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

22nd November 2022

Site Ref: T05/640A

Bantry Marine Research Station Ltd
Gearhies
Bantry
Co. Cork

FISHERIES (AMENDMENT) ACT, 1997 (NO.23)
NOTICE OF MINISTERIAL DECISION TO GRANT AN AQUACULTURE LICENCE

Dear Sir

I would like to inform you that the Minister for Agriculture, Food and the Marine has approved the granting to you of one 10-year Aquaculture Licence for the cultivation of various aquatic plants using longlines on site no. T05/640A (see attached information note). I enclose a copy of the public notice of the decision which **the Department** has arranged to have published in the "The Southern Star".

Any person aggrieved by the decision may, in accordance with Section 41 of the Fisheries (Amendment) Act 1997, appeal against it in writing to the Aquaculture Licences Appeals Board (ALAB). This appeal must be lodged within one month beginning on the date of the publication of the decision.

The Licence will be issued to you as soon as possible after the end of the period of one month from the date of publication of the notice in "The Southern Star", if there is no appeal.

Please also find enclosed a draft copy of the Aquaculture Licence that may be issued by the Minister.

Note: As marine aquaculture operations require separate Aquaculture and Foreshore Licences, a separate determination on the foreshore licence application will be made once the licensing authority, or if appealed, ALAB have made a determination on the aquaculture licence application.

Yours sincerely

Deirdre Fitzpatrick

Deirdre Fitzpatrick
Aquaculture and Foreshore Management Division

S.12 (3) OF THE FISHERIES (AMENDMENT) ACT, 1997(NO.23)
INFORMATION NOTE TO APPLICANT FOR THE PURPOSE OF REGULATION 18 OF THE AQUACULTURE (LICENCE APPLICATION) REGULATIONS 1998

REFERENCE NO:	**T05/640A**
APPLICANT:	**Bantry Marine Research Station Ltd**
AQUACULTURE TO WHICH DECISION RELATES:	Cultivation of various aquatic plants using longlines on site T05/640A on the foreshore adjacent to Dooneen Pier, along the north shore of Dunmanus Bay, Co. Cork.
NATURE OF DECISION:	Grant of Aquaculture Licence.
DATE OF DECISION:	**18th November 2022.**
CONDITIONS OF LICENCE:	See attached.
DURATION OF LICENCE:	10 years
ISSUE OF LICENCE:	The licence will be dated and issued as soon as practicable after the end of the period of one month from the date of publication of a notice in a newspaper circulating in the vicinity of the aquaculture, if no appeal is made to the Aquaculture Licences Appeals Board (ALAB) within that period, under Section 40 and 41 of the Fisheries (Amendment) Act, 1997.

Note: As marine aquaculture operations require separate Aquaculture and Foreshore Licences, a separate determination on the foreshore licence application will be made once the licensing authority, or if appealed, the Aquaculture Licences Appeals Board (ALAB) have made a determination on the aquaculture licence application.

To be inserted in The Southern Star.

FISHERIES (AMENDMENT) ACT, 1997 (NO. 23) NOTICE OF DECISION TO GRANT AQUACULTURE LICENCE(S).

The Minister for Agriculture, Food and the Marine has made determinations on the Aquaculture Licence applications as set out in the table below;

Site Ref No	Applicant	Location	Species & Method	Minister's Decisions
T05/622A	Mr Dan O'Shea	West of Adrigole Harbour, Bantry Bay	Common Periwinkle using hand harvesting	Grant Licence
T05/623A	Mr Dan O'Shea	Faha West, East of Adrigole, Bantry Bay	Common Periwinkle using hand harvesting	Grant Licence
T05/624A	Mr Dan O'Shea	Adrigole Harbour, Bantry Bay	Common Periwinkle using hand harvesting	Grant Licence
T05/625A	Mr Dan O'Shea	Trafrask Bay, Bantry Bay	Common Periwinkle using hand harvesting	Grant Licence
T05/547A	Bantry Marine Research Station Ltd	Gearhies, Bantry Bay	Additional Seaweeds on longlines	Grant amendment of Licence
T05/634A	Mr Dean Murphy	Berehaven Sound, Castletownbere, Bantry Bay	Oysters using bags and baskets on trestles	Grant Licence
T05/640A	Bantry Marine Research Station Ltd	North shore of Dunmanus Bay	Various seaweeds using longlines	Grant Licence

The reasons for these decisions are elaborated on the Department's website at: www.gov.ie

An appeal against the Aquaculture Licence decisions may be made in writing, within one month of the date of its publication, to THE AQUACULTURE LICENCES APPEALS BOARD, Kilminchy Court, Portlaoise, Co. Laois, by completing the Notice of Appeal Application Form available from the Board, phone 057 86 31912, e-mail info@alab.ie or website at http://www.alab.ie/

Note: As marine aquaculture operations require separate Aquaculture and Foreshore Licences, a separate determination on the foreshore licence applications will be made once the licensing authority, or if appealed, the Aquaculture Licences Appeals Board (ALAB) have made a determination on the aquaculture licence application.

An Bord Achomharc Um Cheadúnais Dobharshaothraithe
Aquaculture Licences Appeals Board

Mr Charlie McConalogue T.D.
Minister for Agriculture, Food and the Marine
Agriculture House
Kildare Street
Dublin 2

3 February 2023

Our Ref: AP1/1-3/2022
Site Ref: T05/640A

Re: Appeal against the decision by the Minister for Agriculture, Food and the Marine to grant an Aquaculture Licence to Bantry Marine Research Station Ltd to cultivate various aquatic plants using longlines on the sub-tidal foreshore on site ref T05/640A in Dunmanus Bay, Co. Cork

Dear Minister,

Please find attached copies of three (3) Notices of Appeal received for determination in accordance with Section 43(1) of the Fisheries Amendment Act 1997, ("the Act"). The Notice of Appeal documents may be viewed on the ALAB website at the following link:

https://www.alab.ie/appeals-open/cork/#d.en.167857

Pursuant to Section 42 (1) of the Act, the Board may, in its discretion, treat two or more appeals as, and the appellants, as parties to a single appeal. The Board has decided at this time, to exercise that discretion and to consider all three (3) appeals as a single appeal, as they relate to the same licence application. Please note that the Board, in its discretion, may at any time separate such appeals. In that event you will be notified accordingly.

Please submit to the Board **within 14 days of receipt of this letter** (as required by Section 43(2) of the Act):

(a) A copy of the aquaculture licence concerned and of any drawings, maps, particulars, evidence, environmental impact statement, other written study or further information received or obtained from the applicant for the licence in accordance with a requirement of or under regulations under the Act.

(b) A copy of any report prepared for you in relation to the application, revocation, or amendment and

(c) A copy of any document recording your decision in respect of the application, revocation, or amendment and of the notification of the decision given to the applicant.

Please include, as part of the above, a location map of the surrounding area to include:

(i) Sites under application
(ii) Sites lapsed
(iii) Licensed sites
(iv) Sites currently under appeal (if any).

Section 44(2) of the Act entitles you and each other party, except the appellant, to make submissions or observations in writing to the Board in relation to the appeal within a period of 30 days beginning on the day on which a copy of the Notice of Appeal is sent to that party by the Board.

In accordance with the foregoing, I would be grateful if you would:

(i) Acknowledge receipt of the Board's letter and forward the necessary documentation and
(ii) Make, if necessary, any submission(s) or observations in accordance with Section 44(2) of the Act in writing to be received by the Board on or before **6 March 2023**.

Yours sincerely,

Margaret Carton
Secretary to the Board

cc: Mr Ultan Waldron, Aquaculture and Foreshore Management Division

Published 21st November 2022

"Determination of Aquaculture Licensing application – T05/640A

Bantry Marine Research Station Ltd has applied for authorisation to cultivate various aquatic plants using longlines on the sub-tidal foreshore on a 15.74 hectare site (T05/640A) adjacent to Dooneen Pier, along the north shore of Dunmanus Bay, Co. Cork.

The Minister for Agriculture, Food and the Marine has determined that it is in the public interest to grant the licence sought. In making his determination the Minister considered those matters which by virtue of the Fisheries (Amendment) Act 1997, and other relevant legislation, he was required to have regard. Such matters include any submissions and observations received in accordance with the statutory provisions. The following are the reasons and considerations for the Minister's determination to grant the licences sought: -

a. *Scientific advice is to the effect that the waters are suitable;*

b. *Public access to recreational and other activities can be accommodated by this project;*

c. *The proposed development should have a positive effect on the economy of the local area;*

d. *All issues raised during Public and Statutory consultation phase;*

e. *There are no effects anticipated on the man-made environment heritage of value in the area;*

f. *No significant effects arise regarding wild fisheries;*

g. *The proposed aquaculture activities do not spatially overlap with Natura 2000 sites and there should be no significant impacts on the nearest Natura site(s).*

h. *No significant impacts on the marine environment and the quality status of the area will not be adversely impacted;*

i. *The updated Aquaculture licence contains terms and conditions which reflect the environmental protection required under EU and National law."*

BANTRY BAY
Bá Bheanntraí

Dunmanus Bay
Bá Dhún Mánais

T05-204
T05-371
T05-409
T05-426G
T05-439A
T05-196A
T05-438
T05-196B
T05-570A
T05-466A
T05-426H
T05-473A
T05-377B
T05-426F
T05-377A
T05-365
T05-640A
T05-509A
T05-462A
T05-426J
T05-426I
T05-617A
T05-426K

Site_Statu
- Appealed to ALAB
- Lapsed
- Licensed
- Under Application

Scale = 1:50,000

Drawn : 15-02-2023

DUNMANUS BAY
CO. CORK
Site T05/640A
APPEALED TO ALAB

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

Submission AGR 01359-22: Recommendation to grant an Aquaculture Licence for 1 site (T05/640A).

TO:	Minister	AUTHOR:	Fitzpatrick, Deirdre
STATUS:	Completed	OWNER:	Fitzpatrick, Deirdre
PURPOSE:	For Decision	REVIEWERS:	OKeeffe, Therese Fitzpatrick, Deirdre McLoughlin, PatrickM Waldron, Ultan Beamish, Cecil Smith, Ann
DIVISION:	Aquaculture and Foreshore Management Division		
DECISION BY:			

Final comment

approved by Minister

Action required

Ministerial Determination on Aquaculture Licensing Application (T05/640A).

Executive summary

The Minister's determination is requested in relation to an application of an Aquaculture Licence from Bantry Marine Research Station Ltd. The application is for the culture of various aquatic plants using longlines on site T05/640A totalling 15.74 hectares on the foreshore adjacent to Dooneen Pier, along the north shore of Dunmanus Bay, Co. Cork.

It is recommended that the Minister determines the Aquaculture Licence sought **be granted** to Bantry Marine Research Station Ltd for the reasons outlined in the 'Detailed Information' section below.

Detailed information

DECISION SOUGHT

The Minister's determination is requested in relation to an application of an Aquaculture Licence from Bantry Marine Research Station Ltd, Gearhies, Bantry, Co. Cork. The application is for the cultivation of various aquatic plants using longlines on site T05/640A totalling 15.74 hectares on the foreshore adjacent to Dooneen Pier, along the north shore of Dunmanus Bay, Co. Cork.

Note: Tabs attached to this submission may contain additional information which is subject to redaction if transmitted to third parties.

BACKGROUND

Marine aquaculture operations require separate Aquaculture and Foreshore Licences.

The Aquaculture Licence defines the activity that is permitted on a particular site and the Foreshore Licence allows for the activity permitted under the Aquaculture Licence to take place in that particular area of the Foreshore. The validity of each licence is contingent on the other licence remaining in force.

Section 82 of the Fisheries (Amendment) Act 1997 requires the Minister in considering a lease or a licence under the Foreshore Act to have regard to the decision of the licensing authority in relation to the aquaculture licence. Therefore, the Foreshore Licence submission will be forwarded for consideration once the Licensing Authority/ALAB have made a decision.

82.—The Minister, in considering an application for a lease or a licence under the Foreshore Acts, 1933 and 1992, which is sought in

connection with the carrying on of aquaculture pursuant to an aquaculture licence, shall have regard to any decision of the licensing authority in relation to the aquaculture licence.

APPLICATION FOR AN AQUACULTURE LICENCE

An application (**TAB A**) for an Aquaculture Licence has been received from the applicant referred to above (in conjunction with an application for a Foreshore Licence), for the cultivation of various aquatic plants using longlines on site T05/640A totalling 15.74 hectares on the foreshore adjacent to Dooneen Pier, along the north shore of Dunmanus Bay, Co. Cork,(numbered T05/640A – see **TAB A**).

LEGISLATION

Section 7 of the Fisheries (Amendment) Act 1997 provides that the licensing authority (i.e. Minister, delegated officer or, on appeal, the Aquaculture Licences Appeals Board) may, if satisfied that it is in the public interest to do so, licence a person to engage in aquaculture.

CONSULTATION AND PUBLIC COMMENT

The application was sent to the Department's technical experts, statutory consultees and was also publicly advertised in a composite public notice covering both aquaculture and foreshore elements.

Technical Consultation – TAB B

Marine Engineering Division (MED): Stated no objection to the application and did recommend the inclusion of conditions dealing with structures and site layout.

Statutory Consultation – TAB C

Regulation 10 of the Aquaculture (Licence Application) Regulations, 1998 requires certain statutory bodies to be notified of an Aquaculture Licence application.

Comments were received from the following statutory bodies:

Sea Fisheries Protection Authority (SFPA): Stated no objection to the application.

Commissioner of Irish Lights (CIL): Stated no objection to the application, provided no navigable inter-tidal channels are impeded by the site.

Marine Institute (MI): Stated no objection to the application but made the following recommendations;

- The initial source of seed (plantlets) and other sources which may be used in the future should be subject to approval by the Minister.
- Prior to the commencement of operations at the site, the applicant be required to draw up a contingency plan, for the approval of DAFM, which shall identify, *inter alia* methods for the removal from the environment of any invasive non-native species introduced as a result of operations at this site.

Following considerations implicit to Sections 61 (e and f) of the Fisheries (Amendment) Act 1997, the Marine Institute is of the view that there will be no significant impacts on the marine environment and that the quality status of the area will not be adversely impacted

Irish Water: Stated no objection to the application but indicated the proximity of wastewater discharges to the proposed site.

It is proposed to insert a specific condition covering MSO matters in any licence/s which may issue as follows:

The Minister's determination in respect of this licence is conditional upon immediate full compliance by the Licensee in respect of all requirements and conditions which are imposed under the relevant legal provisions applicable to the Marine Survey Office.

Aquaculture Licence conditions required on foot of the Statutory Consultation process will be contained in Schedules 3 and 4 of the Draft Aquaculture Licence, if granted.

Public Consultation

The application was publicly advertised using a composite public notice covering both aquaculture and foreshore elements, in The Southern Star on 2nd July 2022. The application and supporting documentation were available for inspection at Durrus and Bantry Garda Stations for a period of 30 days from the date of publication of the notice in the newspaper.

There were 26 valid objections/comments received from the public consultation process. It is not possible to disaggregate the comments into aquaculture and foreshore elements. The objections can be summarised as follows:

1. Traffic impact and safety concerns;
2. Visual Impact;
3. Impact on tourism, the impact upon the pier at Dooneen and Green Coast award;
4. Lack of consultation;
5. No economic benefits;
6. Impact on the Special Protection Area (SPA);
7. Defective Screening document;
8. Fishing impact;

A copy of all the observations/submissions received at the Public/Statutory consultation stage was forwarded to the applicant.

The applicant responded as follows to the Public observations/submissions (See document **TAB D**):

1. Traffic impact and safety concerns - A public meeting was facilitated by the local community (Muintir Bhaira Community council) where public opinions could be voiced. Following this meeting the applicant is seeking ways to mitigate the impact on traffic/safety. The applicant, Bantry Marine Research Station Ltd (BMRS) believes that the more intensive work during deployment and harvesting could be carried out at sea and the resultant biomass harvested could be landed at alternative working piers such as the quay west of the church in Durrus in Dunmanus Bay, which is already used by other aquaculture producers. The pier at Dooneen would still be required for maintenance purposes and this would average no more than the applicant accessing the pier once a week. Personnel will be informed of the sensitive nature of the surrounding area and to be considerate of the nature of the road and the variety of users.

2. Visual Impact – The applicant has applied to use grey LD2 buoys, which are specifically designed to be unobtrusive. The lines themselves are submerged but the MFL130 floats at each end would be noticeable. The floats are on a smaller scale as they are not required to hold significant weight. The applicant also stated that the aids to navigation are a statutory requirement.

3. Impact on tourism, the impact upon the pier at Dooneen and Green Coast award – As stated in point 1, using alternative piers for deploying and harvesting will address a lot the concerns regarding the impact on walkers/tourists. There should be no need to store any equipment, parts, or buoys on the pier and the convenience of the company base on the northern side of the peninsula will allow for items to be stored at this location.

4. Lack of consultation – The applicant has applied using the appropriate notice in the local newspaper, as well as providing the application for viewing as required by Aquaculture and Foreshore Management Division. As mentioned earlier a public meeting was held with member of the local community.

5. No economic benefits – The applicant, Bantry Marine Research Station Ltd (BMRS) is a significant local employer in the area. This has been facilitated in part by its existing seaweed farm licences, which have allowed the company to carry out research in conjunction with third level institutions, state bodies and EU consortia into the environmental benefits of different species of seaweed. BMRS acknowledges the grow-out farm itself will not create much additional employment, however, there are significant secondary employment benefits deriving from the research undertaken and the processing of harvested biomass.

6. Impact on the Special Protection Area (SPA); - Following on from point 1 above, the additional traffic that will be generated in this scenario would be minimal. Therefore, BMRS's view is that there would be no concerns of any additional impact upon the adjacent SPA.

7. Defective screening document – BMRS does not accept this, as the appropriate statutory body appointed to conduct same, the Marine Institute, are experts in their field and are carrying out this work regularly all over the country.
8. Fishing impact – Studies have shown that seaweed farms result in a substantial increase in fish populations and predominantly shellfish due to the additional coverage provided by the seaweed canopy, thus allowing better protection

from predators. The development of this farm will if anything, improve the fishing grounds and whilst it may change how people access their pots, it will certainly not unduly restrict them. BMRS will of course consult with the local inshore fishermen and facilitate them. There are no plans to hinder any access to any of the piers.

The applicant agreed with the recommendations/observations of the Statutory consultees except for the comments received from Irish Water regarding the proximity to wastewater discharges. The applicant stated that the proposed development is not in close proximity to wastewater discharges and in any event, seaweed plays an important role in the removal of dissolved nutrients both from runoff from the land or from wastewater discharges and can be absorbed and converted to increase the protein content of seaweed.

CRITERIA IN MAKING LICENSING DECISIONS

The licensing authority, in considering an application, is required by statute to take account of, as appropriate, the following points and must also be satisfied that it is in the public interest to license a person to engage in aquaculture:

a) the suitability of the place or waters

Scientific advice is to the effect that the waters are suitable for the cultivation of seaweed/aquatic plants;

b) other beneficial uses of the waters concerned

Public access to recreational and other activities can be accommodated by this project;

c) the particular statutory status of the waters

(i) Natura 2000

The proposed site is located in Dunmanus Bay, which is not a Natura 2000 area. However, it is adjacent to a number of Natura sites. An Appropriate Assessment Screening was carried out by our scientific advisors who considered that there will be no significant effects on the qualifying interests of the Natura sites. (See document at ***TAB E****);*

(ii) Shellfish Waters

The site is not located within Shellfish Designated Waters.

d) the likely effects on the economy of the area

Aquaculture has the potential to provide a range of benefits to the local community, such as attraction of investment capital, development of support services, etc.;

e) the likely ecological effects on wild fisheries, natural habitats, flora and fauna

No significant issues arose regarding wild fisheries. The Department of Housing, Local Government & Heritage (DHLGH) had no objection on nature conservation grounds and, furthermore, this is not a Natura 2000 site;

f) the effect on the environment generally

The Department's Scientific Advisors, the Marine Institute, are of the view that there will be no significant impacts on the marine environment and that the quality status of the area will not be adversely impacted.

g) DHLGH raised no objection to the development from an underwater archaeological perspective

RECOMMENDATION

It is recommended that the Minister:

approves the granting of an Aquaculture Licence **(TAB F)** to Bantry Marine Research Station Ltd, Gearhies, Bantry, Co. Cork, for a period of ten (10) years for the purpose of cultivating various aquatic plants using longlines in accordance with the terms and conditions of the attached draft Aquaculture Licence.

REASONS FOR DECISION

The Minister for Agriculture, Food and the Marine is required to give public notice of both the licensing determination and the

reasons for it. To accommodate this, it is proposed to publish the following on the Department's website, subject to the Minister approving the above recommendation:

"Determination of Aquaculture Licensing application –T05/640A

Bantry Marine Research Station Ltd has applied for authorisation to cultivate various aquatic plants using longlines on the sub-tidal foreshore on a 15.74 hectare site (T05/640A) adjacent to Dooneen Pier, along the north shore of Dunmanus Bay, Co. Cork.

The Minister for Agriculture, Food and the Marine has determined that it is in the public interest to grant the licence sought. In making his determination the Minister considered those matters which by virtue of the Fisheries (Amendment) Act 1997, and other relevant legislation, he was required to have regard. Such matters include any submissions and observations received in accordance with the statutory provisions. The following are the reasons and considerations for the Minister's determination to grant the licences sought: -

a. *Scientific advice is to the effect that the waters are suitable;*
b. *Public access to recreational and other activities can be accommodated by this project;*
c. *The proposed development should have a positive effect on the economy of the local area;*
d. *All issues raised during Public and Statutory consultation phase;*
e. *There are no effects anticipated on the man-made environment heritage of value in the area;*
f. *No significant effects arise regarding wild fisheries;*
g. *The proposed aquaculture activities do not spatially overlap with Natura 2000 sites and there should be no significant impacts on the nearest Natura site(s);*
h. *No significant impacts on the marine environment and the quality status of the area will not be adversely impacted;*
i. *The updated Aquaculture licence contains terms and conditions which reflect the environmental protection required under EU and National law."*

Related submissions

There are no related submissions.

Comments

OKeeffe, Therese - 27/10/2022 14:31
Recommended for approval please that the aquaculture licence sought by Bantry Marine Research Station Ltd for site T05/640A be granted for the reasons outlined in the submission.

McLoughlin, PatrickM - 02/11/2022 12:42
For updating.

OKeeffe, Therese - 02/11/2022 16:05
For approval please.

McLoughlin, PatrickM - 03/11/2022 09:37
Deirdre, can the spelling of TAB A be corrected. Thanks

OKeeffe, Therese - 03/11/2022 09:43
Tab Changed

McLoughlin, PatrickM - 03/11/2022 12:53
I agree with the recommendation as set out in the submission. Grateful for your review and approval.

Waldron, Ultan - 11/11/2022 19:03
I agree with the recommendation that the Minister determines the Aquaculture Licence sought be granted to Bantry Marine Research Station Ltd for the reasons outlined in the 'Detailed Information' section below and associated submission. Ultan

Beamish, Cecil - 14/11/2022 14:32
Recommended for Ministerial approval for the reasons set out in the Submission.

Smith, Ann - 15/11/2022 10:17
Cleared by the Sec Gen for submision to Minister.

A.S. 15/11/2022

Whelan, Paul - 17/11/2022 15:14
approved by Minister

User details

INVOLVED: Fitzpatrick, Deirdre
OKeeffe, Therese
McLoughlin, PatrickM
Waldron, Ultan
Beamish, Cecil
Sub Sec Gens Office
eSub Sec Gen
eSub Ministers Office
eSub Minister

READ RECEIPT: Fitzpatrick, Deirdre
OKeeffe, Therese
McLoughlin, PatrickM
Waldron, Ultan
Beamish, Cecil
Ennis, Joan
Smith, Ann
Brennan, Darran
Scully, Aaron
Whelan, Paul

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

Marine Engineering Division

Report on Aquaculture Licence Application

Application Reference No: T05/640

Report Prepared by:	**Gearoid O'Shea, Engineer**
Date:	13 April 2022
Applicant	Bantry Marine Research Station Ltd.
Location	Adjacent to Dooneen Pier, Dunmanus Bay, Co. Cork
Applicant Type	Aquaculture/Foreshore Licence
Site	A
Site Area (Ha)	15.73
Species	Various Aquatic Plants
Cultivation Method	Longlines
Intertidal/Non-Intertidal	Non-Intertidal
Source of Seed / Spat	Bantry Marine Research Station Hatchery
Annual Production Estimates	110 Tonnes
Shellfish Waters Designation	Yes ☐ No ☒
Reference:	
Environmental Designation	Yes ☐ No ☒
Reference:	
Development Plans	Yes ☒ No ☐
Reference:	Cork County Development Plan 2014, Section 6.11
Pre-Consultation Meeting	Yes ☐ No ☒

Drawing Validation Sheet

OSI Maps	**Yes**	☒	**No**	☐		
Comment:	1:10,560 scale map indicating location of site					
BA Chart	**Yes**	☐	**No**	☒		
Comment:	MED BA Chart					
Farm Layout Drawing	**Yes**	☒	**No**	☐		
	Directional Arrow	Yes	☒	No	☐	
	Scale	Yes	☒	No	☐	
	Title Block	Yes	☒	No	☐	
	Date	Yes	☒	No	☐	
Comment:	1:2,000 scale layout drawing					
Drawings of structures	**Yes**	☒	**No**	☐		
Comment:	Seaweed longline details					
Details of Proposed Navigation Marking	**Yes**	☒	**No**	☐		
Comment:	4 No. navigation marks at the corners					
Site Access Indicated	**Yes**	☒	**No**	☐		
Comment:	Dooneen Pier					
Site Co-Ordinates Indicated	**Yes**	☒	**No**	☐		
Comment:						
Site Overlap	**Yes**	☐	**No**	☒		
Comment:						
Oyster Fishery Order Overlap	**Yes**	☐	**No**	☒		
Comment:						

☒ **The application is submitted with each of the requirements listed and is therefore deemed to be a valid application.**

☐ **AFMD should be aware that insufficient details have been submitted as per above.**

Site Suitability Assessment

Site Location

The site is located at a relatively sheltered location, adjacent to Dooneen Pier, along the north shore of Dunmanus Bay. The proposed site is adjacent to the road to Sheep's Head which is designated as a scenic route (S109) in the Cork County Development Plan 2014. The site is also adjacent to high value scenic landscape.

Proposed Site Layout and Structures

The proposed longline layout will not cause an obstruction or nuisance. The flotation barrels should be battleship grey in colour. Each floating mussel longline should not be longer 220 metres in length. A maximum of 50 No. seaweed longlines should be permitted within the proposed site.

Land Based Facilities / Site Access

The applicant proposes to use the adjacent Dooneen Pier to access the site.

Navigation

Navigation marks have been proposed at the 4 No. corners of the site.

The MSO should be consulted regarding providing a safe system of navigation for all marine users.

Visual Impact

The Cork County Development Plan indicates there are many scenic routes surrounding Dunmanus Bay. In general, views of the site are obscured and limited from scenic routes.

The proposed farm layout and type of structures adheres to the best practices outlined in the Guidelines for Landscape and Visual Impact Assessment of Marine Aquaculture, 2001.

Impact / Cumulative Impact

There is fishing and marine leisure in the area.

The proposed site location may be used for potting. The SFPA should be consulted regarding possible existing inshore fisheries or potting in this area.

Marine Engineering Division has no objection to the licensing of this site subject to the above.

AN t-ÚDARÁS UM CHOSAINT IASCAIGH MHARA | SEA-FISHERIES PROTECTION AUTHORITY

Aquaculture & Foreshore Application Observations

Application No: T05/640A	**Applicant Name & Area:** **Bantry Marine Research Station Ltd, Dunmanus Bay, Co. Cork**
Application Category Aquaculture: Yes	Foreshore: No

Sea Fisheries Protection Officer Observations	
1. *Possible impacts, if any, on existing wild fisheries in the area, with an emphasis on the possible implications for the SFPA conducting official controls and possible non-compliance issues that could arise.* Dunmanus Bay has a number of inshore fishing vessels which operate throughout the Bay. The area under application is a sheltered fishing area used for potting by at least some of these vessels. The granting of this licence may reduce fishing opportunities for these vessels. There are no implications for SFPA fishery controls providing access to any piers in use (none named in the application) is not hindered.	
2. *Impacts, if any, on shellfish growing areas adjacent to or within the area and the possible impact on the ability of the SFPA to conduct official controls and possible non-compliance issues that could arise.* The application presents no known issues for live bivalve mollusc production in the area or for SFPA controls on existing lbm sites in the area.	
3. *Possible impacts, if any, on seafood safety*. The application presents no issues in terms of seafood safety relevant to the SFPA.	
Sea-Fisheries Protection Authority	**Date:** August 1st, 2022.

Commissioners of IRISH LIGHTS | Navigation and Maritime Services

Commissioners of Irish Lights
Harbour Road, Dun Laoghaire
Co. Dublin, Ireland

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Ms Deirdre Fitzpatrick
Aquaculture and Foreshore Management Division
Dept. of Agriculture Food & the Marine
National Seafood Centre
Clonakilty
Co. Cork
P85 TX47

Reference: T05/640A

Date: 06/07 /2022

Applicant: Bantry Marine Research Station Ltd
Site: Dunmanus Bay, Co. Cork

Dear Ms Fitzpatrick,

Thank you for your letter advising Irish Lights of this application, which was received on 28th June 2022.

Based on the information supplied, there appears to be no objection to the development.

It is important to ensure that no navigable inter-tidal channels are impeded by the site. If a licence is granted, all structures must be clearly marked as required by Regulations and Licensing Permit conditions and to the approval of the Nautical Surveyor with the Marine Survey Office.

Irish Lights requests that you include the following terms in the licence **–**

- That the applicant secures Statutory Sanction from the Commissioners of Irish Lights for the aids to navigation that may be required by the Marine Survey Office. These aids should be in place before development on the site commences. Statutory sanction forms are available at http://www.irishlights.ie/safety-navigation/statutory-sanction.aspx

- The size and specification of aids to navigation should be of the design and specification approved by the Marine Survey Office and must be agreed in advance with the Commissioners of Irish Lights.

It is recommended that local fishing and leisure interests be consulted prior to a decision being made.

Furthermore, if a licence is granted, the UK Hydrographic Office at Taunton: sdr@ukho.gov.uk must be informed of the development's geographical position in order to update nautical charts and other nautical publications.

Yours sincerely,

Joseph Daly
Acting Navigation Services Manager

c.c. Capt. L. Kilbane, MSO, Dept. of Transport

Rinville,
Oranmore,
Co. Galway

Deirdre Fitzpatrick
Aquaculture and Foreshore Management Division
Department of Agriculture, Food and the Marine
Clogheen,
Clonakilty
Co. Cork.

Advice on Aquaculture Licence Application

Applicants	**Bantry Marine Research Station Ltd**
Application type	**New**
Site Reference No	**T05/640A**
Species	**Native seaweeds (*Alaria esculenta, Ulva Lactuca and Palmaria palmata, Asparagopsis armata, Saccharina latissimi, Laminaria digitat, Fucus serratus*) using longlines**
Site Status	**Not located within a Natura 2000 site**

Dear Deirdre,

This is an application for an aquaculture licence for the production of native seaweeds (*Alaria esculenta, Ulva Lactuca and Palmaria palmata, Asparagopsis armata, Saccharina latissimi, Laminaria digitat, Fucus serratus*) using longlines at Site T05/640A in Dunmanus Bay, Co. Cork. The area of foreshore is 15.73Ha.

It is the Marine Institute's view that the potential risk of pollution caused by cultivating seaweeds as proposed is minimal. No hazardous or toxic chemicals are used in the production process. Like all other plants, seaweeds require sunlight and inorganic nutrients (Nitrogen and Phosphorous) for growth. These nutrients are present naturally in seawater and there are no requirements for input of "feed" or other chemicals. The cultivated seaweeds do not excrete toxic or potentially polluting substance as part of their growth cycle. There is a risk of pollution as a result, for example, of a fuel or hydraulic fluid spill from vessels used as part of the management activities e.g. seeding of ropes, harvesting of the seaweed, at the site. Given the scale of the proposal, however, any such events are likely to be minor, localised and the risk is considered to be minimal.

Significant impacts on the general environment are not considered likely.

Considering the location, nature and scale of the proposed aquaculture activity, and in deference to our remit under the Marine Institute Act, and the considerations implicit to Sections 61(e and f) of the Fisheries (Amendment) Act, 1997 the Marine Institute is of the view that there will be no significant impacts on the marine environment and that the quality status of the area will not be adversely impacted.

Site T05-640A is not located within a designated Natura 2000 site and, as concluded in the AA Screening Report for Dunmanus Bay[1], the Marine Institute is of the view that significant effects on any adjacent Natura 2000 sites or features are not likely.

[1] https://www.gov.ie/en/collection/10731-aquacultureforeshore-licence-applications-cork/#dunmanus-bay-june-2022

While it is noted the source of plantlets will be the hatchery at the Bantry Bay Marine Station, it would be important that DAFM manage the potential risk of the introduction of invasive non-native species. On this basis, the MI recommends that the initial source of seed (plantlets) and other sources which may be used at any point in the future should be subject to approval by the Minister. This approval should be a specific condition of any licence that may issue.

Notwithstanding the recommendation outlined above, and in the event that an Aquaculture Licence is granted, the movement of stock in and out of the site should follow best practice guidelines as they relate to the risk of introduction of invasive non-native species (e.g. Invasive Species Ireland). In this regard it is recommended that, prior to the commencement of operations at the site, the applicant be required to draw up a contingency plan, for the approval of DAFM, which shall identify, *inter alia*, methods for the removal from the environment of any invasive non-native species introduced as a result of operations at this site. If such an event occurs, the contingency plan shall be implemented immediately.

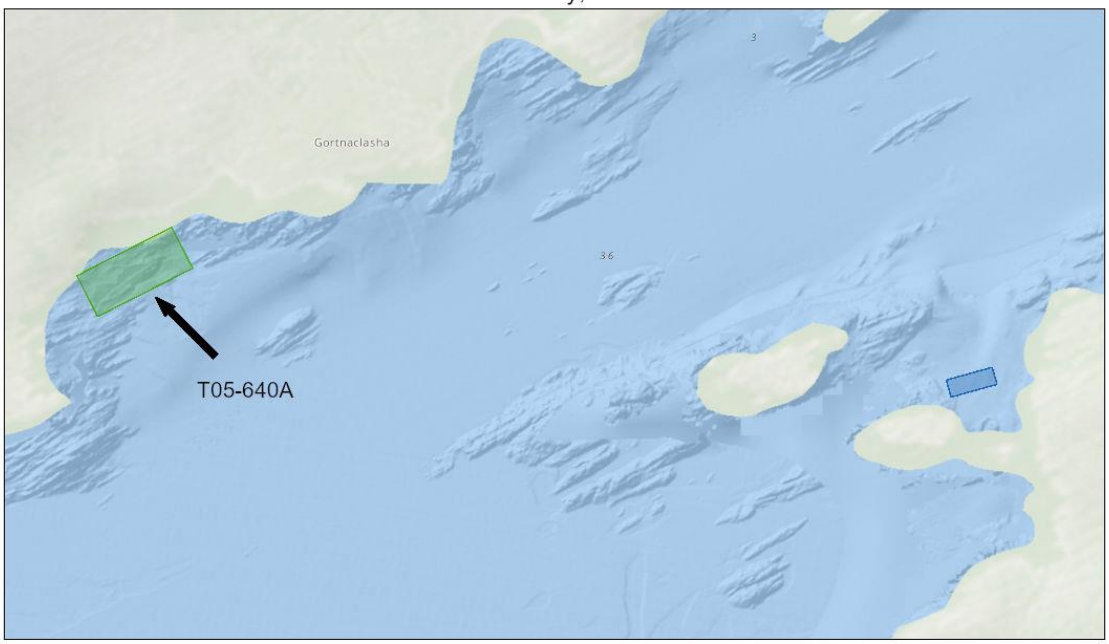
On the basis of the above, the Marine Institute has no objections to a licence being granted for Site T05-640A on the foreshore in Dunmanus Bay, Co. Cork.

Kind regards,

Dr. Francis O'Beirn
Section Manager,
Marine Environment and Food Safety Services,
The Marine Institute.

Date: 17-July-2022

Dunmanus Bay, Co. Cork



19/7/2022, 11:43:07

Licensed

In Progress

1:36,112

0 0.17 0.35 0.7 mi

0 0.3 0.6 1.2 km

Esri, HERE, Garmin, Foursquare, METI/NASA, USGS, GSI, Esri, DeLorme, NaturalVue

Aquaculture Licensing Viewer
DAFM

Your Ref: T05/640A

Our Ref: 22_IW_AQ_09_DunmanusBay

Uisce Éireann
Teach Colvill
24-26 Sráid Thalbóid
Baile Átha Cliath 1
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Éire

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Aquaculture and Foreshore Management Division,
Department of Agriculture, Food and the Marine,
National Seafood Centre
Clonakilty
Co Cork

Date: 14/07/2022

Re: Aquaculture Licence Application T05/640A

Dear Sir/Madam,

We received notification of the above referenced aquaculture licence application by email on 28th June, 2022. The available documentation has been reviewed. We make the following observations in relation to the proposed development.

The development referred to is outside designated shellfish waters.

For your information, we identify in the table the coordinates of existing primary and secondary discharges operated by Irish Water discharging within 10 km of the proposed development. This is indicated in the table below.

Application No.	Within 10 km of non primary discharge point	X	Y	Within 10 km of primary discharge point	X	Y
T05_640A	Yes	81581	27853	Yes	81939	37570
		81939	37531	Yes	81478	28172

The Department may wish to consider the proximity of wastewater discharges to the proposed aquaculture development when making a decision on the application.

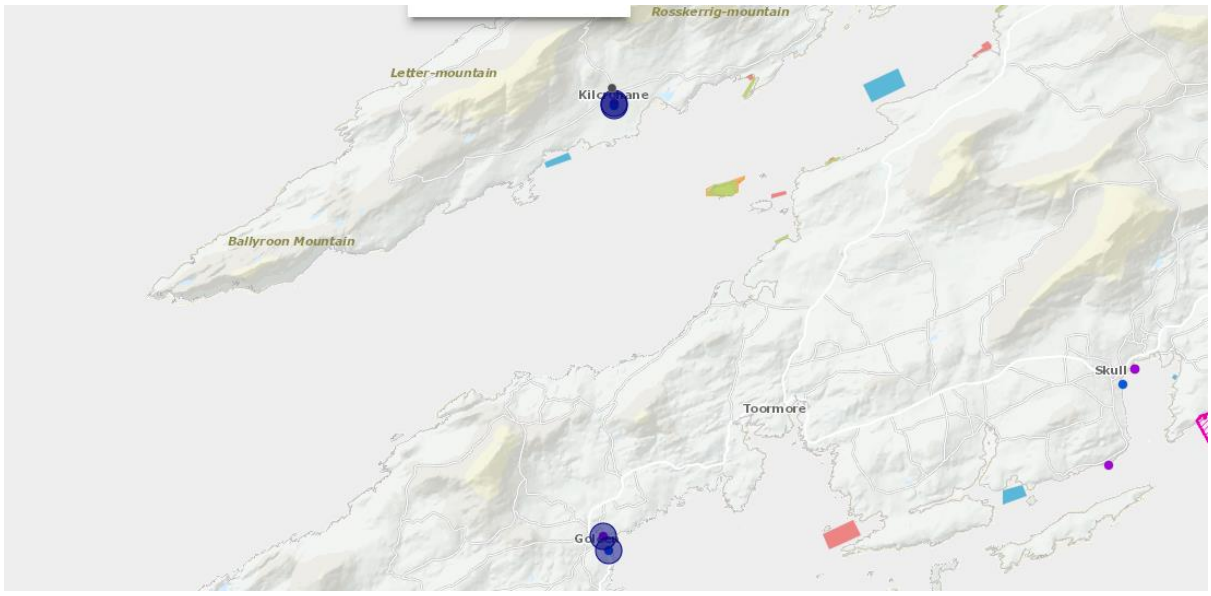
Yours faithfully,

Sheila Convery

Spatial Analyst
Irish Water

T05_640A


Press down to start and let go to finish


Rosskerrig-mountain
Letter-mountain
Ballyroon Mountain
Skull
Toormore

Application for an Aquaculture Licence in Dunmanus Bay

Site Reference: T05/640A

In reference to the Site T05/640A application for an Aquaculture and Foreshore licence and the subsequent public and statutory submissions and observations, Bantry Marine Research Station (BMRS) wish to make the following response.

Public Submissions

The common themes running through the submissions are as follows;

- 1. Traffic impact and safety concerns in relation to same;
- 2. The visual impact of the development;
- 3. The impact on tourism, the impact upon the pier at Dooneen and the Green Coast award;
- 4. Lack of consultation;
- 5. No economic benefits;
- 6. The impact on the Special Protection Area (SPA);
- 7. Defective screening document; &
- 8. Fishing impact.

Before BMRS addresses the specific items above, the company wish to make clear that it has had a long association with the Sheep's Head Peninsula, including having an existing seaweed farm near the company base on the north side of the peninsula. Whilst BMRS may not have agreed with much of the content in the submissions, if the licences are granted the company will seek to reach mutually agreeable accommodations within the parameters allowed with any licence awarded.

The company would also like to thank the local community council (Muintir Bhaira Community Council) for facilitating the public meeting where all opinions were allowed to be voiced. Although reservations were expressed by a few individuals, BMRS note that no submission was made on behalf of the community council. This is important to note because one submission was entered on the "Muintir Bhaira Community Council" headed paper even though this submission was signed in a personal capacity.

1. **Traffic impact and safety concerns** - Following the public meeting and the concerns raised in the submissions, the company are seeking ways to mitigate the impact of same. BMRS believes that the more intensive work during deployment and harvesting could be carried out at sea and the resultant biomass harvested could be landed at alternative working piers such as the quay west of the church in Durrus in Dunmanus Bay, which is already utilised by other aquaculture producers. Whilst the pier at Dooneen would still be required for maintenance purposes, we believe this would average no more than the BMRS pickup accessing the pier once a week. Personnel will be informed of the sensitive nature of the surrounding area and to be considerate of the nature of the road and the variety of users.
2. **Visual impact of the development** - As included in the original application, the company have applied to use grey LD2 buoys, which are specifically designed to be unobtrusive. The Aids to Navigation are a statutory requirement. We have included four on the site to be prudent, but the statutory bodies may only require two with the near shore aids excluded. The lines themselves are submerged but the MFL130 floats at each end would

be noticeable. These floats are on a smaller scale as they are not required to hold significant weight.

3. **Impact upon tourism, impact upon the pier at Dooneen and the Green Coast award**– As discussed in the first point, using alternative piers for deploying and harvesting will certainly address a lot of the concerns individuals had regarding the impact on walkers/tourists. The reduction in the use of the pier at this time will result in minimal additional traffic traversing the pier. The use of the pier itself on such a sparing basis with the BMRS pickup will again have a negligible impact. There should be no need to store any equipment or parts or buoys on the pier and the convenience of the company base on the northern side of the peninsula will allow for items to be stored at this location.
4. **Lack of Consultation** – BMRS have applied using the appropriate notices in the local newspapers as well as providing the applications for viewing as required. In addition, as referred to in some of the submissions, a public meeting was held with members of the local community.
5. **No economic benefits** – BMRS continues to be a significant local employer in the area. This has been facilitated in part by its existing seaweed farm licences, which have allowed the company to carry out research in conjunction with third-level institutions, state bodies and EU consortia into the environmental benefits of different species of seaweed. It is correct to say that the grow-out farm itself will not create much additional employment, however, there are significant secondary employment benefits deriving from the research undertaken and the processing of the harvested biomass.
6. **Impact upon the SPA**- Again following on from the first point above, the additional traffic that will be generated in this scenario would be minimal. Therefore, BMRS's view is that there would be no concerns of any additional impact upon the adjacent SPA.
7. **Defective Screening body** – BMRS does not in any way accept that the screening document is defective. The appropriate statutory body appointed to conduct same, the Marine Institute, are experts in their field and they are carrying out this work regularly all over the country. They state in their statutory submission ***"…as concluded in the AA screening report for Dunmanus Bay, the Marine Institute is of the view that significant effects on any Natura 2000 sites or features are not likely"*** and that they had ***"…no objections to a licence being granted."***. Regardless of the opinions of some, about the Appropriate Assessment carried out the scenario described in the first point above would essentially make this argument redundant.
8. **Fishing Impact** – Various studies over several years have shown that seaweed farms result in a substantial increase in fish populations and predominantly shellfish due to the additional coverage provided by the seaweed canopy, thus allowing better protection from predators (see addendum). The development of the farm will if anything improve the fishing grounds and whilst it may change how people access their pots, it will certainly not unduly restrict them. BMRS will of course consult with the local inshore fishermen and facilitate them. There are no plans to hinder any access to any of the piers and thus there is no impact in this way.

Statutory Submissions

Concerning the statutory submissions that were made, the company note the comments therein. No objection to the proposed application has been made by any of the Statutory consultees.

Irish Water

- *"… the development referred to is outside designated shellfish waters."*
- The proposed development is not in close proximity to wastewater discharges and in any event, seaweed plays an important role in the removal of dissolved nutrients both from runoff from the land or from wastewater discharges and can be absorbed and converted to increase the protein content of seaweed.

Marine Institute (MI)

- BMRS note the contents of the MI submission including that their view is **"…** *that there will be no significant impacts on the marine environment and that the quality status of the area will not be adversely impacted".*
- BMRS does not have any objection to the recommendation that the initial source of seed (plantlets) or other sources in the future should be subject to Ministerial approval.
- BMRS will, if the site is approved, draw up a contingency plan for approval by the department as recommended by the Marine Institute.

Sea Fishery Protection Authority (SFPA)

- BMRS will not be hindering access to piers and the company note the comments of the SFPA that in these circumstances there would be no implications for fishery controls. Similarly, BMRS note that there are no known issues for live bivalve mollusc production and that there are no issues in terms of seafood safety.
- BMRS notes the comments that some inshore fishing vessels use the area for potting and the company will facilitate continued access for these fishermen. Additional comments are also made in point number8 above in connection with same.

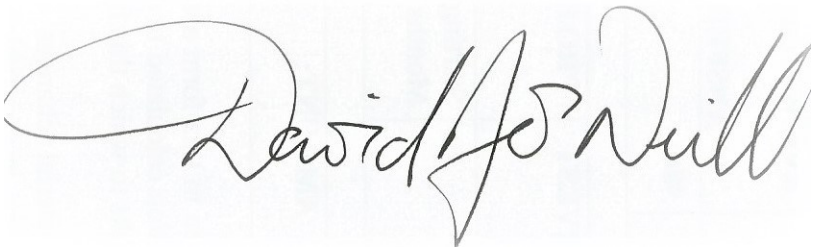
Commissioners of Irish Lights (CIL)

- BMRS note that CIL have no objection to the development.
- BMRS will not interfere with any navigable intertidal channels and all structures will be clearly marked.
- BMRS have no issue with securing statutory sanction from CIL for the Aids to Navigation to be used and with agreeing their design and specification in advance.
- If granted a licence, BMRS will inform the UK Hydrographic Office of the site's location as required.
- All parties have had an opportunity to make submissions based on the application and BMRS believes the same will be reflected in the final decision of the department. However, it remains the intention of BMRS that if the application is successful the company will continue to engage with the local community including fishing and tourism-related groups.

I trust that BMRS have answered the various submissions comprehensively and straightforwardly, resolving all the salient points clearly and concisely.

BMRS looks forward to hearing positively in due course and if further information is required, please contact me.

Kind regards,



David O'Neill
General Manager
BMRS Ltd.

Addendum

Seaweed farming is beneficial, restorative, and enhancing to its location.

Water quality benefits and habitat provision are the two environmental benefit categories that are the most well supported in the scientific literature for seaweed aquaculture and have the best available knowledge associated with positive ecosystem outcomes.

Carbon sequestration and ocean acidification buffering are also benefits of seaweed aquaculture thus providing climate adaptation and mitigation benefits. (The Nature Conservancy, 2021).

A single hectare of seaweed farm will

- Remove carbon dioxide in coastal waterways and reduce ocean acidification.
- Remove more than half a ton of nitrogen.
- Increase the abundance of wild fish by up to 5 tons per year (Gentry et al., 2020).

Environmental Benefits of Restorative Aquaculture (Seaweed) can provide multiple types of benefits to aquatic environments.

- Habitat provision from aquaculture gear (i.e., seaweed lines) and the seaweed cultivated on and within them can provide three-dimensional structured habitat that benefits fish and invertebrates.
- Farms protect juvenile fish and invertebrates, functioning similarly to natural nursery grounds (Costa-Pierce and Bridger, 2002; Barrett et al., 2019).
- Seaweed and biofouling communities associated with farms can provide food resources (Kawai et al., 2021).
- In a global review of 65 studies, higher fish abundance and diversity were generally associated with bivalve and seaweed farms than with nearby reference sites (Theuerkauf et al., 2021).

- The effect on the productivity of wild marine species due to aggregation versus recruitment suggests that there is evidence of increased production due to the presence of aquaculture facilities (Tallman and Forrester, 2007).
- The three-dimensional structure of aquaculture can also stabilize soft sediment, helping to reduce erosion or the impacts of extreme weather events (e.g., Zhu et al., 2020).
- The localized effects of reduced acidification and temperature created by seaweed farms can be beneficial to the provision of effective habitat (e.g., a refuge; Xiao et al., 2021).

Wild kelp forests play a key role in carbon regulation and sequestration (Queirós et al., 2019). Consequently, farming seaweed to capture carbon and sequester CO_2 has been proposed as a climate mitigation strategy (e.g., Froehlich et al., 2019).

"Moreover, their production helps improve ocean health by reducing carbon dioxide, phosphorus and nitrogen in marine ecosystems. They are also a nursery and hide-out for many marine animals, promoting underwater biodiversity" (The European Commission, the European Climate, Infrastructure and Environment Executive Agency (CINEA) February 2022).

References

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Gentry R.R., Alleway H.K., Bishop M.J., Gillies C.L., Waters T., Jones R. 2020. Exploring the potential for marine aquaculture to contribute to ecosystem services. Reviews in Aquaculture, 12(2): 499– 512.

Kawai, K. et al. (2021) 'Oyster farms are the main spawning grounds of the black sea bream *Acanthopagrus schlegelii* in Hiroshima Bay, Japan, Peer J, 9, p. e11475. doi: 10.7717/peerj.11475.

Queirós, A. M. et al. (2019) 'Connected macroalgal-sediment systems: blue carbon and food webs in the deep coastal ocean', Ecological Monographs, 89(3), p. e01366. doi: 10.1002/ecm.1366.

Tallman, J. C., and Forrester, G. E. (2007) 'Oyster Grow-Out Cages Function as Artificial Reefs for Temperate Fishes', Transactions of the American Fisheries Society, 136(3), pp. 790–799. doi: 10.1577/T06-119.1.

The Nature Conservancy. 2021. Global Principles of Restorative Aquaculture. Arlington, VA. (Extensively quoted).

Xiao, X. et al. (2021) 'Seaweed farms provide refugia from ocean acidification', Science of The Total Environment, 776, p. 145192. doi: 10.1016/j.scitotenv.2021.145192.

Zhu, L. et al. (2020) 'Aquaculture farms as nature-based coastal protection: Random wave attenuation by suspended and submerged canopies', Coastal Engineering, 160, p. 103737. doi: 10.1016/j.coastaleng.2020.103737.

Report Supporting Appropriate Assessment of Extensive Aquaculture in Dunmanus Bay, Co Cork

Marine Institute

Rinville

Oranmore, Co. Galway

Version: June 2022

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1. Introduction

1.1. Overview

The following species are currently licenced for culture in Dunmanus Bay - blue mussels, the Pacific oysters, sea urchins, and seaweeds. Some sites represent licences for multiple species and therefore there are currently 6 licenced sites in the bay, in addition to one site for rope mussel culture which is currently under review with the Aquaculture Licence Appeals Board (ALAB).

The MI has been requested to review one application (T05/640A) for extensive aquaculture activities within Dunmanus Bay (Figure 1-1). The proposed activities at the site are as follows:

- Longline culture of multiple native seaweed species – T05/640A, new application for a licence to include the following culture species;
    - *Alaria esculenta;*
    - *Ulva lactuca;*
    - *Palmaria palmata;*
    - *Aspragopsis armata;*
    - *Saccharinea latissimi;*
    - *Laminaria digitata*; and
    - *Fucus serratus.*

The application does not overlap with Natura 2000 sites but due to their proximity to a number of SPAs and SACs (see **Section 2.2**) they are being subject to the Appropriate Assessment (**AA**) process, the first stage of which is screening (see **Section 1.3** for full details of the AA process).

The purpose of this report is to consider if the proposed aquaculture activity is likely to significantly adversely affect the conservation features of Natura 2000 sites in view of their conservation objectives. If the proposed activity is considered likely to adversely affect conservation features, they would have to be carried forward for full AA and considered on a cumulative basis with other aquaculture activities and other likely disturbing activities (e.g. fisheries).

Figure 1-1: Application Site in Dunmanus Bay with other aquaculture sites and Adjacent Natura 2000 sites. Corresponding Natura site names for codes provided in Table 1 below.

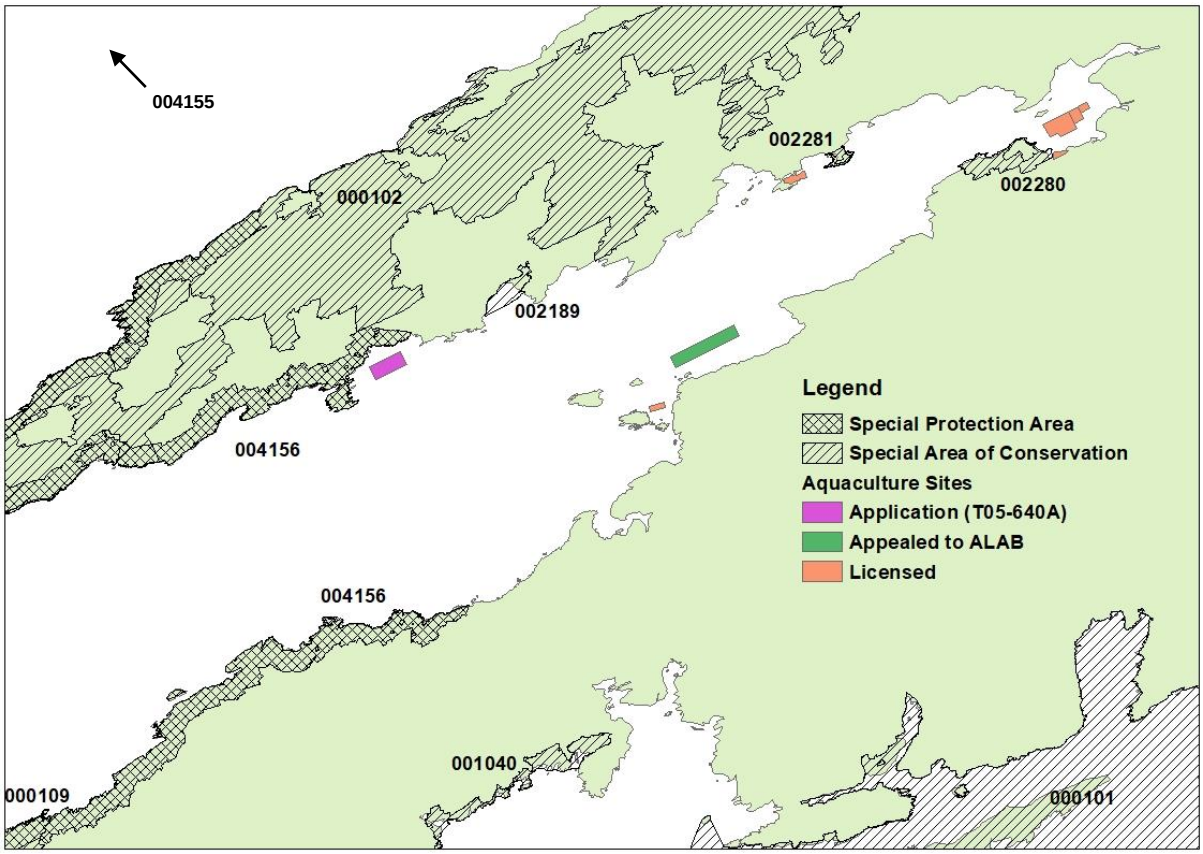


Table 1-1 Adjacent Natura 2000 site names with codes provided in Figure 1-1.

Site Code	Site Name
000101	Roaringwater Bay and Islands SAC
000102	Sheep's Head SAC
000109	Three Castle Head to Mizen Head SAC
001040	Barley Cove to Ballyrisode Point SAC
002189	Farranamanagh Lough SAC
002281	Dunbeacon Shingle SAC
002281	Reen Point Shingle SAC
004156	Sheep's Head to Toe Head SPA
004155	Beara Peninsula SPA

1.2. Legislative Context

Articles 3 - 11 of the European Community (**EC**) Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Flora and Fauna (**Habitats Directive**) provide the legislative means to protect habitats and species of Community interest through the conservation of an EU-wide network of protected sites known as Natura 2000 sites.

The Habitats Directive was originally transposed into Irish law by the *European Communities (Natural Habitats) Regulations, 1997* (S.I. No. 94 of 1997). The 1997 Regulations were subsequently revoked and replaced by the *European Communities (Birds and Natural Habitats) Regulations 2011*, as amended (herein referred to as the 2011 Birds and Natural Habitats Regulations). Natura 2000 sites are referred to as European sites in the 2011 Birds and Natural Habitats Regulations. The terms Natura 2000 sites and European sites are synonymous. The term Natura 2000 sites is used in this report. Natura 2000 sites include SACs which are designated under the Habitats Directive and Special Protected Areas (**SPAs**) which are designated under EC Directive EC 79/409/EEC (**Birds Directive**).

SACs are designated due to their significant ecological importance for habitats and species protected under Annex I and Annex II respectively of the Habitats Directive and while SPAs are designated for the protection of populations and habitats of bird species protected under the Birds Directive. The specific named habitats and/or (non-bird) species for which an SAC or SPA are selected are called the 'Qualifying Interests', of the site. The specific named bird species for which a SPA is selected is called the 'Special Conservation Interests'. However, in practice, the common terminology of Qualifying Interest applies also to Special Conservation Interest. This report focuses on Annex I habitats and Annex II species of the Habitats Directive. The term Qualifying Interest is used throughout.

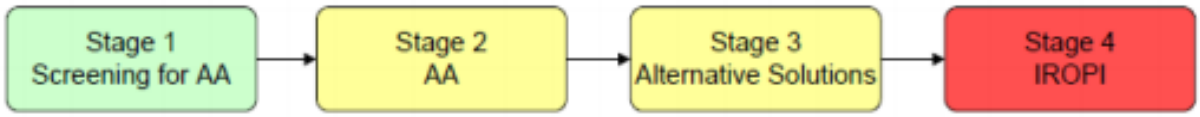
Under Article 6(3) of the Habitats Directive any plan or project likely to significantly affect the integrity of a Natura 2000 site must be subject to an AA. AA focuses on the likely significant effects of a plan or project on a Natura 2000 site and considers the implications for the site in view of its' conservation objectives. Every Natura 2000 site has Conservation Objectives which are set out by the National Parks and Wildlife Service (**NPWS**), a competent authority for the management of Natura 2000 sites in Ireland. The AA process also must consider any plan or proposal in combination with other activities that have the potential to significantly affect the integrity of the Natura 2000 site.

DAFM is the aquaculture licensing authority under the Fisheries (Amendment) Act (1997) and determines applications for new aquaculture licences and applications for renewal of existing aquaculture licences. DAFM is also the competent authority responsible for undertaking AA of aquaculture licence applications. The AA in this report is part of an ongoing programme of AA of aquaculture activities in Ireland, as agreed with the EU Commission in 2009, and currently covers all extensive aquaculture activities in Ireland. As part of this process DAFM must determine if the proposed aquaculture activities individually or in-combination with other activities are likely to significantly impact the Conservation Status of Qualifying Interests and the integrity of relevant Natura 2000 sites. DAFM is responsible for ensuring that an AA is carried out. DAFM must take due consideration of the outcomes of the AA process when determining an aquaculture licence application.

1.3. Appropriate Assessment Process

The requirements for AA derive directly from Article 6(3) of the HD. Article 6(3) outlines the decision-making tests for considering plans and projects that may have a significant effect on a Natura 2000 site. No definition of the content or scope of AA is given in the Habitats Directive, but the concept and approach are set out in EC guidance (EC, 2018). The Guidance on *Appropriate Assessment of Plans and Projects in Ireland* document published by the Department of Environment, Heritage and Local Government (**DEHLG**) in 2009 (DEHLG, 2009) sets out how AA of plans or proposals in Natura 2000 sites in Ireland should be carried out in alignment with EC guidance. In 2021 the Office of the Planning Regulator (**OPR**) published a practice note on AA Screening (OPR, 2021). The practice note provides guidance on how a planning authority should screen an application for planning permission for appropriate assessment

DEHLG (2009) promotes a four stage process to complete the AA. The four stages are:



Stage 3 and Stage 4 are not applicable here. The key procedures involved in completing the first two stages of the AA process are described in below.

Stage 1: Appropriate Assessment Screening

Stage 1 AA Screening is the process that addresses and records the reasoning and conclusions in relation to whether a plan or project, alone or in combination with other plans and projects, is likely to have significant effects on a Natura 2000 site in view of the site's Conservation Objectives.

If the effects are deemed to be significant, potentially significant, or uncertain, or if the screening process becomes overly complicated, then the process must proceed to Stage 2 AA. Screening should be undertaken without the inclusion of mitigation. The greatest level of evidence and justification will be needed in circumstances when the process ends at screening stage on grounds of no effect.

Stage 2: Appropriate Assessment

This stage considers whether the plan or project, alone or in combination with other projects or plans, will have adverse effects on the integrity of a Natura 2000 site, and includes any mitigation measures necessary to avoid, reduce or offset negative effects. This stage requires a targeted scientific examination of the plan or project and the relevant Natura 2000 sites, to identify and characterise any possible implications for the site in view of the site's Conservation Objectives, taking account of

in-combination effects. If the assessment is negative, then recommendations on mitigation measures or on licensing decisions will be made.

1.4. Structure of this Report

The AA process followed in this report adheres closely with DEHLG (2009) and OPR (2021) guidance and follows worse-case scenario principles as it is assumed that cultivation activities are ongoing at all of the existing licenced sites and that the entirety of each existing aquaculture site in Bantry. See **Figure 1-1** for a map of all aquaculture sites considered active in Bantry Bay as of March 2022.

The report considers the following:

- **Section 2 - Stage 1: Appropriate Assessment Screening**
  AA Screening is undertaken to identify potential likely significant effects on Qualifying Interests of Natura 2000 sites. Where the screening exercise cannot exclude likely significant effects on the basis of objective information, the Qualifying Interest would have to be brought forward for further consideration in a Stage 2 AA.

This AA screening process which has followed relevant DEHLG (DEHLG, 2009) and OPR (OPR, 2021) guidance has drawn on information from a number of sources associated with relevant SACs and SPAs (see **Section 2.2**) as well as scientific literature.

2. Stage 1: Appropriate Assessment Screening

2.1. Details of Proposed Aquaculture Activities

Longline Culture of Seaweeds

Longline culture of Seaweed is the proposed activity for site T05/640A. This is a new application. This site is located along the north shore of Dunmanus Bay at Dooneen Point, Kilcrohane (see Figure 1-1).

The site area is 15.74 ha and it is proposed, at full capacity, to deploy 50 x 220m longlines. The maximum proposed total tonnage of algae to be produced at this site is approximately 110 T per annum. The harvest method will be hand-cutting into 1 T bins. All species of algae to be cultured are native and algae will be sourced from the Bantry Marine Research Station Hatchery. The site will be accessed from Dooneen Pier, approximately 350 m to the west of the site.

2.2. Identification of Relevant Natura 2000 Sites and Qualifying Interests

A key consideration as to whether or not an activity is likely to adversely affect Natura 2000 Qualifying Interest is whether or not there is a pathway of connectivity between the Qualifying Interest and the sources of potential impacts associated with the activity.

The likelihood of the proposed activities having an adverse effect on the qualifying interests of an SPA or SAC is greatly reduced given that the activities would not be carried out within any SAC or SPA. However, the proposed activities are proximal to a number of SAC and SPAs and so the potential for *ex-situ* adverse effects of the proposed activities on the Qualifying Interests of these adjacent SACs and SPAs must be assessed.

The Qualifying Interest of a Natura 2000 site could be at risk of negative *in situ* (within the site) and *ex situ* (beyond the site) effects where a Source-Pathway-Receptor (S-P-R) link exists between the activity and the Qualifying Interest[s] of the site.

The following are the adjacent SACs with Qualifying Interests that the proposed aquaculture activities may potentially adversely affect (see Figure 1-1):

- Roaringwater Bay and Islands SAC[1]
- Sheep's Head SAC[2]
- Three Castle Head to Mizen Head SAC[3]
- Barley Cove to Ballyrisode Point SAC[4]
- Farranamanagh Lough SAC[5]
- Dunbeacon Shingle SAC[6]
- Reen Point Shingle SAC[7]

The following are the adjacent SPAs with Qualifying Interests that the proposed aquaculture activities may potentially adversely affect (see Figure 1-1):

[1] https://www.npws.ie/protected-sites/sac/000101

[2] https://www.npws.ie/protected-sites/sac/000102

[3] https://www.npws.ie/protected-sites/sac/000109

[4] https://www.npws.ie/protected-sites/sac/001040

[5] https://www.npws.ie/protected-sites/sac/002189

[6] https://www.npws.ie/protected-sites/sac/002280

[7] https://www.npws.ie/protected-sites/sac/002280

- Beara Peninsula SPA[8]
- Sheep's Head to Toe Head SPA[9]

The assessment of the likelihood of proposed aquaculture activities adversely affecting the Qualifying Interests of adjacent SACs and SPAs are presented in **Sections 2.3**.and **2.4** respectively.

2.3. Screening of Qualifying Interests of Adjacent SACs

Upon review of the qualifying interests of the 7 adjacent SACs, it is clear that, on the basis of lack of physical overlap or hydrological link or other potential interaction, no likely significant effect clearly presents to number of the Qualifying interests for each (see Table 2-1).

[8] https://www.npws.ie/protected-sites/spa/004155

[9] https://www.npws.ie/protected-sites/spa/004156

Table 2-1. List of adjacent Natura 2000 sites with qualifying interests and screening conclusion.

Site Code	Site Name	Qualifying Interest (QI)	Aquaculture AA Screening
000101	**Roaringwater Bay and Islands SAC**	Vegetated sea cliffs of the Atlantic and Baltic coasts	The proposed aquaculture site is located approximately 9.5km from the closest boundary of the Roaringwater Bay SAC. The culture of seaweed is reliant upon ambient nutrient levels in the water column and solar Illumination. The production of seaweed does not use any resources required by the qualifying features of adjacent Natura sites. For these QIs, there is no spatial overlap or likely interactions with the proposed aquaculture activities in Dunmanus Bay **– excluded from further analysis**
		European dry heaths	
		Large shallow inlets and bays	**See Section 2.3.1**
		Reef	
		Phocoena phocoena (Harbour Porpoise)	**See Section 2.3.2**
		Lutra lutra (Otter)	
		Halichoerus grypus (Grey Seal)	
000102	**Sheep's Head SAC**	Northern Atlantic wet heaths with *Erica tetralix*	The proposed aquaculture site is located approximately 0.5km from the closest boundary of the Sheep's Head SAC. The culture of seaweed is reliant upon ambient nutrient levels in the water column and solar Illumination. The production of seaweed does not use any resources required by the qualifying features of adjacent Natura sites.For these QIs, there is no spatial overlap or likely interactions with the proposed aquaculture activities in Dunmanus Bay **– excluded from further analysis**
		European dry heaths	
		Geomalacus maculosus (Kerry Slug)	
000109	**Three Castle Head to Mizen Head SAC**	Vegetated sea cliffs of the Atlantic and Baltic coasts	The proposed aquaculture site is located approximately 9.5km from the closest boundary of the Three Castle Head to Mizen Head SAC. The culture of seaweed is reliant upon ambient nutrient levels in the water column and solar Illumination. The production of seaweed does not use any resources required by the qualifying features of adjacent Natura sites.For these QIs, there is no spatial overlap or likely interactions with the proposed aquaculture activities in Dunmanus Bay **– excluded from further analysis**
		European dry heath	
001040	**Barley Cove to Ballyrisode Point SAC**	Mudflats and sandflats not covered by seawater at low tide	**See Section 2.3.1**
		Perennial vegetation of stony banks	The proposed aquaculture site is located approximately 7.3 km from the closest boundary of the Barley Cove to Ballyrisode Point SAC. The culture of seaweed is reliant upon ambient nutrient

Site Code	Site Name	Qualifying Interest (QI)	Aquaculture AA Screening
		Salicornia and other annuals colonising mud and sand	levels in the water column and solar Illumination. The production of seaweed does not use any resources required by the qualifying features of adjacent Natura sites. For these QIs, there is no spatial overlap or realistic hydrological link and hence likely interactions with the proposed aquaculture activities in Dunmanus Bay – excluded from further analysis
		Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)	
		Mediterranean salt meadows (*Juncetalia maritimi)*	
		Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes)	
		Fixed coastal dunes with herbaceous vegetation (grey dunes)	
		European dry heaths	
		Petalophyllum ralfsii (Petalwort)	
002189	**Farranamanagh Lough SAC**	Perennial vegetation of stony banks	The proposed aquaculture site is located approximately 1.6km from the closest boundary of the Farranmanagh Lough SAC. The culture of seaweed is reliant upon ambient nutrient levels in the water column and solar Illumination. The production of seaweed does not use any resources required by the qualifying features of adjacent Natura sites. For this QIs, there is no spatial overlap or likely interactions with the proposed aquaculture activities in Dunmanus Bay **– excluded from further analysis**
		Coastal lagoons	**See Section 2.3.1**
002281	**Dunbeacon Shingle SAC**	Perennial vegetation of stony banks	The proposed aquaculture site is located approximately 10.5km from the closest boundary of the Dunbeacon Shingle SAC. The culture of seaweed is reliant upon ambient nutrient levels in the water column and solar Illumination. The production of seaweed does not use any resources required by the qualifying features of adjacent Natura sites.For these QIs, there is no spatial overlap or likely interactions with the proposed aquaculture activities in Dunmanus Bay **– excluded from further analysis**

Site Code	Site Name	Qualifying Interest (QI)	Aquaculture AA Screening
002281	**Reen Point Shingle SAC**	Perennial vegetation of stony banks	The proposed aquaculture site is located approximately 8.5km from the closest boundary of the Reen Point Shingle SAC. The culture of seaweed is reliant upon ambient nutrient levels in the water column and solar Illumination. The production of seaweed does not use any resources required by the qualifying features of adjacent Natura sites. For these QIs, there is no spatial overlap or likely interactions with the proposed aquaculture activities in Dunmanus Bay **– excluded from further analysis**
004155	**Beara Peninsula SPA**	Fulmar (*Fulmarus glacialis*)	**See Section 2.4**
		Chough (*Pyrrhocorax pyrrhocorax*)	
004156	**Sheep's Head to Toe Head SPA**	Peregrine (*Falco peregrinus*)	
		Chough (*Pyrrhocorax pyrrhocorax*)	

The following are the adjacent SACs along with the Qualifying Interests that could potentially be affected by the proposed activities:

- Roaringwater Bay and Islands SAC
    - Large shallow inlets and bays [1160]
    - Reef [1170]
    - *Phocoena phocoena* (Harbour Porpoise) [1351]
    - *Lutra lutra* (Otter) [1355]
    - *Halichoerus grypus* (Grey Seal) [1364]
- Barley Cove to Ballyrisode Point SAC
    - Mudflats and sandflats not covered by seawater at low tide [1140]

2.3.1. Annex I Habitats

Of the adjacent SACs there are a number of Annex I Habitats that occur in the marine environment, including:

- Mudflats and sandflats no covered by seawater at low tide;
- Large shallow inlets and bays; and
- Reefs
- Coastal Lagoons

In general, habitats may be impacted by subtidal aquaculture activities via direct physical disturbance from installation of structures, by shading or altering the hydrodynamic regime. Direct effects can also arise due to organic enrichment from fall out from feeding practices or faecal material produced by the cultured organisms[10,11]. For a habitat to be subjected to this type of disturbance the activities would need to directly overlap with or be immediately adjacent to it. Given that the nearest Annex I Habitat (Coastal Lagoon in Farranamanagh Lough SAC) to the proposed activities are located approx. 2.4 km (straight line distance), it is extremely unlikely that the proposed activities will directly adversely affect Annex I Habitats. Furthermore, the culture of seaweed is reliant upon ambient nutrient levels in the water column and solar Illumination and no waste is produced. None of these

[10] Forde, J., Francis, X.O., O'Carroll, J.P., Patterson, A. and Kennedy, R., 2015. Impact of intertidal oyster trestle cultivation on the Ecological Status of benthic habitats. Marine Pollution Bulletin, 95(1), pp.223-233.

[11] O'Carroll, J.P., Quinn, C., Forde, J., Patterson, A., Francis, X.O. and Kennedy, R., 2016. Impact of prolonged storm activity on the Ecological Status of intertidal benthic habitats within oyster (*Crassostrea gigas*) trestle cultivation sites. Marine Pollution Bulletin, 110(1), pp.460-469.

resources are considered limiting. The aquaculture site in Dunmanus Bay will be accessed by boat from Dooneen Pier. As a consequence, noise and pollution e.g. as a result of a fuel spill may present a risk to features of adjoining Natura sites. The risks are, however, not considered significant. Furthermore, it is considered that impacts would be localised and minor.

Adverse effects on Annex I habitats can be **screened out**.

2.3.2. Annex II Species

Marine Mammals

The risk of negative effects of aquaculture activities on aquatic mammal species is a function of:

1. The location and type of structures used in the culture operations – is there a risk of entanglement or physical harm to the animals from the structures?
2. The schedule of operations on the aquaculture sites – is the frequency such that they can cause disturbance to the animals?

Otter *(Lutra lutra)*

A pathway for negative effects on otters from the proposed activities can be ruled out on the basis that:

- The activities are located at significant distance (by a combination of land and water) from SACs designated for Otter.
- The activities will not lead to any modification of the extent of habitat (terrestrial, marine and/or freshwater habitat).
- The activities involve net input rather than extraction of biomass so that no negative impact on the essential food base (fish biomass) is expected
- The number of couching sites and holts or, therefore, the distribution, will not be directly affected by activities.
- Suspended algal production structures are oriented in rows (10m apart), thus allowing free movement through and within the site. As such, the activities are unlikely to pose any risk to otter through entrapment or direct physical injury, and
- Disturbance associated with vessel traffic at the site could potentially disturb otter. On the basis, however, that access to the site will occur during daylight hours only and that otter are active primarily during evening and early morning hours, i.e., crepuscular, it is concluded that encounter rates and hence, disturbance is likely to be very low.

For the reasons listed, likely significant effects on otter from the proposed activities can be **screened out**.

Grey Seal *(Halichoerus grypus)*

The proposed activities must be considered in light of the following important conservation measures for the Grey Seal, *Halichoerus grypus*:

- Access to suitable habitat – artificial barriers should not restrict access;
- Disturbance – frequency and level of impact; and
- Seal Sites – Breeding sites, Moulting sites, Resting sites must not be obstructed or disturbed.

Restriction or modification of suitable habitats and locations considered important to the maintenance of healthy populations must be avoided when possible. These important areas are categorised according to various life history stages (important to the maintenance of the population) during the year. Specifically, they are breeding, moulting and resting sites. It is important that seal access to these sites is not restricted and that disturbance, when at these sites, is kept to a minimum especially within SACs. It is important to note that the influence of the suspended aquaculture on the seabird and seal community in Bantry Bay (Glengarrif Harbour) has generally been found to be positive or neutral[12, 13].

Given the distance between seal sites (in Roaringwater Bay SAC) and the proposed activity there is no pathway for interaction between the two which could result in negative *in-situ* effects. On this basis, likely significant effects on *Grey Seal (Halichoerus grypus),* can be **screened out**.

Harbour Porpoise *(Phocoena phocoena)*

Available data on the Harbour porpoise *Phocoena phocoena* is for within the Roaringwater Bay and Island SAC. There is potential that this species could forage in the vicinity of the proposed aquaculture activities and will potentially interact with the algal longline activities.

It should be noted, however, that the overall footprint of the specified longline aquaculture operations is small (i.e., approx. 15.74 ha) and represents a very small proportion of potential harbour porpoise habitat in Dunmanus Bay. In addition, this activity is located 9.5 km (straight line distance) from the Roaringwater Bay and Island SAC that is designated for the harbour porpoise. Given the relatively small footprint of the suspended aquaculture locations and the depth of the structures (i.e., shallow)

[12] Roycroft, D., Kelly, T.C. & Lewis, L.J. 2004. Birds, seals and the suspension culture of mussels in Bantry Bay, a non-seaduck area in Southwest Ireland. Estuarine Coastal and Shelf Science 61, 703-712.

[13] Roycroft, D., Kelly, T.C. & Lewis, L.J. 2007. Behavioural interactions of seabirds with suspended mussel longlines. Aquaculture International. 15:25–36

the likelihood of interaction and potential adverse effects is very small. In addition, the locations of the structures are relatively close to the shoreline, and as such, they do not present a barrier to movement of this species. Furthermore, the structures are such that echolocating species, such as harbour porpoise and dolphin, can easily avoid the structures/sites[14, 15, 16] and therefore, avoid any risk of entanglement.

It is also important to note that there are no persistent energy sources (e.g., light, noise etc.) likely to result from activities at the sites that pose a risk to harbour porpoise.

Finally, research has demonstrated that cetaceans such as dolphin and harbour porpoise may be attracted to structures similar to those used in longline culture operations[17,18], presumably on the basis that they act as fish attraction devices and therefore act as a food source aggregation area. Given these observations potential adverse effects on harbour porpoise can be **screened out**.

2.4. Screening of Qualifying Interests of Adjacent SPAs

The following are the adjacent SPAs along with the Qualifying Interests that could potentially be affected by the proposed activities:

- Beara Peninsula SPA;
    - Fulmar (*Fulmarus glacialis*)
    - Chough (*Pyrrhocorax pyrrhocorax*)
- Sheep's Head to Toe Head SPA;
    - Peregrine (*Falco peregrinus*)
    - Chough (*Pyrrhocorax pyrrhocorax*)

[14] Watson-Capps JJ, Mann J (2005) The effects of aquaculture on bottlenose dolphin (Tursiops sp.) ranging in Shark Bay, Western Australia. Biological Conservation 124: 519–526.

[15] Heinrich, S. (2006) Ecology of Chilean dolphins and Peale's dolphins at Isla Chiloe, southern Chile (PhD dissertation). University of St Andrews, 239 p.

[16] Ribeiro S, Viddi FA, Cordeiro JL, Freitas TRO (2007) Fine-scale habitat selection of Chilean dolphins (Cephalorhynchus eutropia): interactions with aquaculture activities in southern Chiloe Island, Chile. Journal of the Marine Biological Association of the United Kingdom 87: 119–128.

[17] Díaz López, B. & Methion, S. (2017) The impact of shellfish farming on common bottlenose dolphins' use of habitat. Marine Biology 164: 83. doi:10.1007/s00227-017-3125-x

[18] Callier M, Byron C, Bengtson D, Cranford P, Cross S, Focken U, Jansen H, Kamermans P, Kiessling A, Landry T., O'Beirn F., Petersson E., Rheault, RB., Strand, O., Sundell, K., Svasand, T., Wikfors, GH., McKindsey, CW. (2018) Attraction and repulsion of mobile wild organisms to finfish and shellfish aquaculture: a review. Rev Aquac 10:924-949

2.4.1. Fulmar (*Fulmarus glacialis*)

Fulmar are considered as marine species as they forage solely in the marine environment and roost on marine cliffs[19]. The Fulmar population in Ireland has increased significantly over the last 30 years with a reported 68% increase in the population size from 1985 – 2018[18]. While certain individuals of the fulmar population in Dunmanus Bay and surrounds may be partially displaced by the proposed aquaculture activities, the proposed sites are small. It is extremely unlikely that the proposed activities would adversely affect the fulmar population of the Beara Peninsula SPA to the extent that it's conservation objectives could not be met. For this reason, the potential for adverse effects on Fulmar can be **screened out**.

2.4.2. Peregrine (*Falco peregrinus*)

The foraging ranges of the Peregrine Falcon are extensive and largely encompass terrestrial habitats, but Peregrine are known to forage on intertidal areas also but not over subtidal areas. The proposed activity does not directly overlap with the Sheep's Head to Toe Head SPA and therefore cannot directly affect the protected habitat of this species. For these reasons, potential adverse effects of the proposed activities on Peregrine can be **screened out**.

2.4.3. Chough (*Pyrrhocorax pyrrhocorax*)

Chough are largely considered a terrestrial species as they roost in coastal cliffs and forage on coastal grasslands. The proposed activity is located in areas (subtidal waters) where Chough are unlikely to roost or forage. For this reasons, the potential for the proposed activities on Chough can be **screened out**.

2.5. Screening of Potential Effects of Introduction of Non-native Species

The establishment of non-native species as a wild population in an area can be a potential risk associated with aquaculture largely due to the moving of stock (seed, juvenile or adults) into aquaculture sites. There is the potential that the culture organisms could become established as a wild non-native population and that non-native species may '*hitch-hike'* along with the cultured organisms and then become established as a wild population. In this instance, there are two potential causes of non-native introduction and establishment; the movement of non-native algal species into Site

[19] https://www.npws.ie/sites/default/files/publications/pdf/IWM114.pdf

T05/640A, and the movement of other species that might 'hitchhike' as sporophytes or with target algal species at the site.

2.5.1. Screening of Risk of Establishment of Wild Populations of Non-native Species

Algae

The algae proposed for use at this site (T05/640) are all native species and plantlets are sourced from the hatchery in Bantry Bay. There is no movement of stock from other areas. On this basis, the potential adverse effects from the introduction of non-native species due to seaweed culture can be **screened out.**

3. Screening Conclusion

The screening assessment has determined, in light of best available scientific data, that there is no potential for likely significant effects on the conservation features of Natura 2000 sites from the proposed aquaculture activity (T05/640A) within Dunmanus Bay. All potential adverse effects on conservation features of Natura 2000 sites can be **screened out**.

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

T05/640A

AQUACULTURE LICENCE

AQUACULTURE MARINE AQUATIC PLANTS/FISH FOOD LONGLINES

Bantry Marine Research Station Ltd

Gearhies

Bantry

Co. Cork

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T05/640A

AQUACULTURE LICENCE NO. XXXX

GRANTED UNDER THE FISHERIES (AMENDMENT) ACT 1997 (No. 23 of 1997)

The Minister for Agriculture, Food and the Marine (hereinafter referred to as the "Minister"), in exercise of the powers conferred on him by the Fisheries (Amendment) Act 1997 (No. 23 of 1997) (hereinafter referred to as the "Act"), hereby grants an Aquaculture Licence to:

Bantry Marine Research Station Ltd
Gearhies
Bantry
Co. Cork

(hereinafter referred to as the "Licensee") for the cultivation of various aquatic plants on a site in adjacent to Dooneen Pier, along the north shore of Dunmanus Bay, Co. Cork, as specified in Schedule 1 attached (numbered T05/640A) and indicated by a red line on the attached map in accordance with the plans and drawing(s) in Schedule 2 attached as approved of by the Minister, subject to the Act and Regulations made under the Act and to the terms and conditions set out in the attached pages.

This Aquaculture Licence shall remain in force for a maximum period of XXXXX (XX) years, provided for so long as the Foreshore Licence granted under Section 3 (1) of the Foreshore Act 1933 (No.12 of 1933) in respect of the same site for the purpose referred to is in force.

A person authorised under Section 15(1)
of the Ministers and Secretaries Act 1924 to authenticate the Seal of the Minister for Agriculture, Food and the Marine.

TERMS AND CONDITIONS APPLYING TO THIS AQUACULTURE LICENCE

1. Licensed Area

1.1. The area specified in ***Schedule 1*** attached (15.74 hectares) (labelled T05/640A) and outlined in red on the map(s) in ***Schedule 1***.

1.2. The co-ordinates for the site are based on the Irish National Grid Co-ordinate System.

2. Species, Cultivation and Method Licensed

2.1. Species to be farmed: Native seaweeds – Winged kelp (*Alaria esculenta), Sea Lettuce (Ulva Lactuca), Dulse (Palmaria palmata), Harpoon weed (Asparagopsis armata), Sugar kelp (Saccharina latissimi), Oar weed (Laminaria digitata) and Serrated wrack (Fucus serratus).*

2.2. Method: Longlines - subject to the seeding/plant and/or deployment limits as may be specified in ***Schedule 4*** attached.

3. Infrastructure and Site Management

Indemnity

3.1. The Licensee shall indemnify and keep indemnified the State, the Minister, his officers, servants or agents against all actions, loss, damage, costs, expenses and any demands or claims however arising in connection with the construction, maintenance or use of any structures, apparatus, equipment or any other thing used in connection with the licensed operation in the licensed area or in the exercise of the rights granted under the licence and the Licensee shall take such steps as the Minister may specify in order to ensure compliance with this condition.

3.2. The duty of maintenance and responsibility for the upkeep and safety of the site rests with the Licensee.

Design, Arrangement and Maintenance of Structures

3.3. The Licensee shall ensure that the equipment (including all flotation, mooring and anchoring devices) is placed within the licensed area only. Storage or placement of equipment or plants on the foreshore or seashore outside the licensed area is not permitted under any circumstances.

3.4. The Minister may direct as to the deployment of apparatus, including number or orientation of longlines and flotation devices and their colour, within the site.

3.5. The Licensee shall obtain the prior approval of the Minister to any proposed material change to the plan/drawings or equipment as approved being used during the licensing period as specified in ***Schedule 2*** attached.

3.6. The Licensee shall at all times for the duration of the licence keep all equipment used for the purposes of the licensed operations in a good and proper state of repair and condition to the satisfaction of the Minister or other competent State authority.

3.7. The Licensee shall ensure that the ends of each longline in the licensed area legibly bear the Aquaculture Licence Number in an indelible weatherproof format.

Operational Conduct

3.8. The Licensee shall conduct its operations in a safe manner and with regard for other persons in the area and the environment and shall ensure that the operations are not injurious to adjacent lands or the public interest (including the environment) and do not interfere with navigation or other lawful activity in the vicinity of the licensed area, and shall comply with any lawful directions issued by the Minister and any other competent State authority in that regard.

3.9. The Licensee shall ensure that any aquaculture or other activity conducted under this licence does not adversely affect the integrity of the Natura 2000 network (if applicable) through the deterioration of natural habitats and the habitats of species and/or through disturbance of the species for which the area has been designated in so far as such a disturbance may be significant in relation to the stated conservation objectives of the site concerned.

3.10. The Licensee shall ensure that best practice is employed to keep structures and netting clean at all times and any biofouling by alien invasive species shall be removed and disposed of in a responsible manner. In particular, in 'Natura 2000' sites care must be taken to ensure that any biofouling by alien invasive species will not pose a risk to the conservation features of the site. Measures to be undertaken are set out in the draft Marine Code of Practice prepared by Invasive Species Ireland and can be found on the web site at: **http://invasivespeciesireland.com/.**

Waste Management

3.11. The Licensee shall ensure that the licensed and adjoining areas shall be kept clear of all redundant structures (including apparatus, equipment and/or uncontained plants), waste products and operational litter or debris and shall make provision for the prompt removal and proper disposal of such material. If the Licensee refuses or fails to do so, the Minister may cause the said structures, apparatus, equipment or other thing to be removed and the licensed area restored and shall be entitled to recover from the Licensee as a simple contract debt in any court of competent jurisdiction all costs and expenses incurred by him in connection with the removal and restoration.

Inspection

3.12. The licensed area and any equipment, structure, thing, or premises wherever situated used in connection with operations carried out in the licensed area shall be open for inspection at any time by an authorised person (within the meaning of section 292 of the Fisheries (Consolidation) Act 1959) (No. 14 of 1959) (as amended by the Fisheries Act 1980) (No. 1 of 1980), a Sea Fisheries Protection Officer (within the meaning of the Sea Fisheries and Maritime Jurisdiction Act 2006) (No. 8 of 2006) or any other person appointed in that regard by the Minister or other competent State authority.

3.13. The Licensee shall give all reasonable assistance to an authorised officer or a Sea Fisheries Protection Officer or any person duly appointed by any competent State authority to enable the person or officer enter, inspect, examine, measure and test the licensed area and any equipment, structure, thing or premises used in connection with the operations carried out in the licensed area and to take whatever samples may be deemed appropriate by that person or officer.

3.14. The Licensee shall keep and maintain in the State for inspection on demand by the Minister or a competent State authority, at all times, records of all operations including compliance monitoring and any required follow up action. These records shall be produced by the Licensee on demand by the Minister or other competent State authority and in any event not later than 24 hours from the making of that demand.

3.15. The Licensee shall furnish to the Minister or other competent State authority in the form and at the intervals determined by the Minister or other competent State authority, such information relating to the licensed area as may be required to determine compliance by the Licensee with the terms of this licence and applicable legislation.

4. Navigation and Safety

4.1. The Licensee shall ensure that statutory sanction from the Commissioners of Irish Lights is in place prior to the commencement of operations, regarding all aids to navigation. Statutory Sanction forms are available at http://www.cil.ie/safety-navigation/statutory-sanction.aspx.

4.2. The Licensee shall ensure that the site is marked in accordance with the requirements of both the Marine Survey Office and the Commissioners of Irish Lights as specified in ***Schedule 3***.
The navigation marking detail is also illustrated in ***Schedule 3***.

4.3. The Licensee shall comply with any specification requirement relating to navigational aids, flotation and mooring devices supporting/marking posts/poles, as required by the Minister or any other competent State authority.

4.4. The Minister's determination in respect of this licence is conditional upon immediate full compliance by the Licensee in respect of all requirements and conditions which are imposed under the relevant legal provisions applicable to the Marine Survey Office.

4.5. Prior to commencement of operation the Licensee shall inform the UK Hydrographic Office at Taunton, of the location and nature of the site in order that charts and nautical publications can be updated. Tel: 00 44 1823322352 Email sdr@ukho.gov.uk and the Licensee shall submit proof to the Department within 14 days of the date of this licence that the UK Hydrographic Office has been so informed.

5. Monitoring

5.1. The Licensee shall undertake and/or partake monitoring, in particular environmental monitoring, as directed by the Minister or other competent State authority.

6. Duration, Cessation, Review, Revocation, Amendment, Assignment

Duration, Cessation

6.1. This Licence shall remain in force as long as the accompanying Foreshore Licence remains in force.

Review

6.2. The Licensee may apply for a review of the licence at any time after the expiration of three years since the granting of the licence or its last renewal in accordance with section 70 of the Act.

Revocation, Amendment

6.3. Subject to the Act, the Minister may revoke or amend the licence if:–

(a) he considers that it is in the public interest to do so,
(b) he is satisfied that there has been a breach of any condition specified in the licence e.g., operating outside the licensed area
(c) the licensed area to which the licence relates is not being properly maintained,
(d) water quality results or general performance in the licensed area do not meet the standards set by the Minister or the competent State authority.

Assignment

6.4. This Licence shall not be assigned without the prior written consent of the Minister and may not be assigned during the period of three years, dating from the commencement or renewal of this licence, unless the Minister determines that it may be assigned under condition 6(5) or the condition set out in 6(6) applies.

6.5. A Licensee, who considers that there are exceptional reasons for the assignment of the Licence during the first three years, may apply to the Minister, giving those reasons, for a determination that the Licence may be assigned. The Minister may, at his discretion, having considered the reasons given by the Licensee, determine whether or not the Licence may be assigned. The determination of the Minister in this regard is final.

6.6. Where the Licensee is a company (within the meaning of the Companies Acts) and goes into Liquidation (within the meaning of the Companies Acts) in the first three years dating from the commencement of the licence, the Liquidator shall, with the consent of the Minister, be entitled to assign the licence to enable him to discharge any debts of the liquidated company.

6.7. This licence is issued subject to any order that the High Court may make under section 218 of the Companies Act 1963 or otherwise with regard to the assignment of this licence.

7. Fees

7.1. The Licensee shall pay to the Minister an annual aquaculture licence fee in accordance with the Aquaculture (Licence Application and Licence Fees) (No. 2) Regulations 1998 (S.I. No. 324/1998) as amended by the Aquaculture (Licence Fees) Regulations 2000 (S.I. No. 282 of 2000) or an amount payable under Regulations made under section 64 of the Act.

7.2. The Minister may revoke the licence where the Licensee fails to pay the aquaculture licence fees on demand.

8. General Terms and Conditions

8.1. The Licensee shall at all times comply with all laws and protocols applicable to aquaculture operations.

8.2. Any reference to a statute or an act of an institution of the European Union (whether specifically named or not) includes any amendments or re-enactments in force and all statutory instruments, orders, notices, regulations, directions, bye-laws, certificates, permissions and plans made, issued or given effect under such legislation shall remain valid.

8.3. If any condition or part of a condition in this licence is held to be illegal or unenforceable in whole or in part, such condition shall be deemed not to form part of this licence but the enforceability of the remainder of this licence is not affected.

8.4. The Licensee shall at all times hold all necessary licences, consents, permissions, permits or authorisations associated with any activities of the Licensee in connection with the licensed area.

Notification

8.5. Without prejudice to any other remedy under the licence or in law, if the Minister is of the view that the Licensee is in breach of any obligation under this licence, the Minister may, by notice in writing, require that the Licensee rectifies such breach, within such time as is specified by the Minister. The Licensee shall comply with any direction of the Minister within the time specified in the notice.

8.6. Any notice to be given by the Minister may be transmitted through the Post Office addressed to the Licensee at the last known address of the Licensee.

8.7. The Licensee shall notify the Minister within 7 days of any change in the Licensee's address, telephone, e-mail or facsimile number.

Tax Clearance Certificate

8.8. During the term of this licence the Licensee shall provide to the Minister on demand a current tax clearance certificate.

Companies and Co-operatives

8.9. In the event of the licence being granted to a company (within the meaning of the Companies Acts), control of the licensee company shall not change in any respect

from the control of the company as existed on the date that the licence was granted so long as this licence shall remain in force save with the prior written permission of the Minister.

8.10. In the event of a licence being granted to a company that has been incorporated outside this State, the licensee company shall register with the Companies Registration Office within one month of the establishment of a place of business in the State or alternatively, within one month of the establishment of a branch of the said company in the State and the licensee company shall submit proof to the Department within 14 days of the end of that month that it has been so registered.

8.11. Where the licensee is a Company within the meaning of the Companies Acts, the licensee company shall ensure that it does not become dissolved within the meaning of the Companies Acts for so long as this licence shall remain in force.

8.12. In the event of the licence being granted to a society (within the meaning of section 2 of the Industrial and Provident Societies (Amendment) Act 1978 (No.23 of 1978) the following conditions shall apply:-

8.12.1. The rules relating to membership of the society shall enable any resident of the State to become a member of it where the resident fulfils all the conditions laid down by the society for membership of it and the rules shall not lay down different conditions for different classes of people;

8.12.2. The rules relating to the society as submitted to the Minister before the grant of this licence shall not be amended subsequently other than with the written permission of the Minister; and

8.12.3. The Minister may, if he considers it necessary in the interests of good management of the licensed area, direct that an amendment may be made to the rules of the society and the Licensee shall amend the rules in accordance with that direction.

Clearance of Site

8.13. The Licensee shall, at the Licensee's own expense if so required by written notice from the Minister and within three weeks after receipt of such notice or on cessation of the licence for any other cause, remove the structures, apparatus, equipment or any other thing to the satisfaction of the Minister. If the Licensee refuses or fails to do so, the Minister may cause the said structures, apparatus, equipment or other thing to be removed and the licensed area restored and shall be entitled to recover from the Licensee as a simple contract debt in any court of competent jurisdiction all costs and expenses incurred by him in connection with the removal and restoration. The Licensee shall take such steps as the Minister may specify in order to secure compliance with this condition.

SCHEDULE 1

Schedule 1 contains:

- **the co-ordinates of the site based on the Irish National Grid Co-ordinate System and the area of the site**
- **site map(s)**
- **a chart showing the location of the site in relation to the surrounding area.**
- **site access map.**

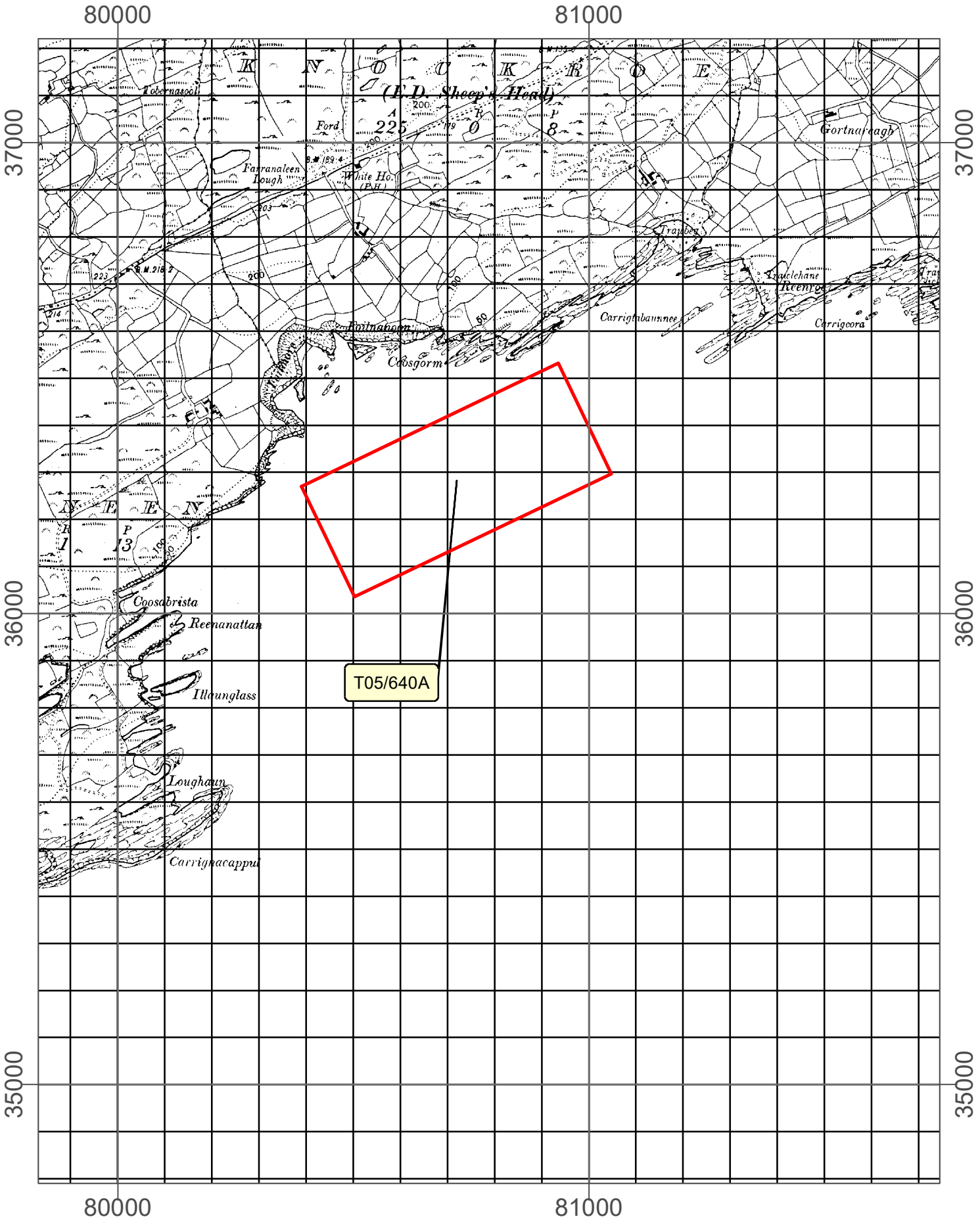
1 NO. SITE AT ROARINGWATER BAY CO.CORK

Co-ordinates & Area

Site T05/640A (15.74 Ha)

The area seaward of the high water mark and enclosed by a line drawn from Irish National Grid Reference point

080390, 036270 to Irish National Grid Reference point
080935, 036532 to Irish National Grid Reference point
081048, 036297 to Irish National Grid Reference point
080503, 036036 to the first mentioned point.

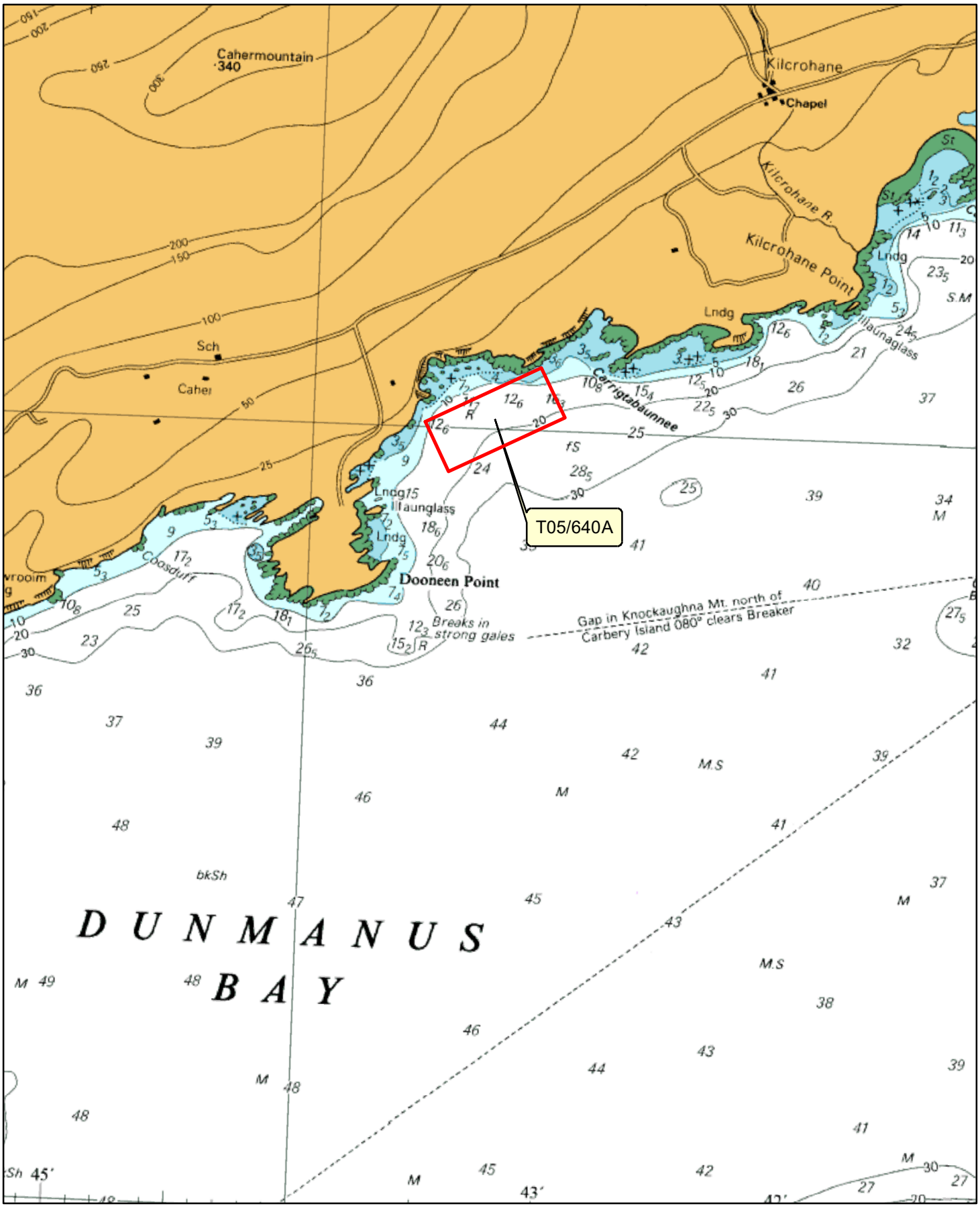


1:10,560

Site_Status
- Application
- Licensed
- 100mgrid

Sites highlighted in red denotes Application

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



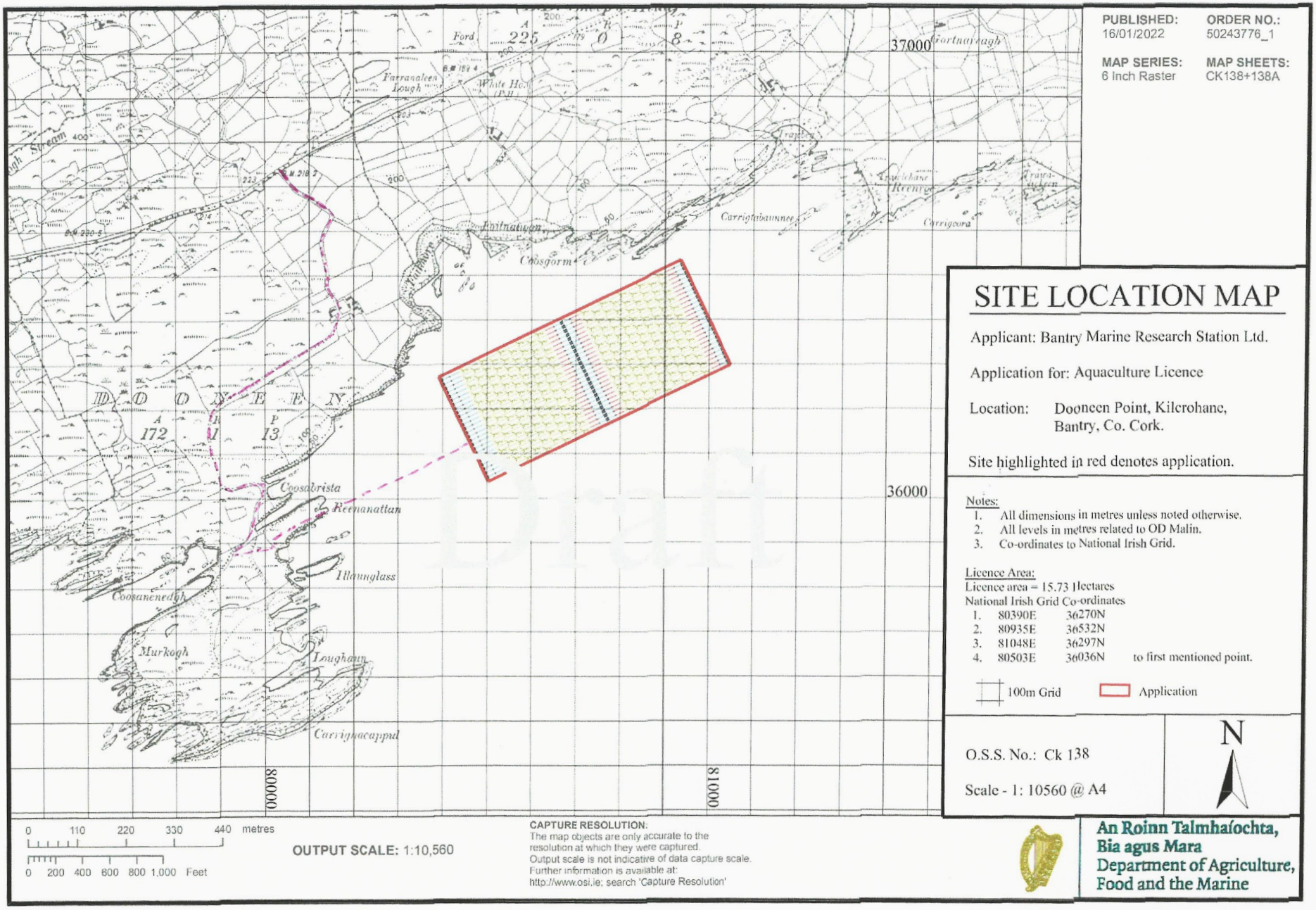
1:24,000

Site_Status
Application
Licensed

Sites highlighted in red denotes Application

Part of Admiralty Chart No =2552-0
Not to be used for Navigation

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

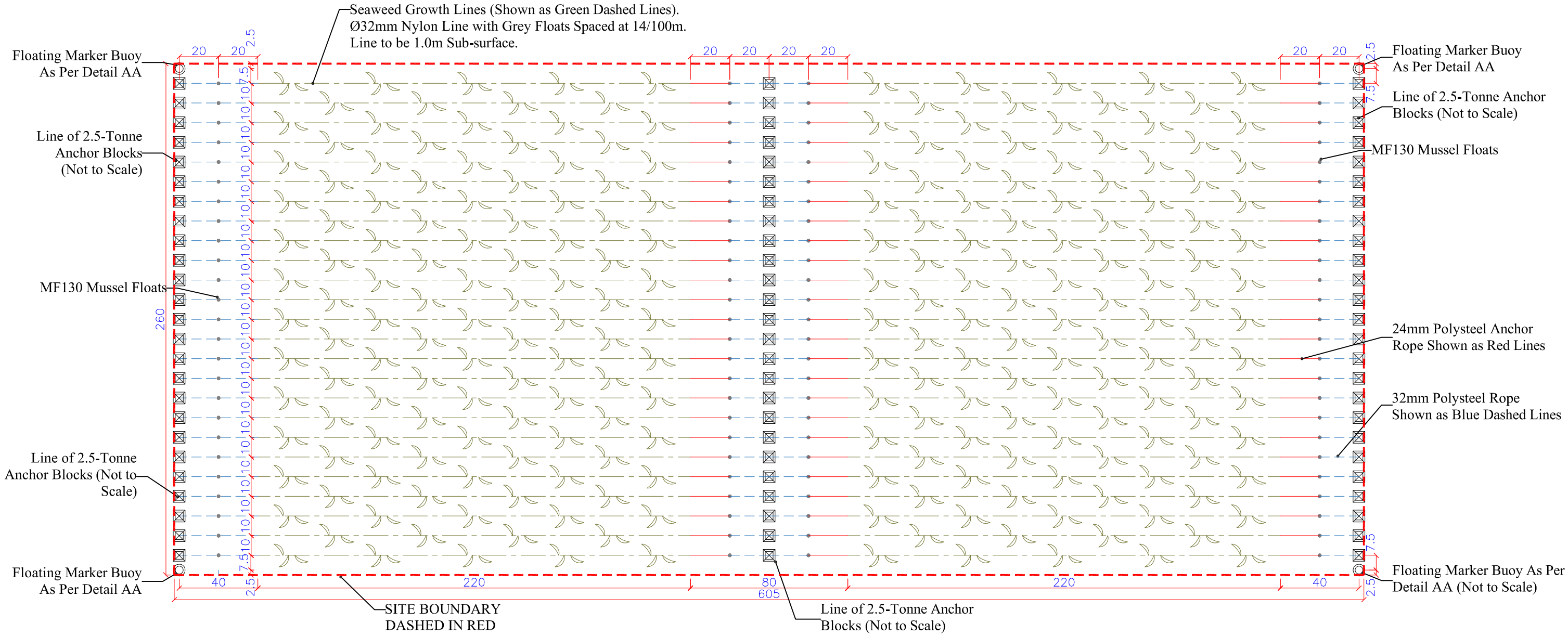


---- = ACCESS ROUTE TO SITE FROM PUBLIC ROAD.

SCHEDULE 2

Schedule 2 contains:

- **the approved plans and drawing(s)**



PROPOSED APPLICATION SITE LAYOUT
SCALE 1/1000

TOTAL SITE AREA = 157,300 SQ.m / 15.73Ha

This drawing is for illustration purposes only.
Not to be used as a working drawing.

Notes:
All anchor blocks to be 2.5 tonne concrete with 32mm polysteel rope to surface.

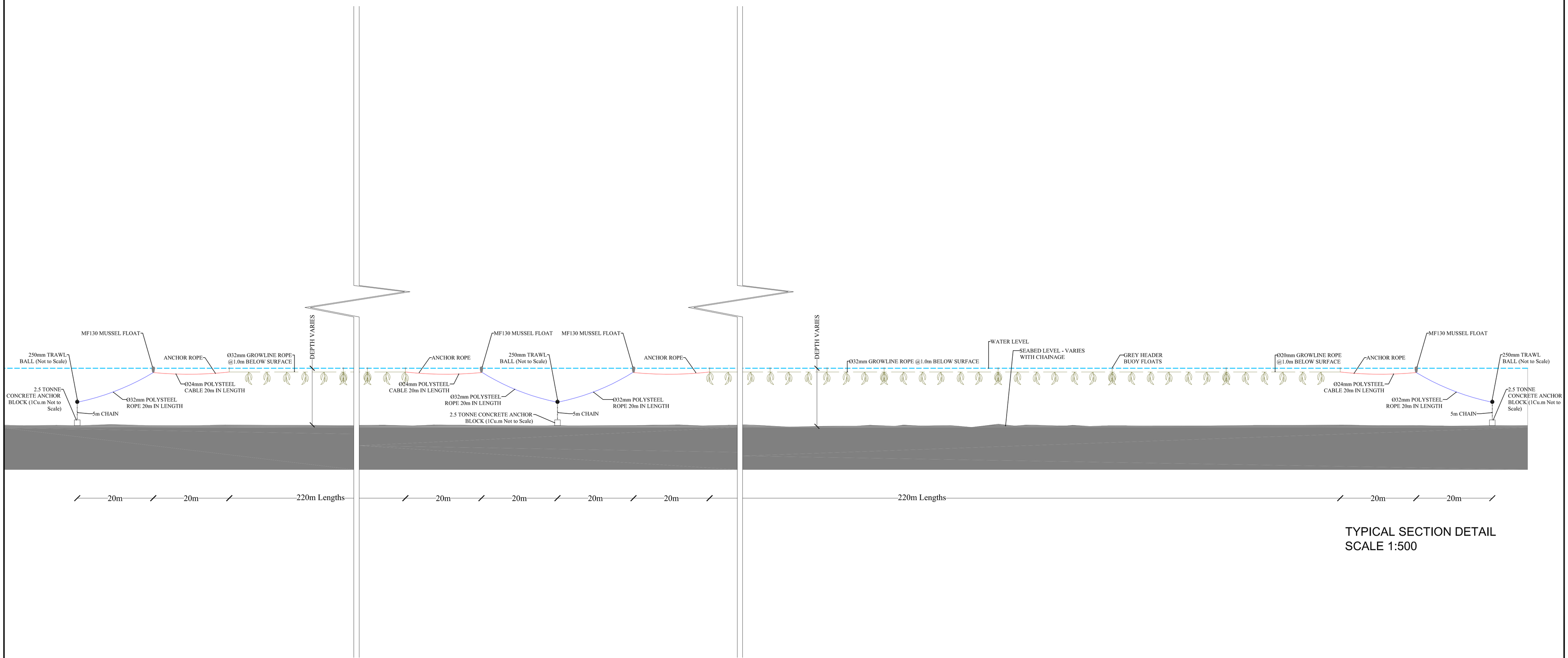
Navigation Marker buoy as each corner of the area as per C.I.L.

Notes:
1. All dimensions in metres unless noted otherwise.
2. All levels in metres related to OD Malin.
3. Co-ordinates to National Irish Grid.

Licence Area:
Licence area = 15.73 Hectares
National Irish Grid Co-ordinates
1. 80390E 36270N
2. 80935E 36532N
3. 81048E 36297N
4. 80503E 36036N to first mentioned point.

Marker Beacons:
St. Andrews Cross special beacons located at corners of site.

Client: Bantry Marine Research Station Ltd.	Date: October 2021
	Scale: 1:2000 @ A3
Project: Aquaculture Licence - Dooneen Point	Drawn By: E.O.M.
	Checked:
Drawing Title: Proposed Layout Plan	Dwg No.: DP-PD-01
	Rev.



TYPICAL SECTION DETAIL
SCALE 1:500

This drawing is for illustration purposes only.
Not to be used as a working drawing.

Notes:
All anchor blocks to be 2.5 tonne concrete with 32mm polysteel rope to surface.

Navigation Marker buoy as each corner of the area as per C.I.L.

Notes:
1. All dimensions in metres unless noted otherwise.
2. All levels in metres related to OD Malin.
3. Co-ordinates to National Irish Grid.

Licence Area:
Licence area = 15.73 Hectares
National Irish Grid Co-ordinates
1. 80390E 36270N
2. 80935E 36532N
3. 81048E 36297N
4. 80503E 36036N to first mentioned point.

Marker Beacons:
St. Andrews Cross special beacons located at corners of site.

Client: Bantry Marine Research Station Ltd.	Date: October 2021
	Scale: 1:500 @ A1, 1:1000 @ A3
Project: Aquaculture Licence - Dooneen Point	Drawn By: E.O.M.
	Checked:
Drawing Title: Proposed Section Detail	Dwg No.: DP-S0-02
	Rev.

SCHEDULE 3

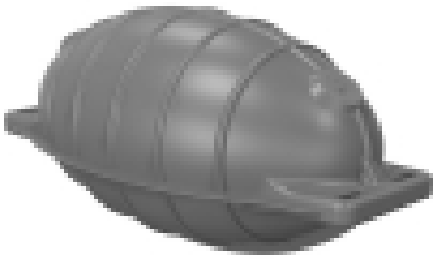
Schedule 3 contains:

- **requirements of the MSO and/or CIL**
- **the navigation marking detail.**

1. No navigable inter-tidal channels to be impeded by this site.

2. The Licensee must secure Statutory Sanction from the Commissioners of Irish Lights for the aids to navigation that may be required by the Marine Survey Office. These aids must be in place before development on the site commences.

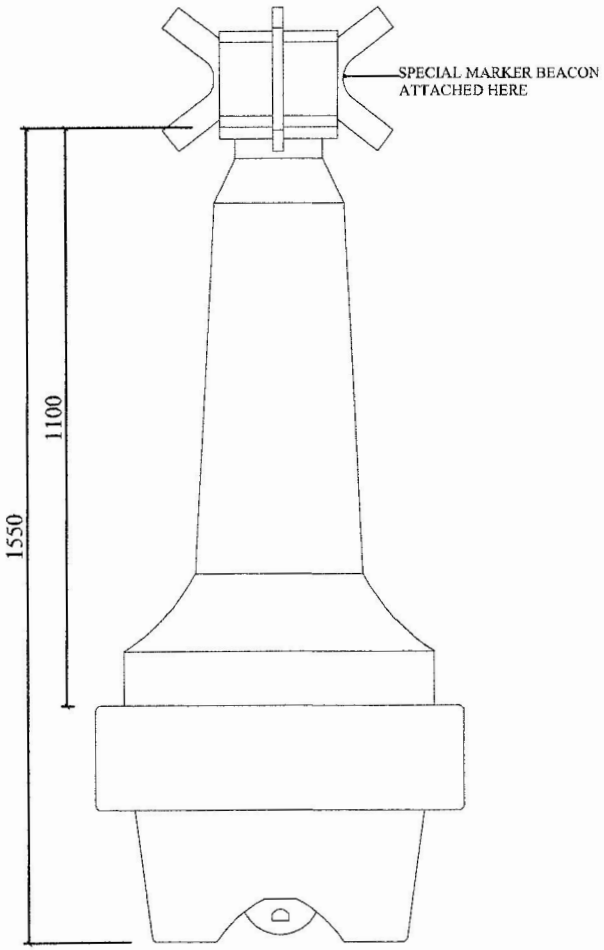
3. The size and specification of aids to navigation must be of design and specification approved by the Marine Survey Office and must be agreed in advance with the Commissioners of Irish Lights.



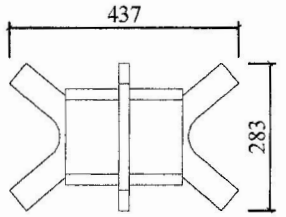
MFL 130 (988L*580H*530W)

LD2 Buoys (note yellow image but proposed in grey) 61cm Length * 29 cm Diameter

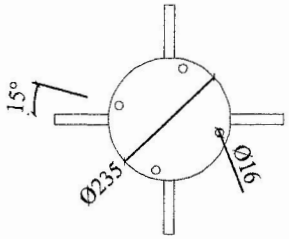
Mooring Block single eye



ELEVATION: FLOATING MARKER BUOY
SCALE 1:10



ELEVATION: SPECIAL MARKER BEACON
SCALE 1:10



PLAN: SPECIAL MARKER BEACON
SCALE 1:10

Floating Marker Buoy Specification:

- Total Height 1550mm
- Total Weight 65kg
- Diameter 600mm
- Volume 189 Litres
- Focal View 1100mm
- Mooring Ring Diameter 25mm
- Mooring Line and Block Suitable for Location

SCHEDULE 4

Schedule 4 contains conditions specific to this licence:

the stocking and/or equipment deployment conditions;

- The flotation barrels should be battleship grey in colour.
- Each floating longline should not be longer than 220 metres in length.
- A maximum of 50 No. longlines will be permitted within the site.
- Site access is from Dooneen Pier.
- The initial source of seed (plantlets) and other sources which may be used at any point in the future must be approved by the Minister.
- Prior to the commencement of any aquaculture activity on this site, the applicant is required to prepare a Contingency Plan, for the approval of the Department of Agriculture, Food and the Marine, which shall identify, inter alia, methods for the removal from the environment of any invasive non-native species introduced as a result of operations at this site. If such an event occurs, the contingency plan shall be implemented immediately.

AQUACULTURE AND FORESHORE LICENCE APPLICATION FORM, for purposes of FISHERIES (AMENDMENT) ACT, 1997 and FORESHORE ACT, 1933

NB: The accompanying Guidance Notes should be read before completing this form.

Note: Details provided in Parts 1 and 2 will be made available for public inspection. Details provided in Parts 3 and 4 and any other information supplied will not be released except as may be required by law, including the Freedom of Information Act 1997 as amended.

USE BLOCK CAPITALS IN BLACK INK PLEASE

For Office Use

Application Ref. No. T05/640.

Date of Receipt (Dept. Stamp):

Type of Applicant (tick one)		
Sole Trader		
Partnership		
Company		X
Co-Operative		
Other	Please specify-	

PART 1: PRELIMINARY DETAILS

Applicant's Name(s)
1. Bantry Marine Research Station Ltd.
Address: Gearhies, Bantry, Co. Cork P75 AX07
2.
Address:
3.
Address:
4.
Address:

Contact in case of enquiries (if different from above)	
Contact Name	**David O' Neill**
Organisation Name (if applicable)	**Bantry Marine Research Station**
Address	**Gerahies,** **Bantry,** **Co. Cork**

PART 1: PRELIMINARY DETAILS

TYPE OF APPLICATION – please indicate relevant type of application
This Application Form is valid for each type of application - ***See Guidance Note 3.1***

(i) Aquaculture Licence	X
(ii) Trial Licence	
(iii) Foreshore Licence, if Marine Based	X
(iv) Review of Aquaculture Licence	
(v) Renewal of Aquaculture Licence	

TYPE OF AQUACULTURE *See Guidance Note 3.2*

Indicate the relevant type of application with a tick.

(i) MARINE-BASED

Finfish			Go to Parts 2.1 and 2.1A
Shellfish	***Subtidal***		Go to Parts 2.2 and 2.2A
	Intertidal		Go to Parts 2.2 and 2.2A
Seaweed/Aquatic Plants/Aquatic Fish Food		X	Go to Parts 2.3 and 2.3A

(ii) LAND-BASED

Finfish ☐ **Shellfish** ☐ Go to Parts 2.4 and 2.4A

Aquatic Plants ☐ **Aquatic Fish Food** ☐ Go to Parts 2.4 and 2.4A

(iii) TRIAL LICENCE ☐ Go to appropriate Parts as above **and** to Part 2.5.

2.3 MARINE-BASED SEAWEED/AQUATIC PLANTS/AQUATIC FISH FOOD AQUACULTURE

When filling out this section refer also to 2.3A and Guidance Note 3.3 for information on Conditions and Documents required with this application type

Proposed Site Location

(i) Bay:_____Dunmanus Bay_____

(ii) County: _____Cork_____

(iii) OS Map No: ____88_____

(iv) Co-ordinates of Site: (please specify coordinate reference system used e.g. Irish Grid (IG) or Irish Transverse Mercator (ITM) or Latitude/Longitude [in which case specify whether ETRS89 or WG84 etc.]

Irish Grid
080390E, 036270N to Irish Grid reference point
080503E, 036036N to Irish Grid reference point
081048E, 036297N to Irish Grid reference point
080935E, 036532N to the first mentioned point

(v) Size (hectares): __ _____15.73Ha_____

(vi) Species (common and scientific name):
Native macro algae; *Alaria esculenta* (winged kelp), *Ulva lactuca* (sea lettuce), *Palmaria palmata* (dulse), *Asparagopsis armata* (harpoon weed), *Saccharina latissima* (sugar kelp), *Laminaria digitata* (oar weed), *Fucus serratus* (serrated wrack)

(vii) What is the source of plantlet? Bantry Marine Research Station hatchery_____

(viii) Cultivation Method? _long lines_____

(ix) Proposed total number of lines/ropes_____50 lines_____

_____

(x) Proposed Production:

Year 1	22T	Year 2	44T	Year 3	110T	Year 4	110T	Year 5	110T

(xi) Reasons for site selection: Dunmanus Bay has ideal conditions for growing indigenous species of seaweed. The site itself is sheltered and has access from a nearby pier for maintenance purposes.

_____

(xii) Provide detailed information on the techniques for cultivation in use or to be used. Are these techniques currently in use in the industry or are they new? Please give details;

Longline deployment techniques are currently in use in the industry. Seeded seaweed string will be prepared onshore at the BMRS hatchery. The company is familiar with the deployment of same and has been utilising these techniques on their existing site for a number of years.
On arrival at the longline, the boat is tied to the header rope at one end to allow for same to be quickly detached when needed. The header rope is temporarily detached from the anchor rope with

the use of a buoy to avoid loss. The header rope is passed through the end of the collector. The collector is held at either end to avoid touching the delicate plants on the culture string. The anchor rope is then reattached to the header rope ensuring a strong connection. The boat is then untied from the line and is pulled down the length of the header rope over hand. The collector should also be pulled down the length of the header rope, the culture string spiralling around the larger diameter header rope. The string must not be coiled too loosely around the rope to ensure the plants anchor to the line. Upon reaching the end of the longline or the end of the culture string, whichever comes first, the end of the culture string is tied through the lay of the rope, as at the start. Before leaving the site it is ensured that the header rope is submerged to a depth of at least .5m below the surface. The buoys are then attached to the header rope spacing them evenly down the length of the line.

(xiii) Methods used for harvesting. - A Boat operated crane will be utilised to remove the longlines from the bay and will then be hand cut into 1T bins.

(xiv) Has the site sufficient space for the site structures including mooring blocks?

Yes, detailed drawings
Attached.

Please provide separately detailed drawings of both over and under water structures including moorings. (See Guidance Note on Site Structures 3.3.2)

(xv) How will the visual impact issues of the flotation devices for the proposed application be addressed? -We propose to use grey LD2 buoys (these are specifically designed to be almost invisible from the shore) and MFL130 floats

(xvi) Is the site located in a sensitive area e.g. SPA (Special Protection Area) or SAC (Special Area of Conservation) i.e. a Natura 2000 site? (Refer to Guidance Note 3.3.1- Natura 2000 sites)

If Yes give details
-No the site of the proposed development is not in a SPA, SAC or Natura 2000 site. However the site is adjacent to or in the vicinity of SPA 004156 (Sheeps Head to Toe Head SPA), SAC 002189 (Farranamanagh Lough SAC) and proposed natural heritage area 000102 (Sheeps head).

See Part 2.3A for details of documentation to be included with this application type

2.3A DOCUMENTATION REQUIRED FOR MARINE-BASED SEAWEED/AQUATIC PLANTS/AQUATIC FISH FOOD AQUACULTURE

(to be included separately with a Licence Application for a new site or for a renewal or review of an existing Licence)

1. **Scale drawing of the structures to be used and the layout of the farm.** The proposed site drawings must illustrate all site structures above and below the water including mooring blocks. (recommended scales normally 1:100 for structures and 1:200 for layout) (See Guidance Note 3.3.2 on Site Structures)

2. **An Appropriate Ordnance Survey Map (recommendation is a map to the Scale of 1:10,000/ 1:10,560, i.e. equivalent to a six inch map).** Note: The proposed access route to the site from the public road across tidal foreshore, (e.g. pier or slipway) must also be shown on the map.

3. **The prescribed application fee (See Guidance Note Section 4)**

4. **If the applicant is a limited Company within the meaning of the Companies Act 1963, as amended, the Certificate of Incorporation and Memorandum and Articles of Association**

5. **If the applicant is a Co-operative, the Certificate of Incorporation and Rules of the Co-operative Society**

6. **Environmental Impact Statement (if required) in certain cases- See Guidance Notes Section 3.3.1**

NOW COMPLETE PARTS 2.6, 3, 4 AND 5 PLEASE

2.6 Employment, Qualifications, Experience, etc
TO BE FILLED IN BY ALL AQUACULTURE APPLICANTS

(i) Please provide details of experience/qualifications of the applicant and any key personnel which are relevant to the aquaculture now proposed:

Bantry Marine Research Station Ltd (BMRS) has been in operation since 1991 as part of the Aquaculture and Fisheries development Centre, University College Cork. However in 2005 it was established as an independent research centre. Research work at the station has grown steadily and has included commercial trials and participation in EU research projects. Key personnel include

Dr. Julie Maguire (Research Director)
Julie Maguire has a PhD in Marine Biology from University College Cork (awarded in 1998). As Research Director of BMRS, Dr Maguire has managed all the Stations research projects and managed the seaweed farm in Bantry Bay since the license was first awarded. Her main research interests lie in climate change mitigation particularly by using seaweed. Her main research efforts and subsequent projects are in; macroalgal cultivation and Integrated Multi Trophic Aquaculture (MABFUEL, NETALGAE, BIFF, ACCIPHOT, IDREEM, ECOFISH, SEAFOOD-AGE, Agrefine, Farm4More, EATFISH), and the extraction and quantification of bioactive compounds and bioplastics (SEABIOPLAS), research to improve products and services such as zero waste and traceability (ORION, LABELFISH, SEATRACES, BIOTECMAR), forecasting and monitoring (ASIMUTH, OSS2015, SAFI, AtlantOS, C-TEP, PRIMROSE, Co-Clime, Nanoculture). Some highlights from her career include she was awarded the Copernicus Masters Award for "Best service for European citizens" for her work on forecasting Harmful Algal Blooms in 2013 and in 2018 she gave a presentation at the European Parliament "Exploring the Use of Seaweed-Derived Biopolymers in Biomedical Technology". She has 28 peer reviewed publications and 2 best practice guidelines for seaweed harvesting in Europe and mussel fisheries management.

Dr Simona Paolacci (Researcher/Principal Investigator)
Dr Paolacci graduated in Environmental Sciences from Sapienza University of Rome (Italy) and has a research Masters in environmental Monitoring and Restoration. After completing her PhD in plant eco-physiology at University College Cork, she worked for three years as a post-doc also in UCC. She developed a phytoremediation system to treat aquaculture wastewater whilst producing a valuable, protein-rich plant biomass. She is interested in marine and freshwater aquatic ecosystems and plants restoration ability. Currently she is involved in a project investigating seafood traceability and compliance to EU seafood labelling legislation. In general, she is interested in environmental policy, and also enjoys using plants and algae to solve environmental issues.

Mr Mick Mackey (Researcher)
Mick Mackey studied Marine and Freshwater Biology at the Royal Melbourne Institute of Technology (RMIT) and the University of Tasmania between 1986 and 1988. After monitoring the phytoplankton and zooplankton of Melbourne's water supplies and streams for six years, he returned to Tasmania in 1995 to study the productivity of Antarctic sea-ice algae as part of his Honours Year. Mick spent the next 20 years working in Ireland and Antarctica researching various aspects of marine mammal and seabird biology, including a 2.5-year stint on Bird Island, South Georgia. He is currently working as a Research Scientist at the Station, where he is immersed in a wide variety of lab-based and field studies involving macroalgae, microalgae, marine invertebrates and fish.

Ms. Dee McElligott MSc. (Researcher)
Ms McElligott holds an MSc. in Geographical Information Systems and Remote Sensing and an undergraduate degree in Zoology. With over ten years' experience in marine research she has participated in EC FP, INTERREG and numerous nationally funded projects. Dee is currently involved in INTERREG projects delivering improved forecasts of HABs, microbial risks and climate impacts in aquaculture locations in a number of EU countries (PRIMROSE), and a project co-developing and co-producing a prototype marine ecosystem climate services (CoCliME). Dee is also involved in a number of macroalgae based projects, including running trials for growing Asparagopsis armata onshore, the purpose of this is to produce an antimethanogenic product for delivery to the cattle industry.

(ii) If a new application please provide details of projected employment creation during first four years of the proposed aquaculture project:

(iii) In the case of a renewal please provide current and future details:

____BMRS is a significant employer in a remote, rural area. The company currently employs 14 staff members which it is hoped will increase significantly in the years to come. It is projected that in year 1, approximately 10 lines will be deployed, in year 2 c.20 lines and in year 3 c.50 lines thus fully utilising the site. The world market for seaweed products is increasing dramatically. Seaweed processing and sales activities will increase over the first 3-4 years. It is envisaged that this project will create 1.5 full time equivalent jobs with a further 2.25 part time equivalent jobs.

FULLTIME JOBS

Year 1:	1	Year 2:	1	Year 3:	2	Year 4:	2

PART TIME JOBS

Year 1:	1	Year 2:	2	Year 3:	3	Year 4:	3

PART 3 D. LIMITED COMPANY

Company Name: Bantry Marine Research Station Ltd._____

Address: Gearhies, Bantry, Co. Cork, P75 AX07_____

_____

Company Registered No. (CRO No.) 402087_____

VAT No. IE-6422087U_____

Phone No. 027 29180_____

Mobile No. [redacted]_____

E-mail Address: jmaguire@bmrs.ie_____

Please list below the names and Personal Public Service No's of the Directors of the Company

Name: __Julie Maguire_____ Personal Public Service No.

Name: ___David'O'Neill_____ Personal Public Service No.

Name: ____Dan Tierney_____ Personal Public Service No.

Name: _____ Personal Public Service No. _____

Please list below the names and Personal Public Service No.'s of the Shareholders in the Company and the percentage shareholding held in each case

Name: _Cervellos Limited (Dan Tierney beneficial owner) _____
Personal Public Service No. _CRO No. 591529_____

% Shareholding:____100%_____

Name: _____ Personal Public Service No. _____

% Shareholding:_____

Name: _____ Personal Public Service No. _____

% Shareholding:_____

Name: _____ Personal Public Service No. _____

% Shareholding:_____

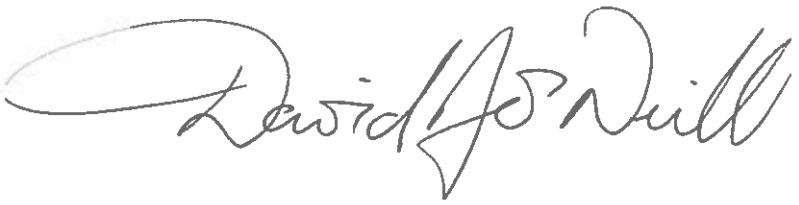
PART 5: DECLARATION AND SIGNING

NB: Refer to Guidance Note Section 3.5 and Section 4 - Guidance on Declaration and Signing and Annual Aquaculture and Foreshore Licence Fees

If this is a renewal have you met all licence conditions of the existing aquaculture licence? If applicable, explain why you have not complied with all conditions:

N/A

I/We hereby declare the information provided in Parts 1, 2, 3 and 4 above to be true to the best of my/our knowledge and that I am over 18 years of age. I/We enclose an application fee* of €_95.23_____ with this application.



Signature(s) of Applicant(s):
(Please state capacity of persons signing on behalf of a Company/Co-op) Director,
Bantry Marine Research Station Ltd.

Date: 18/02/22

NB All persons named on this licence application must sign and date this application form.
Only the existing licence holder(s) can apply for the renewal/review of an Aquaculture Licence.

*Preferred method of payment is by cheque or bank draft. The fee should be made payable to the Department of Agriculture, Food and the Marine.

Refer to Guidance Note Section 4 - Guidance on Aquaculture and Foreshore Licence Fees

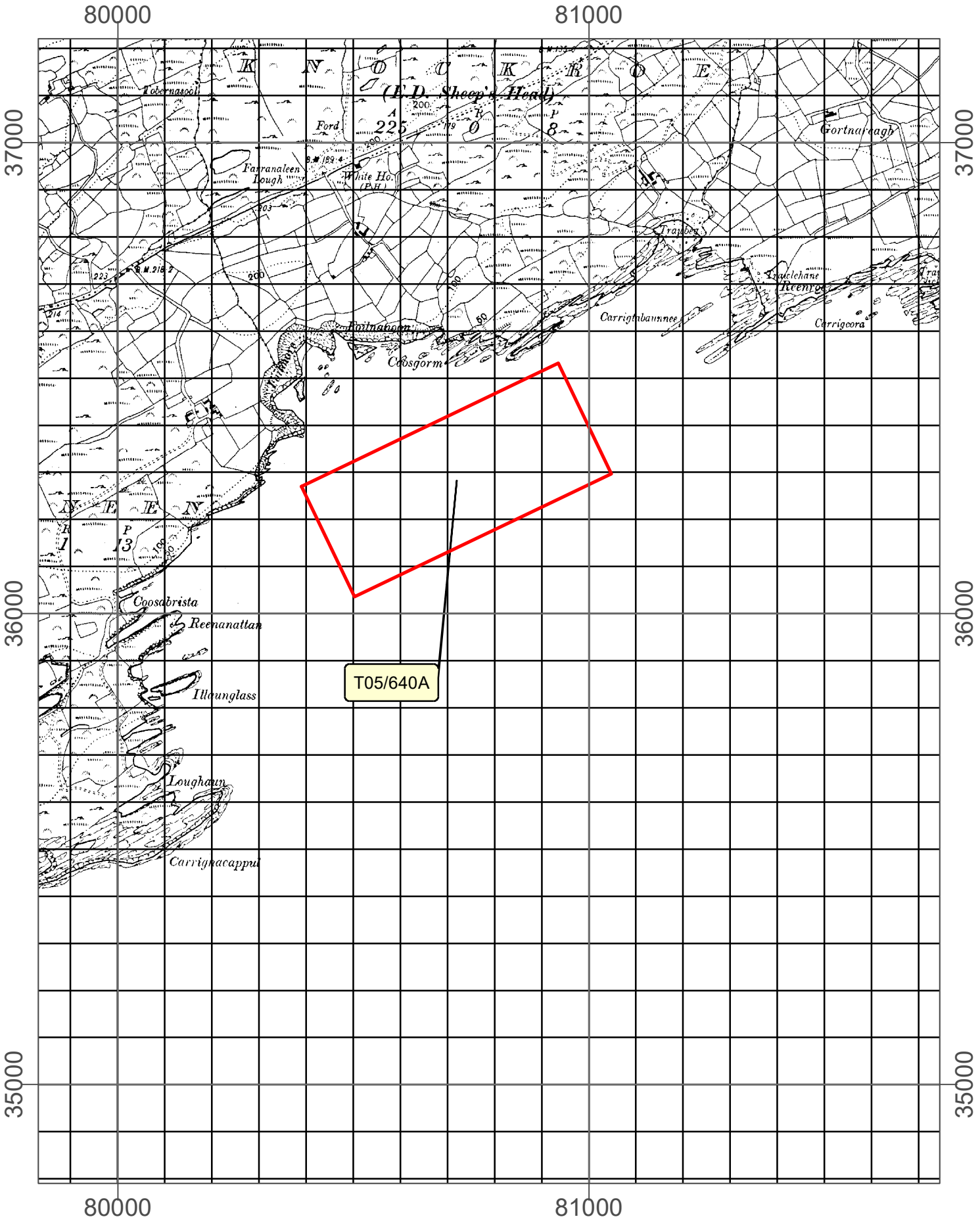
1 NO. SITE AT ROARINGWATER BAY CO.CORK

Co-ordinates & Area

Site T05/640A (15.74 Ha)

The area seaward of the high water mark and enclosed by a line drawn from Irish National Grid Reference point

080390, 036270 to Irish National Grid Reference point
080935, 036532 to Irish National Grid Reference point
081048, 036297 to Irish National Grid Reference point
080503, 036036 to the first mentioned point.

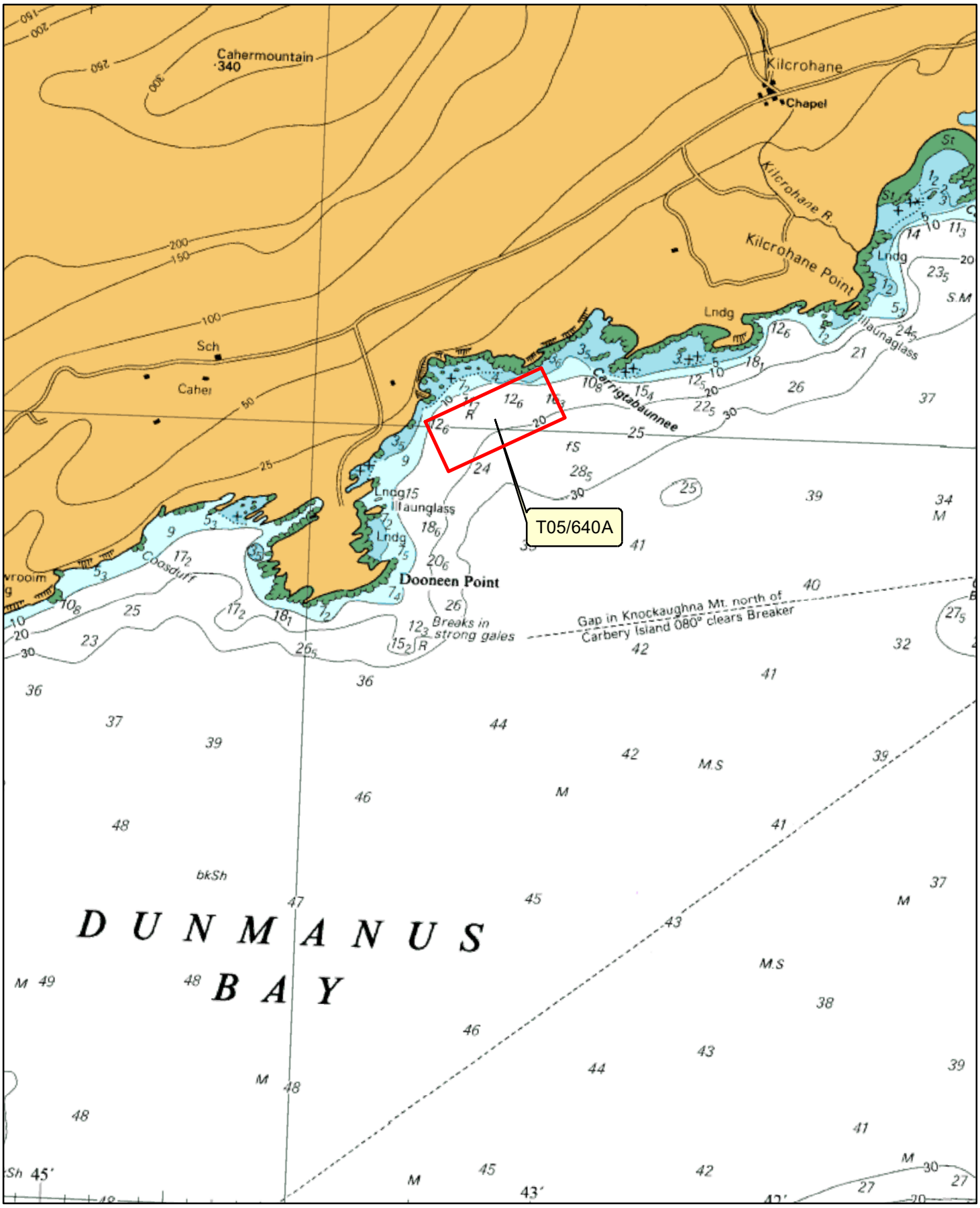


1:10,560

Site_Status
- Application
- Licensed
- 100mgrid

Sites highlighted in red denotes Application

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



1:24,000

Site_Status
Application
Licensed

Sites highlighted in red denotes Application

Part of Admiralty Chart No =2552-0
Not to be used for Navigation

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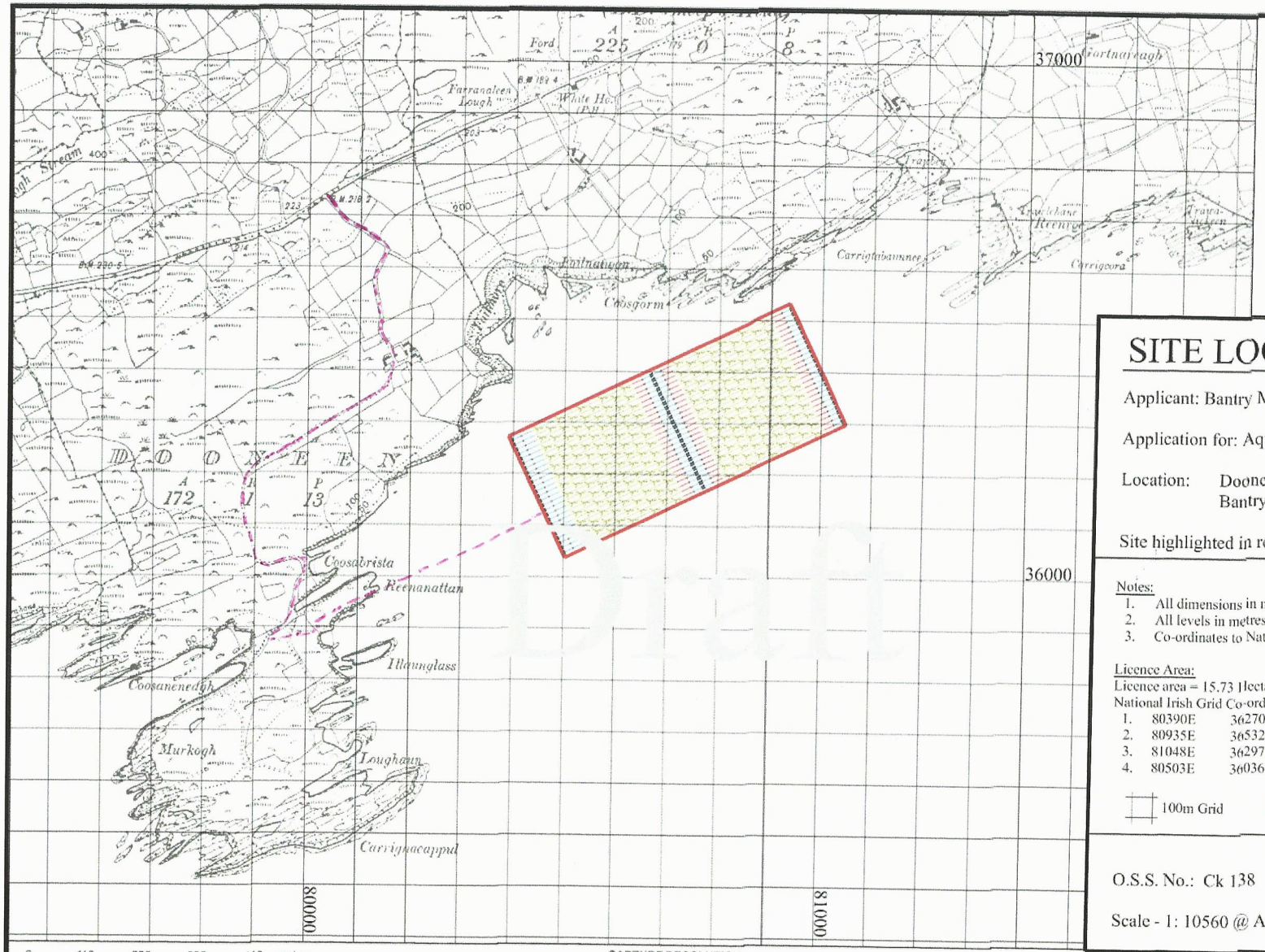
Department of Agriculture, Food and the Marine



PUBLISHED: 16/01/2022
ORDER NO.: 50243776_1
MAP SERIES: 6 Inch Raster
MAP SHEETS: CK138+138A

SITE LOCATION MAP

Applicant: Bantry Marine Research Station Ltd.

Application for: Aquaculture Licence

Location: Dooneen Point, Kilcrohane, Bantry, Co. Cork.

Site highlighted in red denotes application.

Notes:
1. All dimensions in metres unless noted otherwise.
2. All levels in metres related to OD Malin.
3. Co-ordinates to National Irish Grid.

Licence Area:
Licence area = 15.73 Hectares
National Irish Grid Co-ordinates

1.	80390E	36270N	
2.	80935E	36532N	
3.	81048E	36297N	
4.	80503E	36036N	to first mentioned point.

100m Grid Application

O.S.S. No.: Ck 138

Scale - 1: 10560 @ A4

N

OUTPUT SCALE: 1:10,560

CAPTURE RESOLUTION:
The map objects are only accurate to the resolution at which they were captured.
Output scale is not indicative of data capture scale.
Further information is available at:
http://www.osi.ie; search 'Capture Resolution'

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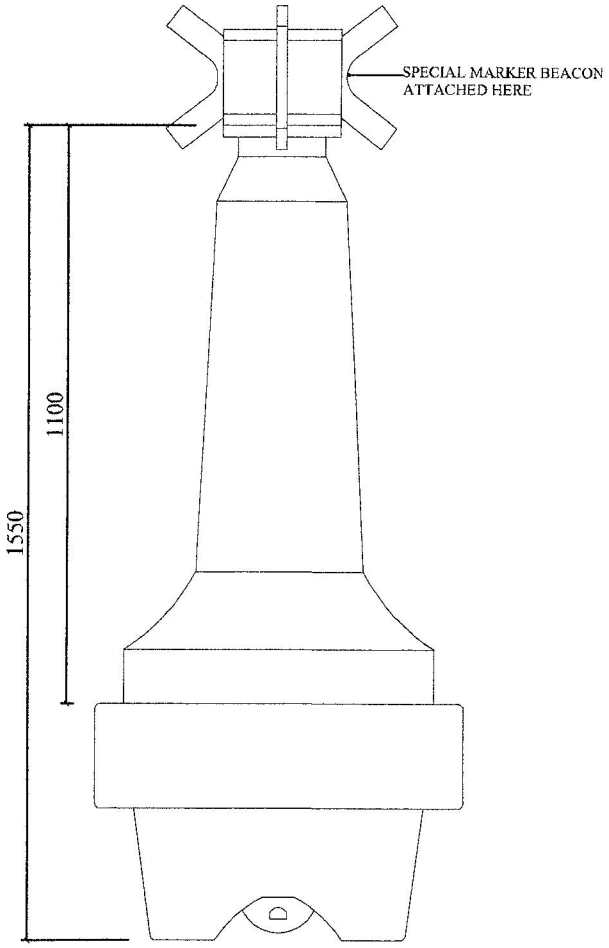
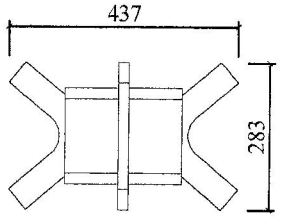
Department of Agriculture, Food and the Marine

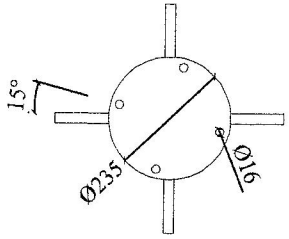
---- = ACCESS ROUTE TO SITE FROM PUBLIC ROAD.



ELEVATION: FLOATING MARKER BUOY
SCALE 1:10



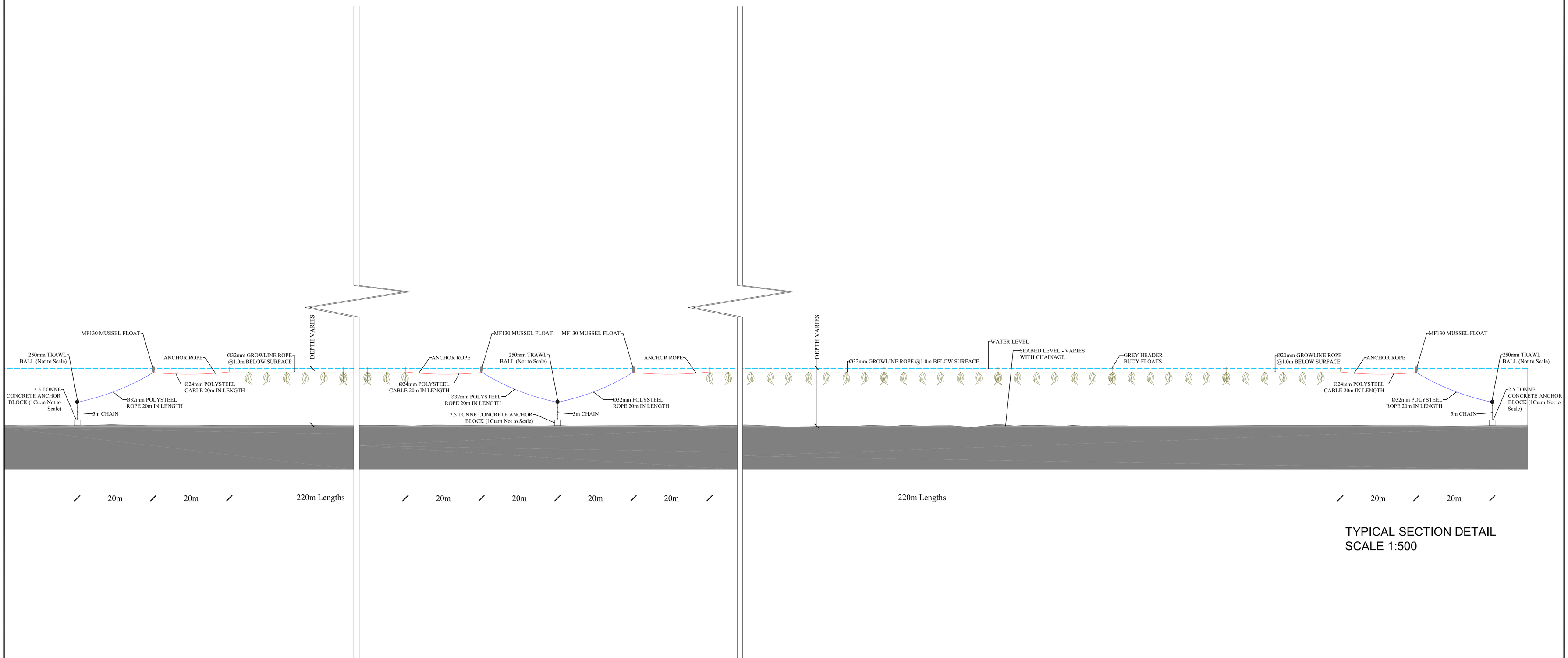
ELEVATION: SPECIAL MARKER BEACON
SCALE 1:10



PLAN: SPECIAL MARKER BEACON
SCALE 1:10

Floating Marker Buoy Specification:

- Total Height 1550mm
- Total Weight 65kg
- Diameter 600mm
- Volume 189 Litres
- Focal View 1100mm
- Mooring Ring Diameter 25mm
- Mooring Line and Block Suitable for Location



TYPICAL SECTION DETAIL
SCALE 1:500

This drawing is for illustration purposes only.
Not to be used as a working drawing.

Notes:
All anchor blocks to be 2.5 tonne concrete with 32mm polysteel rope to surface.

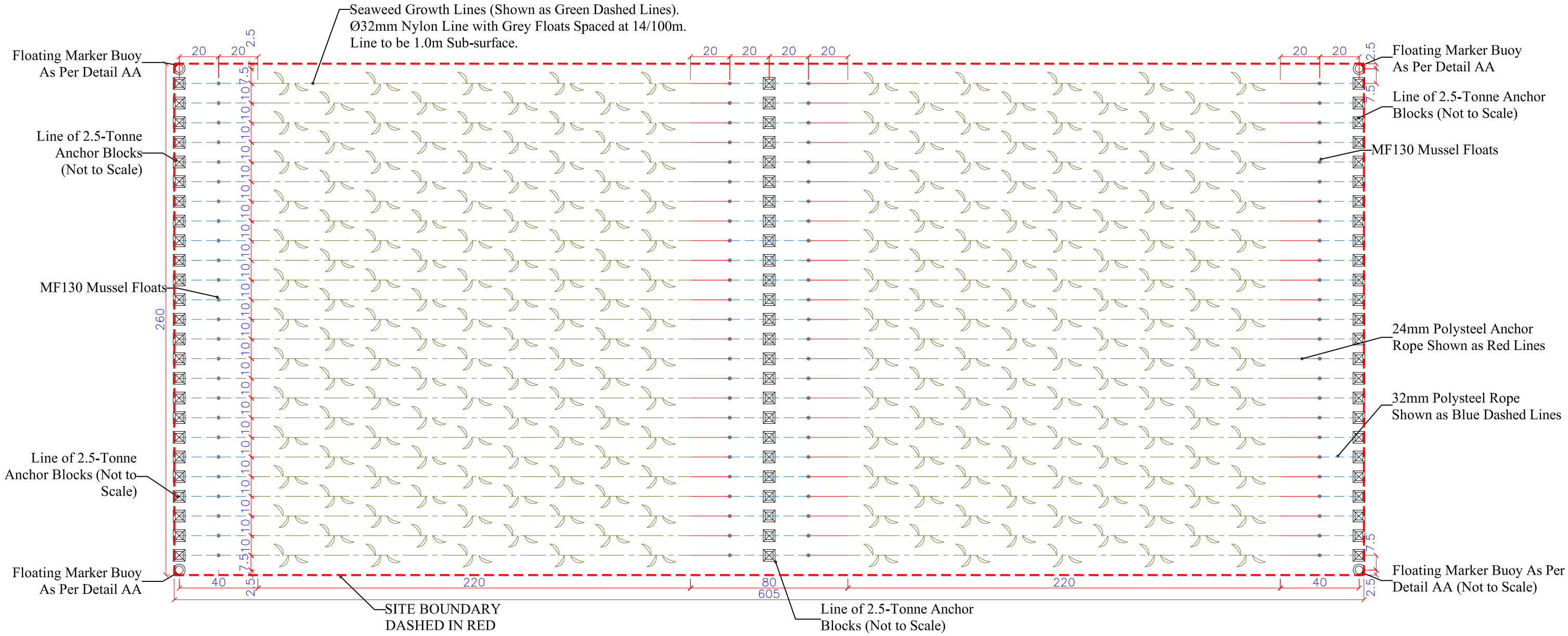
Navigation Marker buoy as each corner of the area as per C.I.L.

Notes:
1. All dimensions in metres unless noted otherwise.
2. All levels in metres related to OD Malin.
3. Co-ordinates to National Irish Grid.

Licence Area:
Licence area = 15.73 Hectares
National Irish Grid Co-ordinates
1. 80390E 36270N
2. 80935E 36532N
3. 81048E 36297N
4. 80503E 36036N to first mentioned point.

Marker Beacons:
St. Andrews Cross special beacons located at corners of site.

Client: Bantry Marine Research Station Ltd.	Date: October 2021
	Scale: 1:500 @ A1, 1:1000 @ A3
Project: Aquaculture Licence - Dooneen Point	Drawn By: E.O.M.
	Checked:
Drawing Title: Proposed Section Detail	Dwg No.: DP-S0-02
	Rev.



PROPOSED APPLICATION SITE LAYOUT
SCALE 1/1000

TOTAL SITE AREA = 157,300 SQ.m / 15.73Ha

This drawing is for illustration purposes only.
Not to be used as a working drawing.

Notes:
All anchor blocks to be 2.5 tonne concrete with 32mm polysteel rope to surface.

Navigation Marker buoy as each corner of the area as per C.I.L.

Notes:
1. All dimensions in metres unless noted otherwise.
2. All levels in metres related to OD Malin.
3. Co-ordinates to National Irish Grid.

Licence Area:
Licence area = 15.73 Hectares
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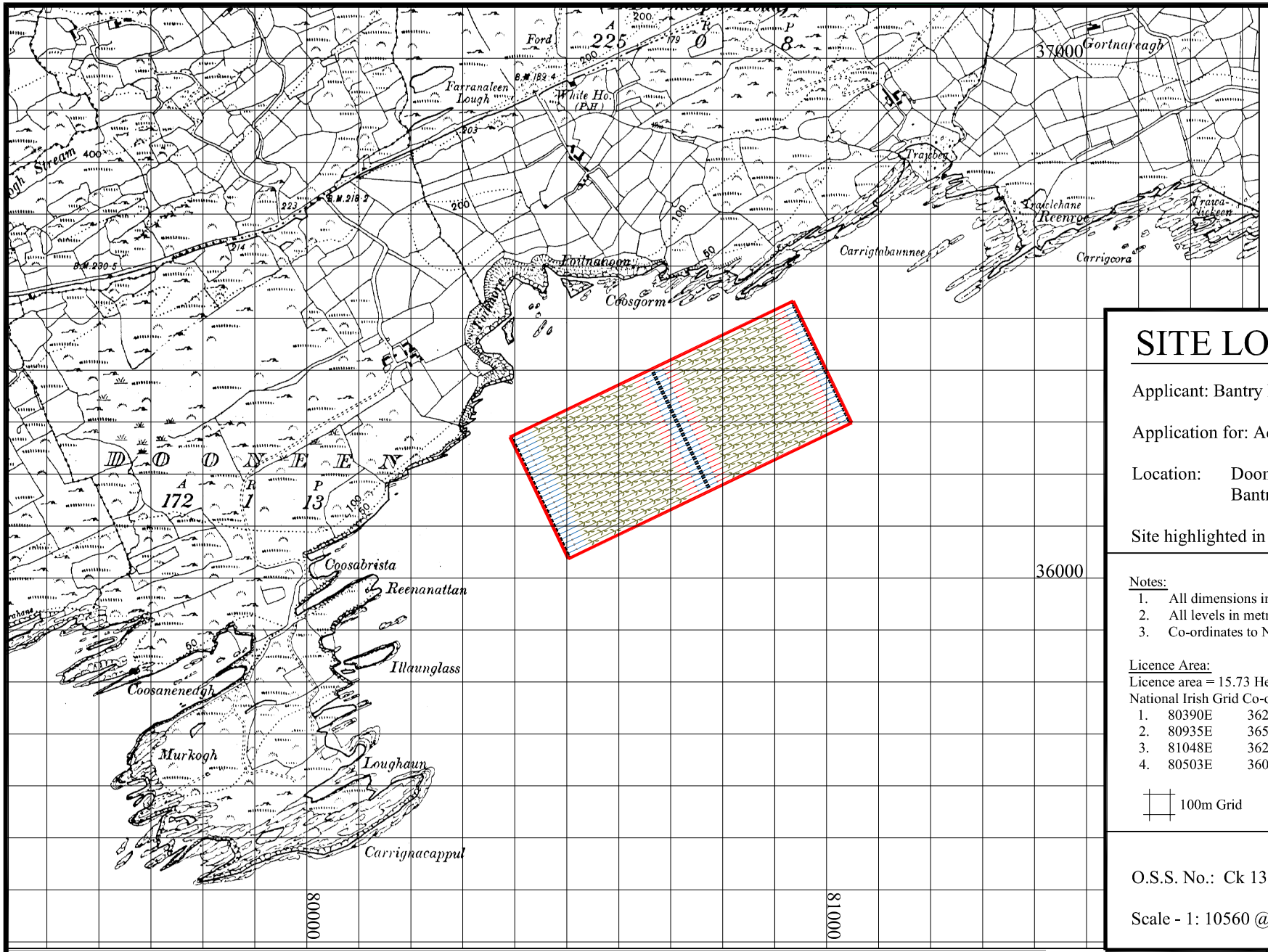
2. 80935E 36532N
3. 81048E 36297N
4. 80503E 36036N to first mentioned point.

Marker Beacons:
St. Andrews Cross special beacons located at corners of site.

Client: Bantry Marine Research Station Ltd.	Date: October 2021
	Scale: 1:2000 @ A3
Project: Aquaculture Licence - Dooneen Point	Drawn By: E.O.M.
	Checked:
Drawing Title: Proposed Layout Plan	Dwg No.: DP-PD-01
	Rev.



PUBLISHED: 16/01/2022
ORDER NO.: 50243776_1
MAP SERIES: 6 Inch Raster
MAP SHEETS: CK138+138A

SITE LOCATION MAP

Applicant: Bantry Marine Research Station Ltd.

Application for: Aquaculture Licence

Location: Dooneen Point, Kilcrohane, Bantry, Co. Cork.

Site highlighted in red denotes application.

Notes:
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2. All levels in metres related to OD Malin.
3. Co-ordinates to National Irish Grid.

Licence Area:
Licence area = 15.73 Hectares
National Irish Grid Co-ordinates

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2.	80935E	36532N	
3.	81048E	36297N	
4.	80503E	36036N	to first mentioned point.

100m Grid Application

O.S.S. No.: Ck 138

Scale - 1: 10560 @ A4

N

0 110 220 330 440 metres
0 200 400 600 800 1,000 Feet

OUTPUT SCALE: 1:10,560

CAPTURE RESOLUTION:
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Output scale is not indicative of data capture scale.
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http://www.osi.ie; search 'Capture Resolution'

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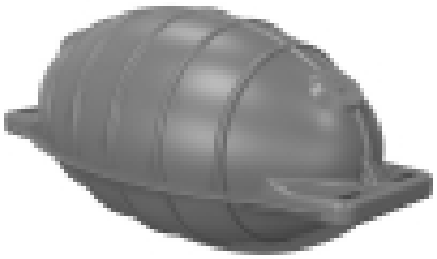
Department of Agriculture, Food and the Marine



MFL 130 (988L*580H*530W)

LD2 Buoys (note yellow image but proposed in grey) 61cm Length * 29 cm Diameter

Mooring Block single eye

Published 21st November 2022

"Determination of Aquaculture Licensing application – T05/640A

Bantry Marine Research Station Ltd has applied for authorisation to cultivate various aquatic plants using longlines on the sub-tidal foreshore on a 15.74 hectare site (T05/640A) adjacent to Dooneen Pier, along the north shore of Dunmanus Bay, Co. Cork.

The Minister for Agriculture, Food and the Marine has determined that it is in the public interest to grant the licence sought. In making his determination the Minister considered those matters which by virtue of the Fisheries (Amendment) Act 1997, and other relevant legislation, he was required to have regard. Such matters include any submissions and observations received in accordance with the statutory provisions. The following are the reasons and considerations for the Minister's determination to grant the licences sought: -

a. *Scientific advice is to the effect that the waters are suitable;*

b. *Public access to recreational and other activities can be accommodated by this project;*

c. *The proposed development should have a positive effect on the economy of the local area;*

d. *All issues raised during Public and Statutory consultation phase;*

e. *There are no effects anticipated on the man-made environment heritage of value in the area;*

f. *No significant effects arise regarding wild fisheries;*

g. *The proposed aquaculture activities do not spatially overlap with Natura 2000 sites and there should be no significant impacts on the nearest Natura site(s).*

h. *No significant impacts on the marine environment and the quality status of the area will not be adversely impacted;*

i. *The updated Aquaculture licence contains terms and conditions which reflect the environmental protection required under EU and National law."*