

Marine Construction Works/Land Reclamation/Beach Replenishment in the Territorial Sea and Controlled Waters Adjacent to Northern Ireland

Marine Licensing

Important: before completing this form, please read these notes carefully.

The following numbered paragraphs correspond to the questions on the application form and are intended to assist applicants in completing the form. These explanatory notes are specific to this application and so applicants are advised to read these in conjunction with the General Marine Licensing Guidance document. However it may be that these notes do not fully cover all the questions that you may have. If further clarification is needed please telephone us on

028 90569247 or email

MarineLicensingTeam@daera-ni.gov.uk

For fees categories please see Marine Licensing Fees Addendum

For further Guidance please refer to Marine Licensing Guidance for Applicants

EXPLANATORY NOTES

1. Project Title

Enter the name of the project.

Indicate the location of the construction project using Latitude and Longitude co-ordinates in degrees and minutes to one decimal point of a minute provided. Any distances at sea should be in nautical miles, and on land should be in miles unless otherwise stated.

Attachments required.

You must provide appropriate drawing of the proposals including a red line diagram of the proposed construction location on an admiralty chart.

2. Applicant

The person, company or organisation making the application. (The licensee(s) may be any of the following, the contractor actually carrying out the construction work, the applicant and possibly other bodies involved).

3. Agent

Any person, company or organisation acting on behalf of the applicant. They may be acting under contract (or other agreement) on behalf of any party listed in the answer to question 2, and have responsibility for the control; management or physical deposit of materials anywhere below the tidal limit of the mean high water springs (MHWS). (e.g. A consultancy company submitting the application or a contractor who will be carrying out the works.)

4. Duration of project

Details of the proposed commencement and completion dates of the works.

A licence is normally valid for 1 calendar year or the duration of the works (whichever is longer) but not normally exceeding 3 years. After this period, it will be necessary for licence holders to re-apply for a further licence to continue any ongoing works. It is the licensee's responsibility to apply for any further licences or an extension prior to the expiry of the initial licence.

5. Description and Cost of the Proposed Project

- (a) This estimate should cover only works taking place below the tidal level of Mean High Water Springs (MHWS) and should take into consideration the cost of materials, labour, fees etc.
- (b) Where the project is expected to take longer than 1 calendar year, this description must detail which elements of work are to be undertaken in the first 12 months, with an outline of the schedule for each further 12 month period of work. (The method of work etc. should be described in the answer to question 7.)
- (c) Select the options which most appropriately describe the type of work proposed. Where the project involves a number of elements, please tick each relevant box.

6. Location of Works

Include a list of the latitude and longitude co-ordinates of the boundary points of the proposed project. In a few cases, (e.g. laying of long pipelines) it may only be practicable to supply co-ordinates for the start and end points.

Latitude and Longitude: For positions read from charts of 1:25,000 scale or smaller, the format should be e.g. **55° 55'.5N 2° 22'.2W**. The decimal point specifies that decimals of minutes are used and the datum is stated explicitly.

It is important that the correct positions are included with this application, as any errors may result in the application being refused or delayed.

To supplement the information given in section 6, Department of Agriculture, Environment and Rural Affairs (DAERA) Marine and Fisheries Division requires the following to be provided with the completed application form:

- A suitably scaled extract from an Admiralty Chart which should be marked to indicate
 - The full extent of the works in relation to the surrounding area;
 - Latitude and longitude co-ordinates defining the area of operation;
 - The level of Mean High Water Springs (MHWS)
 - Any adjacent Special Area of Conservation (SAC), Area of Special Scientific Interest (ASSI), Special Protection Area (SPA)/RAMSAR or similar conservation area boundary.

DAERA Marine and Fisheries Division require electronic copies of all documents to be provided. Normally only **one** copy will be required, however if the documents are too large to send electronically then ancillary copies on CD or other electronic storage devices will be required for consultation purposes, DAERA Marine and Fisheries Division will advise the applicant accordingly.

If they are subject to copyright, **it is the responsibility of the applicant to obtain necessary approvals to reproduce the documents and to submit suitably annotated copies with the application.** Alternatively maps/drawings can be sent electronically by email.

- **Sewer outfalls, discharge pipes for storm overflow and industrial waste etc.** The size and description of the pipe should be shown on the longitudinal sections and also details of any supports, foundations, methods of jointing and details of any tidal flaps.
- **Bridges over tidal waters:** an elevation with longitudinal and cross-sections of the bridge to a suitable scale should show the dimensions of the spans and width of piers, etc. above and below MHWS and the maximum and minimum heights of the undersides of the superstructures above MHWS. The headroom above MHWS and the width of span of the nearest bridges, if any, above and below the site should be stated.
- **Tunnels under tidal waters:** the longitudinal section of the tunnel should show the distances between the bed of the river or estuary and the top of the tunnel. Cross-sections should show the internal and external dimensions of the tunnel and particulars of construction. When a proposed future dredging level is known this must also be shown on all sections.
- **Overhead cables:** catenaries must be supplied in addition to the site plan showing the minimum clearance of the cable at MHWS and the electrical clearance allowed.
- **Marine Aquaculture:** proposals for fish farming and shellfish growing are subject to different procedures (refer to The Marine Licensing (Exempted Activities) Order (Northern Ireland) 2011).

The applicant should note that if the drawings/plans are subject to copyright, **it is the responsibility of the applicant to obtain the necessary approvals to reproduce the documents and to submit suitably annotated copies with the application.**

7. Method Statement

Please provide a full method statement, including details of any temporary structures that may be required below MHWS during the works, and the ultimate fate of the structure and material used in its construction. Details of these structures will be included in any licence that may be issued.

Proposed measures to ensure the marine environment is adequately safeguarded during the work should also be described (e.g. the method to be adopted to ensure that the loss of fine grained material is minimised during construction), as should those taken to minimise any interference with other uses of the sea or foreshore.

8. Permanent Deposits

- (a) Tick the appropriate box (es) to indicate all materials to be deposited below MHWS. If you propose using types of materials for which a specific box is not provided, please describe the nature of such material in the box marked "other".
- (b) If any of the materials to be placed below MHWS are to be brought to the site by sea, give details of the material, e.g. clean rock, and average particle size. Also indicate the vessels to be used, a chart showing the proposed vessel route to the site of the works and details of any trans-shipment areas i.e. where material may be off-loaded to smaller vessels or barges for transport inshore to the site of the works.
- (c) Where the proposed works involve beach replenishment or land reclamation, additional information is required about the material to be deposited and method of delivery. The description of material must include details of its chemical quality. Where the material has not been chemically analysed, DAERA Marine and Fisheries Division may request representative samples for analysis or require the applicant to arrange for analyses to be undertaken before the licence can be determined.

9. Temporary Deposits

If temporary deposits are required, please provide details as with the permanent deposits above. The temporary deposit location details (Latitude/Longitude) should be added to section 6 of the form, and the period of time the site will be used must be provided. If issuing a licence, DAERA Marine and Fisheries Division will include on the document details of any area that has been approved as a temporary deposit site.

10. Dredging

Indicate whether you are proposing to dredge as part of the works. A separate Marine Licence may be required. The granting of the construction licence does not imply that the dredging licence will also be granted, as different assessment criteria are used to determine each type of application.

11. Disposal of material at sea

Indicate whether you are proposing to dispose of any excess material arising from the construction work at sea. A separate Marine Licence may be required. The granting of the construction licence does not imply that the sea licence will also be granted, as different assessment criteria are used to determine each type of application.

12. Planning

If the application is subject to planning permission, please give relevant details, including planning reference number, if planning has been approved/rejected and attached a copy of the environmental statement if appropriate.

13. Statutory Consenting Powers

Please describe what (if any) statutory responsibilities you (or your client) have to consent any aspect of the project.

14. Consultation

- (a) Have the public been invited to comment on these proposals? if so to whom and what was the closing date
- (b) Have any consultation meetings been held with the public/other bodies? If so where and when?

15. Consultation with Conservation Bodies

Consenting authorities have a duty to ensure that any works will not have a significant adverse environmental impact, particularly upon designated conservation areas (e.g. ASSIs/SAC, SPA/RAMSAR sites etc) listed under The Conservation (Natural Habitats, etc.) (Amendment) Regulations (Northern Ireland) 2007. If the applicant (particularly if they have statutory powers for consenting aspects of these works) has already been in consultation with the appropriate nature conservation body – NIEA, Natural Environment Division, please supply any response that they may have given.

Any application for beach replenishment works should be cross checked as to whether the proposed site is a designated bathing water site and if so, ideally all physical works should be done outwith the Bathing Water Season (1st June to 15th September). Further guidance on the Bathing waters Directive (76/160/EEC) can be obtained from <http://www.ni-environment.gov.uk/water-home/quality/bathingqualityni.htm>

In addition, guidance can be obtained from www.foodstandards.gov.uk/ with regards to the Shellfish Waters Directive (2006/113/EC) which has parameters set to protect the water quality in which edible shellfish are grown.

16. Designated Conservation Areas

Indicate whether the proposed works are located within or close to the boundaries of a conservation area such as an ASSI, MCZ, SAC, SPA or Ramsar Site.

17. Environmental Assessment

Please indicate whether any environmental assessments have been carried out in respect of the proposed works, either under your own powers or as required by another authority. If such an assessment has been undertaken, please indicate if a copy has been provided with your application. If the statement/assessment has been completed but is not available, please provide an explanation in the space provided.

Additionally please also give details if and where a copy has been/ is being made available for public inspection.

Please ensure that you have:

- Completed **all** appropriate sections of the application form
- Signed and dated the declaration
- Provided the relevant documentation, charts and continuation sheets and
- Enclosed the correct payment (refer to fees addendum) or paid by means of BACS (if appropriate)

**Otherwise your application will be delayed or returned to you
Marine and Coastal Access Act 2009 (Part 4 Marine Licensing)**

**Application for Marine Construction Works/Land Reclamation/Beach
Replenishment in the Territorial Sea and UK Controlled Waters Adjacent to
Northern Ireland**

(Construction schemes including coast defences, beneficial uses of dredged materials, jetties, land reclamation, outfall pipes etc.)

**It is the responsibility of the applicant to obtain any other consents or
authorisations that may be required**

Under Part 4 (Chapter 5) of the Marine and Coastal Access Act 2009, information contained within or provided in support of this application will be placed on the public register unless DAERA Marine and Fisheries Division (as the licensing authority) approves the applicant's reasons for withholding all or part thereof.

Public Register

Is there any information contained within or provided in support of this application that you consider should not be included on the Public Register on the grounds that its disclosure:

- a) would be contrary to the interests of national security YES ☐ NO ☒
- b) would prejudice to an unreasonable degree your or some other person's commercial interests or those of a third party? YES ☐ NO ☒

If **YES**, to either (a) or (b), please provide full justification as to why all or part of the information you have provided should be withheld.

1. Project Title

Please give a brief identifiable description, including the location of the works.

The project aims to deploy a submersible, gravity based, foundation platform for a tidal turbine quickly and easily deployed using low cost support vessels. The hydrodynamic hull form also provides the benefit of increasing the tidal flow into the turbines increasing the revenue.

This device will be deployed at the QUB tidal test site with replica turbines that are completely fixed at a location west of Portaferry but east and in the lee of Walters Rock in Strangford Narrows.

2. Applicant Details

Title Initials Surname

Address:

17 Fair A Far Cottages
Whitehouse Road
Edinburgh

EH4 6PQ

Name of contact:
(if different from above)

Telephone number:
(inc. code)

+44 (0) 7833 387 701

Email address:

jeremy@qednaval.co.uk

3. Agent Details (if appropriate)

Title

Mr

Initials

A

Surname

McIntosh

Trading Title
(If different from above)

QED Naval Limited

Business Address:

11 Castle Street

Name of contact:
(if different from above)

Position within company
(if appropriate)

Operations Manager

Telephone number:
(inc. code)

+44 (0) 131 557 8049

Email address:

alan@qednaval.co.uk

Company Registration No.

SC 339 873

4. Duration of Project

Expected Start Date

04/09/17

Expected Completion Date

04/09/18

5. Description and Cost of the Proposed Project

- (a) Estimated gross cost of the works proposed seawards of the tidal limit of the High Water Mean Spring Tide Mark

The estimated cost of installation of the Subhub foundation structure is £45,000

- (b) Give a detailed description of the proposed schedule of work

- 1) Launch of the Subhub after transit by crane vessel in Strangford Narrow.
- 2) Moored up alongside the quay in Portferry for ballast system checks.
- 3) Towing and maneuvering trials to be carried out within Strangford Lough and then in open water at sea.
- 4) Barge and/or multicat installation vessel will be moored at the QUB tidal test site along with Subhub tethered to it/them.
- 5) Installation and recovery trials will commence over various states of the tide and conditions.
- 6) The Subhub will be left on the seabed for extended periods (weeks) whilst various other research is carried out.
- 7) Small research vessel carrying ADCP equipment will run over the Subhub being completely submerged with a clearance of at least 6m.
- 8) Small research vessel will use an observation ROV to monitor biofouling and any movement, noise and vibrations of the structure and any marine mammal behavior around the structure.
- 9) At various periods during the trials (quarterly), the structure will be completely recovered for full system tests and servicing.

If necessary please continue on a separate sheet and tick this box

☐

Types of Work Proposed

Coastal/Flood defences:

beach replenishment
 shoreline reinforcement
 flood defence
 sea defence

Slipways:

slipway
 causeway
 launching ramp

Miscellaneous:

habitat creation/replacement
 aquaculture (unless exempted)
 sea wall
 berms/wave screens
 artificial reef

✓

	sea-lock	
Harbour works:	dock wall/quay/wharf	
Navigation works:	lock gates	
	moorings (unless exempted)	✓
	buoy/navigation mark (unless exempted)	✓
	training wall/breakwater	
Land reclamation:	bunded/piled area	
	dock infill	
Intakes/outfall pipes:	intake/outfall	
Cables:	cable/subsea cable	
Pipeline maintenance:	pipe/pipeline maintenance	
Piers etc.:	bridge supports/bridge foundation	
	pier	
	jetty	
Bank stabilisation:		
Scour protection:	gabion	
	mattressing	
Barrages & island etc.	tidal barrier	
	barrage	
	sculpture, statues, fountains etc.	
	ground investigation works	
	impoundment	
Sediment manipulation	groynes	

6. Location of Works

This should include Latitude and Longitude co-ordinates, to 1 decimal minute, defining the extent of the project.

If necessary, please continue on a separate sheet and tick this box

☐

7. Method Statement

The Subhub is a submersible, steel, transit and installation barge which will be delivered to Strangford Lough ready to start operations. It is a complete and temporary structure which is used to carry a payload of turbine equipment and solid ballast used as a gravity base to overcome the combined tidal and wave forces.

The installation process is quite simple since it uses the power of buoyancy and the inherent submersible stability characteristics of the Subhub once submerged. The whole ballasting operation is controlled from the installation vessel which opens valves in the bottom of the Subhub to let the water in and then vent valves in the top of the Subhub are opened to let the air out causing the tanks to fill with water.

The descent to the seabed is controlled by flooding only the neutral ballast tanks where the platform becomes weightless. Then the trim tanks are used to control the attitude of the vessel and the rate of decent.

Once on the seabed then all the rest of the tanks are flooded to take of its operational condition.

Subhub is retrieved by picking up the seabed manifold and connecting all the pneumatic, hydraulic and electrical instrumentation system to it opening the seawater inlet valves and blowing high pressure air into the tanks to displace the water so Subhub becomes buoyant again and rises to the surface. A heavy lift vessel will be on standby to move the device in calm water

If necessary, please continue on a separate sheet and tick this box

☐

8. Permanent Deposits

(a) quantity of permanent materials to be deposited below HMWS tidemark:

Timber (m ² or tonnes)	N/A.....
Iron/Steel (tonnes)	N/A.....
Plastic/Synthetic (m ²)	N/A
Silt (m ³)	N/A
Sand (m ³)	N/A
Concrete (m ³)	N/A
Concrete bags/mattresses	

(Confirm number, dimensions
& total volume m³)

N/A

Stone/Rock/Gravel
(size range and volume m³)

.....

If 'other' please describe below

If necessary, please continue on a separate sheet and tick this box

(b) for work involving salt marsh feeding, beach replenishment or land reclamation
please provide the following information relating to the material to be deposited:

Quantity (tonnes)

Nature of Material
(e.g. sand, silt, gravel etc.)

Source:
(if sea dredged please state
location of origin)

Particle Size

Has the material been chemically analysed? Yes ☐ No ☐

If Yes, please include the analysis data with your application.

9. Temporary Deposits

Will there be a need to make any temporary deposits of material below HMWS tidemark
during the works

Yes ☒ No ☐

(a) quantity of temporary materials to be deposited below HMWS tidemark:

Timber (m² or tonnes)

Iron/Steel (tonnes) **165 tonnes**

Plastic/Synthetic (m²)

Silt (m³)

Sand (m³)

Concrete (m³)

Concrete bags/mattresses
(Confirm number, dimensions
& total volume m³)

Stone/Rock/Gravel
(size range and volume m³)

If 'other' please describe below

If necessary, please continue on a separate sheet and tick this box

10. Dredging

Do you intend to apply for a licence to dredge as part of the works?

Yes ☐ No ☒

If Yes, please indicate the location
of the dredging and nature of material

11. Disposal of Material at Sea

Do you intend to apply for a licence to dispose at sea material dredged as part of the works?

Yes ☐ No ☒

If Yes, please indicate:
Nature and quantity of material
(sand, gravel, silt, clay, rock etc.)

12. Planning

Is this project subject to a planning application?

Yes ☐ No ☒

If Yes, attach a copy of environmental statement (if appropriate) and indicate what stage the application for planning permission is at (i.e. approved, awaiting notification, rejected)

.....

13. Statutory Consenting Powers

Do you, or (if appropriate) your client, have statutory powers to consent any aspect of this project?

Yes ☐ No ☒

If Yes, please give details

14. Consultation

(a) Have the public been invited to submit comments? YES ☐ NO ☒
If YES, how and where?

(b) Have any consultation meetings been held? YES ☐ NO ☒
(with the public or other bodies)

If necessary please continue on a separate sheet and tick this box

☐

15. Consultation with Conservation Bodies

Please provide details of any consultation that has taken place with NIEA Natural Environment Division and, if appropriate, include copies of any correspondence with your application.

If necessary please continue on a separate sheet and tick this box

☐

16. Designated Conservation Areas

Are any parts of the proposed work located within the boundaries of a designated conservation area? YES ☒ NO ☐

If **No**, please indicate approximate distance of the disposal operation from the nearest designated conservation area.

 kms

17. Environmental Assessment

Has an environmental assessment been undertaken to support any application in respect of the works, your own statutory powers (if applicable) or any other reason?

YES ☐ NO ☒

If **YES**, is a copy of the assessment included with this application?

YES ☐ NO ☐

If the assessment has been undertaken but has not been included with the application, please provide an explanation below.

Is the environmental assessment available for public inspection?

YES

☒

NO

☐

If YES at what locations:

Portaferry and Strangford Lough

Declaration

I declare that the information given in this form and related papers is to the best of my knowledge and belief true.

WARNING

It is an offence under the Act under which this application is made to fail to disclose information or to provide false or misleading information.

Signature of applicant:
(or agent acting on behalf of applicant)

[Redacted Signature]

Date:

29/08/17.

Name (Block Letters):

JEREMY SMITH.

Position within company:
(if applicable)

MANAGING DIRECTOR.

PLEASE CHECK CAREFULLY THE INFORMATION YOU HAVE GIVEN AND THAT ALL ENCLOSURES (INCLUDING COPIES) HAVE BEEN INCLUDED

Application Checklist

- Completed application form
- Project drawings (GA of structure, Layout of seabed and test site plan)
- Method statement
- Maps/charts
- Additional environmental information e.g. photographs, environmental impact assessment etc.
- Payment

