

# **PROJECT:**

# US to Ireland Subsea Fibre Optic Cable, Castlefreke, Long Strand & Glandore Bay, Co. Cork

## SCOPE:

Foreshore Archaeological Desktop Study

# **PREPARED BY:**

DATE:

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CLIENT:

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# 1. Introduction

This report sets out the results of an archaeological desktop study of the foreshore at the landfalls as part of a Maritime Usage Licence application for marine surveys to investigate the feasibility of constructing a new subsea telecoms cable system, linking the United States with Southwest Ireland across the Atlantic Ocean. The study was undertaken by *Mizen Archaeology Ltd*. on behalf of McMahon Design & Management Ltd.

# 2. Receiving Environment

# 2.1 Location for proposed survey and landfalls

The License Application Area is situated off the coast of County Cork (Figure 1). The survey corridor has length of 898.5 km and a total area of 16,880 km<sup>2</sup>. A cable route corridor of approx. 500m width will be surveyed within the licence application area. The survey corridor will be approximately 3 x Water Depth (up to 10km in width) in areas where the water depth is greater than 1500m off the Continental Shelf. The general lines of the proposed offshore survey corridors within Irish EEZ are shown in Figure 2 overleaf.

The survey area covers two potential landfalls close to Rosscarbery in County Cork, with survey corridors through Rosscarbery Bay to encompass two potential landfalls to the southeast of the entrance to Rosscarbery; namely at Ownahincha (Inchy Strand)/Little Island Strand and at Long Strand (Figures 1 & 2).

A Desktop Marine Archaeology Assessment will be undertaken for the final 500m marine survey corridor offshore before survey works are undertaken which will identify the known wrecks or artefacts of cultural heritage within that area and consider the works in combination with historical and cultural sensitivity of the area.

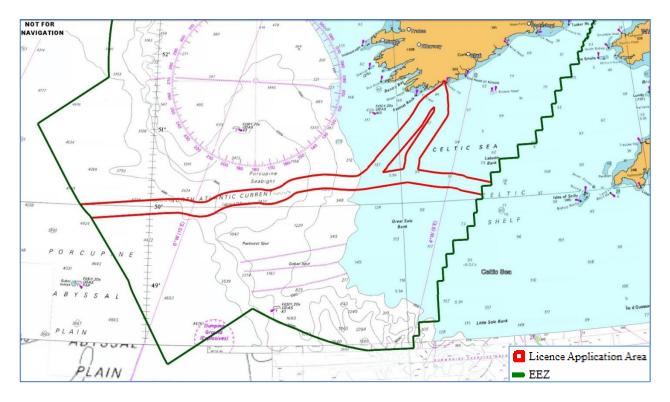


Figure 1: Proposed survey area.

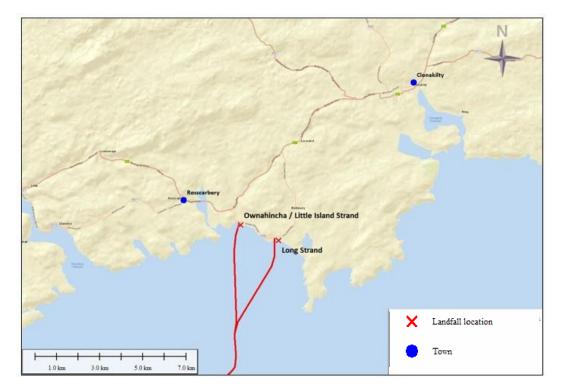


Figure 2: Potential landfall locations.

## 2.1.1 Long Strand

The survey area covers a potential landfall at Long Strand. The beach is a long and uninterrupted stretch of sand and is buffered to the north from the R598 (Clonakilty Rd) and L4006 (to Galley Head) by a belt of grassy coastal sand dunes and an area known as Castle Freke Warren (locally as 'The Warren', Figure 3).



Figure 3: Proposed licenced survey area at Long Strand landfall site.

### 2.1.2 Ownahincha/Little Island Strand

The survey area covers a potential landfall at Ownahincha (Inchy Strand)/Little Island Strand. This is effectively two beaches linked by a spit at Iron Rock with shingle and the Ownahincha River to the west and with sand, dunes and rocky inlets to the east. The R598 (Clonakilty Rd) runs parallel to the beach, separated by a belt of grassy coastal sand dunes on the eastern, coastal edge (Figure 4).



Figure 4: Proposed licenced survey area at Ownahincha landfall site.

### 2.2 Location relative to cultural heritage

The location of the proposed landfall and cable route is a remote coastal area of West Cork, within Rosscarberry Bay and to the immediate southeast of the entrance to Glandore Harbour. There is no evidence of maritime infrastructure within the areas of the two strands, either today or over the centuries – no landing slips, quays or harbour works depicted; however, the presence of coastal archaeological sites as well as the shipwreck records (as discussed below) denote an active cultural coastal landscape nevertheless. While very much used as an amenity by locals and visitors alike, frequenting and enjoying the two open strands with their fine, golden sands, this was very much a dispersed landscape in times past. That being said, the medieval sites (ringforts, castle & church) as well as the later fortified house of Castle Freke, had a defined focus on the sea, functioning to patrol and control users of this coastal areas but also to denote status for those coming ashore. While large ships did not land in the area, it is to be presumed smaller craft could have, beaching on the strands and allowing access to and from the hinterland. There is therefore a cultural heritage potential at the sites of the two proposed landings and cable route that is addressed in the following study.

# 3. Scope of Geophysical Survey and Site Investigation Works

The full details of the works, including the geophysical survey can be found in the following: MDM 2024. US to Ireland Subsea Fibre Optic Cable Application Schedule of Works, Works Methodology (McMahon Design and Management Ltd.). The principal objective of the Marine Survey & Site Investigations is to ascertain a feasible and safe route for cable system design, deployment, survivability and subsequent maintenance with due regard for environmental and ecological considerations, and including pertaining to underwater cultural heritage. The survey will also enable decisions to be made on cable armouring and burial. The survey will identify the necessary water depths, route features, seabed obstructions, seabed geomorphology and cable hazards and will also provide detailed information on the seabed sediment, subsurface stratigraphy and upper sediment layers to support cable route and installation engineering. The site investigations will provide "ground-truthing" of the geophysical data along the route.

The geophysical survey operations will be broken down into separate but overlapping areas, with boundaries defined by water depth as specified in the technical requirements outlined below. These water depth boundaries may be adjusted due to suitability of the survey vessel(s) and survey spread. The survey and survey line spacing will be designed to ensure adequate coverage and overlap of geophysical measurements.

- Landfall Beach Survey Terrestrial Beach and Intertidal Zone
- Inshore Survey from 3m Chart Datum to 15m Chart Datum
- Offshore Survey Water depths greater than 15m Chart Datum

### Landfall Beach Survey & Site Investigations

A non-intrusive topographic and geophysical survey of the beach along the line of the proposed cable route at each landfall is required to the low water mark. The topographical survey would typically be carried out by GPS Rover, Total Station or UAV Aerial Drone using photogrammetry or LiDAR techniques. The terrestrial geophysical survey will comprise remote sensing techniques such as Ground Penetrating Radar to establish subsurface features and depth to bedrock and magnetometer or handheld marine metal detector to locate buried ferrous objects.

Landfall Site Investigations will be undertaken on the beach to establish the depth and nature of the sediment and depth to bedrock. The focus of the site investigations will be on the upper layers of sediment to assess the feasibility of cable burial and installation techniques. The following may be undertaken at each landfall:

- 3 Trial Pits on the beach (target depth 2.5m).
- Bar probes on the beach at 10m spacing (approx. 6 to 8).
- Bar probes from the Low Water Line to the 3m water depth contour at 10m spacing. (approx. 6 to 8)

The Trial Pits will be positioned at approximately 30m centres starting seaward of the High-Water Mark. The Trial Pits will be excavated, logged, photographed and backfilled in a single tidal cycle. The trial pits will be backfilled with the original excavated materials in the sequence in which they are excavated.

A summary Method Statement for excavation of the Trial Pits is as follows;

- Excavate sand and place to one side.
- Excavate substrate and place separate from sand.
- Measure, log and photograph each Trial Pit.
- Backfill in sequence compacting with bucket of back-hoe as the backfilling proceeds.

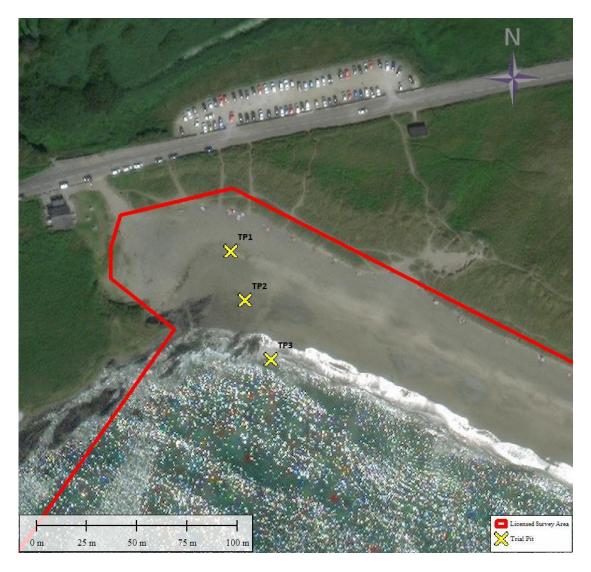


Figure 5: Long Strand trial pit locations.

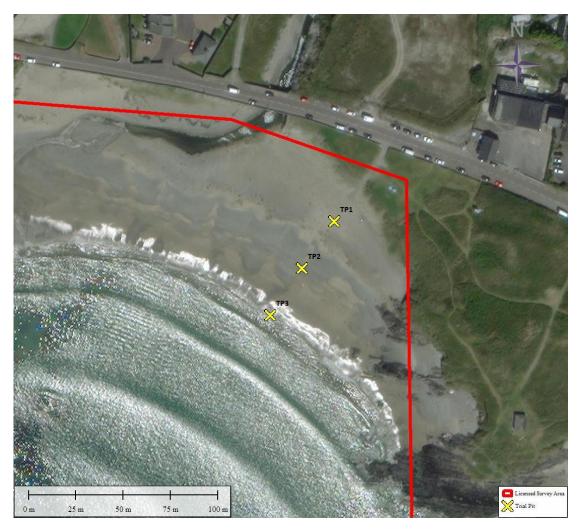


Figure 6: Ownahincha trial pit locations Ownahincha.

The bar probes on the beach are manually driven to a depth of 2 metres simply to prove the depth of upper layers of sand, gravel or soft material.

# 4. Archaeological Methodology

A detailed desktop study of the landfall was undertaken by *Mizen Archaeology Ltd.* to ensure all available literature and background information was considered to inform the underwater archaeological potential of the cable route. A Desktop Marine Archaeology Assessment will be undertaken for the final 500m marine survey corridor offshore before survey works are undertaken which will identify the known wrecks or artefacts of cultural heritage within that area and consider the works in combination with historical and cultural sensitivity of the area. The following sources were consulted as part of the desktop study:

- <u>RMP</u>: The Record of Monuments and Places (RMP) compiled by the Archaeological Survey
  of Ireland comprises lists, classifications of monuments and maps of all recorded
  monuments with known locations and zones of archaeological significance. The monument
  records are accessible online via the National Monuments Section (NMS) of the Department
  of Housing, Local Government and Heritage at <u>www.archaeology.ie</u>. These were used to
  establish the wider archaeological context of the area.
- <u>OSI</u>: Ordnance Survey Ireland historic and contemporary maps were examined to measure the changing landscape of the landfall site, and the surrounding shore.
- <u>Excavations Bulletin</u> online database (<u>www.excavations.ie</u>) which contains summaries of all archaeological excavations in Ireland, was consulted to review archaeological investigations undertaken previously in the area and therefore to inform on the nature and extent of the potential archaeology that may be encountered.
- <u>Wreck Inventory of Ireland Database (WIID) and Wreck Viewer</u>: The information contained within the WIID & WV was gathered from a broad range of cartographic, archaeological and documentary sources, and each entry in the Inventory gives information on the ship's name, type of vessel, port of origin, owner's name, cargo, date of loss and other relevant information where available. While the WIID contains information on some 18,000 shipwreck records (both those with known and unknown locations), the Wreck Viewer contains the same information for those wrecks but only those with known locations.</u>
- <u>Inventory of Piers and Harbours</u> is a draft unpublished document compiled by the DHLGH which has drawn primarily from information contained in the Office of Public Works (OPW) own documents reporting on works to piers and harbours from the 18<sup>th</sup>-century to the mid-20<sup>th</sup> century. It draws on select other historical sources too that deal with historical piers and harbour development in Ireland.
- <u>Topographical Files</u>: Accessed via National Museum of Ireland and they hold details of any artefactual material recovered with Ireland and dating from the 18<sup>th</sup> century to present, categorised according to County and Townland.
- <u>Cartography</u>: Several historic maps and charts were examined (see references below for a full list) and which provide valuable insight into the changes to the coastline over time, indications of structures in place through time and which may now be gone as well as navigation routes that can inform on ship traffic and ship losses as well.
- <u>Aerial Photography</u>: A variety of low and high-altitude aerial photography was examined (see references below for full list).

• <u>Documentary sources</u>: Key historical and archaeological sources were examined. For a full list of all sources examined see Bibliography in Section 8.

# 5. Archaeological Desktop Study

# 5.1 Historical and Archaeological Overview

There are no recorded archaeological sites or features within the footprint of the proposed landfall locations. There are, however, a number of sites less than and within a 1km radius, ranging in date from the Bronze Age through to the Post-Medieval period (Figure 5; see also Appendix 9.1 for a full list of the RMP sites).



*Figure 7: Recorded sites and monuments in the vicinity of trial pits and proposed cable routes.* 

### Prehistoric

There are three prehistoric sites within a 1km radius of the proposed landfall sites: a *fulacht fiadh* (CO143-090), a *ring barrow* (CO143-075), and a *standing stone* (CO143-027).

*Fulacht fiadh* are also referred to as burnt mounds, these are the most common prehistoric monument type in Ireland. On the surface of the ground, they may be visible as a crescent-shaped or horseshoe-shaped mound, generally located close to a water source, such as a stream or river. Excavations of *fulacht fiadh* have sometimes revealed associated hearths, troughs, and arrangements of postholes. They were used for water heating, although whether for cooking, bathing, or other purposes is debated. While examples have been dated from the Neolithic through the Medieval period, the majority were constructed in the Bronze Age (2500-500 BC). Notably, the ring barrow is in close proximity to the medieval Rathbarry Castle (CO143-074002-).

#### **Early Medieval**

The early medieval period is represented by three ringforts (CO143-103, CO143-078, and CO143-077) and three souterrains (CO143-071002-, CO143-070, and CO143-104).

Ringforts are the most common monument from the Early Medieval Period (400-1100 AD) in Ireland, with examples in every county. Most examples are simple enclosures defined by a single earthen bank and ditch (raths), and are between 25-30m in diameter. These were likely occupied by extended and dispersed family units, and were probable self-sufficient. Their interiors generally contained features such as domestic dwellings, outhouses, animal pens, food processing structures, craft areas, hearths and souterrains. In examples where there has been little to no evidence of interior structures, it has been suggested that they may have functioned as shelter for cattle. A mixed economy would have been practiced, involving cereal growing, animal husbandry, and dairying in particular. By the 10<sup>th</sup> century, there were significant social and economic changes, and many though not all ringforts were abandoned, and therefore a date range into the mid-Medieval period is recorded (i.e. 13<sup>th</sup> century).

Souterrains are underground structures, which range from simple short lengths of a single undifferentiated passage or simple chambers to complexes of interconnected passages and chambers. They are generally found in association with settlement sites, especially ringforts. It is thought that they served two basic functions: as temporary refuge in times of danger and as storage cellars to keep dairy and other food at cool temperatures. Their main period of use was during the early to mid-Medieval, specifically *c*. AD 750-1250, although some earlier examples have been found. They have an uneven geographical distribution, with concentrations in West Cork, Kerry, northern Antrim, southern Galway and northern Louth.

#### **Medieval & Post-Medieval**

Rathbarry Castle (CO143-074002, CO143-074003) was said to have been built by Randal Oge Barry in the early 15<sup>th</sup> century, on the site of a substantial rath (Carroll 2001, 150). James FitzRichard Barry took on the title Lord Barrymore in 1568, though he was eventually tried and imprisoned for treason, after joining the ill-fated Earl of Desmond's rebellion of the 1580s. The village within which the castle is located is still known as Rathbarry but the areas around it are all now referred to as Castlefreke, including the Castle, woods and dunes, as Castlefreke Warren as noted above. The castle overlooks Rahavarrig Lough and Long Strand to the south and west. The land slopes to the north and east and while built by Randel Oge Barry by 1642 it was in the possession of Arthur Freke (Power et al, 1992, p. 324). He had learned of an imminent uprising in early 1642 and, despite friendships with local Irish chieftains, he supported the English side (Carroll 2001, 151). Teige an Duna MacCarthy laid siege to the fortification, which apparently housed over 100 people from the surrounding countryside (The Schools' Collection 0316, 75). The siege was briefly lifted when Lord Forbes arrived from Kinsale, but as he went to aid the English in Rosscarbery, the siege was laid again. Ultimately, the siege was ended by the arrival of a large force led by Sir Charles Vavasour and Captain Jephson. The besieged were brought to safety in Bandon, but Rathbarry Castle was burnt. Despite the damage, the Irish reoccupied Rathbarry Castle and began repairs, before being removed the following year by the Parliamentarian Colonel Myn. The Frekes later tried to return to the castle, but were evicted by the Hulls of West Cork, who were extensive speculators in the area and who had leased it from them.

In 1690, the castle was burned down by Jacobean forces, and no further attempts were made to restore it. When the Frekes returned to the area in 1794, they built a new country house- Castlefreke House (CO143-071001) a short distance away. This continued to be held by the Frekes until the first half of the 20<sup>th</sup> century, when it was sold. The roof was then removed from the building, and it has since been left to deteriorate.

Rathbarry parish church (CO143-076003) which is located a short distance southeast from Castlefreke Castle was recorded as in repair in 1615 and in ruins by the end of the same century, although the date of its initial construction is not recorded. This rectangular structure is missing its eastern and western walls, with only portions of the northern and southern walls surviving. There is visible signs of alterations and rebuilding to the remaining structure. There is a doorway at the west end of the north wall but much of it has been robbed out; a single window ope in the north and south walls are now missing its light surrounds while a square-headed light can be seen in the north wall and pointed light in south wall. A trefoil-headed piscine was recorded in the church in the 1930s but this appears now to be gone. The

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tomb of Ralph Freke, who died in 1717 can be found overlying the east end of the south wall (Power et al, 1992, p. 335).

The church is located within Rathbarry/Castlefreke graveyard (CO143-076001). On a gentle west-facing slope that overlooks Long Strand to the south, the graveyard and its church is within the Castlefreke demesne. The graveyard is roughly rectangular surrounded by a stone wall. Inscribed gravestones primarily date from the 1700s and the ruins of the Church of Ireland Church (CO143-076002-), which was constructed in 1825, stand within the northern section of the site, close to the site of the earlier parish church of Rathbarry. The C of I church was closed by 1927 (HEV; Power *et al*, ibid.).

A high cross, known as Lady Carbery's Cross (CO143-073), is the tallest high cross in Ireland. However, it was only erected in 1922 as a memorial to Lady Carbery's late husband, the 9<sup>th</sup> Baron of Carbery. The cross is located to the west of the proposed landfall at Long Strand, along a small roadway that heads north from the R598.

#### **Protected Structures**

Rathbarry Church of Ireland church (Reg. No. 20914316) is also a listed as a Protected Structure. This square-plan, single-bay structure with a three-stage tower with double height nave attached to the southwest has an attached gabled entrance porch. The roof is missing. There are crenelated pinnacle to the tower. The walls are of rubble and dress limestone, with ashlar buttresses and with string courses between the tower stages. There are square-headed opening at the upper tower levels, pointed arch opening to the ground floor. There are a pair of lancet windows to the nave, set in tripartite arrangements to the chancel. There are also the remains of mosaic within the chancel. Built by the Freke family in the early 19<sup>th</sup>-century when the estate was being greatly improved (National Inventory of Architectural Heritage).

Castlefreke demesne walls, gates and railings (Ref no. 20914318). These date to the mid-19<sup>th</sup> century and surround the Castlefreke estate. They consist of rubble stone demesne walls, built around 1840, the rubble fabric was overhung with coping stones. The walls traverse fields as well as running along the roadside. The walls inform on the extent of Castlefreke estate in its heyday, being at one time continuous for many kilometres and for the most part they remain in a good state of repair (Ibid.).

Castlefreke gate lodge (Ref no. 20914317) is a double-pile two-bay and single-storey gate lodge, built around 1820. It has a pitched roof porch to the front, at the east, with timber bargeboards. There is a later extension to the rear, at the north. Gables on the south side are incorporated into the demesne wall. The canted window is within dressed limestone walls, with square-headed window opening with

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stone sills, and the opening now blocked off. Limestone voussoirs can be seen to the canted bay window opening. A square-headed door opening is in the porch, also now blocked but which has a limestone lintel. Rendered gate piers are within the rubble demesne wall to the south, the piers are rendered and have stone ball finials and wrought-iron gates. These are situated and denote the entrance to Rathbarry Castle. The gate lodge forms part of the overall demesne, which has a number of other gate lodges throughout and these buildings denoted the status of the main house. Built by the Frekes, the gate lodge retains much of its original form and character (National Inventory of Architectural Heritage).

House (Ref No. 20914309) is constructed of wood with a corrugated roof. This detached, three-bay single storey structure was built around 1950. A more recent extension can be seen to the rear. It has a pitch roof with timber bargeboards and finials. It comprises timber clapboard walls on a concrete plinth, and has square-headed windows with timber and metal sills. The square-headed door opening has wrought-iron strap hinges. A wrought-iron gate is located to the south. Its unique character is enhanced by its corrugated roof and the material used in its construction. It is a fine example of a mid-20<sup>th</sup>–century coastal holiday house which were easily erected and inexpensive to build. It retains many of its original features (Ibid.).

### 5.2 Place names and Townland names

Ireland is known for its many defining place names, whether seen in its large cities and towns or within the smallest of villages; roads, fields, bays, inlets, streams and even rocks had their own particular place names. Much of these place names are now forgotten but can be gathered from a variety of sources, including oral tradition, historic sources (e.g. 19<sup>th</sup>-century or earlier charts), documentary sources (e.g. School's Folklore Collections), etc. Many of these are taken from long forgotten events or ship losses, or names referring to individuals who have left no trace. Translations of place names in Irish can be found online, in the dedicated website 'logainm (www.logainm.ie). Within the proposed landfall areas place names are evident on the 1830s and 1880s OS maps. Those most relevant are listed in Table 2 below:

Area	Site	Townland
1	Ownahinchy(a) strand/Inchy Strand	Creggane (An Cregaun/Creagán) Little Island, within Rosscarbery Bay.
2	Cormack's Rock	Creggane ( <i>Carraig Cormac</i> ) Little Island, within Rosscarbery Bay.
3	Iron Rock	Little Island, within Rosscarbery Bay.
4	Cloghna Head	Little Island, within Rosscarbery Bay.

#### Table 1: Place name list.

5	The Long Strand	Castlefreke, Rosscarbery Bay.
6	Creggan Strand	West of Ownahinchy Strand
7	Mussel Rock	SE of Long Strand
8	Bealacoon Cove	SE of Mussel Rock, Rosscarbery Bay.

Townlands were the smallest units of land established in the Irish administrative system in the first half of the 19<sup>th</sup> century, though most were in existence before that as part of a much earlier 'Tuath' or tribal boundary set up (<u>www.logainm.ie</u>). This explains their origin names in Irish, many of which are based on the early tribes in a particular area or on actions/events that took place within a given location.

Table 3 provides a list of the four townlands within the desktop study area. The townland Burgatia appears on the Down Survey parish map for Rosscarbery (1655) as 'Burgeseagh'. The townland is shown touching on 'Rosse Harbour', which is marked as "not passable for ships but boats" and, "a Harbour for small boats". The townlands to the north and south, touching on Ross Harbour are "Rosse Towne" and "Clone-bawne", respectively. The accompanying terrier recorded that 'Burgeseagh', 'Clonebawne', and 'Rosse towne,' were owned by the Bishop of Ross.

Area	Townland English name	Townland Irish name	Meaning	Background
1	Creggane	An Creagán/An Screagán	A rocky place	Possibly deriving from the rough pasture and rock coastal terrain of the region.
2	Little Island	Illaun/Oileann Beag	Small island	Possibly denoting that the area could be cut off during times of flooding from the Ownahincha River, rendering it akin to a small island near the coast.
3	Castlefreke- warren	No translation	Rabbit warren	Established by Arthur Freke and his descendants as a warren for rabbits along the dune system within the Castle Freke demesne.
4	Burgatia	An Bhuirgéiseach	Referring to burgage or burgage plots.	Burgatia appears on the Down Survey parish map for Rosscarbury (1655) as 'Burgeseagh'. The townland is shown touching on 'Rosse Harbour', which is marked as "not passable for ships but boats" and, "a Harbour for small boats".

Table 2: Townland name meaning & townland boundaries within selected areas, in the barony of Rathbarry.

# 5.3 Topographical Files of the NMI

Consultation with the Topographical Files of the National Museum of Ireland, which hold details of any artefactual material recovered and dating from the 18<sup>th</sup> century to present, categorised according to County and Townland, indicates just one find from the area. This was a logboat found in the townland of Castle Freke in 1979 (NMI ref. 1979:101). It is possible that such a craft was used on the nearby Lough Rahavarrig, which is located within the Rathbarry/Castle Freke demesne and immediately south of Rathbarry castle. The lake is shown clearly on the 1<sup>st</sup> Ed OS map of the 1830s, with an ice house on its shores to the north and fox cover areas within the woodland to the southwest. On the later 1880s OS map and 1940s Cassini map, the lake has formed into marsh land and remains today as rough wet ground.

# 5.4 Cartographic Information

The 6-inch Ordnance Survey (OS) map shows Ownahinchy Bridge, near to the proposed Owenahincha landfall site (Fig. 6). The bridge is at a junction where the foreshore meets the road. Along the proposed cable route, heading southwards, a rock is labelled as "Cormack's Rock." On the 25-inch OS map (Figure 7), the strand is labelled 'Ownahinchy Strand', and both the bridge and rock are still shown.

For the proposed Long Strand landfall site, nothing is shown on the foreshore on either of the 6-inch or 25-inch OS maps.

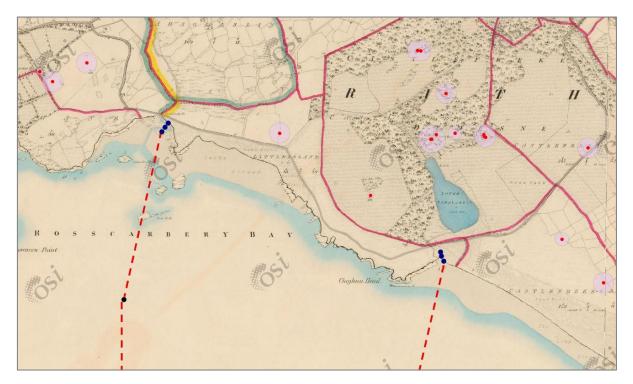


Figure 8: 6-inch OS map extract, showing proposed landing locations (blue) and survey routes (red).

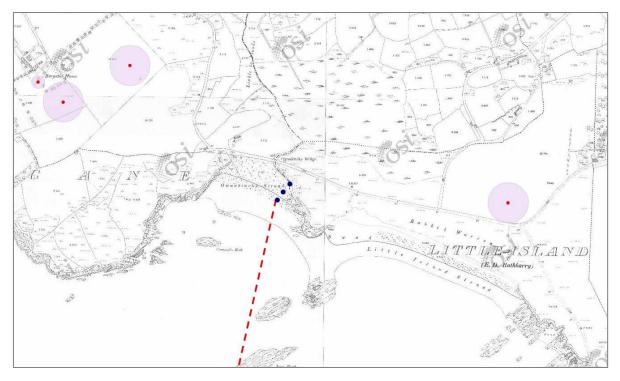


Figure 9: 25-inch OS map, showing proposed landing location at Owenahincha (blue) and survey route (red).

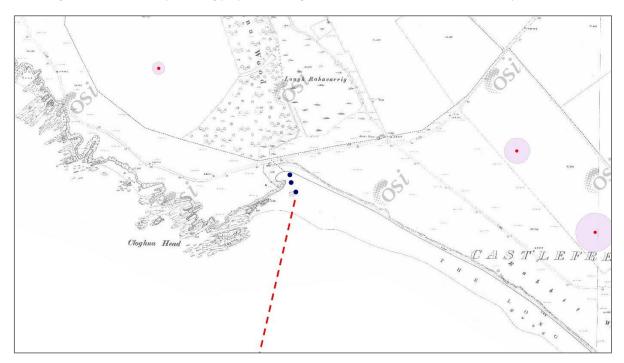


Figure 10:25-inch OS map, showing proposed landing location at Long Strand (blue) and survey route (red).

## 5.5 Previous Archaeological Work

The *Excavations Bulletin* is published annually and provides summary accounts of archaeological excavations in Ireland from the years 1969–2018. It can also contain summaries of surveys (both terrestrial and underwater) and of archaeological monitoring work (Bennett, annual publications).

Having reviewed the source it was clear that there are no previous archaeological investigations recorded in the *Excavations Bulletin* in the proposed survey area or in its immediate surrounds.

# 6. Discussion

The proposed licenced survey area does not contain any recorded sites or monuments within the foreshore. However, within a 1km radius of the two possible landfall sites there are a number of sites from the Bronze Age through to the Post-Medieval period. While none of the coastal/terrestrial recorded monuments are to be affected by the survey, the evidence of occupation in the area over such a long period highlights the possibility for new discoveries on land and along the foreshore/strand areas (either of sites or artefacts).

# 7. Impacts and Mitigation Measures

## 7.1 Potential Impacts

The proposed geophysical survey is a non-invasive survey methodology that will have no negative impact on the wrecks within the area or any archaeological remains on the foreshore. The results of the survey may identify further wrecks or anomalies within the survey area, however, and it is therefore key to review the raw data to identify potential sites or wreckage and thereby inform the cable route.

The survey results should also inform on the locations for the site investigation works on the foreshore, as these are invasive and therefore have the potential to negatively impact underwater cultural heritage, both known and previously unknown sites and artefacts, including buried archaeological remains.

# 7.2 Recommended archaeological mitigation

### 7.2.1 Foreshore/Intertidal:

To address the potential impacts of the excavation works on the foreshore, the intertidal and beach area will be the focus of an archaeological survey comprising visual walkover survey accompanied by a hand-held metal detection survey. This will be carried out on both strands by an underwater archaeologist under licence approved by the National Monuments Service. The intertidal surveys will be undertaken at low Spring tides. A camera, DGPS and metal detector will be deployed, scanning a series of survey lines in a grid pattern on the beach and intertidal zones. The survey will be carried out to determine the location of all known or previously unknown visible or buried archaeological or cultural heritage features in advance of the landfall site investigations. If a geophysical survey/remote sensing survey is proposed for the foreshore area, the results of this should be made available to the archaeologist to review in advance of the foreshore/intertidal archaeological survey being undertaken to inform that survey.

It is recommended that all groundworks in the foreshore be archaeologically monitored by a suitably qualified underwater archaeologist licenced under the National Monuments Acts.

### 7.2.1 Near and offshore:

A Desktop Marine Archaeology Assessment will be undertaken for the final 500m marine survey corridor offshore before survey works are undertaken which will identify the known wrecks or artefacts of cultural heritage within that area and consider the works in combination with historical and cultural sensitivity of the area.

The results of the marine geophysical survey should be then archaeologically assessed and interpreted by a suitably qualified archaeo-geophysicist or should be made available to the contracting archaeologist who is experienced in the interpretation of such raw data. The results should be assessed in regard to the known recorded shipwreck sites and all identified anomalies should be georeferenced and plotted within the proposed survey line. The results should inform the locations of the SI works to ensure all identifiable negative impacts on known or potential underwater cultural heritage are minimalised and mitigated.

Ideally, an archaeologist should be on board the SI works vessel when the grab samples, etc. are being taken to monitor and assess them in real time for any cultural heritage content and to ensure, if there is, that no further impact to the archaeology occurs. If this is not possible, the results of all samples should be provided to the archaeologist to inspect and ensure the identification of any archaeology that may be present and to inform the resultant archaeological report.

All mitigation measures are recommendations only. The ultimate decision rests with the National Monument Service of the Department of Housing, Local Government, and Heritage in collaboration with the National Museum of Ireland.

# 8. Bibliography

### 8.1 Documentary Sources

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MDM 2024. US to Ireland Subsea Fibre Optic Cable Licence Application Schedule of Works (McMahon Design and Management Ltd.).

Power, D. (with E. Byrne, U. Egan, S. Lane & M. Sleeman) 1992. *Archaeological Inventory of County Cork: Volume 1 – West Cork* (Government of Ireland Publications).

# 8.2 Cartographic Sources

1<sup>st</sup> Ed 1830s/1840s Ordnance Survey Map – Rosscarbery Bay 2<sup>nd</sup> Ed 1880s Ordnance Survey Map – Rosscarbery Bay Cassini 1940s Map – Rosscarbery Bay 1655 Down Survey- Parish Map of Rosscarbery

# 8.3 Other Sources

Excavations Bulletin: www.excavations.ie HEV - Historic Environment Viewer, National Monuments Service; www.archaeology.ie Irish Maritime History Journal Online: Crescent City – Mexican Silver Dollars; https://lugnad.ie/crescent-city/ National Inventory of Architectural Heritage (NIAH): http://www.buildingsofireland.ie/niah/ National Monuments Service: www.archaeology.ie Ordnance Survey of Ireland: www.osi.ie Place names Database of Ireland: www.logainm.ie School's Collection - National Folklore Collection: www.duchas.ie Wreck Viewer, National Monuments Service: www.archaeology.ie Wrecks Online: https://wrecksite.eu/wreck.aspx?12250

# 9. Appendices

# 9.1 RMPs and SMRs

Number	Туре	ITM E	ITM N	Description
CO143-070	Souterrain	531375	535320	On rock eminence overlooking Little Island strand. Discovered 1970. Five
				subrectangular chambers; floors rock-cut; otherwise earth-cut; ceilings barrel-vaulted.
				Chamber 1: L 3.35m; Wth 1.62m; H 1.36m. Chamber 2: L 4.26m; Wth 1.52m; H 1.45m.
				Chamber 3: L 3.66m; Wth: 1.52m; H 1.43m. Chamber 4: L 3.66m; Wth 1.52m; H 1.4m.
				(NMI; McCarthy 1977, 289-291). No visible surface trace.
CO143-073	Cross	531903	534960	
CO143-034	Megalithic	530666	536340	On small platform, near top of hillside, overlooking valley of Ownahinchy River; tomb
	tomb-			well preserved. Entrance to chamber (L c. 1.5m; Wth c. 1.1m) at E marked by two tall
	portal			portal-stones; S portal leans against the N. Sides and back of chamber are each formed
	tomb			of single stones. Two slabs lean against S side of chamber, three small stones lean
				against N portal; function unclear. Chamber covered by high-pitched roofstone resting
				on portals and two large pad-stones to W. In front of each portal, orthostat forms inner
				end of funnel-shaped approach; line of S orthostat continued 2.5m to E by two pairs of
				overlapping slabs. (de Valera and O Nualláin 1982, 37-38, Co. 55; Roberts 1988, ch. 1,
				no. 35).
CO143-102	Burnt	529993	536097	In pasture, on a gentle S-facing slope. A spread (c. 10m x c. 10m) of heat-shattered
	mound			stones and charcoal-enriched soil was noted in a ploughed field in 2002 (pers. comm.
				Mary Sleeman). When inspected in 2005, the field was in pasture and the spread of
				burnt material could not be located.
CO143-103	Ringfort-	530258	535726	
	rath			
CO143-104	Souterrain	530061	535618	
CO143-027	Standing	529987	535677	In garden of Burgatia House to SE of Rosscarbery. Stoen (H 2m; 1.8m x 0.8m) leans
	stone			slightly to NE. Finlay (1973, 114) records 56 cup-marks on the N face including 'two cup-
				and-circles near the top Tradition of human remains unearthed to N of stone
				(Webster 1930, 97).
CO143-087	Building	529810	535446	
CO143-	Castle-	532251	535284	Overlooking Rahavarrig Loug hand Long Strand to S and stream to W; land sloping
074002-	tower			down gently to N and E. According to Gillman (1897, 7) built by Randal Oge Barry in 15 <sup>th</sup>
	house			century but by 1642 in possession of Arthur Freke when subjected to prolonged and
				unsuccessful siege by Irish forces (Gillman 1897, 1-20). Site now occupied by 19 <sup>th</sup>

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				century farm buildings of Castlefreke estate. Little of earlier defences survive: at SE corner of coachyard rounded arch (axis E-W) covering rectangular area (7.3m x 4.1m), springs from two noticeably thick walls (Wth 1.2m) though now much altered and rebuilt. To S and W site skirted by tall revetment wall built against rock face. Projecting from this to south is semi-hexagonal bastion with blocked-up semi-circular arched opes which appear to have been for cannon (Gillman 1897, 5); bastion is now filled-in and top level with ground inside. Farmyard now being converted into folk park.
CO143- 074003-	Bawn	532257	535284	Overlooking Ravarrig Lough and Long Strand to S and stream to W; land sloping down gently to N and E. According to Gillman (1897, 7) built by Randal Oge Barry in 15 <sup>th</sup> century but by 1642 in possession of Arthur Freke when subjected to prolonged and unsuccessful siege by Irish forces (Gillman 1897, 1-20). Site now occupied by 19 <sup>th</sup> century farm buildings of Castlefreke estate. Little of earlier defences survive: at SE corner of coachyard rounded arch (axis E-W) covering rectangular area (7.3m x 4.1m), spring from two noticeably thick walls (Wth 1.2m) tough now much altered and rebuilt. To S and W site skirted by tall revetment wall built against rock face. Projecting from this to south is semi-hexagonal bastion with blocked-up semi-circular arched opes which appear to have been for cannon (Gillman 1897, 5); bastion now filled-in and top level with ground inside. Farmyard now being converted into folk park.
CO143- 074001-	Building	532283	535310	
CO143-075	Barrow- ring- barrow	532391	535320	On rocky ground to NE of Rathbarry Castle (CO143-074002-). Central mound (diam. c. 8m; H 0.6m) surrounded by fosse (D 0.2m) with external bank (H 0.6m) from SE->SE. Much disturbance from SE->SW. Gap in bank at ESE. Identified as remains of circular tower associated with Rathbarry Castle by Gillman (1895,5) but this is very unlikely.
CO143- 076003-	Church	532569	535296	In graveyard (CO143-076001-) poorly preserved ruins of Rathbarry parish church. Rectangular structure (c. 17.5m E-W; c. 7.5m N-S) missing E and W walls; surviving portions of N and S walls show signs of alterations and rebuilding (Webster 1932, 276). Doorway at W end N wall- surrounds gone. Single window opes in N and S walls now missing light surrounds but Webster (1932, 276) has drawing of both; square-headed light in N wall and pointed light in S wall; corbels, in two rows, project from outside of S wall. Church in repair in 1615 (Brady Vol 2 1863, 539) but in ruins by 1693 (Webster 1932, 276). The above entry is incorrect as it appears in the West Cork Inventory. The following is a corrected version: In graveyard (3198). Ruins of rectangular church (99ft 7in x 23ft) (Webster 1932, 276). Segmental arched doorway at W end of S wall, surrounds gone. Window opes in N and

	[				Swalls F and square based of light in N wall and pointed light in Swall bath with
					S walls, E end; square-headed light in N wall and pointed light in S wall, both with
					external rebates. Wide arched niche in W end of N wall, wall press at E end. Pointed
					trefoil-headed piscina in S wall, E end. Pointed E window embrasure with plank
					centering, triple-pointed light with external hood moulding. W wall inserted with wide
					collapsed central ope; two lintelled slit windows at N and S end. Interior contains
					numerous headstones including tomb of Ralph Freke who died in 1717. Church in
					repair in 1615 (Brady 1863, vol. 2, 539) but in ruins by 1693 (Webster ibid.).
CO143-		Graveyard	532561	535301	On gentle W-facing slope, overlooking Long Strand to S, within Castlefreke demesne.
076001-					Roughly regtangular yard enclosed by stone wall; contains ruins of Rathbarry parish
					church (CO143-076002-) and to N ruins of C of I parish church (CO143-076002-). This
					latter church built in 1825 (Lewis Vol. 2 1837, 488-9); it is now roofless though walls
					stand to full height; rectangular in plan (long axis NE-SW) with shallow chancel
					projection to NE, pinnacle tower at W corned and entrance porch at S corner; it was
					closed in 1927.
CO143-		Church	532559	535312	In the N half of a graveyard (CO143-076001-). A C of I church built in 1825 (Lewis 1837
076002-					vol 2, 488-9); it is now roofless though walls stand to full height; rectangular in plan
					(long axis NE-SW) with shallow chancel projections to NE, pinnacle tower at W corned
					and entrance porch at S corner; it was closed in 1927.
CO143-072		Enclosure	532340	535550	In level woodland between Castlefreke to N and Rathbarry Church to S. Circular area
					(diam. c. 30m) defined by earthen bank (h 1.7m); heavily overgrown with bamboo
					bushes reeds.
CO143-090		Fulacht fia	533010	534705	Spread of burnt material visible after ploughing, according to local information. No
					visible surface trace.
CO143-078		Ringfort-	533251	534453	In pasture on SW-facing slope overlooking Galley Head. Circular enclosure (diam. 54m);
		rath			bank levelled but visible as differential growth pattern (GSAP).