An Roinn Talmhaíochta, Bia agus Mara
Department of Agriculture, Food and the Marine

Aquaculture Licence Application

Marine Engineering Division Report

Site T-Reference:	T32-1012
Application ID:	35543
Report Prepared By:	Michael Whelton
Date:	20 May 2025

Application Details

Applicant(s)	Emerald Mussels Ltd, [redacted]
Location	Arklow Bay, Irish Sea
Application Type	New
Site Area (Ha)	71.93 Ha
Species	Blue Mussel (Mytilus edulis)
Cultivation Method	Rope Longlines (Spat Collection Site)
Source of stock	Natural spatfall
Annual Production Estimates	1000 tonnes (Year 5)
Shellfish Waters Designation	None
Development Plans	Wicklow County Development Plan 2022-2028 Objectives: CPO 9.50; CPO 19.3
Pre-Consultation Meeting	None

Site Description

Site Location

The site application is titled T32-1012. The site is located in the Irish Sea approximately 3km east of Arklow Head, Co Wicklow. The 72Ha site lies 2.4km northeast of existing licenced mussel seed site T32-027A and 5km southwest of mussel seed application site T32-1013 by the same company. Figure 1 outlines the location of the site (in red). The site is rectangular in shape and its long axis is oriented in a South to North direction.

The consistency of the seabed at this location is primarily sand and suitable for the aquaculture proposed. The depth across the site varies from 16 to 17 metres.
There is existing aquaculture on this section of the Irish coast, which indicates the hydrodynamic regime is suitable for this type of aquaculture at this location.
The application information suggests a mean current speed of 0.51m/s with a maximum speed of 1.08 m/s. A mean annual wave height of 0.69m and a maximum recorded height of 5.32 metres is reported for the site.

Site History

This is an application for a new site.

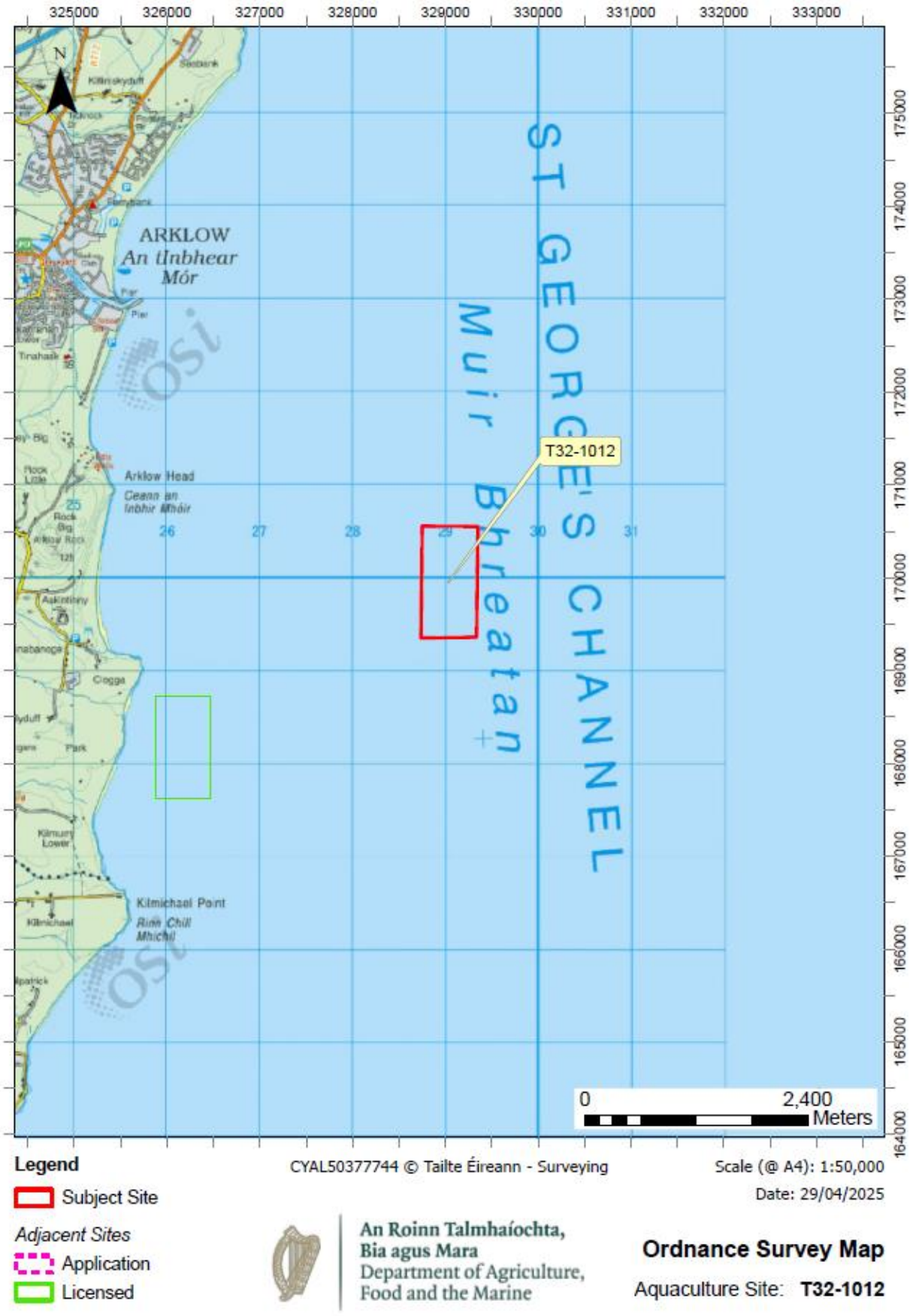

Figure 1 T32-1012 Site Location Map

Proposed Development

Site Management

This is a new application for mussel spat collection using rope longlines on a 72 Ha site. The applicant has also applied for another 72 Ha site T32-1013 to the northeast of this site. The applicant proposes to install 64 No. longlines over two phases as the site is developed. Each longline is predicted to produce approximately 15 tonnes of mussels produce.

Site Layout and Structures

The applicant has submitted details of site location, layout and site structures.

Proposed Site Layout and Structures

The applicant proposes to install 64 No. 187.25m single headrope longlines secured using 6m fielder marine anchors drilled into the seabed. The site will consist of 4 blocks of 16 No. longlines with a spacing of 36m between longlines, and a surface spacing of 89m between each block of longlines. Droppers will be installed such that they will not extend to within 2m of the seabed. The applicant has allowed a buffer of 50m between the anchors and the end of the site and a buffer of 30m between lines and the edge of the site.

Land Based Facilities / Site Access

The operators propose to access the site from the South Pier in Arklow Harbour and is just over 4km from the site. The operator proposes to access the site from Arklow Harbour by work vessel. Details of the access route were included with the application, and this access is acceptable.

Potential Impacts

Navigation

The proposed site is located directly north of an existing Commissioners of Irish Lights (CIL) navigation mark. The applicant has provided details of proposed navigational marking including 8 No. navigational marks for the site. Any navigational marking should be approved by CIL. The Applicant is to maintain all navigation markers as specified by the license.

There is vessel activity in the area including fishing, commercial and marine leisure traffic. South Pier in Arklow is 4 km from the site and there is a range of marine traffic operating

within proximity of the proposed site. These include fishing vessels, pleasure crafts, tugs and special craft. Pot fishing vessels will be impacted by the site area.

Visual Impact

This site is located approximately 3km from the Wicklow coastline. The Wicklow County Development Plan 2022-2028 classifies the adjoining coastline as either Urban or as Coastal Area of Outstanding Natural Beauty. The CDP indicates that there are no "Views of Special Amenity Value or Special Interest", or "Prospect of Special Amenity Value or Special Interest" overlooking this site.

The types of structures proposed adhere to the best practices outlined in the Guidelines for Landscape and Visual Impact Assessment of Marine Aquaculture, 2001. The licence conditions will specify the orientation of the structures on the sites to minimise the visual impact. The visual impact of this proposal is not significant. Due to the distance from the shoreline and the nature of the development and structures, the magnitude of landscape and visual impact are both considered low. The overall Landscape and Visual Impact is of low significance.

Environmental

The proposed site is located in Arklow Bay. The proposed site is not located on a Natura 2000 site. The Supporting Information for Screening for Appropriate Assessment Report was not assessed by MED. There are 3 Dumping at Sea licensed sites located in the vicinity of the proposed site.

Other Beneficial Uses There is tourism, fishing, seaweed harvesting (future) and marine leisure in the area. There are a number of small local beaches in the area. Aquaculture activities at this site should not interfere with these usages.

Cumulative Impact

There has been licensed aquaculture activity in Arklow Bay in recent years. There is existing fishing, commercial port activities and marine leisure in the area. The proposed navigational marking will reduce the impact of the aquaculture on navigation in the area. The Arklow Bank windfarm is located east of the proposed site and the connecting export cable is located north of the site. There are proposals for offshore renewable energy sites in the Irish Sea with foreshore licences to carry out site investigation works at the location of this site. The Shelmalere Offshore Wind project, the Kilmichael Point project, the Arklow Bank Phase 2 project, the South Irish Sea project and the Latitude 52 project are all located in the vicinity of the proposed site.

There has been aquaculture activity in Arklow Bay. Site T32-027A is licensed since 2019. Table 1 outlines the nearby aquacultures in Arklow Bay. This application does not significantly increase the cumulative impact of aquaculture within Arklow Bay.

Table 1 Nearby Aquaculture Sites

Site	T32-027A (in Operation)	T32-1013 (in Application)	T32-028A (In Application)
Distance (km)	2.4	4.9	6.2
Direction	SW	NE	N

Kilpatrick Sandhills and Buckroney-Brittas Dunes are two Special Areas of Conservation (SAC) in proximity to the proposed site. Kilpatrick Sandhills is 4.15km and Buckroney-Brittas Dunes is 7.2km from the proposed site.

Conclusions

Marine Engineering Division has the following comments on this application:

- AFMD should ascertain if the proposed licensing of this site will impact on any Offshore Renewable Energy project proposals.
- Marine Engineering Division has no objection to the licensing of this site subject to the above items being addressed.