

Shannon Technology and Energy Park (STEP) Power Plant

Appendix A12.3: Archaeological Intertidal Survey

Shannon LNG Limited

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Report on Intertidal Survey at Ralappane and Carhoonakineely, Co. Kerry



Archaeological
Management Solutions

PART 1 – ARCHAEOLOGICAL INFORMATION



Licence Number: 24R0012

By Dr Conn Herriott

March 2024

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Disclaimer

The results, conclusions and recommendations contained within this report are based on information available at the time of its preparation. Whilst every effort has been made to ensure that all relevant data have been collated, the author and AMS accept no responsibility for omissions and/or inconsistencies that may result from information becoming available subsequent to the report's completion.

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Summary

This report describes the results of an archaeological intertidal/foreshore and metal detector survey (detection device licence no. 24R0012) on the south side of the Lower Shannon Estuary, in Ralappane and Carhoonakineely townlands, Ballylongford, Co. Kerry.

The survey was carried out by marine archaeologist Dr Conn Herriott of Archaeological Management Solutions (AMS) on 12 February 2024, under detection device licence number 24R0012, issued to Dr Herriott by the National Monuments Service (NMS).

The entire foreshore/intertidal Survey Area was inspected by detailed visual walk-over at maximum low-water spring tide in order to identify any archaeological objects, features or deposits which may have been present. Metal detecting was also undertaken throughout the entire Survey Area.

No archaeological objects, features or deposits were identified, and no further mitigation is recommended.

Recommendations are subject to the agreement of the National Monuments Service of the Department of Housing, Local Government and Heritage, the National Museum of Ireland and the local planning authority where required and should only be carried out in accordance with the necessary approvals. Please note that the statutory and local authorities may issue alternative and/or additional recommendations/conditions.

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Abbreviations and Definitions

Abbreviation	Definition
AMS	Archaeological Management Solutions
CDC	Centers for Disease Control and Prevention
CIF	Construction Industry Federation
DAHGI	Department of Arts, Heritage, Gaeltacht & The Islands
DEHLG	Department of Education, Heritage & Local Government
EIAR	Environmental Impact Assessment Report
GIS	Geographic Information System
GPS	Global Positioning System
HSA	Health & Safety Authority
HSE	Health & Safety Executive
ITM	Irish Transverse Mercator
NMI	National Museum of Ireland
NMS	National Monuments Service
OD	Ordnance Datum
OS	Ordnance Survey
RAMS	Risk Assessment Method Statement
RMP	Record of Monuments & Places
SI	Site Investigation
UAIAR	Underwater Archaeological Impact Assessment Report
UAU	Underwater Archaeology Unit
WHO	World Health Organisation
WIID	Wreck Inventory of Ireland Database
ZoN	Zone of Notification

Coordinate System

All grid coordinates in this report use the Irish Transverse Mercator (ITM) coordinate reference system unless otherwise stated.

1 Introduction

1.1 Project Background

This report presents the results of a detailed archaeological walk-over and metal detection survey (detection device licence no. 24R0012) in the intertidal zone on the south side of the Lower Shannon Estuary, in Ralappane and Carhoonakineely townlands, Ballylongford, Co. Kerry (Figure 1; Plate 1). The survey was carried out in advance of any impacts by proposed Site Investigation (SI)/Geotechnical works and deployment of metocean monitoring equipment, to ensure all impacts to intertidal cultural heritage are avoided. The reasons for carrying out this archaeological investigation, as well as information regarding funding, planning and development issues, are presented in Part 2 of this report. The visual walk-over and metal detection survey was undertaken by Dr Conn Herriott and Richard Hinchy of Archaeological Management Solutions (AMS) on 12 February 2024.

1.2 Purpose and Scope of this Assessment

The aim of the archaeological survey was to locate and identify any cultural heritage remains that were traceable visually or by use of metal detector within the defined limits of the foreshore and intertidal zone survey area. The survey results will be integrated into an Underwater Archaeological Impact Assessment Report (UAIAR).

1.3 Proposed Works

The proposed Shannon Technology and Energy Park (STEP Power Plant) on the south side of the Lower Shannon Estuary, at Ralappane, Co. Kerry will comprise a combined cycle gas turbine plant (CCGT) with three combustion turbines, a 120 MWh battery energy storage system (AECOM, 2021, 1-2). The scheme will incorporate a stormwater outfall pipe extending into the subtidal zone of the estuary on the west side of Ardmore Point.

2 Site Location and Description

2.1 Site Location

The Survey Area (c.270m northeast–southwest, c.40m northwest–southeast) is located on the west side of Ardmore Point, on the south shore of the Lower Shannon Estuary, approximately 4.5km west of Tarbert and 3.5km northeast of Ballylongford in the townlands of Carhoonakineely and Ralappane, Ballylongford, Co. Kerry (Figure 1; Plate 1). Marine geological coring carried out as part of previous SI works indicate that the seabed surface stratum at this location is comprised of soft estuarine mud (0.45–4.5m thick) (Boland 2007, 36). The lower foreshore within the Survey Area comprises aerated sediments (sandy, gravelly clay with occasional sandstone and mudstone cobbles and boulders, 5.7m thick) (*ibid.*) (Plate 2). The middle foreshore comprises exposed bedrock below rock and earthen cliffs (AECOM 2021, 12-18) (Plate 3–Plate 4). Above the cliffs, the coastal topography on the south side of the estuary in the immediate vicinity is generally undulating and under pasture, with some boggy fields and pockets of marshy ground (Plate 5) (Boland 2007, 7; AECOM 2021, 12-18). The soils in the immediate area on the south shore of the estuary are generally poorly drained peaty gleys and acid brown earths (AECOM 2021, 12-19). The water table is high (0.4m below ground surface), resulting in frequent water-logging (Boland 2007, 7). Site visits carried out in January 2020 and March 2021 as part of the intertidal survey for the cultural heritage report (Chapter 12) of the recent Environmental Impact Assessment Report (EIAR) found that the site topography had not changed in the interim (AECOM 2021, 12-17, 12-18); this topographical description also fit the area in February 2024, at the time of the survey reported on here. The underlying geology consists of sandstones, layers of mudstone (Namurian, Shannon Group) (AECOM 2021, 12-19).

2.2 Details of Statutory Protections that Apply to the Site

This location is within the Lower River Shannon Special Area of Conservation, and the River Shannon and River Fergus Estuaries Special Protection Area.¹ No other statutory protections apply to the site.

¹ <https://www.npws.ie/protected-sites/spa/004077> [Accessed: 25 February 2024].

3 Archaeological and Historical Background

Providing an important means of travel, transport and livelihood since prehistoric times, the Lower Shannon Estuary has a very rich, diverse and important archaeological heritage (see O’Sullivan 2001; Arup 2008; AECOM 2021). The changing physical environment of the Shannon Estuary and its environs would have considerably impacted the populations occupying and moving across the area throughout history. The evolution of the landscape may have changed patterns of access to the Shannon and the extent of intertidal areas and wetlands available for human exploitation. It may have removed or buried traces of earlier human activity and the landscape in which that activity took place.

The high-energy environment and processes of natural and anthropogenic sea level change (outlined below) have undoubtedly damaged and obscured much of the maritime archaeological remains in the Study Area. The work of O’Sullivan (2001) has revealed the potential for discovery of these cultural heritage remains. O’Sullivan and other researchers have shed light on the vast number and diverse array of archaeological remains along the shores of the Shannon estuary. Although O’Sullivan and his colleagues did not focus their field research on the lower Shannon estuary, even with a limited survey and examination of previous records and investigations they recorded eleven archaeological sites on the lower Shannon intertidal zone along the coasts of Clare and Kerry (O’Sullivan 2001, 311–313). The result of their targeted work upriver brings into sharp focus the very high potential for sites and features relating to submerged prehistoric forests, fish traps, wrecks and other archaeological remains along the shores of the estuary. The first- and second-hand data gathered by that research team were significant enough to prompt O’Sullivan (*ibid.*, 271) to call for focused intertidal and underwater surveys along the lower Shannon estuary. He specifically pointed out ‘the bays and inlets around Ballylongford and Tarbert, Co. Kerry’ as having ‘great potential for exciting survey work’ (*ibid.*). Subsequent archaeological investigations have also identified fish weirs in the intertidal zone of the lower estuary (ADCO 2018, 20).

3.1 Recorded Monuments

There are three Recorded Monuments within the close vicinity of the Survey Area (Table 1; Figure 1–Figure 4). A rath (KE003-003----) is depicted c.330m to the east on the first-edition six-inch Ordnance Survey (OS) map (surveyed 1840, published 1846) but is not shown in later historical mapping and has not been identified on the ground in recent times. The remains of a cashel (K003-004----) lie c.285m to the south-southeast of the survey area. *Caithear Gheal* (Cahergal) earthwork (KE003-005----), which was probably an enclosure of which no surface trace is now visible, is marked in historical OS mapping as late as the second-edition six-inch OS map (levelled 1897, published 1921). From the sixth century,

this area of Munster was dominated by the Uí Fidgente, sub-kings of the Eóganacht (Ó Corráin 1972, 6).

Table 1: Recorded Monuments within 1km of the survey area

SMR Ref.	Site Type	Townland	ITM Easting	ITM Northing	Legal Status
KE003-003----	Ringfort - rath	Carhoonakineely	503106	649013	RMP
K003-004----	Ringfort - cashel	Carhoonakineely; Ralappane	502829	648734	RMP
KE003-005----	Earthwork	Carhoonakineely	502970	648714	RMP

3.2 Previous Archaeological Investigations

In addition to these Recorded Monuments, a large number of terrestrial archaeological features were identified in the Survey Area's immediate vicinity during previous archaeological investigations. These investigations include two desk-based environmental impact assessments (Arup 2008; AECOM 2021), an intertidal survey and marine geophysical survey (Boland 2007), a partial wade and metal detection survey of a watercourse (Arup 2008), two terrestrial geophysical surveys (Arup 2008; Roche & Drummond 2023), and a built heritage survey and archaeological testing (Long & O'Malley 2009). The archaeological features discovered include burnt mounds, kilns/furnaces/charcoal production pits, archaeological complexes/settlement areas, other miscellaneous archaeological features (both clusters and isolated), and one marine geophysical anomaly of a potentially archaeological nature. Together with the Recorded Monuments in this area, such features provide some context—and highlight the potential—for intertidal and subtidal cultural heritage in the survey area. Given the extent and density of these features, there is some likelihood that archaeological remains extend into the intertidal and subtidal deposits of the Shannon Estuary.

3.3 Stray Finds

There are no stray finds recorded in the online Finds Database of the National Museum of Ireland (NMI) as made available through Heritage Maps in the townlands immediately surrounding the proposed development.²

² <https://www.heritagemaps.ie/> [Accessed: 23 February 2024] – Note: the NMI finds database on Heritage Maps is only complete to 2010 and is often found to be inaccurate and unreliable with respect to find locations.

3.4 Historical OS Maps

The first-edition six-inch OS map (surveyed 1840, published 1846) depicts the coastline as well defined, with Ardmore Point labelled (Figure 2). The map indicates that the entire shoreline incorporated exposed bedrock. No changes of note are visible on the 25-inch OS map (surveyed 1896–1897, published 1897–1898; Figure 3) or second-edition OS six-inch map (published 1921; Figure 4), although the degree of bedrock along the coast appears to decrease in favour of shingle. This is in keeping with the current foreshore composition. Comparison between the historical and current mapping and satellite imagery (Figure 1–Figure 4) shows no other significant changes along this coastline.

Ralappane House, a Protected Structure (Kerry Record of Protected Structures no. 003-001), is drawn on all historical OS maps and lies c.710m to the south of the Survey Area (Figure 2–Figure 4).

3.5 Placenames and Folklore

The Survey Area is located within Ralappane and Carhoonakineely townlands, in the civil parish of *Cill Neachtain* (Kilnaughtin) within the barony of *Oireacht Uí Chonchúir* (Iraghticonnor). Both of these townland names may relate specifically to the topographical features. According to the Placenames Database of Ireland, Ralappane (*Ráth Lapáin*) townland appears to be named for a *rath* ('ringfort') although a folkloric investigation in the mid-twentieth century found no account of the name's origin.³ The townland name Carhoonakineely (*Ceathrúin Chionnaola*) refers to the quarterland of the Conneely family, according to the Ordnance Survey Parish Namebooks, usually written by John O'Donovan (1841).⁴ No folklore associated with these townlands was found.⁵

3.6 Potential for Submerged Prehistoric Landscapes⁶

The key controlling factor altering the physical environment of the study area over the long term has been changes in relative sea level. These have been modelled for the middle Shannon, though the underlying data appear relatively sparse (Shennan *et al.* 2018). The relative sea level curve indicates rapid sea level rise from c.10 000 BP until c.6250 BP, changing from -30 to -5m Ordnance Datum (OD), with a more modest increase in relative sea level from c.6250 BP to the present. The rising relative sea level widened the Shannon and submerged an area of former terrestrial environment in its proximity.

³ <https://www.logainm.ie/24186.aspx> [Accessed: 23.2.24].

⁴ <https://www.logainm.ie/24178.aspx> [Accessed: 23.2.24].

⁵ <https://www.duchas.ie/en/places> [Accessed: 23.2.24].

⁶ Dr Steve Lancaster, AMS.

This mainly occurred prior to the beginning of the Neolithic period, which reduces the prospect of submerged settlement sites. Mesolithic activity sites and contemporary palaeo-ecological materials that were formerly terrestrial or intertidal areas may well be preserved as submerged landscapes, which may be buried within the estuarine and subtidal deposits. Changing patterns of deposition and erosion within the tidal zone of the Shannon may reveal buried deposits. For example, the submerged preserved forests noted on the Shannon may, in part, date from this period (O'Sullivan 2001). The more recent slower rise in relative sea level may also have resulted in either the inundation of former intertidal or terrestrial areas or, more likely the extension of the intertidal zone over ground that was either fully terrestrial or in the coastal floodplain, changing opportunities for exploitation at the time, and either eroding or covering earlier deposits.

Submerged landscapes have the potential to preserve both ecofactual material such as wood, and organic artefactual material including structures such as fish traps and boats.

In addition to the natural processes of relative sea level change, the Shannon has been subject to considerable land reclamation work, particularly in the nineteenth century (Hickey & Healy 2005). Works may include the simple enclosure of land with flood defences and drainage of the area but may incorporate the deliberate raising of land levels through the creation of made ground.

3.7 Wrecks

The NMS Wreck Inventory of Ireland Database (WIID) was consulted using the NMS Wreck Viewer and Wreck Data available for download.⁷ Although there are no known wrecks with recorded locations within c.10km of the survey area, the WIID includes a number of recorded wrecks of unknown location as having foundered in the Shannon Estuary off the coast of Co. Kerry (Table 2); this includes eleven vessels in the Wreck Inventory of the National Maritime Archaeological Survey (O'Sullivan 2001, 329–330; Boland 2007, 21). Breen and Callaghan (2001) recorded 77 wrecks along the northern (i.e., Clare) coast of the estuary (see also O'Sullivan 2001, 314–323). For the majority of these vessels which foundered in the lower Shannon Estuary, only general information about their place of loss is available (e.g. 'Kilrush' in Lloyd's List). Furthermore, O'Sullivan (*ibid.*) noted many other wrecks along the Kerry and Limerick coasts of the Shannon estuary, the locations of which are approximate; it is possible some of these wrecks also lie in the study area. This plethora of records indicates that in the historically

⁷ <https://dahg.maps.arcgis.com/apps/webappviewer/index.html?id=89e50518e5f4437abfa6284ff39fd640> [Accessed: 23.2.24]. It is important to note that the Wreck Viewer only displays wrecks for which there is a recorded location, comprising just c.22% of the recorded wrecks off the Irish coast.

heavily trafficked Shannon estuary, there is significant potential for the discovery of unrecorded and unknown wrecks from all periods which are not listed in the WIID or other sources.

Table 2: Historic shipwrecks in the Shannon Estuary, Co. Kerry (after O’Sullivan 2001, 329–330; Boland 2007, 21; original source: Wreck Inventory of the National Maritime Archaeological Survey, with updates from WIID)

Wreck No.	Wreck Name	Classification	Location	Details	Date of Loss
W06091	<i>Brittania</i>	Unknown	Between Tarbert and Glynn	Vessel of Rothsay	8/11/1825
W05624	<i>Diana</i>	Unknown	Near Tarbert	London to Limerick	6/2/1820
W05778	<i>Llanthewy / Llanthenry (SS)</i>	Steamship	Beale Bar	Irish Steamship of Newport	27/12/1902
W06349	<i>Margaret</i>	Man-of-War	Mouth of River Shannon	Liverpool to Limerick	6/1/1618
W06254	<i>Premier</i>	Steel steamship	52.59217°N, - 9.642°E. Between Kilcredane Light and Beal Bar Buoy	537-tonne steel steamer. Cargo of sugar.	26/11/1898
W05867	<i>Quereda</i>	Unknown	Off Carrig Island	Vessel of Sunderland. Limerick to London.	27/1/1834
W05943	<i>Thetis</i>	Sloop	52.57722°N, - 9.63333°E. Kerry, Beale Bar, Shannon Estuary, off townland of Corcas and Sandhills.	En route to Limerick. Wreck site is marked on the second-edition six-inch OS map.	30/11/1834
W06015 (?)	Unknown	Unknown	The Beeves, near Tarbert	Unknown	November 1839
W06000	Unknown	Rowboat	Off Tarbert	18 ft. rowing vessel	15/8/1893
W05819	<i>Maurice Murphy</i>	Fishing boat	Ballylongford, below	Unknown	15/8/1893
W05983	Unknown	Unknown	Beale Point	‘Canoe’	10/9/1903
W12570	Unknown	Lighter	Tarbert Roads	Unregistered iron lighter of 12 tons.	9/2/1904

4 Aim & Methodology

4.1 Aim

The aim of the archaeological survey was to determine if previously unrecorded deposits, features or objects of archaeological or cultural heritage significance are present within the foreshore and intertidal zone of the proposed development. If such deposits, features or objects were found, their nature, extent, date and significance would have been defined during the monitoring and an appropriate mitigation strategy (i.e., preservation *in situ* and/or preservation by record) would have been implemented in consultation with NMS. All survey results will be included in the forthcoming UAIAR.

4.2 Survey Methodology

The site was visually inspected and scanned by metal detector by a two-man team—licence-holding marine archaeologist Dr Conn Herriott (detection device licence no. 24R0012), assisted by GIS (Geographic Information System) archaeologist Richard Hinchy who plotted the survey track in real time by Global Positioning System (GPS). The survey covered the entire intertidal zone from high-water mark to low-water mark, and took place at maximum low-water spring tide (13.20) on 12 February 2024, following a numbered grid system consisting of a baseline marked out on the long axis of each area, from which perpendicular offset lines were marked at 10m intervals to form stints and these were subdivided along the offset line to form parallel transects 2m wide. Each transect was subjected to visual inspection and metal detection survey. This strategy ensured 100% coverage of the Survey Area.

The metal detectors used were a high-performance Minelab Equinox 800 with an 11-inch elliptical search waterproof coil, and a Minelab Excalibur II metal detector with 10-inch round Double-D hardwired coil. Both of these metal detectors operate within a 1.5–40kHz frequency range and have discrimination mode to allow non-ferrous, ferrous or all metals to be targeted.

The survey was carried out to best practice and in adherence with relevant guidelines and standards, including the *Framework and Principles for the Protection of the Archaeological Heritage* (DAHGI 1999a), *Policy and Guidelines on Archaeological Excavation* (DAHGI 1999b) and *Standards for the Care and Treatment of Archaeological Objects from Excavations* (NMI 2022).

4.3 Recording Methods

The survey area, baselines and transects were recording by GPS. Once all elements of the UAIAR are complete—including the final compilation and interpretation of this intertidal survey—all information will be compiled and submitted to UAU. The report will include a statement of the project background,

survey methodologies and results, including a detailed description (supported by photographs and figures as appropriate) of any identified archaeological objects or geophysical anomalies, an assessment of their potential significance, and recommendations to mitigate the impact of the proposed development on any foreshore, intertidal or subtidal remains. Detailed figures showing the location of any finds will also be included in the UAIAR.

During this intertidal survey, every effort was made to ensure the highest possible level of identification and retrieval of archaeological features, objects and deposits. All potential archaeological objects detected were investigated through careful visual inspection and—where necessary—hand excavation by or under the guidance of the licence-holder. No archaeological remains or features were exposed during the excavation works. In the event that such remains or features had been found, their location would have been picked up by GPS, and they would have been exposed, cleaned and tested by in order to establish their nature, extent, depth, date and significance unless deemed to be of sufficient importance to require preservation *in situ*. Where appropriate, environmental or bulk soil samples would have been retrieved. Following the discovery of any archaeological remains, NMS would have been notified immediately and consulted with regard to any necessary mitigatory action (i.e., preservation *in situ*, preservation by record, appropriate exclusions, modifications of survey strategy).

Should any archaeological objects have been discovered, these would have been recovered, recorded and conserved for deposition in accordance with the survey Method Statement (Herriott 2023) and NMI's *Standards for the Care and Treatment of Archaeological Objects from Excavations* (NMI 2022). The UAIAR would have contained a record of these artefacts, in accordance with NMS *Guidelines for Authors of Reports on Archaeological Excavations* (DEHLG 2006).

Temporary secure accommodation would have been provided for any finds, samples or other archaeological materials recovered, pending deposition with NMI. Pending the completion of the UAIAR, the intertidal survey archive will be initially maintained by the licence holder, with its final place of deposition being the NMS archive. The archive will be ordered, arranged, boxed and deposited with NMS in accordance with their *Guidelines for the Transfer of Excavation Archives to National Monuments Service Archive* (Barrett 2023).

4.4 Weather Conditions

There were sunny spells and scattered showers throughout the duration of the survey.

4.5 Constraints on Methods

Seaweed on the lower foreshore obscured visibility (Plate 6). Many rocks were slippery from rain, seaweed and other growth, which slowed but did not inhibit the survey.

4.6 Health and Safety

The archaeological works complied with all current *Safety, Health and Welfare at Work (Construction) Regulations* (2013). A Health and Safety Plan—i.e., a Risk Assessment Method Statement (RAMS)—was prepared by AMS prior to commencement of on-site works. The document outlined the hazards and risks identified in relation to the archaeological works, along with controls to minimise or eliminate these risks, and emergency plans and procedures.

Health and safety are at the core of AMS operations, and we understand the heightened risk when working in coastal locations. When surveying in close proximity to the waterline, both archaeologists were wearing Personal Flotation Devices of the hydrostatic release type. On-site safety equipment included an emergency medical kit, rescue throw ropes and buoyant throw flotation device. A safety toolbox talk was held at the start of the survey day and project risk assessment and other safety documents were on site for review and amendment, as necessary.

The archaeological survey was also carried out in line with AMS 'Safe Operating Procedures for COVID-19' (Hardy 2022). This document has been prepared with reference to Government of Ireland, HSE, HSA, CDC and WHO guidance and guidelines, and drawing on the Construction Industry Federation's (CIF) *Construction Sector C-19 Pandemic Standard Operating Procedures*. The control measures set out in the Safe Operating Procedure aim to provide a safe working environment for all staff members and any essential visitors.

5 Survey Results

No archaeological or cultural heritage features, finds or deposits were identified in the course of this intertidal survey at Ralappane and Carhoonakineely, Co. Kerry. The survey took place during a maximum low-water spring tide on 12 February 2024 and involved a visual walk-over and metal detector inspection by licence-holding marine archaeologist Dr Conn Herriott and GIS archaeologist Richard Hinchy. The entire survey area was inspected.

The ground surface throughout the Survey Area in this intertidal/foreshore zone was gently sloping and comprised either rock shingle or bedrock which was c.30% covered in seaweed (Plate 1, Plate 2, Plate 5 & Plate 6). Shingle and boulders of varying sizes and rock types covered the lower portion of the Survey Area (Plate 2), and sedimentary bedrock was exposed throughout most of the upper portion (Plate 1). The waterline and lowermost c.10m of the foreshore were almost entirely covered by seaweed (Plate 6), which impeded visual inspection although metal detection was carried out here and throughout the survey area (Plate 7). Where the upper foreshore met the c.2–4m-high supratidal rock and earthen cliffs, gorse and other vegetation was growing (Plate 8). Above the cliffs were boggy fields in pasture (Plate 3–Plate 5, Plate 8 & Plate 13Plate 9). No collapse of these cliffs was evident. In several places, field drainage ditches flowed down gullies onto the foreshore (Plate 8). Modern metal, ceramic, concrete and glass objects and debris were found on the upper and middle foreshore (Plate 9–Plate 12). Very occasional driftwood logs were also found here (Plate 4). A modern rowboat was found overturned in a field above the cliffs above the west end of the intertidal survey area (Plate 13). Nothing of archaeological significance was uncovered during the visual walk-over inspection or through metal detection.

6 Conclusions and Recommendations

The results of the survey have confirmed nothing of archaeological significance was uncovered during the visual walk-over inspection or through metal detection. As a result, no further mitigation is recommended.

The results of the intertidal survey will be presented in the forthcoming UAIA report.

Recommendations are subject to the agreement of the National Monuments Service of the Department of Housing, Local Government and Heritage, the National Museum of Ireland and the local planning authority where required and should only be carried out in accordance with the necessary approvals. Please note that the statutory and local authorities may issue alternative and/or additional recommendations/conditions.

References

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Cartographic Sources

- First-edition six-inch OS map (surveyed 1840, published 1846).
- 25-inch OS map (surveyed 1896–1897, published 1897–1898).
- Second-edition six-inch OS map (published 1921).

Figures



Figure 1: Survey Area location and extent

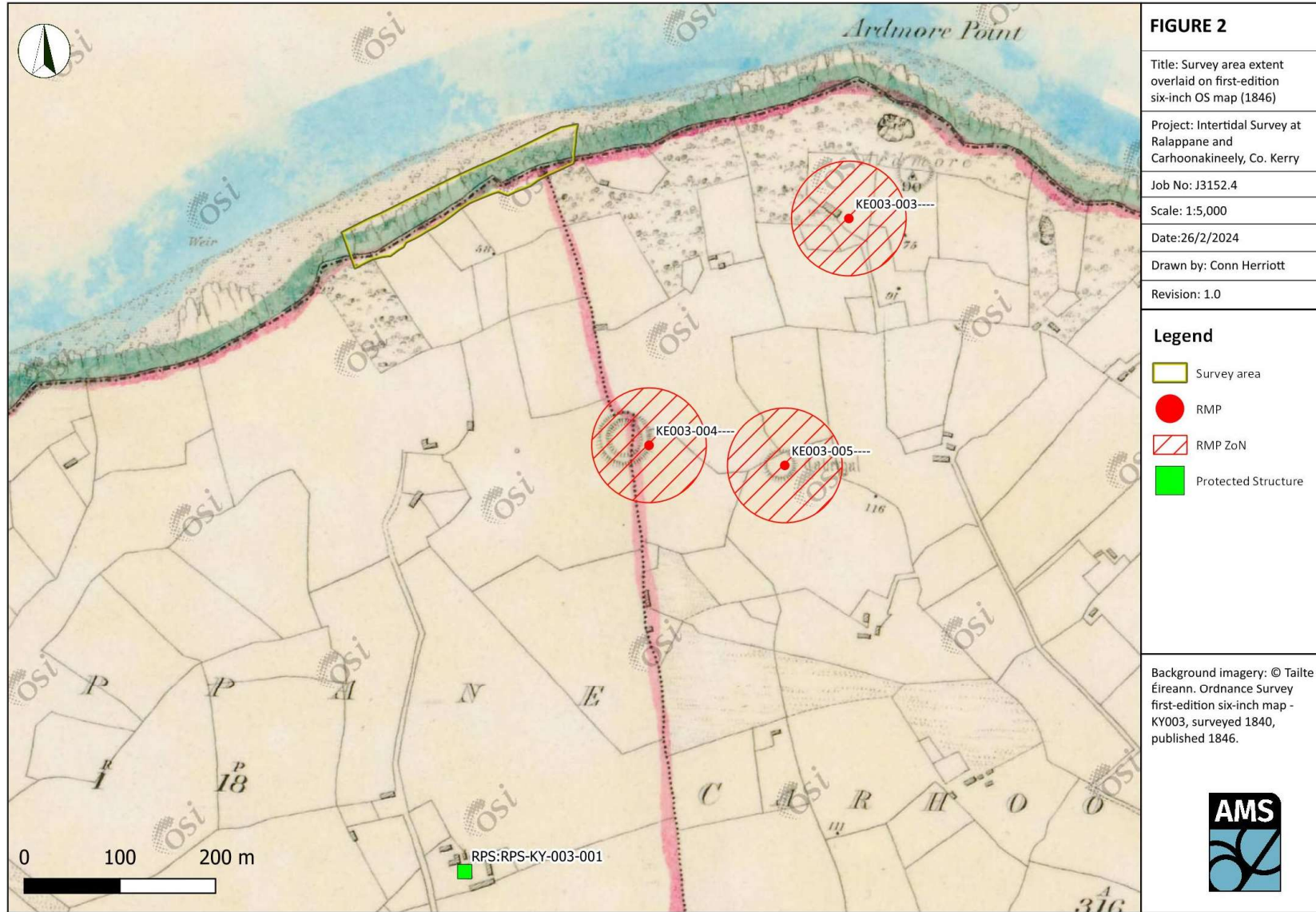


Figure 2: Survey Area extent overlaid on first-edition six-inch OS map (1846)

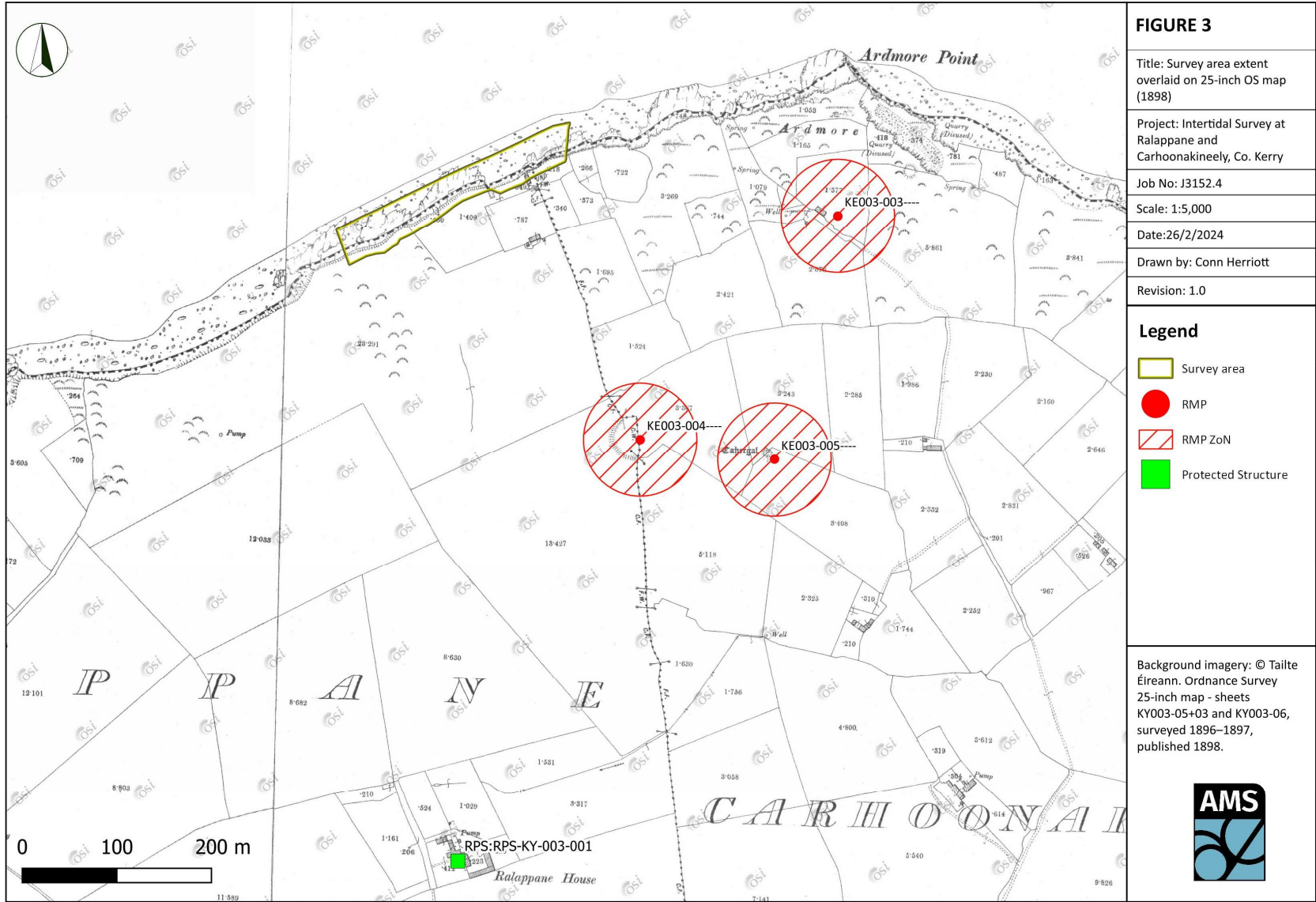


Figure 3: Survey Area extent overlaid on 25-inch OS map (1898)

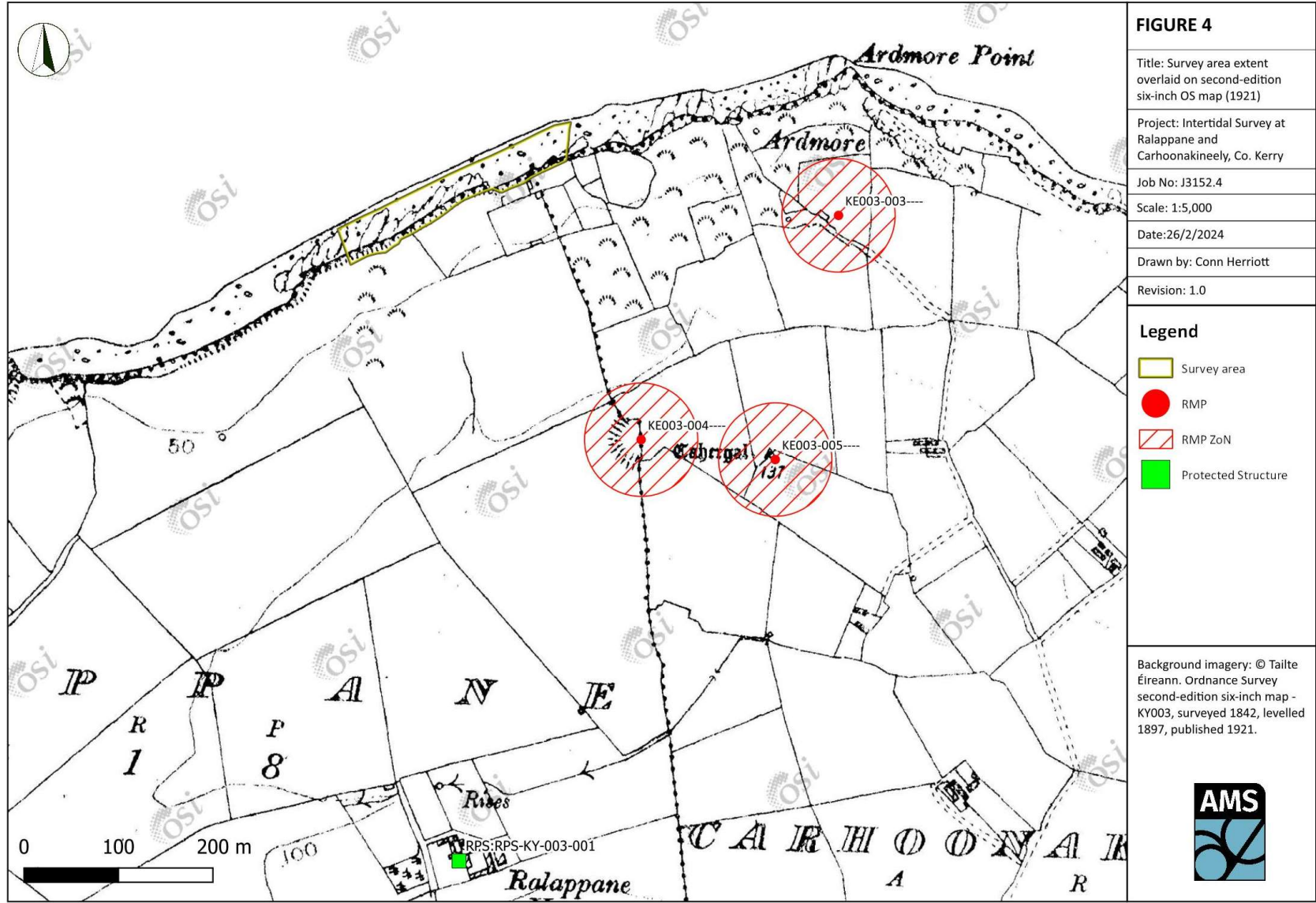


Figure 4: Survey Area extent overlaid on second-edition six-inch OS map (1921)

Plates



Plate 1: General view of the upper foreshore in western half of the Survey Area, looking west.



Plate 2: Lower foreshore of rock shingle and boulders, looking east-northeast.



Plate 3: Earthen cliffs in east part of Survey Area, looking east.



Plate 4: Cliffs of rock and earth at upper foreshore, looking southwest, with driftwood log in right foreground.



Plate 5: General view of foreshore in Survey Area, looking northeast.



Plate 6: Lower foreshore at spring low-water tide, covered by seaweed.



Plate 7: Metal detecting in progress by Richard Hinchy, looking northwest.



Plate 8: Earthen and stone cliffs, vegetation and side of drainage ditch, looking south.



Plate 9: Modern metal object found on upper foreshore, adjacent to cliff base.



Plate 10: Roughly cylindrical modern concrete pile/pillar fragment with embedded reinforcing metal bar, found on middle foreshore, looking west-southwest.



Plate 11: Roughly cylindrical modern concrete fragment with embedded metal bar, found on middle foreshore, looking south-southeast.



Plate 12: Modern ceramic tile fragment found on upper foreshore.



Plate 13: Modern rowboat in field above foreshore, looking west-northwest.

Appendix 1: Archive Register

Field Records	Items (Quantity)	Comments	Description
Site drawings (plans)	0	-	-
Site registers (folders)	1	-	On AMS server
Context sheets	0	-	-
Digital photographs	108	-	On AMS server
Security copy of archive	1	-	On AMS server

Appendix 2: Photograph Register

Photo No.	Facing	Description	File name	Scale	Initials & Date
1	W	General overview of survey area	IMG_2510	-	CH 12/2/24
2	NE	General overview of survey area	IMG_2511	-	CH 12/2/24
3	WSW	General overview of survey area	IMG_2512	-	CH 12/2/24
4	WSW	General overview of survey area (lower foreshore)	IMG_2513	-	CH 12/2/24
5	SW	General overview of survey area	IMG_2514	-	CH 12/2/24
6	SW	General overview of survey area	IMG_2515	-	CH 12/2/24
7	NE	General overview of survey area (lower foreshore)	IMG_2516	-	CH 12/2/24
8	ENE	General overview of survey area	IMG_2517	-	CH 12/2/24
9	S	Upper foreshore and cliff	IMG_2518	-	CH 12/2/24
10	E	Upper foreshore and cliff	IMG_2519	-	CH 12/2/24
11	E	General overview of survey area	IMG_2520	-	CH 12/2/24
12	E	General overview of survey area	IMG_2521	-	CH 12/2/24
13	E	General overview of survey area	IMG_2522	-	CH 12/2/24
14	W	General overview of survey area	IMG_2523	-	CH 12/2/24
15	W	General overview of survey area	IMG_2524	-	CH 12/2/24
16	WNW	General overview of survey area	IMG_2525	-	CH 12/2/24
17	WNW	General overview of survey area	IMG_2526	-	CH 12/2/24
18	WNW	General overview of survey area	IMG_2527	-	CH 12/2/24
19	WNW	General overview of survey area	IMG_2528	-	CH 12/2/24

Photo No.	Facing	Description	File name	Scale	Initials & Date
20	WNW	General overview of survey area	IMG_2529	1m	CH 12/2/24
21	NW	General overview of survey area (upper foreshore)	IMG_2530	1m	CH 12/2/24
22	NW	General overview of survey area (upper foreshore)	IMG_2531	1m	CH 12/2/24
23	NE	General overview of survey area (upper foreshore)	IMG_2532	1m	CH 12/2/24
24	ENE	General overview of survey area (upper foreshore)	IMG_2533	-	CH 12/2/24
25	S	Earthen cliff	IMG_2534	-	CH 12/2/24
26	E	Upper foreshore and cliff	IMG_2535	-	CH 12/2/24
27	SW	Upper foreshore and cliff, with driftwood at front right	IMG_2536	-	CH 12/2/24
28	SW	Upper foreshore and cliff, with driftwood at front right	IMG_2537	-	CH 12/2/24
29	SW	Driftwood close-up	IMG_2538	-	CH 12/2/24
30	WSW	Upper foreshore and cliff	IMG_2539	-	CH 12/2/24
31	NW	General overview of survey area	IMG_2540	-	CH 12/2/24
32	NE	General overview of survey area	IMG_2541	-	CH 12/2/24
33	W	General overview of survey area	IMG_2542	-	CH 12/2/24
34	W	General overview of survey area	IMG_2543	1m	CH 12/2/24
35	W	General overview of survey area	IMG_2544	1m	CH 12/2/24
36	ENE	General overview of survey area	IMG_2545	1m	CH 12/2/24
37	SSE	Upper foreshore and cliff, with modern field-wall at top of cliff	IMG_2546	1m	CH 12/2/24
38	SSE	Upper foreshore and cliff, with modern field-wall at top of cliff	IMG_2547	-	CH 12/2/24
39	-	Modern metal object	IMG_2548	1m	CH 12/2/24
40	-	Modern metal object	IMG_2549	-	CH 12/2/24

Photo No.	Facing	Description	File name	Scale	Initials & Date
41	-	Modern metal object	IMG_2550	-	CH 12/2/24
42	-	Modern metal object	IMG_2551	-	CH 12/2/24
43	-	Modern metal object	IMG_2552	1m	CH 12/2/24
44	-	Modern metal object	IMG_2553	1m	CH 12/2/24
45	-	Modern metal object	IMG_2554	1m	CH 12/2/24
46	-	Modern metal object	IMG_2555	1m	CH 12/2/24
47	-	Modern metal object	IMG_2556	-	CH 12/2/24
48	W	Upper foreshore and cliff	IMG_2557	-	CH 12/2/24
49	W	Upper foreshore and cliff	IMG_2558	-	CH 12/2/24
50	W	Upper foreshore and cliff	IMG_2559	-	CH 12/2/24
51	W	Upper foreshore and cliff	IMG_2560	-	CH 12/2/24
52	WSW	Upper foreshore and cliff	IMG_2561	-	CH 12/2/24
53	WSW	Upper foreshore and cliff	IMG_2562	-	CH 12/2/24
54	ENE	Drystone field-wall/structure at top of cliff	IMG_2563		CH 12/2/24
55	ENE	Drystone field-wall/structure at top of cliff	IMG_2564		CH 12/2/24
56	S	Stones in field adjacent to cliff	IMG_2565		CH 12/2/24
57	S	Stones in field adjacent to cliff	IMG_2566		CH 12/2/24
58	SE	Stones in field adjacent to cliff	IMG_2567		CH 12/2/24
59	SE	Stones in field adjacent to cliff	IMG_2568		CH 12/2/24
60	NNW	Stones in field adjacent to cliff	IMG_2569		CH 12/2/24
61	NE	General view of survey area	IMG_2570		CH 12/2/24

Photo No.	Facing	Description	File name	Scale	Initials & Date
62	NE	General view of survey area	IMG_2571		CH 12/2/24
63	NE	General view of survey area	IMG_2572		CH 12/2/24
64	NE	General view of survey area	IMG_2573		CH 12/2/24
65	NE	General view of survey area	IMG_2574		CH 12/2/24
66	NE	General view of survey area	IMG_2575		CH 12/2/24
67	NE	General view of survey area	IMG_2576		CH 12/2/24
68	NE	General view of survey area	IMG_2577		CH 12/2/24
69	NE	General view of survey area	IMG_2578		CH 12/2/24
70	WNW	General view of survey area	IMG_2579		CH 12/2/24
71	NW	View from modern lookout structure	IMG_2580		CH 12/2/24
72	NW	View from modern lookout structure	IMG_2581		CH 12/2/24
73	NW	View from modern lookout structure	IMG_2582		CH 12/2/24
74	SW	Interior of modern lookout structure	IMG_2583		CH 12/2/24
75	W	Interior of modern lookout structure	IMG_2584		CH 12/2/24
76	W	Modern lookout structure	IMG_2585		CH 12/2/24
77	W	Modern lookout structure	IMG_2586		CH 12/2/24
78	W	Modern lookout structure	IMG_2587		CH 12/2/24
79	-	Modern metal object	IMG_2588		CH 12/2/24
80	NE	Metal-detecting in progress	IMG_2589		CH 12/2/24
81	NE	Metal-detecting in progress	IMG_2590		CH 12/2/24
82	NNW	Metal-detecting in progress	IMG_2591		CH 12/2/24

Photo No.	Facing	Description	File name	Scale	Initials & Date
83	NW	Metal-detecting in progress	IMG_2592		CH 12/2/24
84	NW	Metal-detecting in progress	IMG_2593		CH 12/2/24
85	-	Modern ceramic object	IMG_2594		CH 12/2/24
86	-	Modern ceramic object	IMG_2595		CH 12/2/24
87	ENE	General view of survey area; metal-detecting in progress	IMG_2596		CH 12/2/24
88	NNW	Modern concrete object (pile? Pillar?) with metal bar embedded	IMG_2597		CH 12/2/24
89	NNW	Modern concrete object (pile? Pillar?) with metal bar embedded	IMG_2598		CH 12/2/24
90	WSW	Modern concrete object (pile? Pillar?) with metal bar embedded	IMG_2599		CH 12/2/24
91	SSE	Modern concrete object (pile? Pillar?) with metal bar embedded	IMG_2600		CH 12/2/24
92	SW	Modern rowboat	IMG_2601		CH 12/2/24
93	NW	Modern rowboat	IMG_2602		CH 12/2/24
94	NE	General view of survey area	IMG_2603		CH 12/2/24
95	NE	General view of survey area	IMG_2604		CH 12/2/24
96	ENE	General view of survey area	IMG_2605		CH 12/2/24
97	ENE	General view of survey area	IMG_2606		CH 12/2/24
98	NE	General view of survey area; GPS survey in progress	IMG_2607		CH 12/2/24
99	NE	General view of survey area	IMG_2608		CH 12/2/24
100	NE	General view of survey area	IMG_2609		CH 12/2/24
101	NNE	General view of survey area; GPS survey in progress	IMG_2610		CH 12/2/24
102	NNE	General view of survey area; GPS survey in progress	IMG_2611		CH 12/2/24
103	WSW	General view of survey area (lower foreshore)	IMG_2612		CH 12/2/24

Photo No.	Facing	Description	File name	Scale	Initials & Date
104	WSW	General view of survey area (lower foreshore)	IMG_2613		CH 12/2/24
105	WSW	General view of survey area (lower foreshore)	IMG_2614		CH 12/2/24
106	WSW	General view of survey area (lower foreshore)	IMG_2615		CH 12/2/24
107	W	General view of survey area	IMG_2616		CH 12/2/24
108	WNW	General view of survey area	IMG_2617		CH 12/2/24

Appendix 3: Summary of Intertidal Survey

During spring low tide on 12 February 2024, an archaeological walk-over and metal detection survey was carried out along a 250m-long and 50m-wide stretch of the intertidal zone of the Lower Shannon Estuary in Ralappane and Carhoonakineely townlands, near Ballylongford, Co. Kerry. The survey was undertaken by licensed marine archaeologist Dr Conn Herriott and GIS archaeologist Richard Hinchy of Archaeological Management Solutions (AMS) under detection device licence 24R0012 issued by the National Monuments Service (NMS). No archaeological objects, features or deposits were noted.