colwyn, sestertius	Findspot	Roman	n/a	453455	5905209	CPAT PRN 122107
CA622	Old colwyn, trumpet brooch	Findspot	Roman	n/a	453455	5905209	CPAT PRN 122113
CA623	Old Colwyn, dagger guard	Findspot	Medieval	n/a	453455	5905209	CPAT PRN 122111
CA624	Rhos-on-sea beach, Coin Hoard	Findspot	Post-medieval	n/a	450946	5906554	CPAT PRN 119275
CA625	Conwy, find, 2016	Findspot	Post-medieval	n/a	460755	5905212	CPAT PRN 128861
CA626	Llandrillo-yn-rhos Fish Weir	Monument	Medieval	Extant	451035	5906675	CPAT PRN 34278
CA627	Rhos on Sea Fish Trap	Monument	Post-medieval	Extant	451104	5906746	NMRW NPRN 301217
CA628	Penmaenrhos Jetty	Monument	Post-medieval	Extant	454455	5905223	CPAT PRN 34203
CA629	Llysfaen Quarry Jetty	Monument	Modern	Extant	456207	5905048	CPAT PRN 34206
CA630	Llysfaen Quarry Jetty II	Monument	Modern	Extant	456706	5905105	CPAT PRN 34279
CA631	Raynes Quarry Jetty	Monument	Modern	Extant	455207	5905084	CPAT PRN 34205
CA632	Victoria Pier and Pavilion, Colwyn Bay	Monument	Post-medieval to Modern	Extant	451825	5905606	NMRW NPRN 34227
					451831	5905617	CPAT PRN 25354

5.73. Other live wrecks located in the WSA in UK (Welsh) waters include:

- SS *Cork* (**CA502**), an Irish cargo steamer of 1232 grt, torpedoed by German submarine *U-103* on 26 January 1918 (UKHO 7363; NPRN 272119);
- SS *Sea Gull* (**CA503**), a British steamer of 976 grt, sunk by *UB-103* on 17 March 1918 (UKHO 7370; NPRN 240669);

- FV *Hyacinth* (**CA504**), a British steam drifter of 79 grt that sprang a leak and foundered on 25 March 1924 (UKHO 7355; NPRN 506764);
- SS *Delfina* (**CA505**), a Spanish cargo ship of 3096 grt that ran onto rocks near the Skerries at the northwest corner of Anglesey on 16 December 1928 (UKHO 7437; NPRN 272209);
- SS *Vigsnes* (**CA506**), a Norwegian cargo ship of 1599 grt, torpedoed by German submarine *U-1172* on 23 January 1945 (UKHO 7361; NPRN 240199);
- MFV *Fin-ar-bed* (**CA507**), a British fishing vessel of 32 grt that took on water and sank after hitting a submerged object on 3 December 2001 (UKHO 60302);
- an unidentified wreck, also referred to as *Slate Barge A* (**CA508**), a wooden slate barge discovered by recreational divers on 16 September 1986 and subsequently dived on in 1988, 1992, and 1993 (UKHO 8139; NPRN 506955); and
- an unidentified wreck, also referred to as *Slate Barge B* (**CA509**), which is possibly the wreck of the *Glory* (NMRW) or the *Vine* (UKHO). If the *Glory*, this was a wooden sailing vessel that sank off Little Ormes Head in October 1821 (UKHO 8238; NPRN 240100).

5.74. Six further unidentified live wrecks (**CA510-515**) are located in the WSA. These wrecks have been located by recent geophysical or diver survey, but have yet to be identified positively.

5.75. There are 11 wrecks whose status is unknown recorded in the WSA, though it should be noted that the associated survey descriptions suggest that, in the majority of instances, wreck material is present on the seabed at these locations. These include:

- *Nicola Faith* (**CA516**), a fishing vessel (UKHO 96894);
- *Susie Mo II* (possibly; **CA517**), a fishing vessel (UKHO 91489); and
- nine further unidentified wrecks (**CA518-526**).



LEGEND:

- MaresConnect marine licenced areas
- wider study area (WSA)
- Ireland-UK median line

Asset type

- Aircraft
- Anchorage
- Anomaly
- Findspot
- Monument
- Named location
- Obstruction
- Reported loss
- Submerged forest
- Wreck

*duplicate positions shown and labelled separately if >100m apart

GEODETTIC INFORMATION:

0 6 Kilometers

Coordinate System: WGS 1984 UTM Zone 30N
Projection: Transverse Mercator
Datum: WGS 1984
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -3.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter



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PROJECT TITLE:
MaresConnect Interconnector

FIGURE TITLE:
Heritage assets in the WSA, nearshore to offshore, Wales

DRAWN BY: KW
CHECKED BY: DG
APPROVED BY: MW

PROJECT NO.
23064

FIGURE NO.
13

Service Layer Credits: World Imagery: Earthstar Geographics



LEGEND:

- MaresConnect marine licenced areas
- wider study area (WSA)
- Ireland-UK median line

Asset type

- Aircraft
- Anchorage
- Anomaly
- Findspot
- Monument
- Named location
- Obstruction
- Reported loss
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*duplicate positions shown and labelled separately if >100m apart

GEODETTIC INFORMATION:

0 10 Kilometers

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Central Meridian: -3.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
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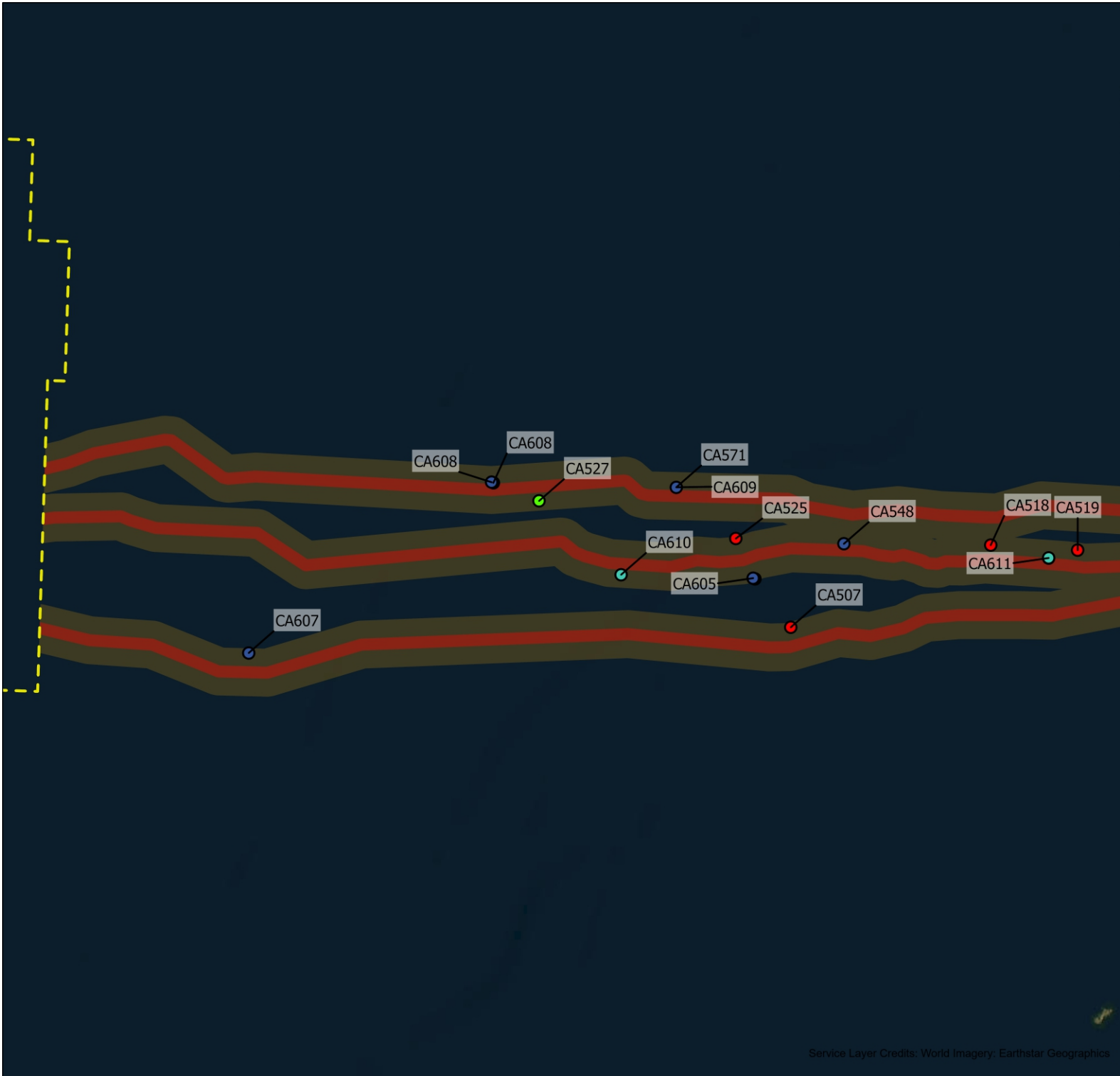
PROJECT TITLE:
MaresConnect Interconnector

FIGURE TITLE:
Heritage assets in the WSA, offshore, Wales

DRAWN BY: KW
CHECKED BY: DG
APPROVED BY: MW

PROJECT NO.
23064

FIGURE NO.
14



LEGEND:

- MaresConnect marine licenced areas
- wider study area (WSA)
- Ireland-UK median line

Asset type

- Aircraft
- Anchorage
- Anomaly
- Findspot
- Monument
- Named location
- Obstruction
- Reported loss
- Submerged forest
- Wreck

*duplicate positions shown and labelled separately if >100m apart

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0 10 Kilometers

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Latitude Of Origin: 0.0000
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PROJECT TITLE:
MaresConnect Interconnector

FIGURE TITLE:
Heritage assets in the WSA, offshore to median line, Wales

DRAWN BY: CHECKED BY: APPROVED BY:	KW DG MW	PROJECT NO. 23064	FIGURE NO. 15
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- 5.76. One seabed anomaly detected by previous geophysical surveys (**CA527**) within the WSA is considered to be of anthropogenic origin but has not yet been investigated further. This comprises a small linear reflector with a strong sonar shadow (NPRN 525133).
- 5.77. Two submerged forests are recorded within the WSA, at Rhos-on-Sea (**CA528**; NPRN 524772) and at Abergele (**CA529**; NPRN 524722). These have been discussed above.
- 5.78. There are five aircraft losses recorded within the WSA (**CA530-534**; NPRN 515454, 515642, 515644, NPRN 515388 / PRN 130228, and NPRN 506979). As stated above (paragraph 5.69), the ephemeral nature of aviation crash sites at sea means that remains of aircraft are rarely found at their given locations, and these records should be seen as providing an indication that aviation remains may exist at, or in proximity to, the general area. As yet, no remains of these aircraft have been confirmed within the WSA. If remains are identified during works associated with the proposed development, they would be designated automatically as Controlled Sites under the Protection of Military Remains Act (PMRA) 1986.
- 5.79. A further 68 wrecks recorded within the WSA are listed as reported losses. These are reports of wreck events, and either do not have reliable locational information or should not be interpreted as indicative of the presence (or otherwise) of physical remains. As stated above, these records are included to highlight the archaeological potential for encountering wrecks. Of these, 37 wrecks have been assigned an individually distinct spatial coordinate (**CA535-571**; Table 4, Figures 12-15).
- 5.80. The remaining wrecks are all identified at a maritime named location recorded close to Orme Head (**CA572**). These locations serve to highlight the archaeological potential of an area, based on the number of reported losses recorded in the vicinity. These losses have been assigned a temporary spatial coordinate by the RCAHMW that represents the centre of the general area in which the loss was recorded, pending additional information. The location should not therefore be seen as indicative of the presence or absence of physical remains. Wrecks recorded at this location include **CA573-603**, as well as two of the aircraft losses (**CA532**; **CA534**) described above.

5.81. Six further wrecks recorded within the WSA in UK waters are considered dead. These include:

- SS *Derbent* (possibly; **CA604**), a British tanker of 3178 grt torpedoed by German submarine *UB-96* on 30 November 1917 (UKHO 66762);
- SS *Djerv* (**CA605**), a British merchant steamship of 1527 grt, torpedoed by German submarine *U-86* on 20 February 1918 (UKHO 7367 / NPRN 272249);
- *Clytie* (possibly; **CA606**), a British steamship of 471 grt (UKHO 7349) ; and
- three unidentified wrecks (**CA607-609**; UKHO 7042, 7049 / NPRN 506759 and UKHO 7371).

5.82. There are two obstructions recorded within the WSA:

- a seabed obstruction / foul ground first reported in 1945 (**CA610**; UKHO 7368). Associated survey information suggests that there are no features here apart from steep submarine cliffs and that the record should be amended to 'dead'; and
- a seabed obstruction / fisherman's fastener first reported in 1987 (**CA611**; UKHO 7463 / NPRN 506745). The presence of this obstruction has been disproved by geophysical survey, and it is now considered dead.

5.83. There are two anchorages recorded in the WSA. Although no known wrecks are present at these two locations, the presence of anchorages, particularly charted or marked examples, are a good indication that the area was used by marine traffic. The potential to encounter associated archaeological material on the seabed in the vicinity is therefore high. Anchorages recorded within the WSA include:

- a charted pool / area of slightly deeper water off Penmaen Rhos (**CA612**; NPRN 518975); and

- a charted anchorage, also described in 19th century sailing directions, between the Rhos Point and Penmean Head headlands (**CA613**; NPRN 518929).

5.84. There are 12 findspots recorded within the WSA. These include:

- a prehistoric anvil stone (**CA614**; PRN 100485);
- a Neolithic stone axe (**CA615**; PRN 100457);
- a Bronze age flat axe (**CA616**; PRN 122112);
- a Roman brooch (**CA617**; PRN 106447);
- four Roman coins (**CA618-621**; PRN 122108, 122109, 122110, 122107);
- a Roman trumpet brooch (**CA622**; PRN 122113);
- a medieval dagger guard (**CA623**; PRN 122111);
- a post-medieval coin hoard (**CA624**; PRN 119275); and
- a post-medieval gold fede (**CA625**; PRN 128861).

5.85. Seven monuments are recorded within the WSA, including a medieval fish weir (**CA626**; PRN 34278), a post-medieval fish trap (**CA627**; NPRN 301217) four post-medieval jetties (**CA628-631**; PRN 34203, 34206, 34279, 34205), and the modern Victoria Pier and Pavilion (**CA632**; PRN 25354 / NPRN 34337). All seven monuments are extant.

6. CONCLUSIONS

- 6.1. A total of 190 cultural heritage assets have been identified in proximity to the proposed development. This includes 58 within the FLAA and MUL areas, from the coast of Co. Dublin to the Ireland-UK median line, and 132 within the WSA in UK waters, to MHWS at the proposed landfall locations.
- 6.2. In Ireland, 40 wrecks are located within the licenced areas, including 26 classified as live, eight dead, one lifted and five whose status is unknown. A further 452 losses are

documented in the licenced areas, but with no spatial coordinates attached. The existence of these wrecks must be considered tentative. Twelve sites and monuments are also recorded in the intertidal zone or the zone of wave action in the FLAA.

- 6.3. Initial geophysical surveys in Irish waters are non-invasive, and no mitigation is considered necessary. A review of the acquired marine geophysical survey data will be undertaken for each sampling location prior to the onset of GI and benthic surveys. This will be accompanied by an underwater archaeology impact assessment (UAIA). This impact assessment will ensure that impacts to known archaeological sites and potential cultural heritage assets are avoided, with survey methodologies and sampling locations potentially altered based on the results of the archaeological assessment.
- 6.4. Both the archaeological assessment of marine geophysical survey data and the UAIA will be submitted to the UAU for review and approval prior to the commencement of any activities that disturb the seabed.
- 6.5. Following route selection, a more detailed DBA and full archaeological review of marine geophysical survey data will be undertaken as part of the application process. This will include an assessment of significance. At that time, archaeological exclusion zones (AEZs) will be placed around all known sites and geophysical anomalies with archaeological potential to ensure that impacts to known or potential heritage assets are avoided. Suggested mitigation for the initial GI and sampling is outlined in detail in Coracle Archaeology (2024).
- 6.6. A total of 132 cultural heritage assets are recorded in the WSA in UK waters, including 100 wrecks, five aircraft, two submerged forests, two obstructions, one seabed anomaly, one maritime named location, two anchorages, 12 findspots and seven monuments. Of the 100 wrecks, 15 are considered live, six dead, while the status of 11 is unknown. The remaining 68 wrecks are reported losses, the existence of which cannot be verified.
- 6.7. The presence of recorded submerged forests / peat deposits at the proposed Welsh landfall locations suggests that they must be considered of considerable archaeological and palaeo-environmental significance. Potential impacts on these deposits, and on

marine cultural heritage assets more generally, will be outlined in the project-specific written scheme of investigation (WSI) for the initial round of survey, sampling and geotechnical works. A more detailed DBA and full archaeological review of marine geophysical survey data will be produced following final route selection and will be submitted as part of the application process. This will be accompanied by a WSI detailing the impact of the proposed development on marine cultural heritage assets and outlining suggested mitigation strategies.

- 6.8. The relative density of known and located historic assets identified in this rapid DBA along the entirety of the route suggests that the potential to encounter unexpected cultural remains during the initial phase of works associated with the proposed project is moderate. This is supported by the large numbers of reported losses identified in both Irish and Welsh jurisdictions: it is clear that the proposed development will be undertaken in an area of considerable maritime activity throughout history, at local, national and international levels.
- 6.9. The results of the geophysical surveys could therefore assist in refining understanding of maritime heritage in the study area through potential new discoveries and updated positions for extant recorded assets. The initial geophysical surveys are, however, non-invasive, and will have no impact on known heritage assets.

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8. APPENDIX A

Reported losses in Irish waters (FLAA, MUL) with no assigned spatial coordinates. Arranged from south to north by recorded place of loss.

Name	WIID no.	Classification	Year of loss	Place of loss
Howth, Ireland's Eye (north of / near / off / close to)				
<i>Sarah Jane</i>	W00798	Cutter	1869	Lambay Island, Co Dublin to Howth, between
<i>Weser</i>	W00812	Unknown	1858	Howth, Co Dublin / N side of Baldoyle
Unknown	W00817	Unknown	13th / 14th Century	Howth, Co Dublin, N of
<i>Aston</i>	W00867	Unknown	1848	Howth, Co Dublin, off
<i>Betsey</i>	W00868	Unknown	1838	Howth, Co Dublin
<i>Catherine</i>	W00872	Unknown	1804	Howth, Co Dublin
<i>Columbus</i>	W00874	Sloop	1797	Howth, Co Dublin, off
<i>Dodger</i>	W00877	Cutter	1897	Howth Nose, 1 mile N
<i>Ellen</i>	W00879	Dandy	1876	Howth, Co Dublin
<i>Jennett</i>	W00888	Unknown	1820	Howth, Co Dublin, off
<i>John and Ellen</i>	W00889	Unknown	1843	Howth, Co Dublin, off
<i>John and William</i>	W00890	Sloop	1832	Howth, Co Dublin, off
<i>Juno</i>	W00891	Unknown	1811	Howth, Co Dublin, near
<i>Mary Ann</i>	W00896	Unknown	1816	Howth, Co Dublin, N of
<i>Minerva</i>	W00902	Sloop	1833	Howth, Co Dublin, off
<i>Nelly</i>	W00904	Unknown	1816	Howth, Co Dublin, near
<i>Nicholas</i>	W00905	Unknown	1820	Howth, Co Dublin, near
<i>Wicklow</i>	W00920	Unknown	1815	Howth, Co Dublin, near
Unknown	W00928	Wherry	1767	Howth, Co Dublin, off
Unknown	W00930	Boat	1785	Howth Head, Co Dublin, off
Unknown	W00931	Boat	1785	Howth Head, Co Dublin, off
Unknown	W00932	Smack	1785	Howth, Co Dublin, 1 league beyond
Unknown	W00936	Boat	1789	Howth, Co Dublin, near
Unknown	W00937	Collier	1799	Howth, Co Dublin, off
Unknown	W00940	Schooner	1829	Howth, Co Dublin, off
Unknown	W00941	Unknown	1838	Howth, Co Dublin, off
Unknown	W00942	Unknown	1850	Howth, Co Dublin, off
Unknown	W00944	Unknown	1850	Loughshinny and Howth
Unknown	W00945	Schooner	1850	Howth, Co Dublin, near
Unknown	W00957	Fishing boat	1901	Howth, Co Dublin, near
Unknown	W00958	Boat	1901	Howth, Co Dublin, near

Name	WIID no.	Classification	Year of loss	Place of loss
Unknown	W00959	Lugger	1901	Howth, Co Dublin, off
<i>Elizabeth</i>	W02003	Brig	1861	Skerries, Co Dublin, E of / Howth
<i>Gemini</i>	W02020	Smack	1886	Howth, Co Dublin, Battery, c.2 miles off
<i>Isabella</i>	W02031	Lugger	1871	Howth, Co Dublin, 5 miles from
<i>Leinster</i>	W02038	Cutter	1868	Howth, Co Dublin to Lambay
<i>Manchester</i> (SS)	W02047	Steam Packet	1829	Skerries, Co Dublin / Dublin Bay, sandbanks between Dun Laoghaire and Howth
<i>St. Peter</i>	W02081	Sloop	1887	Howth, Co Dublin, c.23 miles ENE of
Unknown	W02126	Unknown	1760	Balbriggan to Howth
Unknown	W02159	Wherry	1791	Howth Head, Co Dublin, 7 leagues off
<i>Trevannance</i>	W03014	Schooner	1857	Howth Head, Co Dublin, 28 miles from
<i>Maid of Howth</i>	W12564	Lugsail	1904	Howth, Co Dublin, near
No Name	W12618	Sailing Boat	1897	Howth, Co Dublin, off
<i>Mary Ann</i>	W13357	Unknown	1816	N of Howth
Unknown	W16419	Collier	1799	Howth, off
<i>Diamond</i>	W18352	Smack	1868	Howth Head, near
<i>Friendship</i>	W11929	Schooner	1852	Ireland's Eye, Co Dublin
Unknown	W12887	Brig	1816	Ireland's Eye, a league off
Bennet Bank				
<i>Six Brothers</i>	W02089	Unknown	1831	Dublin Bay, near Bennets Bank
Portmarnock				
<i>Gainsborough</i>	W00756	Brig	1838	Carrick Hill, Baldoyle Strand / Gay Brook Cove, Malahide/ Portmarnock Strand
<i>Jamaica Packet</i>	W00770	Unknown	1888	Portmarnock, Co Dublin, Velvet Strand
<i>Malfilatre</i>	W00778	Schooner	1899	Portmarnock Point, Co Dublin / a bank inside Ireland's Eye
<i>Nicholas</i>	W00788	Merchant Vessel	1306	Portmarnock, Co Dublin, Strand, near Malahide
<i>Perseverance</i>	W00792	Schooner	1861	Portmarnock, Co Dublin, Velvet Strand / Spit of Baldoyle
<i>Snowdon</i>	W00801	Barque	1855	Portmarnock, Co Dublin, beach / Belost Strand, off Carnick Head, Malahide Bay
<i>Weiser</i>	W00811	Unknown	1859	Portmarnock, Co Dublin, Velvet Strand
Unknown	W00818	Unknown	1464	Portmarnock, Co Dublin

Name	WIID no.	Classification	Year of loss	Place of loss
Unknown	W00825	Unknown	1838	Portmarnock, Co Dublin, black rocks at Tobermaceany, near the shore
Unknown	W00839	Unknown	1861	Portmarnock, Co Dublin, Velvet Strand
Unknown	W00847	Yacht	1920	Portmarnock, Co Dublin, Strand, behind the Country Club
Unknown	W00850	Unknown	Unknown	Portmarnock, Co Dublin, Velvet Strand
Unknown	W00855	Unknown	Unknown	Portmarnock, Co Dublin, beach, 100 yards S of the esplanade
Unknown	W00862	Unknown	Unknown	Portmarnock, Co Dublin, Strand, N end, at the low water mark
<i>Prosperity</i>	W17228	Smack	1907	Portmarnock golf links/Baldoyle Strand
Malahide				
<i>Ann</i>	W00738	Unknown	1853	Malahide, Co Dublin, rocks S of
<i>Anne</i>	W00739	Yawl	1828	Malahide, Co Dublin, harbour
<i>Annie / Anny</i>	W00740	Brig	1853	Malahide, Co Dublin / N of Baldoyle
<i>Bezery</i>	W00743	Yacht	1929	Malahide, Co Dublin, harbour
<i>Cygnnet</i>	W00749	Unknown	1842	Malahide, Co Dublin, harbour entrance
<i>Elizabeth</i>	W00753	Schooner	1886	Malahide Bar, Co Dublin, outside
<i>Guardian</i>	W00761	Barque	1852	Malahide, Co Dublin, off
<i>Jamaica Packet</i>	W00769	Unknown	1836	Malahide, Co Dublin, near
<i>Lady Hobart</i>	W00775	Unknown	1865	Lambay Island, Co Dublin, off / off Malahide
<i>Margaret</i>	W00779	Unknown	1838	Malahide, Co Dublin, near
<i>Mary Ann / Anne</i>	W00784	Brig	1881	Malahide, Co Dublin, 1 mile N
<i>Newry</i>	W00787	Schooner	1827	Malahide, Co Dublin, near
<i>Ocean Ranger</i>	W00790	Sailing Ship	1865	Malahide Bay, Co Dublin/ entrance to Malahide River
<i>Oona</i>	W00791	Cutter	1886	Malahide, Co Dublin, 1 mile S. of
<i>Triumph</i>	W00807	Unknown	1820	Malahide, Co Dublin
<i>Two Friends</i>	W00808	Unknown	1812	Mallowwhite (sic Malahide)
<i>William & Sarah</i>	W00813	Unknown	1878	Malahide, Co Dublin, estuary
Unknown	W00827	Unknown	1838	Malahide, Co Dublin, Velvet Strand
Unknown	W00834	Unknown	1858	Malahide, Co Dublin, N of
Unknown	W00835	Unknown	1859	Malahide, Co Dublin, Donabate, between

Name	WIID no.	Classification	Year of loss	Place of loss
Unknown	W00848	Unknown	Unknown	Malahide, Co Dublin, near Robswalls Castle
<i>Lancaster</i>	W02969	Ship	1789	Malahide, Near
<i>Windsor</i>	W12040	Unknown	1858	Malahide, Co Dublin, off
<i>Gitana</i>	W15026	Unknown	1893	Malahide
Unknown	W16012	Ship	1855	Malahide, Carrick Tower, near
Unknown	W16063	Unknown	1858	Malahide Bar
<i>Mary Kate</i>	W16638	Unknown	1871	Malahide, near
<i>Lancashire</i> (SS)	W17271	Steamship	1908	Malahide inlet, S. side of
Corballis				
<i>Mary Anne</i>	W00785	Ship	Unknown	Corballis, sandbank off
Unknown	W00826	Schooner	1838	Corballis
Unknown	W00846	Unknown	1914-1918	Corballis, near
Portrane				
<i>James</i>	W00771	Unknown	1828	Rush, Co Dublin to Portrane, between
Unknown	W00816	Ship	1260	Portrane Harbour, Co Dublin
Unknown	W00823	Brig	1784	Portrane, Co Dublin
Unknown / <i>Dumba</i>	W00832	Brig	1855	Portrane, Co Dublin
Unknown	W00838	Unknown	1861	Portrane, Co Dublin
<i>Ada</i>	W12186	Schooner	1873	Portrane, Co Dublin, beach (stranded)
<i>Galatea</i>	W15491	Unknown	1855	Portrane
<i>Antje</i>	W15923	Galliot	1859	Portrane
Rogerstown				
<i>Queen Adelaide</i>	W00794	Smack	1861	Donabate, Co Dublin, Rogerstown
<i>Victoria</i>	W00810	Schooner	1854	Donabate, Co Dublin, Rogerstown Bay
Unknown	W00819	Cruiser	1775	Donabate, Co Dublin, Rogerstown
Unknown	W00820	Cruiser	1775	Donabate, Co Dublin, Rogerstown
Lambay Island				
<i>Albion</i> (SS)	W00737	Iron Steamship	1887	Lambay Island, Co Dublin, N side
<i>Avon</i> (SS)	W00741	Iron Steamship	1879	Lambay Island, Co Dublin, Burren Rock
<i>Ceres</i>	W00746	Schooner	1825	Lambay Island, Co Dublin, rocks off
<i>Clansman</i>	W00747	Schooner	1874	Lambay Island, Co Dublin, Taylor's Reef
<i>Echo</i>	W00751	Merchant Vessel	1806	Lambay Island, Co Dublin, off
<i>Emily</i>	W00754	Schooner	1868	Lambay Island, Co Dublin, Taylor Reef,

Name	WIID no.	Classification	Year of loss	Place of loss
<i>Georgina</i>	W00757	Schooner	1873	Lambay Island, Co Dublin, the Quarry inside Taylor's Rocks
<i>Grand Mile</i> (SS)	W00759	Steamship	1847	Lambay Island, Co Dublin, off
<i>Granuaile</i> (SS)	W00760	Steamship	1847	Lambay Island, Co Dublin, NE of
<i>Henry</i>	W00763	Sailing Ship	1780	Lambay Island, Co Dublin
<i>Horatio</i>	W00764	Unknown	1848	Lambay Island, Co Dublin, off
<i>Industry</i>	W00765	Unknown	1760	Lambay Island, Co Dublin (Lanly Bay sic. Lambay?), near
<i>Isabel</i> (SS)	W00768	Steel Steamship	1913	Lambay Island, Co Dublin, c.2 miles N of / Fraser Patch, N of Lambay
<i>Jane</i>	W00772	Brig	1854	Lambay Island, Co Dublin, off
<i>John Dugdale</i>	W00773	Ship	1838	Lambay Island, Co Dublin, off
<i>La Nawede</i>	W00776	Ship	1307	Lambay Island, Co Dublin
<i>Maid of the Mill</i>	W00777	Unknown	1826	Lambay Island, Co Dublin, off
<i>Margaret</i>	W00780	Schooner	1909	Lambay Island, Co Dublin, off / S Rock Lightship, 6 miles SW of
<i>Maria Stella</i>	W00781	Lugger	1865	Lambay Island, Co Dublin, off
<i>Mary</i>	W00782	Unknown	1828	Lambay Island, Co Dublin, off
<i>Pioneer</i>	W00793	Schooner	Unknown	Lambay Island, Co Dublin, Saltpan Bay, near Taylor's Rocks
<i>Richard & Martha</i>	W00795	Ketch	1689	Lambay Island, Co Dublin
<i>Robert</i>	W00796	Unknown	1834	Lambay Island, Co Dublin to Rush, between
<i>Robert and Ross</i>	W00797	Unknown	1817	Lambay Island, Co Dublin
<i>Shamrock</i>	W00799	Schooner	1878	Lambay Island, Co Dublin, NW side of
<i>Speedwell</i>	W00802	Pilot boat	1869	Lambay Island, Co Dublin, off
<i>Tom</i>	W00806	Unknown	1849	Lambay Island, rocks at back of
<i>Una</i>	W00809	Schooner	1881	Lambay Island, Co Dublin, Tailor's Rock / Rockabill, off
<i>Will O' The Wisp</i>	W00815	Schooner	1855	Lambay Island, Co Dublin, Burren Rocks / Talbot Bay / off Harp Ear
Unknown	W00822	Schooner	1779	Lambay Island, Co Dublin, near
Unknown	W00824	Ship	1807	Lambay Island, Co Dublin, near
Unknown	W00833	Ship	1855	Lambay Island, Co Dublin, near
Unknown	W00836	Unknown	1861	Lambay Island, Co Dublin, off
Unknown	W00837	Unknown	1861	Lambay Island, Co Dublin, off

Name	WIID no.	Classification	Year of loss	Place of loss
Unknown	W00844	Trawler	1901	Lambay Island, Co Dublin
Unknown (SS)	W00845	Steam Trawler	1904	Lambay Island, Co Dublin, off
Unknown	W00852	Schooner	Unknown	Lambay Island, Co Dublin, E side of Harp Ear
Unknown	W00853	Boat	Unknown	Lambay Island, Co Dublin, Seal Hole, c.1 mile E of
Unknown	W00854	Unknown	Unknown	Kiln Point, Lambay
<i>Brothers</i>	W00869	Brigantine	1880	Dublin Bay, Baily Light / Lambay, off
<i>Dusty Miller</i>	W00878	Brig	1859	Ireland's Eye, Co Dublin, NE corner / near Lambay
<i>Eva</i> (SS)	W02006	Screw Steamer	1853	Lambay Island, Co Dublin, 15 miles ENE of
<i>Flora</i>	W02015	Brigantine	1872	Lambay Island, Co Dublin, 40 miles E of
<i>Hypatia</i> (SS)	W02028	Steam Trawler	1904	Lambay Island, Co Dublin, c. 6 miles E
<i>Lancashire</i> (SS)	W02037	Steel Steamship	1910	Lambay Island, Co Dublin, Deep, 6 miles E of
<i>Mary</i>	W02051	Unknown	1833	Irish Sea, circa. 20 miles E of Lambay
Unknown	W02172	Brig	1833	Lambay Island, Co Dublin, c20 miles E
Unknown	W02178	Unknown	1852	Lambay Island, Co Dublin, 8 miles off
Unknown	W02181	Unknown	1856	Lambay Island, Co Dublin, 18 miles E of
Unknown	W02187	Brigantine	1863	Lambay Island, Co Dublin, about 16 miles E of
Unknown	W02195	Trawler	1890	Lambay Island, Co Dublin, 10 miles off
Unknown	W02199	Unknown	1892	Lambay Island, Co Dublin, 15 miles E of
Unknown	W02201	Unknown	1899	Lambay Island, Co Dublin, 10 miles N
Unknown	W02205	Scow	1907	Dublin Bay, Baily, SW ½ W, Lambay WNW
Unknown	W02208	Unknown	Unknown	Rockabill, Co Dublin to Lambay, between
Unknown	W02220	Vessel	Unknown	Lambay Island, Co Dublin, 6 miles NE of
Unknown	W03092	Unknown	1877	Lambay Island, Co Dublin to Carlingford Light, between
<i>Diamond</i>	W11988	Smack	1853	Lambay Island, Co Dublin (found abandoned)
<i>Margaret</i>	W12079	Cutter	1865	Lambay Island, 3 miles SSE of
<i>Earnest</i>	W12467	Steam Trawler	1916	Lambay Island, Co Dublin, 12 miles E of
<i>William John</i>	W12711	Cutter	1890	Lambay Island, Co Dublin, 2 miles SSW of
<i>Margaret</i>	W13613	Unknown	1837	Lambay, off

Name	WIID no.	Classification	Year of loss	Place of loss
<i>Isabel</i>	W14605	Schooner	1913	Lambay Island, off
Unknown	W14744	Unknown	1890	Lambay Island, off
Unknown	W15012	Unknown	1890	Lambay Island, 10M off
Unknown	W15247	Unknown	1892	Lambay Island, 15M E of
Unknown	W16013	Unknown	1855	Lambay, near
Unknown	W16158	Unknown	1807	Lambay, off
<i>Brother</i>	W16287	Brig	1880	Lambay, off
Unknown	W16398	Unknown	1779	Lambay
Unknown	W17174	Ship	1877	Lambay island E by N and Carlingford light, SSE
Unknown	W18357	Lugger	1868	Rockabill and Lambay, between
Rush				
<i>Dolly Varden</i>	W00750	Yawl	1900	Rush Harbour, Co Dublin, near entrance
<i>Hannah Maria</i>	W00762	Unknown	1804	Rush, Co Dublin
<i>Industry</i>	W00766	Schooner	1886	Rush Point, Co Dublin, near
<i>Iron Man</i>	W00767	Unknown	Unknown	Rush, Co Dublin, near
<i>Mary</i>	W00783	Unknown	1844	Rush, Co Dublin
<i>Nicholas</i>	W00789	Unknown	1774	Rush Point, Co Dublin
Unknown	W00821	Cutter	1775	Rush, Co Dublin, near
Unknown	W00828	Trawler	1852	Rush, Co Dublin
Unknown	W00829	Trawler	1852	Rush, Co Dublin
Unknown	W00831	Brig	1854	Rush, Co Dublin, 2-3 miles off
Unknown (SS)	W00840	Steamship	1862	Rush, Co Dublin
Unknown	W00843	Yacht	1887	Rush Point, Co Dublin, off
Unknown	W00851	Unknown	Unknown	Rush, Co Dublin, near the sewer
<i>Blue Jacket</i>	W02913	Dandy	1868	Rush, off
<i>Margaret</i>	W03932	Schooner	1824	N Rush Bank
<i>No Name</i>	W12728	Yawl	1887	Rush Point, Co Dublin, off
<i>Branste</i>	W13383	Unknown	1819	Rush & Skerries, Co Dublin, between
Unknown	W15988	Brig	1854	Rush, 2-3M off
Loughshinny				
<i>Bertha</i>	W00545	Boat	1855	Skerries, Co Dublin / Loughshinny
<i>Myrtle</i>	W00632	Smack	1853	Loughshinny Bay, 0.25 mile N
<i>Village Belle</i>	W00663	Lugsail	1900	Loughshinny Harbour, Bar
Unknown	W00709	Unknown	1850	Loughshenny (sic Loughshinny)
Unknown	W00710	Unknown	1850	Loughshinny

Name	WIID no.	Classification	Year of loss	Place of loss
Unknown	W15913	Fishing boat	1929	Loughshinny, off
Skerries				
<i>Herbert</i> (SS)	W00492	Iron Steamship	1895	Skerries, Co Dublin, 8 miles ENE of
<i>Agnes</i>	W00530	Brig	1854	Skerries, Co Dublin, off
<i>Alexander</i>	W00531	Unknown	1766	Skerries, Co Dublin, near
<i>Amity</i>	W00533	Unknown	1844	Skerries, Co Dublin
<i>Ann & Fanny</i>	W00535	Unknown	1816	Skerries, Co Dublin, near
<i>Anna Maria</i>	W00537	Cutter	1881	Skerries, Co Dublin, pier head
<i>Aurora</i>	W00539	Brig	1861	Skerries, Co Dublin
<i>Azalie</i>	W00540	Schooner	1859	Skerries Harbour, Co Dublin, near
<i>Barmouth</i>	W00542	Unknown	1838	Skerries, Co Dublin
<i>Belle</i>	W00544	Smack	1881	Skerries, Co Dublin, pier
<i>Blackwater</i> (SS)	W00550	Iron Steamship	1905	Skerries, Co Dublin, near
<i>British Oak</i>	W00554	Unknown	1828	Skerries, Co Dublin, near
<i>Brothers</i>	W00555	Brigantine	1888	Skerries, Co Dublin, off
<i>Captain Parry</i>	W00556	Unknown	1893	Skerries, Co Dublin
<i>Caroline</i>	W00557	Unknown	1822	Skerries, Co Dublin, rocks near
<i>Cloud</i>	W00559	Sloop	1884	Skerries, Co Dublin, harbour, 3 miles N by W of / Rockabill, 1.5 miles N by W of
<i>Concord</i>	W00560	Unknown	1834	Skerries, Co Dublin
<i>Delight</i>	W00561	Unknown	1829	Skerries, Co Dublin, off
<i>Ebruna / Eblana</i>	W00565	Trawler	1881	Skerries, Co Dublin, pier, 0.5 mile SSW of
<i>Eliza</i>	W00566	Unknown	1858	Skerries, Co Dublin
<i>Ellaw</i>	W00569	Smack	1881	Skerries, Co Dublin
<i>Falcon</i>	W00575	Smack	1876	Skerries, Co Dublin, near the coast guard station
<i>Fanny</i>	W00578	Unknown	1847	Skerries, Co Dublin
Fishing boat No. 328	W00579	Fishing boat	1900	Skerries, Co Dublin, off
<i>Fortune</i>	W00580	Brigantine	1886	Barnageera, Skerries, Co Dublin
<i>Friends</i>	W00581	Unknown	1834	Skerries, Co Dublin
<i>Gazelle</i>	W00582	Barge	1875	Skerries, Co Dublin, the Roads
<i>Georgiana</i>	W00584	Unknown	1850	Skerries Harbour, Co Dublin, rocks near
<i>Georgiana / Georgina</i>	W00585	Brigantine	1850	Skerries, Co Dublin, 0.25 miles NW of
<i>Gipsey / Gipsy</i>	W00586	Smack	1861	Colt Island, near Skerries
<i>Glen Phoebe</i>	W00587	Smack	1858	Cross Rock, near Skerries

Name	WIID no.	Classification	Year of loss	Place of loss
<i>Glendalough</i>	W00588	Schooner	1915	Skerries, Co Dublin, pier, 300 yards NW of
<i>Grace & Ann</i>	W00589	Smack	1852	Skerries, Co Dublin, S strand
<i>Hector</i>	W00591	Sailing Ship	1764	Skerries, Co Dublin, rocks near
<i>Henry</i>	W00592	Schooner	1908	Skerries, Co Dublin, the Roads / Balbriggan 4 miles N of
<i>Highfield</i>	W00594	Unknown	1834	Skerries, Co Dublin
<i>Hope</i>	W00595	Unknown	1797	Skerries, Co Dublin, near
<i>Intrepid</i>	W00596	Barque	1826	Skerries, Co Dublin, near
<i>Irene</i>	W00597	Unknown	1834	Skerries, Co Dublin
<i>Isabel</i>	W00598	Brig	1876	Skerries, Co Dublin, harbour / harbour, 1 mile N of
<i>Isabella</i>	W00599	Schooner	1877	Skerries, Co Dublin, the Roads
<i>Jane and Mary</i>	W00601	Unknown	1834	Skerries, Co Dublin
<i>John</i>	W00603	Unknown	1811	Skerries, Co Dublin, off
<i>John & Hannah</i>	W00604	Unknown	1788	Skerries, Co Dublin, the Roads
<i>John & Mary</i>	W00605	Schooner	1872	Skerries, Co Dublin, off
<i>Johnson</i>	W00607	Unknown	1786	Skerries, Co Dublin, Islands
<i>June</i>	W00608	Schooner	1831	Skerries, Co Dublin, off Shennick Island / near Balbriggan
<i>La Virtue</i>	W00610	Unknown	1763	Skerries, Co Dublin, near
<i>Maggie</i>	W00613	Sailing Boat	1929	Skerries, Co Dublin, off
<i>Manchester</i>	W00615	Unknown	1858	Skerries, Co Dublin, near
<i>Mantura</i>	W00616	Schooner	1848	Skerries, Co Dublin, off
<i>Margaret</i>	W00617	Unknown	1828	Skerries, Co Dublin, the Roads
<i>Margaret Ann</i>	W00618	Schooner	1861	Skerries, Co Dublin
<i>Margaret Anne</i>	W00619	Schooner	1861	Skerries, Co Dublin, near
<i>Margaretta</i>	W00620	Unknown	1830	Skerries, Co Dublin
<i>Mary</i>	W00621	Smack	1848	Skerries, Co Dublin, Cross Rocks
<i>Mary Frances</i>	W00627	Unknown	1833	Skerries, Co Dublin, harbour
<i>Matthew Owen</i>	W00629	Schooner	1890	Skerries, Co Dublin, 3 miles SW of
<i>Morning Star</i>	W00631	Ship	1812	Skerries, Co Dublin
<i>Nancy</i>	W00633	Unknown	1786	Skerries, Co Dublin
<i>Prince Albert</i>	W00636	Unknown	1848	Skerries, Co Dublin, off
<i>Robert & Mary</i>	W00639	Unknown	1790	Skerries, Co Dublin, near
<i>Rowen</i>	W00641	Unknown	1838	Skerries, Co Dublin

Name	WIID no.	Classification	Year of loss	Place of loss
<i>St. Antonio & Almas</i>	W00642	Unknown	1782	Skerries, Co Dublin, near
<i>St. John</i>	W00644	Smack	1877	Skerries, Co Dublin, 1 mile N of
<i>St. Joseph</i>	W00645	Fishing boat	1908	Skerries, Co Dublin, near
<i>St. Peter</i>	W00646	Unknown	1833	Skerries, Co Dublin
<i>Savage</i>	W00649	Brig	1756	Skerries, Co Dublin, harbour
<i>Shamrock</i>	W00651	Smack	1856	Skerries Harbour, Co Dublin / Horrocks, W side of Dublin Harbour
<i>Shrimp</i>	W00653	Barge	1875	Skerries, Co Dublin, the Roads
<i>Speculator</i>	W00654	Schooner	1850	Skerries, Co Dublin, near
<i>Spey</i>	W00655	Brig	1846	Skerries, Co Dublin, off
<i>Telford</i>	W00658	Unknown	1834	Skerries, Co Dublin
<i>Two Brothers</i>	W00661	Unknown	1790	Skerries, Co Dublin
<i>Victor / Victory</i>	W00662	Smack	1881	Skerries, Co Dublin, pier, 0.5 mile SW of
<i>Village Belle</i>	W00664	Schooner	1916	Skerries, Co Dublin, off
<i>Volusia</i>	W00665	Unknown	1838	Skerries, Co Dublin
<i>Wanderer</i>	W00666	Schooner	1856	Colt Island, NE of Skerries
<i>Water Lily</i>	W00667	Unknown	1857	Irish Sea, Skerries or Balbriggan, between
<i>Wave</i>	W00668	Schooner	1897	Cross Rock, near Skerries Pier, Co Dublin
<i>William</i>	W00670	Brigantine	1881	Skerries, Co Dublin
<i>Winsor</i>	W00671	Unknown	1811	Skerries, Co Dublin, near
Unknown	W00674	Unknown	1534	Skerries, Co Dublin, harbour
Unknown	W00675	Unknown	1534	Skerries, Co Dublin, harbour
Unknown	W00676	Unknown	1534	Skerries, Co Dublin, harbour
Unknown	W00677	Unknown	1534	Skerries, Co Dublin, harbour
Unknown	W00678	Packet boat	1675	Skerries, Co Dublin
Unknown	W00679	Unknown	1689	Skerries, Co Dublin, harbour
Unknown	W00681	Ship	1726	Skerries, Co Dublin
Unknown	W00682	Ship	1726	Skerries, Co Dublin
Unknown	W00683	Ship	1726	Skerries, Co Dublin
Unknown	W00684	Ship	1726	Skerries, Co Dublin
Unknown	W00685	Ship	1726	Skerries, Co Dublin
Unknown	W00687	Brig	1756	Skerries, Co Dublin, harbour
Unknown	W00688	Sloop	1756	Skerries, Co Dublin, off
Unknown	W00689	Ship	1764	Skerries, Co Dublin, near
Unknown	W00690	Unknown	1764	Skerries, Co Dublin

Name	WIID no.	Classification	Year of loss	Place of loss
Unknown	W00691	Unknown	1764	Skerries, Co Dublin
Unknown	W00692	Unknown	1766	Skerries, Co Dublin, Islands, near
Unknown	W00693	Unknown	1766	Skerries, Co Dublin Islands, near
Unknown	W00697	Collier	1783	Skerries, Co Dublin
Unknown	W00698	Collier	1783	Skerries, Co Dublin
Unknown	W00699	Collier	1783	Skerries, Co Dublin
Unknown	W00700	Unknown	1783	Skerries, Co Dublin
Unknown	W00701	Brig	1786	Skerries, Co Dublin, near
Unknown	W00703	Coaster	1790	Balbriggan and Skerries
Unknown	W00704	Unknown	1812	Skerries, Co Dublin, near
Unknown	W00705	Sloop	1824	Skerries, Co Dublin
Unknown	W00708	Unknown	1848	Skerries, Co Dublin, off
Unknown	W00714	Schooner	1856	Colt Island, off Skerries
Unknown	W00715	Brigantine	1859	Skerries, Co Dublin
Unknown	W00718	Unknown	1861	Balbriggan to Skerries
Unknown	W00719	Unknown	1861	Barnegeeragh rocks, between Balbriggan and Skerries
Unknown	W00720	Unknown	1861	Barnegeeragh rocks, between Balbriggan and Skerries
Unknown	W00722	Brig	1861	Skerries Harbour, Co Dublin, outside
Unknown	W00723	Schooner	1861	Skerries, Co Dublin, Islands
Unknown	W00724	Brig	1861	Skerries, Co Dublin Island, N of
Unknown	W00725	Brig	1861	Skerries, Co Dublin, 1 mile N of
Unknown	W00726	Unknown	1871	Skerries, Co Dublin, near
Unknown	W00728	Unknown	1877	Skerries, Co Dublin
Unknown	W00729	Unknown	1880	Skerries, Co Dublin
Unknown	W00734	Boat	1929	Skerries, Co Dublin
<i>Juniata</i>	W00774	Unknown	1825	Skerries, Co Dublin, 1 mile from
<i>Active</i>	W01970	Barge	1905	Skerries, Co Dublin, 12 miles SE of
<i>Countess of Arran</i>	W01991	Unknown	1855	Skerries, Co Dublin, lighthouse, 5 miles NNE of
Unknown	W02203	Unknown	1903	Skerries, Co Dublin, 20° E by S of
Unknown	W03089	Unknown	1854	Irish Sea, Skerries to Strangford, between
Unknown	W05992	Sailing Boat	1849	Cahiriveen, off the Skerries
<i>Janes</i>	W11939	Unknown	1852	Skerries, Co Dublin (on shore)
<i>Victory</i>	W12316	Smack	1881	Skerries Pier, Co Dublin, ½ mile S.W. of

Name	WIID no.	Classification	Year of loss	Place of loss
<i>River Ness</i>	W12458	Steam Trawler	1940	Skerries, Co Dublin, 8 miles NE by N of
<i>Ruby (SS)</i>	W12465	Steamship	1913	Skerries, Co Dublin, 10 miles W of
<i>Carolina Falanga</i>	W12729	Barque	1887	Skerries, Co Dublin, Irish Sea, off
<i>Mary Ann Louisa</i>	W13486	Unknown	1830	Skerries, Co Dublin, on the shore
<i>Romeo</i>	W14070	Unknown	1843	St. Patrick's Island, Skerries
<i>St. Nicholas of Galway (SS)</i>	W14298	Steam Trawler	1934	Rockabill, 20M N of / Skerries
<i>Yews</i>	W14591	Schooner	1910	Skerries, Co Dublin, 10M off
Unknown	W15253	Unknown	1896	Skerries Lighthouse, SW ½ S, 10M
<i>Georgiana</i>	W15290	Unknown	1850	Skerries, Co Dublin, on the rocks
<i>Helping (MV)</i>	W15802	Motor Fishing Vessel	1928	Dun Laoghaire to Skerries Bay, en route
Unknown	W15825	Unknown	1903	Skerries, Co Dublin, E by S 20 degrees
Unknown	W16310	Unknown	1766	Skerries, Co Dublin,
<i>Alexander of Irwin</i>	W16311	Snow	1766	Skerries, Co Dublin, near
<i>Rectory Bells</i>	W17341	Trawler	1881	Skerries
Unknown	W17411	Fishing boat	1838	Skerries Harbour, off
<i>Emma</i>	W18312	Unknown	1867	Skerries Sound
<i>Jane</i>	W18328	Schooner	1867	Cans Rock, near Skerries
<i>Azoff</i>	W00541	Unknown	1869	Shenick Island (Skerries)
Rockabill				
<i>Albert</i>	W00482	Brigantine	1872	Rockabill, Co Dublin, lighthouse, NNW 8 miles of
<i>Curlew (SS)</i>	W00486	Steam Trawler	1899	Rockabill, Co Dublin, 5 miles NE
<i>Trinculo</i>	W00501	Lugger	1876	Rockabill, Co Dublin, 9 miles NE
<i>Recovery</i>	W00637	Sloop	1882	Rockabill, Co Dublin, lighthouse, c.1 mile away/4 miles ENE of
<i>Sarah</i>	W00648	Ketch	1890	Rockabill, Co Dublin, off
Unknown	W00732	Trawler	1890	Rockabill, Co Dublin, lighthouse, off
<i>Dove</i>	W01995	Motor Boat	1912	Rockabill, Co Dublin Lightship, 3 miles ENE
<i>Eva</i>	W02007	Schooner	1877	Rockabill, Co Dublin, 12 miles SE of
<i>Repealer</i>	W02073	Schooner	1873	Rockabill, Co Dublin, lighthouse, 5 miles SSE of
<i>Countess</i>	W02924	Brigantine	1875	Rockabill, Co Dublin, NW by W 20 miles

Name	WIID no.	Classification	Year of loss	Place of loss
<i>Solway</i> (SS)	W12328	Steamship	1881	Rockabill, Co. Dublin, 25 miles E by S of
<i>The Marquis</i> (SS)	W12365	Steamship	1917	Rockabill, Co Dublin, 16 miles ESE of
<i>Downshire</i> (SS)	W12478	Steamship	1914	Rockabill, Co Dublin, lighthouse, 6 miles SSE of
<i>Soggarth Aroon</i>	W12508	Ketch	1910	Rockabill, Co Dublin, lighthouse, 12 miles NE of
<i>Buttercup</i>	W12685	Ketch	1891	Rockabill, Co Dublin, lighthouse, 8 miles off, Irish Sea
<i>Shamrock</i>	W12686	Smack	1892	Rockabill, Co Dublin, Lighthouse, 8 miles S of, Irish Sea
<i>Hotson</i>	W18192	Schooner	1867	Rockabill, near
Balbriggan				
<i>Henry</i>	W00337	Schooner	1908	Laytown station, 4 miles ENE/Balbriggan
<i>Sirius</i>	W00392	Brig	1853	Balbriggan, 2 miles N
Unknown	W00461	Barque	1881	Balbriggan, 7 miles NNE
<i>Amelia</i>	W00532	Unknown	1813	Balbriggan
<i>Ann</i>	W00534	Schooner	1861	Caragree Rocks, near Balbriggan
<i>Ann Elizabeth</i>	W00536	Schooner	1880	Balbriggan Strand
<i>Argyle</i>	W00538	Unknown	1820	Balbriggan
<i>Betty</i>	W00546	Unknown	1806	Balbriggan, near
<i>Billow</i>	W00547	Schooner	1879	Balbriggan
<i>Billow</i>	W00548	Schooner	1879	Balbriggan
<i>Billy</i>	W00549	Unknown	1769	Balbriggan
<i>Britannia</i>	W00553	Unknown	1823	Balbriggan, near
<i>Caroline</i>	W00558	Unknown	1857	Balbriggan, Lighthouse Point
<i>Dundalk</i>	W00563	Unknown	1838	Balbriggan
<i>Earl Gower</i>	W00564	Unknown	1844	Balbriggan
<i>Eliza Jane</i>	W00567	Lugger	1913	Balbriggan, rocks N of the Lighthouse
<i>Elizabeth</i>	W00568	Unknown	1833	Balbriggan
<i>Emma</i>	W00572	Unknown	1873	Balbriggan
<i>Endeavour</i>	W00573	Brig	1881	Balbriggan
<i>Fame</i>	W00576	Unknown	1815	Balbriggan, near
<i>Fancy</i>	W00577	Sloop	1826	Balbriggan, near
<i>General Johnston</i>	W00583	Unknown	1803	Balbriggan
<i>Hart</i>	W00590	Trawler	1903	Cardy Rocks/ 1.5 miles E. of Balbriggan Coastguard Station

Name	WIID no.	Classification	Year of loss	Place of loss
<i>Henry Cox</i>	W00593	Unknown	1833	Balbriggan, near
<i>James Hamilton</i>	W00600	Brig	1852	Murphy's Bay, S of Balbriggan Lighthouse
<i>Jessie Graham</i>	W00602	Fishing boat	1908	Balbriggan Harbour
<i>Kohinnon</i>	W00609	Schooner	1877	Balbriggan harbour, 200 yards N
<i>Lady Florence</i>	W00611	Unknown	1833	Balbriggan
<i>Lady Lilford</i>	W00612	Brig	1879	Long Leg, near Balbriggan
<i>Maid of Galloway (SS)</i>	W00614	Paddler Steamer	1850	Balbriggan, 0.75 miles N
<i>Mary</i>	W00622	Schooner	1858	Balbriggan, near
<i>Mary</i>	W00623	Schooner	1861	Balbriggan, N of
<i>Mary Ellen</i>	W00624	Schooner	1897	Balbriggan Harbour, entrance
<i>Mary Ellen</i>	W00625	Brigantine	1897	Balbriggan
<i>Mary Ellen</i>	W00626	Brigantine	1899	Balbriggan Lighthouse, 200 yards to the NW / Balbriggan Beach, Co Dublin
<i>Matchless</i>	W00628	Lugger	1910	Balbriggan Pier, near the S side
<i>Minerva</i>	W00630	Unknown	1820	Balbriggan
<i>Osprey</i>	W00634	Cutter	1883	Cardy Rocks, near Balbriggan
<i>Pride of Erin (MV)</i>	W00635	Motor Boat	1915	Balbriggan, 3-4 miles SE
<i>Rigby</i>	W00638	Schooner	1850	Balbriggan, 0.25 mile N
<i>Rosebud</i>	W00640	Cutter	1911	Balbriggan
<i>Sarah</i>	W00647	Schooner	1873	Balbriggan, rocks near
<i>Senhouse</i>	W00650	Brig	1852	Balbriggan Pier Head
<i>Shannon</i>	W00652	Unknown	1844	Balbriggan, N of
<i>Spray</i>	W00656	Fishing boat	1910	Balbriggan Harbour
<i>Surprise</i>	W00657	Lugger	1876	Balbriggan, 1½ miles S, near Ardgillan / Longleg
<i>Triumph</i>	W00660	Schooner	1857	Balbriggan
<i>Welsford</i>	W00669	Brigantine	1877	Lothar Lodge, 2 miles N of Balbriggan
<i>Young England</i>	W00672	Barque	1852	Balbriggan Harbour, N of (within 100 yards of the wreck of Bower Hill - W00551)
<i>Young James</i>	W00673	Unknown	1815	Balbriggan, near
Unknown	W00686	Unknown	1750	Barnewall Estate, near Balbriggan
Unknown	W00694	Unknown	1770	Balbriggan, off
Unknown	W00695	Wherry	1772	Balbriggan, near
Unknown	W00696	Boat	1783	Balbriggan
Unknown	W00702	Sloop	1786	Balbriggan

Name	WIID no.	Classification	Year of loss	Place of loss
Unknown	W00706	Schooner	1838	Balbriggan, near
Unknown	W00707	Unknown	1844	Balbriggan, off
Unknown	W00711	Unknown	1852	Balbriggan
Unknown	W00712	Unknown	1852	Balbriggan
Unknown	W00713	Unknown	1856	Balbriggan
Unknown	W00716	Unknown	1861	Balbriggan, N of
Unknown	W00717	Schooner	1861	Balbriggan, 3 miles N of the Tower
Unknown	W00721	Unknown	1861	Balbriggan
Unknown	W00727	Barque	1875	Balbriggan Lighthouse, off
Unknown	W00731	Trawler	1888	Balbriggan, bearing W 2.5 miles
Unknown	W02218	Unknown	Unknown	Balbriggan, c. 10 miles off
<i>Dispatch</i>	W02928	Sailing Ship	1869	Balbriggan to the Calf of Man
Unknown	W03075	Man O' War	1763	Balbriggan, near / Mornington, near Drogheda
Unknown	W03090	Unknown	1861	Bettystown to Balbriggan
<i>Hooton</i>	W13836	Unknown	1839	Balbriggan
Unknown	W14154	Schooner	1838	Balbriggan, near / on the shore
<i>Amity</i>	W14828	Unknown	1892	Balbriggan Harbour
<i>Walney</i> (SS)	W14858	Steamship	Unknown	Balbriggan Harbour
<i>Harmony</i>	W15035	Schooner	1894	Balbriggan Harbour
<i>Ellen Mary</i>	W15048	Trawler	1898	Balbriggan, Cargy Rocks
<i>Galway Maid</i> (SS)	W15269	Unknown	1850	Balbriggan, 0.25M N of
<i>Sarah Blanche</i> (SS)	W15294	Steamship	1849	Balbriggan Harbour
<i>Catherine</i>	W15505	Unknown	1855	Balbriggan, rocks near
Skerries Lifeboat	W16728	Lifeboat	1873	Balbriggan, near
Bremore, Cardy Rocks				
<i>Bower Hill</i>	W00551	Unknown	Unknown	Cardy Reef, Bremore Bay
<i>Ellen and Mary</i>	W00571	Cutter	1898	Cardy Rocks, off Bremore
<i>Europe</i>	W00574	Snow	1766	Bremore, rocks off
Unknown	W00730	Trawler	1883	Cardy rocks
Unknown	W00733	Unknown	1903	Cardy Rocks