

FS007084 Prescribed Bodies Consultation

Foreshore Licence Application to carry out annual Maintenance Dredging at Maheerorty Pier and associated Beach Nourishment of nearby Dooley Beach, Donegal County Council

- **Engineering Inspector**
- **Inland Fisheries Ireland**
- **Marine Survey Office**
- **Environmental Protection Agency**
- **Marine Institute**
- **Sea Fisheries Protection Authority**
- **Underwater and Archaeology Unit/National Parks and Wildlife Services**
- **Department of Agriculture, Food and the Marine**

Engineering Report

Re FS007084-Foreshore Licence Application to carry out annual maintenance dredging at Maherarorty Pier and associated Beach Nourishment of nearby Dooley Beach-Donegal Co Co

In relation to the above Donegal Co Co, have submitted a foreshore licence application in connection with the above and I comment as follows:

SUBMITTED DOCUMENTATION

The following documentation, contained within a bound A4 document, has been submitted in support of this Foreshore Licence Application:

- Completed Foreshore Licence Application dated 5/1/2021
- Methodology(Method Statement) –ref Section 3.0 of Application Document dated Jan 2021
- “Marine Sediment Characterisation Magheraroarty Pier Dredging and Disposal Operation” dated February 2020 and prepared by Aquafact (Consultants)-includes sediment sampling and analysis-
- Stage 2 “Natura Impact Statement” dated December 2020, prepared by Greentrack Environmental Consultants
- Stage 1 “Screening Report for Appropriate Assessment” dated November 2019, prepared by Greentrack Environmental Consultants
- “Marine Intertidal Survey to inform Appropriate Assessment ” dated 7th September 2020 ,prepared by Ecofact Environmental Consultants
- Correspondence with Marine Institute (ref correspondence dated 18/12/2019) re “Sampling/analysis requirements for Dredged sediments.(see Appendix 1 of the ‘Marine Sediment Characterisation Report’)
- Correspondence with NPWS (ref correspondence dated 20/12/2020) in relation to requirements to prepare an NIS and a brief outline on issues to be addressed.
- Drawings/Maps as follows:
 - Drawing No 001 ‘Magheraorty Harbour Location Map’ at scale 1:20000 on A3
 - Drawing No 002 Rev 1 ‘Magheraorty Harbour Dredging, Traffic and Nourishment Locations’ at Scale 1:5000 on A3
 - Drawing No 200a Rev 1 “Magheraorty Harbour Dredging Location” at scale 1: 2000 on A3 (dredge area delineated in red outline)
 - Drawing No 003 “Magheraorty Admiralty Map” NTS
 - Drawing No 004 “ Foreshore Licence Map” at Scale 1:5000 on A3 (with proposed dredge and nourishment areas delineated in red outline)

- Photographs(ref Plates 1-15 in the “Marine Intertidal Survey—‘document)
- EPA Dumping at Sea Application Material Analysis Report form data

BACKGROUND HISTORY

Magheraroarty Pier is in North Donegal and was extended in the early 2000’s by Donegal Co under licence/lease from the then DCMNR. It was recognised that the approach channel would require dredging annually due to the large movement of sediments from west to east which has been exacerbated in recent years due to the increase in the frequency and intensity of storm events.

The maintenance dredging and beach nourishment activities have been undertaken at Magheraroarty since 2008 initially under DAS Permit No 389, issued by DAFF. then by EPA (the established regulating authority for DAS Permits who acquired Permit No 389 in June 2011, renaming it S0014-01.) This Permit was valid until 10/3/2013 but was granted an extension until 10/5/2013 (to facilitate that year’s campaign which takes place in March/April of each year). The EPA then advised that the legislative changes under Foreshore and DAS(Amendment) Act 2009, meant that the works at Magheraroarty no longer required a DAS Permit, but did require a Foreshore Licence from DOECLG hence the subsequent Foreshore Licence for 2014 to 2019 which was issued by DECLG in 2014 (Ref FS005988). The present Foreshore Licence Application is in effect an application for a continuation of this Licence for the next 5 years from 2021-2026.

Due to winter storms and Covid-19 restrictions in 2020, there was delays to the submission of this Foreshore Licence Application to cover the 2020 campaign (normal dredging occurs in March/April in each year) which meant that there was a requirement to submit a separate urgent application to undertake emergency dredging (5000T) at the Pier in June 2020 (Ref FS 0071040) (This was to allow for the continued safe navigation/berthing at the pier and ongoing operation of Ferry and other users). Both Engineering and Marine Institute had no objections to this Approval being granted as it was in effect of immediate necessity, could be dealt with as a continuation of the Existing Licence, was considered not to impact on marine environment and was in the public interest. (see comments from MI and Engineering dated 25/5/2020). A Foreshore Licence was granted for this operation (ref FS007140 3/6/2020 – 6/6/2020)

The present Foreshore Licence Application is in effect an application for a continuation of the 2014-2019 Licence (and gap year 2020 for emergency dredging as mentioned above) for the next 5 years from 2021-2026.

PROPOSED SCHEME

The proposed works comprise:

- **Maintenance Dredging of Magheroarty Harbour**
- **Beach Nourishment on Dooley Strand**

It is proposed to undertake annual maintenance dredging of Magheraroarty Harbour in order to maintain navigable depths at -2.5m for the continued use of the harbour by the Tory Island ferry,

commercial fishing boats and charter boats in the local area. The works also comprise the relocation of uncontaminated material from the area of accretion at Magheraroarty Harbour to an intertidal area on Dooley strand which suffers erosion from wave and wind action and longshore drift. The area of the Harbour to be dredged, incorporating turning circle and berthing pockets is indicated on Drawing No 002a covering an area of app 6200m²(0.62ha). The agreed location for the beach nourishment is on Dooley Strand and is illustrated on Drawing No 002, incorporating an intertidal area of app 12.7 Ha .The quantity of material, to be removed from the Harbour, has increased over the past number of years from 9385T in 2010 to 16950T in 2012 , to 20000T (DAS Permit Extension, as granted by the EPA) , and maintained at a maximum of 20000T in the Foreshore Licence granted for 2014-2019 , and which is also now being sought on an annual basis for the current foreshore licence application covering the next five years to 2026 . The anticipated dredged volume may vary from 10000T to a maximum of 20000T. The increase has been attributed to the more frequent and intense storm occurrences in this area over the more recent years.

The ' Methodology' (ref Section 3.0 of Application Document dated Jan 2021) effectively a Method Statement, provides details as to how the project works will be undertaken for both elements of the scheme, this can be summarised as follows:

The sand will be excavated by 360 degree tracked excavators working at low tide and loaded on articulated dumpers to be brought to the intertidal beach nourishment site where it will be spread evenly also using a 360-degree low bearing tracked excavator. A dedicated trafficked area along the upper foreshore, for machinery movement between dredged site and nourishment site, is shown on Drawing No 002. Previous campaigns have demonstrated that the deposited sand on the foreshore is generally levelled by the tidal action with the material naturally dispersing on incoming and outgoing tide. The work is carried out during a low tide over a 5-6-day period coinciding with the Spring tide in March/April each year to give best access to the entire berthing area.

The work is restricted by tide therefore there is no unsightly build-up of sediment along Dooley Strand during the 5-6-day period of the works. Access to this section of the works (deposition site) is restricted to leisure users (walkers etc.) during the course of the works to ensure the safety of the public. Walkers are channelled along the upper side of the beach by use of physical barriers. The dump trucks have a designated route along the foreshore which is marked out and the sand dunes are unaffected by the works. This will be achieved by the provision of appropriate barriers and signage for the duration of the works (ref "Methodology" section 3.0 of Application Document). These minor restrictions will apply for app 5 hours per day over the 6-day period of the works.

Access for berthing will be restricted during the course of the works., however fishermen and other boat users will not be affected as these works will be carried out pre-season(if approved for March/April window) The ferry service will only be restricted for the period of low tide and will otherwise operate uninterrupted. All locals including land owners, fishermen and the general public will be advised of the works in advance through the local media and signage. The amount of material to be moved will kept to the minimum amount which will enable access to the pier. No over excavation or widening of the access channel will be undertaken.

It is reasoned the amount of sediment transported and deposited in the harbour is proportional to the speed of the flow of water along the beach. Therefore large amounts of sediment are deposited within the harbour during storm events. Although most of the sediment is deposited along Dooley Spit

,the sediment deposited within the harbour is substantial ,reducing navigable depths for the Tory Island Ferry and commercial fishing fleet ,hence the need for the proposed development (ref NIS Section 5.6.1 "Sediment Transport").

With regards to the potential release of contaminants from sediments into surrounding environment, it is noted that the material has been determined, following sampling and analysis, to be clean brown sand. The sediments analysed were below the lower Irish action limits for organochlorines, PCB's, total extractable hydrocarbons, organotin and < 16 Polycyclic aromatic hydrocarbons (PAHs) .Therefore sediments within the dredge site are not considered to pose any risk of significant adverse effects to marine water quality (ref NIS Section 5.6.1 "Sediment Transport " pg. 25 and the Ecofact "Marine Intertidal Survey –document dated 7th September 2020)

These works are necessary to maintain safe access to navigation of vessels operating at Magheraorty. Access to the pier and beach will be restricted during the works for the health and safety of the general public

TIMING OF WORKS

It is anticipated that the works will continue to be carried out annually during March/April for each year. This is considered the optimum time to remove material deposited from winter storm events, and ensure navigable depths are reinstated for the busy summer season. Based on previous campaigns, it is anticipated that it will take one shift to remove app 2000t-4000t of sand from the harbour and deposit it on the foreshore. Therefore, each annual campaign should not take longer than 5-6 days to complete (a shift equates to tidal work during 1 No 24hr day). Shifts may not be successive due to tidal and weather constraints at the time of the works. The emergency dredging last year was carried out in June as explained earlier. If there is slippage to the date of approval of this permit it is suggested that a time period for 2021 campaign can be set back to a suitable date in Q2/Q3 beyond whenever the Consent is in place on a once off basis in order to accommodate this year's campaign within the terms of the 2021-2026 Licence- see proposed Site Specific Condition 19 below-(when/if granted).

IMPACTS ON NATURA 2000 SITES

A detailed review of the NIS as submitted by the Applicants will be undertaken by the Departments Environmental Consultants in undertaking the Appropriate Assessment on behalf of this Department as the Competent Authority for this project. Therefore the following is an outline summary of the findings as presented in the application documents

The works are located within a Natura 2000 designated site-Ballyness Bay SAC (Site code 001090), and close to the Falcarragh to Meenlaragh SPA (Site code 004149). Previously dredged material was disposed on lands but this method was not acceptable to the NPWS, who were of the view that the permanent removal of sediment from the coastal system, coupled with increased storm activity, could potentially impact upon the Ballyness Bay SAC particularly on the Dooley sand spit/dune system. The NPWS accordingly advised that any material removed from this system must be deposited in an area that will maintain the natural processes occurring along the coastline, hence this proposed beach nourishment scheme which is in effect an SAC management scheme. The beach nourishment activities will replenish eroding sand in the intertidal zone at a point app midway along Dooley Strand. The beach

nourishment is essential in sustaining the integrity of the SAC as the permanent removal of material from the SAC will have a detrimental impact on the Natura 2000 site as a whole.

Greentrack (Environmental Consultants) undertook an Appropriate Assessment Stage 1 Screening exercise (ref 'Screening Report for Appropriate Assessment 'November 2019). This determined that as the Falcarragh to Meenlaragh SPA is only designated for the Corncrake; it can be screened out as there was no suitable habitat for this species in or around the subject site location. All other Natura 2000 sites further away have no avenue of connectivity to the subject site and therefore were not considered further. The subject site is within the Ballyness Bay SAC which was screened in for further studies.

Ballyness Bay SAC (001090) contains several important coastal habitats listed on Annex I of the EU Habitats Directive, including the priority habitat, fixed dunes, the site is also an important wildfowl site.

The following are the Qualifying Interests of the Ballyness Bay SAC:

- (1130) Estuaries
- (1140) Mudflats and sandflats not covered by seawater at low tide
- (2110) Embryonic shifting dunes
- (2120) Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes)
- (2130) Fixed coastal dunes with herbaceous vegetation (grey dunes)
- (2190) Humid dune slacks
- (1013) *Vertigo geyeri* (Geyer's Whorl Snail)

Map 4 (ref 'Screening Report for Appropriate Assessment') shows the subject site in relation to these qualifying interests. An assessment of the likely significant effects is provided in section 6 with particular reference to Table 6.1 "Site Description and Screening Matrix " which indicated that with the exception of Mudflats and Sandflats not covered by seawater at low tide(1140), and Embryonic Shifting dunes (2110) , the proposed works will not pose any significant threat to the other qualifying interests as there is no avenue of connectivity from the subject site to these qualifying interests , therefore they are not considered further.

Embryonic Shifting dunes are located adjacent to the subject nourishment area, however all sand for the beach nourishment, will be dredged from the pier and no sand will be removed from this habitat to facilitate the beach nourishment process, therefore there is no significant threat posed to this qualifying interest.

The subject site is located on a designated mudflat and sandflat and the Screening Assessment concludes that this qualifying interest could be damaged by mechanical activity during the transportation of sand by dump trucks to the nourishment site. Therefore, it is deemed that "the proposed development could pose a significant threat to this qualifying interest". The Screening Report therefore concluded that on this basis that *"due to the scale, nature, and location of the proposed project there could be a significant negative effect on the qualifying interest of Mudflats and Sandflats not covered by seawater at low tide (1140). This qualifying interest has the potential to be damaged by mechanical activity during transportation of sand by dump trucks to the agreed site"*

It therefore considered that a stage 2 Appropriate Assessment is required i.e. the preparation of an NIS

Having reviewed the Application this Department Environmental Consultants in their independent Appropriate Assessment Determination of the Project ,on behalf of the Department , are likely to agree that the project either individually or in combination with other plans and projects, is likely to have a significant effect on the Ballyness Bay SAC and so a Stage 2 Appropriate Assessment is required.

On this basis the Applicants Consultants prepared and submitted an NIS for this project (ref 'Natura Impact Statement' dated December 2020). This was prepared with input from NPWS (ref Correspondence with NPWS -dated 20/12/2020- in relation to requirements to prepare an NIS and a brief outline on issues to be addressed.)

Review of NIS

A detailed review of the NIS will be undertaken by the Department's Environmental Consultants as part of their preparation of an Appropriate Assessment Determination for this Department.

The key findings and conclusions from this NIS can be summarised as follows:

Table 3.2 shows all Natura 2000 Sites within zone of Influence of this development (15km) and outlines significant threats to the integrity of these sites.

Ballyness Bay SAC and Falcarragh to Meenlaragh SPA are screened in for further studies due to potential significant threats to the integrity of both these Natura 2000 sites as a result of the proposed development.(Map 3 shows the location of the proposed development relative to these Natura 2000 Sites)

Tables 6.1 and 6.2 have detailed all qualifying interests, general threats and potential threat from proposed project on the Ballyness Bay SAC (0.01090) and the Falcarragh to Meenlaragh SPA (004149) This screening matrix has established that the proposed project could have a negative effect on the qualifying interest of the Ballyness Bay SAC: **(1140) Mudflats and sandflats not covered by seawater at low tide**

The project directly affects 13.32ha of the c1000ha Ballyness Bay SAC Coastal Cell comprising a relatively small proportion of the SAC at 1.33%..Therefore the project as described will Impact a relatively small proportion of the SAC.

It is deemed that the proposed development could:

- a) Significantly damage/destroy or result in the loss of the Qualifying interest habitats and species associated with the Ballyness Bay SAC as a result of the footprint of the development or inappropriate construction techniques.
- b) Significantly damage /destroy the habitat of bird species, which are species listed in Annex I of the EU Habitats Directive (Council Directive 92/43/EEC on the conservation of natural habitats and of wild flora and fauna)

Table 7.1 outlines a matrix of threats, source of threats and recommended mitigation measures where applicable.

The potential threats examined with regard to “Pre Development”, “Dredging and Deposition of Dredged material” and “In Combination” phases were as follows:

- Reduction in SAC habitats(habitat loss and habitat alteration)
- Water Quality Impacts (water resource quality and impact to water quality)
- Habitat and species fragmentation and the introduction of invasive alien species to the SAC (species disturbance and species displacement)
- Displacement of birds
- Increase the risk of water pollution, accidental spillages including siltation and negative impact on water quality

A more detailed review of the potential sources for these threats is provided with reference to Table 7.1

The material for disposal is recently deposited sand which has been transported along Dooley Strand to the sheltered harbour area. The results of the analysis of the sediment characteristics within the dredged zone has determined that the material is clean brown sand which is uncontaminated and is not considered to pose any significant risk to the surrounding environment. The proposal will not alter the sediment budget within Dooley Strand. The deposition of dredged material in the area for the beach nourishment will restore sediment to the strand that has been trapped by the physical barrier of the pier.

The nourishment site is app 0.59% of the SAC Area and 7.3% of the sandy shore area in Dooley Strand

There is significant bird activity in and around the project site areas. Machinery noise may cause some localised disturbance but this should not be significant as the birds have large areas to move around. However, if there is any change in bird activity time restrictions on dredging activities may apply (see mitigation measure ‘VIII’and’ IX’ below)

Mitigation Measures (ref Table 7.1 in NIS)

A series of recommended Mitigation Measures to eliminate any potential threat to the qualifying interests of the Ballyness SAC from the proposed project are outlined in Table 7.1 which can be summarised as follows:

- I. An Ecological Clerk of Works (ECoW) to be appointed for the duration of the development and to be involved in overseeing the implementation of all the mitigation measures as outlined in Table 7.1 and providing appropriate advice /direction in this regard in consultation with “all personnel” involved in the dredging/nourishment operations. The haul routes to the beach nourishment area to be agreed in consultation with the ECoW taking account of the conditions at that specific time. All personnel involved in the dredging/nourishment to be briefed by the ECoW prior to works commencing.
- II. Dump trucks, to haul dredged material, to be fitted with low profile tyres prior to entering the foreshore. Dump trucks to follow pre agreed haul route to the area for deposition/nourishment.
- III. The minimum amount of material to maintain -2.5m CD to be dredged annually. Excess material removal to be avoided.

- IV. Dredged material to be deposited evenly across the nourishment area not exceeding a height 20mm above the surrounding ground level. No sediment to be removed off site in order to ensure that the sediment budget at Dooley Strand is not affected
- V. When idle, plant to be stored in areas less susceptible to pollution incidents or on dedicated hard standing areas far away from watercourses. Static plant to have drip trays underneath to prevent ground contamination. Spill kits to be available in event of any accidental oil spillage. Prior to bringing plant on site, checks for oil/fuel/water leaks are to be conducted in the adjacent car park.
- VI. Refuelling of plant to be undertaken in a designated area with impermeable surface located as far away from watercourse as practical. Plant to be thoroughly inspected and serviced before the commencement of works to ensure it is working efficiently and sustainably.
- VII. The works to be conducted by suitably qualified and experienced individuals.
- VIII. The ECoW to advise the Contractor if there is any change to bird activity that may require a time restriction to be placed on dredging activities.
- IX. Timing of works is to take place after 11.30 am and is not to exceed 5 days in early to late March annually to minimise disturbance to local bird species. Mobile plant to have noise emission levels that comply with limiting levels as defined in EC Directive 86/662/EEC and any subsequent amendments. Any plant that is used intermittently must be shut down when not in use to minimise noise levels. Mufflers must also be applied to all machinery in order to further minimise noise levels.
- X. Plant used should be thoroughly cleaned before entering and prior to leaving the site,

These Mitigation measures can be considered reasonable and I am satisfied that if they are adopted there should be no significant impact to the Qualifying Interests and Conservation Objectives of the Ballyness Bay SAC and indeed the wider marine environment. This is a qualified opinion obviously dependent on the considered views of the Departments Environmental Consultants in their review of the NIS and Appropriate Assessment Determination of the project. The implementation of these Mitigation Measures can be set as a condition of the Foreshore Licence when/if granted subject to views and recommendations of the Department's Environmental Consultants in this regard.

In-Combination Effects with other planned projects

Ionad Pobal Rabhairtaigh, located adjacent to subject site, were granted Planning Permission on 13/8/2019(ref 19/50962) to extend the existing car park and construct a children's play area. A NIS had been submitted along with this proposal including the assignment of an Ecological Clerk of Works to oversee this work. These works have not yet begun but is unlikely to have any significant in-combination effects with this project if all mitigation measures and best practice included in the NIS are implemented

Seasonal activity in and around Magheraority Pier can become very busy during the tourist season. However no significant increase in the volume of boat activity is predicted. All commercial boating activity will be subject to industry guidelines and best practice No mitigation is required regarding this in combination effect. Therefore this in-combination effect it is not considered significant

Conclusion to NIS (ref Section 8)

The NIS has been prepared with the best scientific knowledge on the current proposal and associated works that is available to the Consultants at time of preparation.

The NIS concludes that due to the small scale and nature of the project, the proposal as detailed will have no likely or significant negative impact on the Ballyness Bay SAC Site No 001090 if all mitigating measures as outlined in Table 7.1 are implemented. The proposed beach nourishment will assist in sustaining the qualifying habitats and achieving the conservation objectives of the Ballyness Bay SAC.

This NIS concludes that “the proposed development, with the implementation of described mitigation , will not impact the conservation objectives of this Natura 2000 site and will not negatively affect the integrity of the Natura 2000 network” .

The Department’s Environmental Consultants will be undertaking its own Appropriate Assessment of this project ,for this Department as the Competent Authority , including specifically a review of the NIS as submitted by the Applicant and is likely to reach a similar conclusion that subject to the implementation of all of the Mitigation Measures as set out in Table 7.1 that there will be no significant impact to the Qualifying Interests and Conservation Objectives of the Ballyness Bay SAC as a result of the proposed Dredging and Beach Nourishment operations at Magheraorty Pier and Dooley Strand.

IMPACTS ON OTHER USERS OF HARBOUR AND BEACH

Marine activity in the area comprises:

- *Tory Island Ferry*
- *Local Fishing Fleet*
- *Charter Boats*
- *Pier with adjacent beach has seasonal recreation use*

Marine activity may be affected during the course of the dredging works which are anticipated to be completed in 10 shifts (effectively 5-6 days but not necessarily consecutive).

The main impact will be on berthing and launching activities of the Tory Island ferry, fishing fleet (two commercial vessels use the pier) and charter boats using the Harbour during the course of the works. Various seasonal fishing vessels and leisure craft may also use this facility.

Access for berthing will be restricted during the course of these works, however fishermen and other boat users will not be affected as these works will be carried out pre-season. Commercial fishing vessels also can berth at Bunbeg during the course of the works.

The Tory Island Ferry operates daily services between Magheraorty and Tory Island comprising 3 no. berthing and 3 no. launching activities per day. The Ferry service will only be restricted for the period of low tide and will otherwise operate uninterrupted. The Tory Island Ferry service will alter its timetable for the duration of the dredging works.

There is no aquaculture activity within the area due to its exposure to Atlantic waves. Nearby Ballyness Bay has recently been approved for the cultivation of pacific oysters and Clams and this may impact on future dredging campaigns. Lobster and Brown Crab are fished off shore from this location and will

not be impacted as these works will be carried out in advance of the fishing season. Consultation with aquaculture operators and fishermen will take place in advance of the works.

All locals, including landowners, fishermen and the general public, will be advised of the works in advance through the local media and signage.

The appointed Contractor will inform all those associated with marine operations in the area of their proposed schedule and will if required accommodate berthing and launching of vessels using the harbour.

As well as posting notices on site and using local radio, representatives from Donegal Co Co will be made available if required to inform the local community of the proposed works and answer any queries that they may have in relation to the works.

CONCLUSION RECCOMENDATIONS

Engineering Division is satisfied that subject to the mitigation and harbour management measures proposed there should be minimal impact to fisheries, navigation or the environment. In particular, it is noted that procedures will be put in place to maintain the Tory Island ferry crossing at all times throughout the dredging works and that the NPWS have been supportive of the beach nourishment element in order to minimise impact to the Ballyness SAC. In terms of the beach nourishment it is noted that the material levels out with the tides however as from previous technical reports, it would be advisable to ensure that it is spread evenly and as thinly as possible and in any event at a depth not exceeding 100mm with well graded sides. This is important to protect the public walking along the beach from vehicle and trip hazards. Signage explaining the activity should be provided and additional safety signage erected while work is on-going. Consideration should be given to marshalling or cordoning off the deposition site. The tide should be permitted to wash over the levelled in-filled area several times and inspected between each tide before public access is permitted in order to ensure that the sand is sufficiently compact and safe to walk on. It is noted from the submitted documentation that in relation to previous campaigns, the mainstay of these measures are being undertaken but a suitable condition should still be included in the Foreshore Licence to sustain this position.

Members of the public must be protected at all times during the course of the works and the council should give due consideration to closing the pier during dredging operations if from a safety point of view this is merited (again from the submitted documentation there appears to be leverage to do this if required).

In terms of the beach nourishment, as with previous campaigns, the beach requires a survey prior to dumping operations being undertaken. The beach should be surveyed in cross sections at regular distances. In previous DAS Permit (ref Condition 6 of Permit No 389) there was a requirement to undertake a series of post dumping surveys at bi monthly intervals to establish the fate of deposited material, however from previous discussions with Donegal Co Co this is now a well-established activity and they have indicated that only one post survey should now be necessary for this purpose. This is considered acceptable, and an appropriate condition can be included in the Foreshore Licence.

In conclusion Engineering inspectorate is satisfied that the proposed works will not impact on fisheries, navigation or the marine environment and subject to mitigation measures proposed, will not

impact on any Natura 2000 site.(also pending view of the Departments Environmental Consultants in this regard) . Therefore, Engineering has no objection to the granting of a foreshore licence for the maintenance dredging of Magheraroarty Harbour and associated beach nourishment at Dooley Strand subject to the following conditions:

1. **The Licensee shall use that part of the Foreshore the subject matter of this licence for the purposes as outlined in the application and for no other purposes whatsoever.**
2. **The Licensee shall notify the Department of the Housing Local Government and Heritage at least 14 days in advance of the commencement of the works on the foreshore.**
3. **The Licensee shall carry out the works in conformance to the "Methodology" as outlined in Section 3.0 of the Application Document dated January 2021 unless otherwise varied or directed by other condition in this Licence**
4. **This licence permits the dredging of a maximum of 20000 tonnes annually, for a period of 5-years, from 2021 to 2025, of dredged spoil from Magheraroarty Harbour using a rubber tyred or tracked excavator. .**
5. **During the course of the works the working area shall be secured from unauthorised public access or encroachment by means of suitable barriers and signage and the applicant shall comply with all relevant safety legislation in this regard**
6. **During the course of the works public access onto and along the adjacent foreshore shall be maintained.**
7. **No refuelling of equipment, machinery or plant shall take place on the foreshore.**
8. **No storage of machinery or plant shall take place on the foreshore.**
9. **Appropriate methods of operation shall be adopted to ensure that no spillages of fuel or other leakages occur during the works.**

10. **During the course of the works the Applicants shall ensure that:**
 - (a) **All necessary precautions are put in place to protect the public in accordance with relevant Health and Safety Legislation;**
 - (b) **Existing public access arrangements to the general foreshore area are not impeded by any vessels, plant or materials used in connection with the dredging and beach nourishment operations, and where relevant this access should be made safe and guaranteed by the provision of appropriate signage/notices/barriers etc. to the satisfaction of the Department of Housing Local Government and Heritage**
 - (c) **Procedures are adopted to ensure that the dredging and beach nourishment operations are not injurious to fishing, navigation, adjacent lands or the public interests**

11. **Where applicable, the Licensee shall furnish the names/registered number of all vessels involved in the operation to the Marine Survey Office Department of Transport Tourism and Sport in Dublin to ensure compliance with respect to Irish Load line and other relevant vessel certification**
12. **The Licensee shall arrange the publication of a Marine Notice through the Maritime Safety Directorate Department of Transport Tourism and Sport Leeson Lane Dublin 2, giving general description of operations and approximate dates of commencement and completion.**

13. The Licensee shall keep and maintain, for inspection on demand by the Minister, records of all dredging operations, including quantities of material dredged and placed at the agreed site on Dooley Strand. These records shall be produced by the Licensee on demand by the Minister and in any event not later than 24 hours from the making of that demand.
14. The Licensee shall ensure that the material is spread evenly and as thinly as possible at the agreed site on Dooley Strand and in any event spread at a depth of less than 100 mm with well graded sides. Signage explaining the activity shall be provided and additional safety signage shall be erected while work is ongoing.
15. A beach survey shall be undertaken prior to the dumping operation and a post dumping survey should be undertaken two months after dumping has ceased in order to determine the fate of the material. The beach should be surveyed in cross sections at regular distances to the satisfaction of DHLGH. Should the fate of material be such that the location of deposition needs to be altered the next year then the beach should be resurveyed at bi monthly intervals post dumping, continuing for 6 months' post dredging, which can be reduced in time subject to the agreement of DHLGH if the fate of the deposition material is clearly re-established.
16. The Licensee shall ensure that the proposed Mitigation Measures as set out in Table 7.1 of the "Natura Impact Statement" dated December 2020, are implemented in full. **(provisional based on the advice and recommendations of the Department's Environmental Consultants)**
17. Members of the public shall be protected at all times during the course of the works and the Licensee shall give due consideration, if necessary, to closing the pier during the course of dredging operation
18. The continued operation of the Tory Island Ferry service shall not be compromised during the course of the dredging campaign at the Harbour and appropriate measures shall be adopted in order to allow for its continued safe operation during the works.
19. The Dredging and beach nourishment operations shall be undertaken within the months of March and April for each year for which this Licence remains valid except for the initial year (2021) for which a later date in that year may be allowed subject to advance notice of at least 3 weeks being provided to the Licensor to allow for subsequent consideration, agreement and approval in this regard.

Engineering Inspector

Inland Fisheries Ireland:

RE: FS007084 Application for licence for dredging and beach nourishment at Magheraroarty

Overview

This application is in respect of:

- Maintenance dredging at Magheraroarty Pier with disposal of dredgings via beach nourishment at the nearby beach
- *Circa* 20 K tonnes to be removed annually, with permit request for a period of 5 years from 2021
- Referred period of dredging is March – April annually during the Spring low tide
- Dredging waste is sand of marine/beach origin deposited via longshore drift
- Dredging to be via excavator based on beach
- Dredging waste to be loaded onto lorries for overland haulage along the beach
- Dredging to be done during ebb periods of spring tides

IFI Comments:

The mitigation of accidents and the protection of the aquatic and marine environment is outlined in the supporting document. All refuelling of machines and equipment must take place well away from the shoreline. All fuels, lubricants and hydraulic fluids must be kept in secure bunded areas away from the shoreline. IFI must be included in an Emergency Response Plan as a notifiable body in the event of water pollution occurring during construction works. Particular attention to activities likely to generate suspended solids and/or other pollutants and the proposals to prevent these pollutants need to be specified. The sites of dredging and dumping lie within or adjacent to SAC and SPA sites. IFI considers the Natura Impact Statement to be comprehensive and concurs with findings as to no significant effect.

In previous correspondence in 2014 and in 2008, IFI requested that alternative strategies are investigated. There is no mention in the documentation that this is the most suitable method given the location and conditions or that alternative methods were ruled out. IFI considers that the nature of the work will have minimal effect on the local fish population provided the mitigation measures outlined in a suitable CEMP and outlined above are implemented. IFI would request that the local Environmental Officer is informed 5 days in advance of the commencement of works each year.

Inland Fisheries Ireland

Marine Survey Office

After careful consideration the Marine Survey Office has no objection to the proposed works in the application referenced in the subject line from a navigational safety perspective. However the following shall be noted;

A local Marine Notice shall be published for the information of all local maritime users detailing the proposed dredging campaign and any associated hazards to navigation arising for the duration of the licence period.

Marine Survey Office

Environmental Protection Agency

I refer to your correspondence requesting observations/comments from the Agency on the above application and accompanying Natura Impact Statement (NIS).

In accordance with the requirement as set out the Foreshore Regulations 2011 (S.I. No. 353 of 2011), the Agency advises as follows:

It is noted that according to the NIS *Section 4. Project Description*, it is proposed that all material removed during annual maintenance dredging at Magheraroarty Harbour will be loaded onto 2. no dump trucks and transported along a marked route along the foreshore, during low tide – mid tide to an agreed site on Dooley Strand for the purposes of beach nourishment. The Agency is satisfied, based on the information provided in their application and NIS, that there is no requirement for a Dumping at Sea (DAS) Permit for any deliberate disposal of material in the maritime area, under the provisions of the DAS Act 1996 as amended.

The Agency would further advise:

That the proposed activity shall not result in a contravention of the Water Framework Directive 2000/60/EC, Habitats Directive 92/43/EEC, Marine Strategy Framework Directive 2008/56/EC, Bathing Water Directive 73/160/EEC or Environmental Liabilities Directive 2004/35/EC.

Please note that there is no requirement for you to acknowledge receipt of this correspondence. For all further queries and correspondence relating to foreshore and planning matters, please contact eiaplanning@epa.ie.

Please note that there is no requirement for you to acknowledge receipt of this correspondence.

Yours faithfully,

EIA Planning

Environmental Licensing Programme

Environmental Protection Agency

Marine Institute

Re: FS007084 - Magheraroarty Pier Dredging and Beach Nourishment

On the basis that annual maintenance dredging of Magheraroarty Pier is required to maintain navigable depths to -2.5m Chart Datum, Donegal County Council have submitted a foreshore application to load accumulated material from the pier and reuse the material as part of an ongoing beach nourishment scheme. It is proposed to excavate a maximum of 20,000 Tonnes sediment from the base of the pier (area =0.62ha) on an annual basis and deposit the material onto Dooley Strand over an area of approximately 12.7ha. It is intended that the material will be spread evenly throughout the deposition area such that the accumulation of sediment will be a maximum of 10cm throughout.

The works are proposed to take place during March/April annually and will be confined to low tide periods during a 5-6 day period that coincide with spring tides.

The application form is accompanied by a number of documents that describe, the proposed methodology, surveys carried out and their results and likely interactions between the proposed works and conservation features.

The closest aquaculture operation to the dredging at the pier and deposition site is approx. 1.12km and 300m, respectively. However, the sites are separated by the terrestrial dune system at Dooley Strand. There is no hydrological link between the dredging/disposal locations and aquaculture sites. There are no known fisheries on the strand.

It is noted the sediment to be disposed has been assessed for chemical contaminants¹. The sediments analysed were below the lower Irish action limits for organochlorines, PCBs, total extractable hydrocarbons, organotin and Σ 16 Polycyclic aromatic hydrocarbons (PAHs). The sediments within the dredge site are not considered to pose any risk of significant adverse effects to marine water quality (see e-mail from MI Marine Chemist- Appendix 1).

¹ Aquafact 2020. Marine Sediment Characterisation Magheraroarty Pier Dredging and Disposal Operations. Aquafact for Donegal County Council February 2020. 23pp

² Greentrack Environmental Consultants. 2000. Natura Impact Statement in relation to proposed Annual dredging and Beach Nourishment at Magheraroarty Beach by Donegal County Council over a Five-year Period within the zone of influence of the Ballyness Bay SAC site code 001090 and Falcarragh to Meenlaragh SPA site code 004149. December 2020. 101pp.

³ NPWS. 2014. Ballyness Bay SAC (site code: 1090) Conservation objectives supporting document - Marine Habitats. Version 1 - April 2014

The Natura Impact Statement² considers the likely interactions between the proposed works and the conservation features of Natura sites. The conclusion that a full AA was required and produced is correct especially given the proposed works occur directly within the Ballyness Bay SAC. The habitat underlying the proposed works is Mudflats and sand-flats not covered by seawater at low tide (1140). Further to this, the community type found in the works area is Mobile sand community complex. This community complex is, in general, considered to have low species diversity and abundance³. This classification is consistent with the results of benthic surveys identified in the NIS, which describes the area as impoverished from a faunal perspective. These community types are typically described from area subjected to high and sustained levels of physical disturbance (i.e., from wind and wave action). 2

¹ Aquafact 2020. Marine Sediment Characterisation Magheraroarty Pier Dredging and Disposal Operations. Aquafact for Donegal County Council February 2020. 23pp

² Greentrack Environmental Consultants. 2000. Natura Impact Statement in relation to proposed Annual dredging and Beach Nourishment at Magheraroarty Beach by Donegal County Council over a Five-year Period within the zone of influence of the Ballyness Bay SAC site code 001090 and Falcarragh to Meenlaragh SPA site code 004149. December 2020. 101pp.

³ NPWS. 2014. Ballyness Bay SAC (site code: 1090) Conservation objectives supporting document - Marine Habitats. Version 1 - April 2014

The Marine Institute agrees with the conclusions of the NIS that the proposed activities will not interfere with the integrity of the Natura sites considered. Furthermore, the retention of the dredged material within the system (coastal cell) is considered a positive consequence of the proposed works. A number of practical operational measures are proposed in the NIS (Table 7.1). It is appropriate that these would form the basis of conditions that may apply to any licence that may issue.

On the basis of the above, the Marine Institute has no objection to a foreshore licence being granted.

Sea Fisheries Protection Agency

The local inspector for the area has confirmed that the application should not cause any issues for the SFPA under its remit. I have attached my comments for the file.

Sea Fisheries Protection Authority Eastern Region

Application No:	FS007084	Applicant Name:	Donegal County Council
Application Category			
Aquaculture	Foreshore General	Energy	Other
	Dredging and beach nourishment		
Location	Magheraroarty, County Donegal	Species	N/A
Date	24-3-2021	SFPA Region	North Western

Inspectors comments
<p>The application refers to the removal of silt to retain a working depth and access to the pier for the Tory island ferry. The dredging is carried out on an annual basis and approximately 10-20,000m² of silt is removed. Given the location of the works, this application is unlikely to have a negative impact on the local shellfish aquaculture sites in Ballynass. However the applicant should inform the shellfish growers prior to any works commencing.</p>
<p>1. Wild Fisheries</p> <p>The application is for an intertidal section of the Magheraroarty beach and therefore will not interfere with any sub-tidal wild fisheries within Inishbofin Bay.</p>
<p>2. Shellfish Production Areas</p> <p>There are no classified shellfish production areas in the area of the proposed works. The adjacent aquaculture sites in Ballynass should not be affected by the proposed application due to its location.</p>
<p>3. Seafood Safety</p> <p>There is not expected to be any issues with seafood safety caused by the proposed works. The operators should be aware of the notification process should a pollution incident take place during the construction period. The SFPA office with responsibility for Magheraroarty is Killybegs and should be contacted directly on 0749731264 or sfpakillybegs@sfpai.ie</p>
Sea Fisheries Protection Officer

Underwater and Archaeology Unit/National Parks and Wildlife Services

NPWS and UAU have no comment to make on this application.

Department of Agriculture, Food and the Marine

Our Ref: FW.15.22 An application by Donegal County Council for dredging and beach nourishment at Magheraroarty Pier, County Donegal.

DHLGH Ref: FS007084

The Department of Agriculture, Food and the Marine has no objections to this application by Donegal County Council.

Kind Regards,

AFMD

Department of Agriculture, Food and the Marine