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N11 Oilgate-Rosslare Harbour N25

Wexford County Council

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N11/N25 Oilgate to Rosslare Harbour Scheme
River Slaney MUL Application

Attachment 3.1 - Description of Proposed Maritime Usage

June 2026

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1 Introduction

1.1 Introduction

Mott MacDonald Ireland Limited, on behalf of Wexford County Council (WCC) ('the Applicant'), are submitting a Maritime Usage Licence (MUL) application for site investigation surveys at the River Slaney, northwest of Wexford town. The MUL is being sought solely to facilitate site investigation surveys associated with the proposed N11/N25 Oilgate to Rosslare Harbour Scheme.

The N11/N25 Oilgate to Rosslare Harbour Scheme ('the proposed scheme') forms part of the European Designated E01 Route and provides a direct link to both mainland Europe and the United Kingdom via Rosslare Europort. The N11 and N25 connect Rosslare Europort with Dublin and Belfast to the north and Cork and Waterford to the west and forms part of the TEN-T European Transport Network. The EU TEN-T Regulation requires member states to develop the network to a high-quality standard. The section of N11 and N25 from north of Oilgate to Rosslare Europort is the only section of the TEN-T Corridor connecting Belfast, Dublin and Rosslare Europort not to have been completed to a high-quality standard.

This is a strategically important part of the national transport network, and the project aims to ensure that the sections of the network in question have the capacity and resilience to safely meet the future transport needs on a national, regional and local level. The proposed scheme is a critical state infrastructure of national and European priority.

The proposed scheme is approximately 31km in length and will utilise a mix of both the existing road corridor, which will be upgraded, and a new corridor that will bypass significant constraints and deficiencies on sections of the existing corridor. The proposed scheme will include works in/near the crossing of the River Slaney. A new bridge crossing of the River Slaney is proposed as part of the proposed scheme.

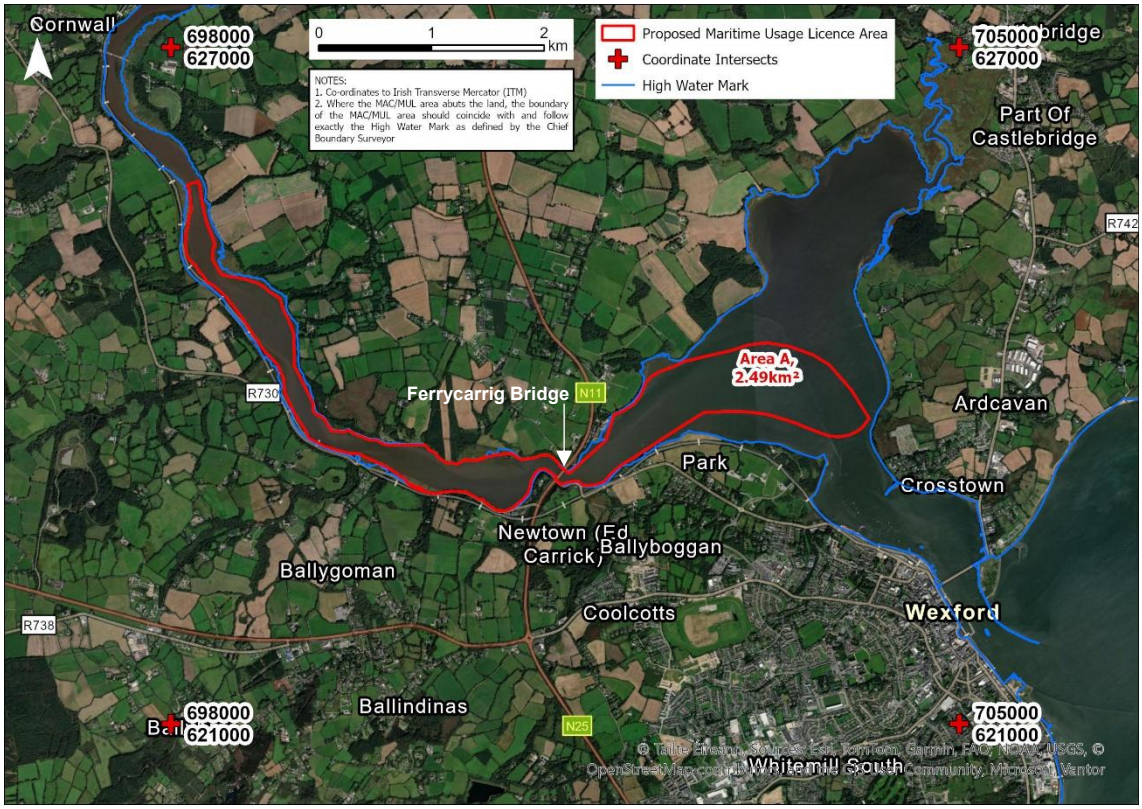
This document provides details of proposed maritime usage and a description of all the surveys proposed.

1.2 Survey Location

The site investigation surveys proposed by the Applicant, will be undertaken at the River Slaney west of Wexford town, Co. Wexford. The MUL application area is approximately 2.49km^2, as shown in Figure 1.1.

The western extent of the MUL area is approximately 4.8km west of the existing Ferrycarrig bridge (along the river), near the townlands of Carigmannon and Newtown Lower. The eastern extent of the MUL area is approximately 3km east of the Ferrycarrig bridge (along the river), near the townlands of Park and Crosstown. The Ferrycarrig bridge carries the existing N11 over the River Slaney.

Figure 1.1: Proposed Maritime Usage Licence Area



Source: Mott MacDonald, 2026

2 Site Investigation Surveys

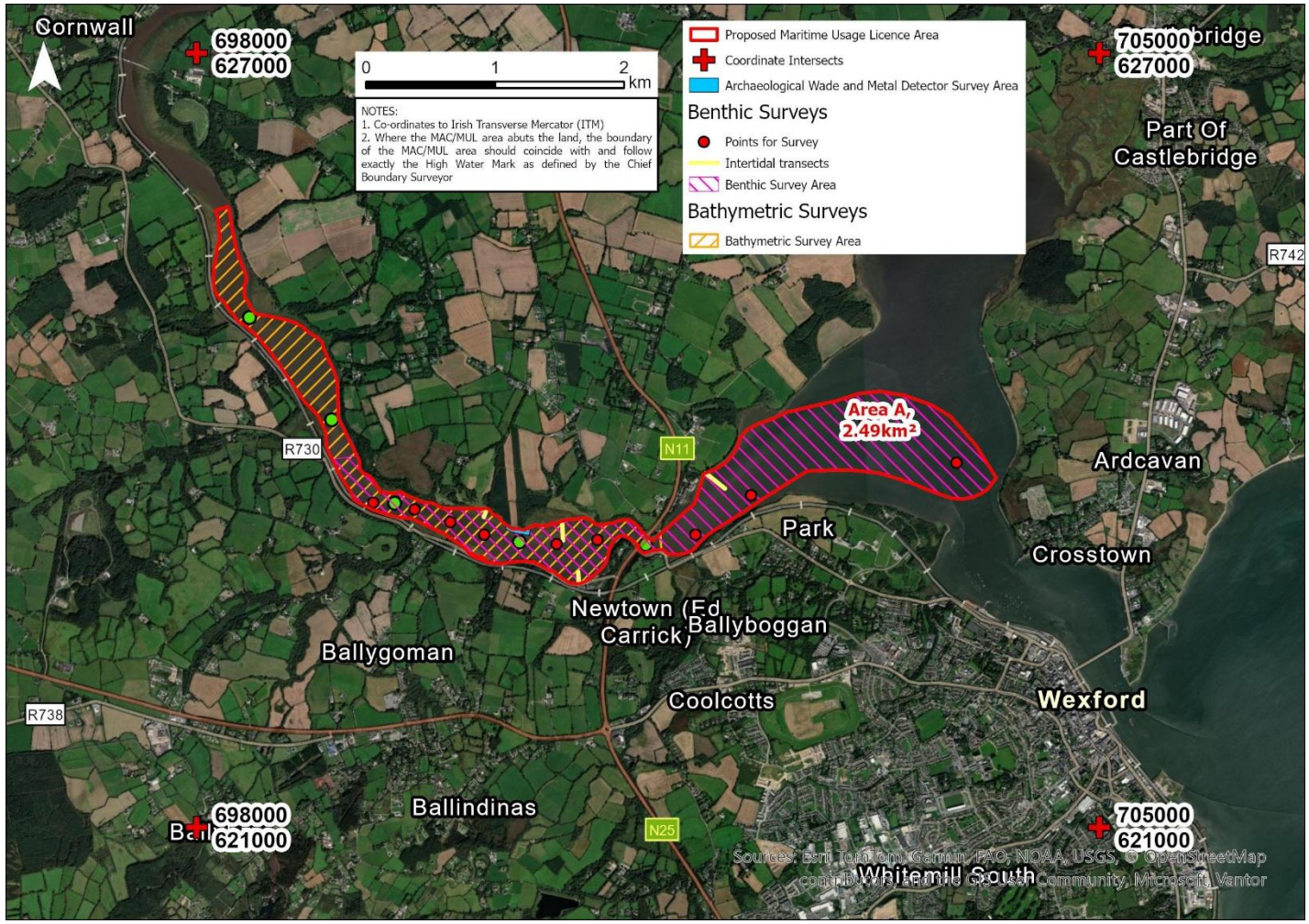
2.1 Summary of Proposed Surveys

To inform the design of the proposed scheme, specifically works in/near the crossing of the River Slaney, the following surveys (hereafter referred to as 'proposed surveys') are required. The proposed surveys are within the marine environment (below the high water mark (HWM)) are shown in Figure 2.1.

- A hydrographic survey (bathymetry and current measurements) of the River Slaney is proposed for a section that flows through Wexford. The hydrographic survey will be used to inform a hydraulic model of the River Slaney in the vicinity of the proposed bridge crossing. The key areas to be surveyed include the riverbed, the riverbank, and the Ferrycarrig Bridge within the survey area, together with current measurements including current speed, direction, turbidity, temperature etc. Further details are provided in Section 2.2.
- An archaeological wade and metal detector survey of the nearshore is proposed to be undertaken at low tide, under licence from National Monument Survey (NMS), in order to assess its archaeological potential. This has been agreed with the Underwater Archaeology Unit (UAU) of the National Monuments Service (NMS) and will progress during Phase 5 (Enabling and Procurement) of the proposed scheme. Further details are provided in Section 2.3.
- Subtidal and intertidal benthic surveys are proposed to provide a comprehensive and up-to-date description of the species and habitats found within and in the vicinity of the N11/N25 Scheme, specifically at the proposed bridge crossing. Further details are provided in Section 2.4.

The knowledge gained from the proposed surveys will be used to minimise uncertainty and reduce risk in relation to environmental constraints at an early design stage. The results of the proposed surveys may also be used at a later date to provide a baseline against which to monitor effects of construction and operation of the proposed development. The proposed programme of surveys to be undertaken within the MUL survey area is discussed in Sections 2.2 to 2.4.

Figure 2.1: Location of Proposed Surveys



Source: Mott MacDonald, 2026

2.2 Hydrographic Survey (Bathymetric Survey)

2.2.1 Survey Description

The hydrographic survey will map the physical features of the River Slaney, such as depth, tides, currents, and the profile of the riverbed. The extent of the survey area is outlined in Figure 2.1, the bathymetric survey area is shown in orange hatch, with indicative locations of current measurements shown in green.

Survey works will be undertaken from a dedicated survey vessel. The equipment will be deployed from either a boat or a Remote Operated Vehicle (ROV). In the case of a ROV, a support boat would still be required.

Sonar equipment (multi-beam sonar or a side-scan sonar) will be deployed to develop a bathymetric survey of the riverbed profile. A current meter will be used to measure river velocity at five locations within the survey area (as shown in Figure 2.1) and at up to 5m depth intervals. The riverbed material build-up will be mapped using a sub-bottom profiler. Measurements will be undertaken over several tidal conditions to ensure full coverage of the riverbed bathymetric survey area and record variance in current velocity between high and low tides. The hydrographic survey will be used to inform a hydraulic model of the River Slaney, specifically in the vicinity of the proposed bridge crossing.

2.2.2 Survey Timeline

The surveys will commence as soon as feasible following the grant of a MUL and appointment of a contractor. The exact mobilisation dates will not be known until the maritime usage licence has been obtained and the process of procuring a contractor is complete. It is estimated that the proposed surveys will take approximately four weeks to complete in the field.

2.3 Archaeological Wade and Metal Detector Survey

2.3.1 Survey Description

In October 2024, an intertidal walkover survey and geoarchaeological assessment of the Ground Investigations (GI) results was undertaken, investigating a c.190m stretch of the north bank of the River Slaney at spring low tide. Following this survey, as discussed with the Transport Infrastructure Ireland (TII) Project Archaeologist and the UAU at the NMS, archaeological wade and metal detector surveys were recommended to further understand the archaeological potential of this area along the River Slaney and to fully interpret the impact of the proposed Scheme.

The survey area for both the wade and the metal detector survey will be finalised in consultation with the TII Project Archaeologist and the UAU at the NMS but will likely cover the same area as the 2024 intertidal walkover survey. This indicative area is shown in Figure 2.1 in blue. The surveys will be performed within this survey area. Allowances will be made for immovable obstacles or areas unsuitable for survey.

The survey area will be subject to a systematic wade survey and inspection at low tide to identify any evidence for archaeological remains (structures/ features/ deposits) and archaeological objects located in/ on/ adjacent to it. Any identified or potential archaeological remains or objects will be described, recorded, photographed and their location and extent surveyed. Their condition will also be recorded.

The metal detector survey is designed to record the location of ferrous and non-ferrous metal objects/ material contained on/ within sediments on the nearshore. The objective of the metal

detector survey is to provide a quantitative estimation of the amount of metal finds in the development area and to record their locations. The survey will be undertaken using a metal detector suitable for use in a nearshore environment.

The locations of all archaeological remains or objects identified will be recorded using EDM (Electronic Distance Measurement) and/ or DGPS (Differential Global Positioning System), as appropriate. All archaeological remains or objects identified will be photographed in-situ with a scale and north point. Any submerged remains/ objects observed will be photographed using a bathyscope or an underwater digital camera.

Any constraints encountered (e.g. immovable obstacles or areas unsuitable for survey etc.) which impede completion of the survey will be recorded and described, and the locations shown on a drawing.

A full descriptive report of the survey will be produced following completion of the surveys. As the wade and metal detection survey will be carried out under a Detection Device Consent and Dive Licence issued by the NMS, a standalone report will need to be submitted to the Licensing Authorities, as part of their conditions.

The key aim of these surveys is to inform any further mitigatory works that will be carried out in advance of the commencement of construction of the proposed scheme. The surveys will also aid in describing the nature of the sediments present within the riverine environment of the study area, and inform the Cultural Heritage Impact Assessment in the Environmental Impact Assessment Report for the proposed scheme.

2.3.2 Survey Timeline

The surveys will commence following the grant of a MUL. The exact mobilisation dates will not be known until the marine usage licence has been obtained and will be dependent on weather and tidal conditions.

It is estimated that the proposed surveys will take approximately one day to complete in the field.

2.4 Subtidal and Intertidal Benthic Surveys

The benthic surveys are proposed to provide a comprehensive and up-to-date description of the species and habitats found within subtidal and intertidal areas of River Slaney, in vicinity of the proposed scheme. The extent of the benthic survey area is outlined in Figure 2.1, shown in pink hatch.

2.4.1 Subtidal Survey Description

A stainless steel 0.025m^2 Van Veen grab sampler will be used to recover undisturbed sediment samples from the River Slaney riverbed at a total of ten (four upstream and six downstream of the proposed River Slaney bridge) faunal grab stations. The indicative locations of these are shown in Figure 2.1, in red. Triplicate samples will be collected at each station. An additional grab will also be collected for particle size analysis (PSA) and organic carbon at each station.

A Rigid Inflatable Boat (RIB) will be used to deploy the grab sampler. The Van Veen grab sampler comprises of a steel bucket with hinged access flaps, that is deployed in an open position, but which shuts when the sampler is in contact with the riverbed. In closing, sediment and biological material are retained inside the sampler. On arrival at each pre-selected survey station, the location will be recorded using DGPS. Additional information (such as date, site name, sample code, water depth at each replicate, type and specification of the sampler, anchorage, weather, quality of the sample, penetration depth, description of the sediment and

mesh size) will be recorded if possible. The samples will be sieved on a 1mm mesh sieve. Following a successful grab, photographs of the sample (including sample label) and notes on sediment type, texture, grain size, colour, odour (H_2S), residues, layering, volume, presence of fauna/tubes, algae, surface features etc, will be taken.

A sample of 500ml will be collected for PSA and organic carbon using a plastic scoop and labelled sediment sample will be stored in a cool box prior to PSA analysis in the laboratory. Each faunal sample will be stored and documented separately. All samples will be labelled and the information on the labels will be sufficient to identify the sample with certainty (e.g. date, location, station, job number, client, survey name etc). The labelling will be done on waterproof chemical resistant paper using a soft carbon pencil that will not fade in the fixing or alcohol solutions. These labels will be placed in the bucket with the sample, and the bucket will also be labelled on the outside using a waterproof marker.

2.4.2 Intertidal Survey Description

A survey of the intertidal zone upstream and downstream of the proposed Slaney River crossing will be undertaken. This will involve a Phase 1 Intertidal Walkover Survey and Phase II Intertidal Quantitative Transect Survey.

2.4.2.1 Phase I – Walkover Survey

An intertidal walkover survey will be undertaken prior to the Phase II quantitative transect surveys. The intertidal Phase I Walkover Survey will cover an approximate 1km stretch of the riverbank (north and south banks), dependent on access and local conditions. A Marine Nature Conservation Review (MNCR) Phase I intertidal survey will be completed within the intertidal areas during mean low water spring (MLWS) tidal conditions. The “Common Standards Monitoring Guidance” (Joint Nature Conservation Committee (JNCC), 2004) and “Common Standards Monitoring Guidance for Littoral Sediments Habitats” (JNCC, Version 4, August 2004) will be followed. In addition, the “CCW Handbook for Marine Intertidal Phase I Survey And Mapping” (Wyn et al., 2000), and the “Guidelines for the Conduct of Benthic Studies at Marine Aggregate Extraction Sites (2nd edition)” (Ware and Kenny, 2011) will be adhered to.

These surveys will take place at or near spring low tide. During the walkover survey any observations that appear to be related to ongoing change to the littoral habitats, will be recorded. These may include saltmarsh encroachment, invasive species, localised erosion and sediment accretion. The distribution of features will be recorded using photographs and GPS fixes. Habitat and biotope boundaries will be mapped using GPS trackers, and detailed notes on biotope (using European Nature Information System (EUNIS) and JNCC guidance) and sediment character/taxa will be recorded in key habitats along the upper, mid and low shore.

This will be supplemented by occasional dig-overs of representative habitats (where required), which will entail digging over approximately $0.1m^2$ of surface sediment and sieving through a 1mm sieve to provide a rapid in-situ assessment of benthic fauna. The survey will also include a record of sedimentary habitat, whereby sediment grain size is assessed in-situ using standardised Wentworth scale sediment comparison guides.

2.4.2.2 Phase II – Quantitative Transect Surveys

Following Phase 1 Walkover Surveys, Phase II Quantitative Intertidal Transect Surveys will be conducted within the benthic survey area as shown in Figure 2.1. The methodology will follow that set out within the *Marine Monitoring Handbook;* “Procedural Guideline No. 3-1 In situ intertidal biotope recording” (Wyn and Brazier, 2001) and “Procedural Guideline No. 3-6 Quantitative sampling of intertidal sediment species using cores” (Dalkin and Barnett, 2001). If rocky shore habitat is encountered, surveying will be adapted appropriately to use quadrats

rather than core sampling. Photographic records during surveying will be taken, as appropriate, for recording and reporting purposes.

Four transects running perpendicular to the shoreline will be undertaken (two upstream and two downstream of the proposed River Slaney crossing). The indicative transects are shown in yellow in Figure 2.1. Along each transect, a 0.25m^2 quadrat will be used to survey at three stations (upper shore, mid shore and lower shore). Salient features will be noted as encountered along each transect and additional notes, supplemental photographs and level readings made, where appropriate. Rocks and stones will be overturned, and the algal canopy cover (if present) will be partially removed at each station (where applicable) to investigate for the presence of any faunal species.

Quadrats will also be used to calculate the abundance of lug worms (Arenicola marina). In situ dig-overs of each quadrat following initial analysis will be conducted. At each quadrat location, a 15cm diameter core sample (in triplicate) will be taken to a depth of 15cm and preserved in 4% buffered formalin in separate labelled (inside and out) sealed containers. An additional 15cm diameter core sample will be taken at each station for PSA and organic carbon analysis in labelled (inside and out) containers. The anoxic layer depth will be recorded for each sample.

Where any features of conservation interest are identified, the boundaries of these will be mapped using GPS in order to provide information on extent. Within each area of conservation, an agreed number of quadrats will also be sited to allow estimates of mean % cover to be calculated for each bed. Station locations will be recorded on a hand-held GPS unit (accuracy 3-5m) and recorded in the survey notebook. A photograph will be taken of each sampling station in order to help visually characterise the sediments and notes will be taken. Any evidence of anthropogenic disturbance or damage at any of the stations will be logged, measured (where relevant) and photographed. This includes activities such as bait digging, fishing activities and coastal defence works.

This methodology will result in 36 intertidal cores and 12 samples for the analysis of PSA and organic content. Due to the nature of the substrate in the intertidal zone of the estuary, it may not be feasible from a health and safety perspective to survey the intertidal area on foot. The soft mud in the vicinity of the proposed development may require sampling from a vessel instead. In this case AQUAFACT proposes to sample each transect (upper, mid, and lower shore) from a RIB at high water using a 0.025m^2 Van Veen grab sampler. Triplicate samples will be collected at each shore height, as well as an additional grab for sediment analysis, as outlined in the subtidal methods above.

2.4.3 Survey Timeline

The surveys will commence as soon as feasible following the grant of a MUL. The exact mobilisation dates will not be known until the marine usage licence has been obtained and will be dependent on weather and tidal conditions. The subtidal survey and the intertidal survey will take approximately one day each.

3 Summary of Surveys

Table 3.1 presents a summary of all surveys, including methodology, purpose of surveys, relevant guidance documents and indicative timelines.

Table 3.1: Summary of Surveys

Discipline	Survey Type	Method	Purpose	Sampling Effort	Indicative Quantity	Indicative Programme of Works	Reference/ Guidance
Design	Hydrographic Survey (Bathymetric Survey)	Use of Sonar equipment to profile the riverbed. A current meter will be used to measure river velocity at five locations within the survey area and at up to 5m depth intervals.	To map the physical features of the River Slaney, such as depth, tides, currents, and the profile of the riverbed.	Measurements will be undertaken over a number of tidal conditions to ensure full coverage of the riverbed bathymetric survey area and record variance in current velocity between high and low tides.	Measurements will be undertaken over different tidal conditions.	To be commenced following grant of MUL, over a period of four weeks. Surveys to avoid bad weather.	-
Underwater Archaeology	Archaeological Wade Survey	A systematic wade survey and inspection of data gap at low tide to identify any evidence for archaeological remains and archaeological objects; within the intertidal area. Any identified objects/remains will be appropriately recorded.	The results will inform the EIAR and mitigation required prior to commencement of construction for the proposed scheme.	The survey area was determined following an initial walkover of the survey area in 2024. A systematic wade survey and inspection, and metal detector survey will be conducted at low tide.	One survey	To be undertaken during Phase 5 of the proposed scheme. Both wade and metal detector surveys will be completed in approximately one day. Surveys to avoid high tide and foul weather.	● Archaeology and Flood Relief Schemes: Guidelines *(*Department of Housing, Local Government and Heritage (DHLGH, 2023)). Available at: archaeology.ie/app/uploads/2024/11/archaeology-and-flood-relief-schemes-guidelines-nms-2023.pdf
	Archaeological Metal Detector Survey	A handheld metal detector will be used to record any ferrous and non-ferrous metal objects/ material within the intertidal area. Any identified objects/remains will be	The results will inform the EIAR and mitigation required prior to commencement of construction for the proposed scheme.	Series of transects at 10m intervals across the survey area, where accessible.	One survey	To be undertaken during Phase 5 of the proposed scheme. Both wade and metal detector surveys will be completed in	● Archaeology and Flood Relief Schemes: Guidelines *(*Department of Housing, Local Government and Heritage (DHLGH, 2023)). Available at: archaeology.ie/app/uploads/2024/11/archaeology-

Discipline	Survey Type	Method	Purpose	Sampling Effort	Indicative Quantity	Indicative Programme of Works	Reference/ Guidance
		appropriately recorded.				approximately one day. Surveys to be completed during spring tide and daylight hours.	and-flood-relief-schemes-guidelines-nms-2023.pdf
Benthic Communities	Subtidal Survey	A stainless steel 0.025m^2 Van Veen grab sampler will be used to recover undisturbed sediment samples from the River Slaney riverbed. A RIB will be used to deploy the sampler. All samples will be appropriately labelled.	Determination of benthic communities. Analysis of particle size, organic carbon, faunal data.	Ten faunal grab stations. Triplicate samples will be collected at each station, along with an additional grab for PSA and organic carbon. Total 40 samples.	One Survey	To be commenced following grant of MUL. Subtidal surveys to be completed over one day. Surveys to avoid foul weather.	● NMBAQC Guidelines for processing marine microbenthic invertebrate samples (Worsfold, T. and Hall, D., 2010). Available at: https://www.nmbaqcs.org/media/440n1nus/guide-for-processing-marine-macrobenthic-invertebrate-samples.pdf
	Intertidal Survey – Phase 1 Walkover Survey	Walkover survey over 1km stretch of the north and south riverbank. Occasional dig-overs of representative habitats as required, over c. 0.1m^2 of surface sediment.	Record observations and map habitat boundaries.	1km stretch of the riverbank within the MUL area. Exact location to be determined.	One Survey	To be commenced following grant of MUL. Intertidal surveys (Phase I and II) to be completed over one day. Surveys to be completed during spring tide.	● NMBAQC Guidelines for processing marine microbenthic invertebrate samples (Worsfold, T. and Hall, D., 2010). Available at: https://www.nmbaqcs.org/media/440n1nus/guide-for-processing-marine-macrobenthic-invertebrate-samples.pdf ● Common Standards Monitoring Guidance (JNCC, 2004). Available at: https://jncc.gov.uk/our-work/common-standards-monitoring-guidance/

Discipline	Survey Type	Method	Purpose	Sampling Effort	Indicative Quantity	Indicative Programme of Works	Reference/ Guidance
							• Common Standards Monitoring Guidance for Littoral Sediments Habitats (JNCC, Version 4, August 2004). Available at: https://data.jncc.gov.uk/data/9b4bff32-b2b1-4059-aa00-bb57d747db23/CSM-LittoralSedimentHabitats-2004.pdf • CCW Handbook for Marine Intertidal Phase I Survey And Mapping (Wyn et al., 2000). • Guidelines for the Conduct of Benthic Studies at Marine Aggregate Extraction Sites (2nd edition) (Ware and Kenny, 2011). Available at: https://www.marbef.org/qa/documents/conductofsurveysatmaesites.pdf
	Intertidal Survey – Phase II Quantitative Transect Survey	Record salient features along each of the four transects within the intertidal area. A 0.25m^2 quadrat will be used at three stations along each transect. Any features of conservation interest	To investigate for the presence of any faunal species.	Four transects perpendicular to the shoreline, three quadrats along each transect. Triplicate core samples will be collected at each location, along with an additional grab for PSA and organic	One Survey	To be commenced following grant of MUL. Intertidal surveys (Phase I and II) to be completed over one day. Surveys to be completed during spring tide.	• NMBAQC Guidelines for processing marine microbenthic invertebrate samples (Worsfold, T. and Hall, D., 2010). Available at: https://www.nmbaqcs.org/media/440n1nus/guide-for-processing-marine-

Discipline	Survey Type	Method	Purpose	Sampling Effort	Indicative Quantity	Indicative Programme of Works	Reference/ Guidance
		will be appropriately recorded. If sampling is needed from a vessel, this will be conducted from a RIB at high water using a 0.025m^2 Van Veen grab sampler.		carbon. Total 48 samples.			macrobenthic-invertebrate-samples.pdf ● Marine Monitoring Handbook: Procedural Guideline No. 3-1 In situ intertidal biotope recording (Wyn and Brazier, 2001). Available at: https://data.jncc.gov.uk/data/ed51e7cc-3ef2-4d4f-bd3c-3d82ba87ad95/mmh-Section6.pdf ● Marine Monitoring Handbook: Procedural Guideline No. 3-6 Quantitative sampling of intertidal sediment species using cores (Dalkin and Barnett, 2001). Available at: https://data.jncc.gov.uk/data/ed51e7cc-3ef2-4d4f-bd3c-3d82ba87ad95/mmh-Section6.pdf