



# Screening Report for Appropriate Assessment

Screening Report for Appropriate Assessment in relation to the proposed Annual dredging and Beach Nourishment at Magheraroarty Beach by Donegal County Council within the zone of influence of the Ballyness Bay SAC site code 001090.

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November 2019

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# 1 INTRODUCTION

## 1.1.1 Background

Greentrack Consultants have been instructed by Donegal County Council to undertake this Screening Report for Appropriate Assessment under Article 6 of the EU Habitats Directive, examining their proposal for the annual dredging and beach nourishment at Magheraroarty Beach, Gortahork, Co. Donegal.

This Screening Report has been prepared by Greentrack Consultants with all reasonable care, due diligence, professional application and best scientific knowledge available to Greentrack at the time of writing. Information contained within this report is based on the interpretation of data collected and has been accepted by Greentrack in good faith. This Screening Report is prepared under instruction from Donegal County Council. Greentrack accept no responsibility to any third party to whom this report is made known or available. Any such third parties rely on the findings of this report at their own risk

The aim of this screening report is to aid the Competent Authority in determining whether or not an “Appropriate Assessment” is required for the proposed development. This report will assess any likely significant effects or impacts (if any) caused by the proposed development on any Natura 2000 sites within its zone of influence, both independently and in conjunction with other plans and projects.

## 1.1.2 Legislative Context

The Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora, better known as “*The Habitats Directive*”, provides legal protection for habitats and species of European importance. Articles 3 to 9 provide the legislative means to protect habitats and species of Community interest through the establishment and conservation of an EU-wide network of sites known as Natura 2000. These are Special Areas of Conservation (SACs) designated under the Habitats Directive and Special Protection Areas (SPAs) designated under the Conservation of Wild Birds Directive (79/409/ECC) as codified by Directive 2009/147/EC.

Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to affect Natura 2000 sites (Annex 1.1). Article 6(3) establishes the requirement for Appropriate Assessment (AA):

*Any plan or project not directly connected with or necessary to the management of the [Natura 2000] site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subjected to appropriate assessment of its implications for the site in view of the site’s conservation objectives. In light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the*

*plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.*

Article 6(4) states:

*If, in spite of a negative assessment of the implications for the [Natura 2000] site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, Member States shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.*

## **1.2 Stages of the Appropriate Assessment Process**

**Stage 1 - Screening for any likely significant impacts.** Screening involves an initial assessment of the project or plan's effect on a Natura 2000 site(s). If it cannot be concluded that there will be no significant effect upon a Natura 2000 site, an Appropriate Assessment is required. The process addresses and records the reasoning and conclusions in relation to the first two tests of Article 6(3):

- I. whether a plan or project is directly connected to or necessary for the management of the site, and
- II. 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 its 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 impact. This report provides the information necessary to enable the appropriate authority to screen the proposed development for the requirement to prepare an Appropriate Assessment.

**Stage 2 - Appropriate Assessment (Natura Impact Statement or NIS):** The consideration of the impact on the integrity of the Natura 2000 site(s) from the project or plan, either alone or in combination with other projects or plans, with respect to the site's structure and function and its conservation objectives. Additionally, where there are adverse impacts, an assessment of the potential mitigation of those impacts.

**Stage 3 – Assessment of alternative solutions:** The process which examines alternative ways of achieving the objectives of the project or plan that avoid adverse impacts on the integrity

of the Natura 2000 site. The process must return to Stage 2, as alternatives will require appropriate assessment in order to proceed. Demonstrating that all reasonable alternatives have been considered and assessed, and that the least damaging option has been selected, is necessary to progress to Stage 4.

**Stage 4 – Assessment where no alternative solutions exist and where adverse impacts remain:** Stage 4 is the main derogation process of Article 6(4), which examines whether there are imperative reasons of overriding public interest (IROPI) for allowing a plan or project that will have adverse effects on the integrity of a Natura 2000 site to proceed in cases where it has been established that no less damaging alternative solution exists. Compensatory measures must be proposed and assessed. The Commission must be informed of the compensatory measures. Compensatory measures must be practical, implementable, likely to succeed, proportionate and enforceable, and they must be approved by the Minister. Each listed stage determines whether a further stage in the process is necessary. If, for example, the conclusions at the end of Stage One are that there will be no significant impacts on the Natura 2000 site(s), there is no requirement to proceed further.

Following on from Article 6(3) of the Habitats Directive the objective of this report is to screen for “*Any Likely Significant Effects*” and to conclude whether or not an Appropriate Assessment is necessary for the proposed development. This report will screen the proposed development against the qualifying interests of Natura 2000 sites within its zone of influence and will examine any likely significant effects that the proposed activity may have on these sites.

## 2 METHODOLOGY

### 2.1 Approach

The methodology used for this screening report is undertaken in the following stages:

- Define the project and determine whether it is necessary for the conservation management of Natura 2000 sites.
- Identify Natura 2000 sites likely to be influenced by this development.
- Review the project to determine if it has the potential to affect the Natura 2000 sites and determine whether the Natura 2000 sites are vulnerable to the effect.
- Identify other plans or project that, in combination with this project, have the potential to affect Natura 2000 sites.

### 2.2 Guidance Documents

This report was carried out in accordance with relevant guidance, in particular:

- Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities. Department of Environment, Heritage and Local Government, 2009.

- European Commission. Managing Natura 2000 Sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC. Office for Official Publications of the European Communities, Luxembourg, 2018.
- Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites: Methodological Guidance on the Provisions of Article 6 (3) and (4) of the Habitats Directive 92/43/EEC. European Commission, 2002.
- Guidance Document on Article 6 (4) of the 'Habitats Directive' 92/43/EEC. Clarification of the Concepts of Alternative Solutions, Imperative Reasons of Overriding Public Interest, Compensatory Measures, Overall Coherence. Opinion of the European Commission. European Commission, 2007 / 2012.
- Habitats Directive and environmental assessment of plans and projects. García Ureta, A. Journal for European Environmental and Planning Law 2, 8496, 2007.
- Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPW 1/10 & PSSP 2/10.
- Compliance Conditions in respect of Developments requiring (1) Environmental Impact Assessment (EIA); or (2) having potential impacts on Natura 2000 sites. Circular letter PD 2/07, NPWS 1/07
- Compliance of Existing Land Use Plans with the EU Habitats Directive. Department of Environment, Heritage and Local Government (2011) Circular Letter PSSP 5/2011.

### **2.3 Statement of Authority**

This AA Screening Report has been compiled by Shannen McEwen, Ecologist with Greentrack, who holds a BSc (Hons) Environmental Science and a Diploma in Professional Practice from the University of Ulster. Shannen joined Greentrack in 2017 and has completed numerous Appropriate Assessment Screening Reports and Natura Impact Statements in terrestrial and aquatic habitats. Shannen is also an Associate Member of the Institution of Environmental Sciences.

## **3 DESCRIPTION OF THE PROJECT**

The proposal is for the annual dredging and beach nourishment of Magheraroarty Beach (Dooey Strand), Gortahork, Co. Donegal. The works comprise the relocation of clean, uncontaminated material from an area of accretion within Magheraroarty Harbour to an intertidal area on the Strand which suffers erosion from wave and wind action and longshore drift. A maximum of 20,000T of recently deposited sand is to be removed from the harbour annually and returned to its original location on Dooey Strand through the process of beach nourishment. Annual maintenance dredging of Magheraroarty harbour is required to maintain navigable depths to -2.5m Chart Datum for the Tory Island ferry, commercial fishing boats and charter boats of the local area.

Beach nourishment or replenishment is the artificial placement of sand on an eroded shore to maintain the amount of sand present in the foundation of the coast, and this way to

compensate for natural erosion and to a greater or lesser extent protect the area against storm surge. Beach nourishment also often aims at maintaining beaches (beach width for tourism and recreational purposes). The process involves dredging material (sand, pebbles) from a source area (offshore or inland) to feed the beach where erosion is occurring. The material to be dredged is recently deposited sand from Dooley Strand and is to be replenished back on the adjacent beach. It is proposed to remove the sand from the harbour by a 3600 tracked excavator. During excavation it is likely there will be some disturbance to the seabed

The material will then be loaded on to Dump Trucks and transported along a marked route along the foreshore, during low tide – mid tide to the agreed disposal site on Dooley Strand for the purposes of beach nourishment. Beach nourishment will be carried out in the intertidal zone. The material will be spread as evenly as possible over the disposal area to avoid any high points on the relatively flat beach.

Map 1 below shows the location of the subject site. Photographs 1-3 give a visual assessment of the subject site.

**Map 1: Location of Subject site**



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**Photograph 1:  
Overview of the subject site**



**Photograph 2:  
Magheraroarty Pier**





**Photograph 3:  
Approximate location for beach nourishment**



## **4 THE RECEIVING ENVIRONMENT**

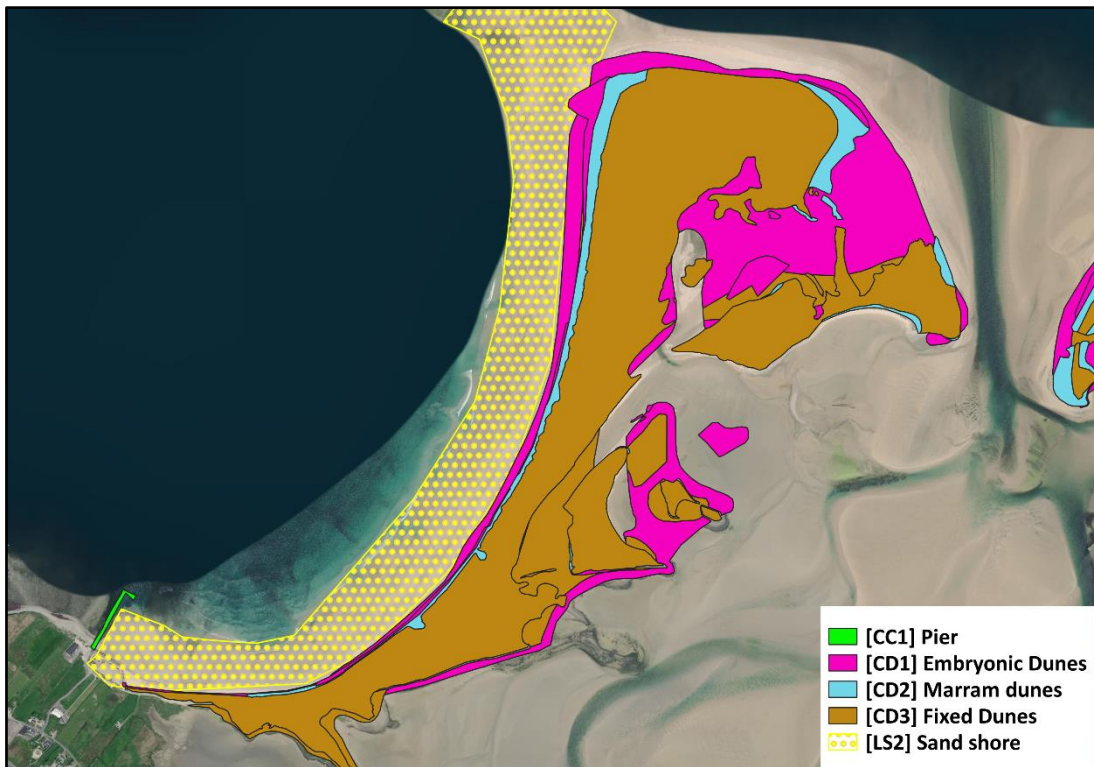
### **4.1 General Location**

The receiving environment is in the townland of Magheraroarty, Gortahork, County Donegal with site access off the adjacent L-1133-1 local road just off the main R257 regional road. Most of the surrounding area consists mainly of residential dwellings/holiday homes and extensively managed grassland. The subject site is within the village of Meenlaragh.

### **4.2 Site Description**

A site walkover was carried out on 20/08/2019 by Denis Faulkner and Shannen McEwen of Greentrack. Using the Fossitt Guide to Habitat in Ireland (2000) the subject site can be termed as a sand shore (LS2) which contains the Annex I habitat of mudflats and sandflats not covered by sea water at low tide (1140). The pier (CC1) is located to the NW of the site where the dredging will take place. Embryonic shifting dunes border the strand as seen in map 4. There was no flora or fauna of interest noted in the area due to the nature of the subject site. Map 2 below shows the habitats around the subject site and the surrounding environs.

**Map 2:  
Habitats around the subject site and the surrounding environs**



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## 5 NATURA 2000 SITES

### 5.1 Identification of Natura 2000 Sites

In terms of the identification of relevant Natura 2000 sites, the zone of impact (also known as the area of influence) is determined based on their potential connectivity (*source-pathway-receptor* model) to the proposed Project in terms of, for example:

- Nature, scale, timing and duration of works and possible impacts
- Distance and nature of pathways (dilution and dispersion; intervening ‘buffer’ lands, roads *etc.*); and
- Sensitivity and location of ecological features.

Having considered the potential ecological impacts through source-receptor-pathway connectivity (e.g. hydrological link) and given the nature of the proposed project, it was deemed that the zone of influence for such project would be limited to a radius of 10 km. The Natura 2000 sites occurring within 10 Km of the subject site are as follows:

- Ballyness Bay SAC site code 001090 – within boundary
- Falcarragh to Meenlaragh SPA site code 004149 – adjacent to subject site
- Inisbofin, Inisdooey and Inisbeg SPA site code 004083 (2.1km N)
- Gweedore Bay and Islands SAC site code 001141 (3.3km W)

- Horn Head and Rinclevan SAC site code 000147 (6.2km E)
- Horn Head to Fanad Head SPA site code 004194 (7.1 km E)
- Muckish Mountain SAC site code 001179 (9km SE)
- Cloghernagore Bog and Glenveagh National Park SAC 002047 (9.1km SE)
- Derryveagh and Glendowan Mountains SPA site code 004039 (9.1km SE)
- West Donegal Coast SPA site code 004150(9.8km SW)

Map 3 shows the subject site in relation to the named Natura 2000 sites.

**Map 3: Natura 2000 sites in close proximity to the subject site**



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The subject site is located within the Ballyness Bay SAC which has been screened in for further studies. The subject site also has an adjacent land border with the Falcarragh to Meenlaragh SPA. However, as the Falcarragh to Meenlaragh SPA is only designated for Corncrake, the fact that there is no suitable habitat for the Corncrake in and around the subject site allows us to screen out this SPA.

Due to the nature of the development and the absence of any avenue of connectivity, the following sites have been screened out of any further studies; Inisbofin, Inisdooney and Inisbeg SPA site code 004083, Gweedore Bay and Islands SAC site code 001141, Horn Head and Rinclevan SAC site code 000147, Horn Head to Fanad Head SPA site code 004194, Cloghernagore Bog and Glenveagh National Park SAC 002047, Derryveagh and Glendowan Mountains SPA site code 004039, West Donegal Coast SPA site code 004150.

## 5.2 Characteristics of the Natura 2000 Site

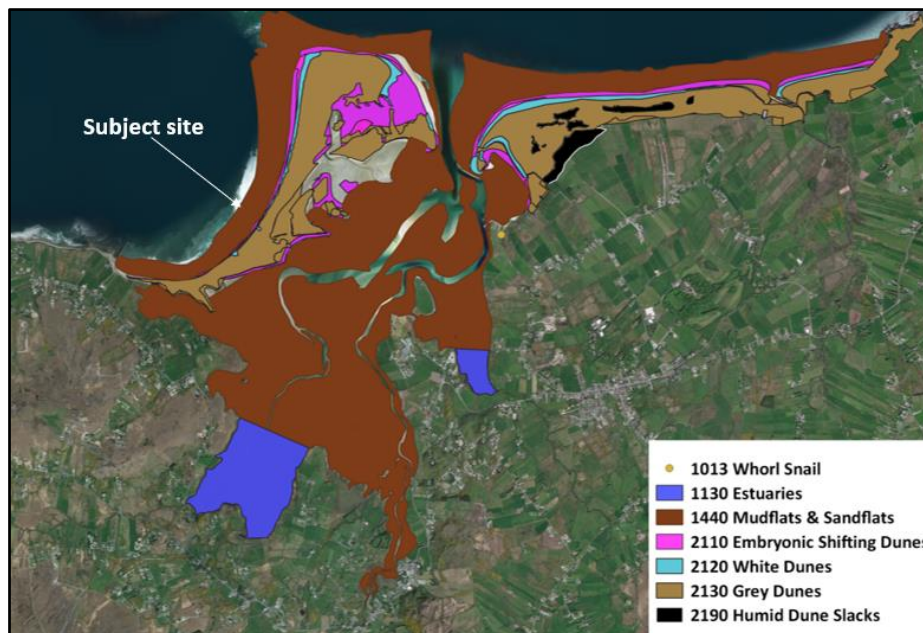
### **Ballyness Bay SAC site code 001090:**

Ballyness Bay is situated in north-west Donegal adjacent to the towns of Gortahork and Falcarragh. The underlying geology is mostly pelites, with some smaller areas of limestone and quartzite. This is mostly covered by windblown sand and peat. Ballyness Bay is a large and very shallow estuarine complex, with extensive areas of sandflats which are exposed at low tide. Land use within the bay comprises fishing and sailing on a small scale; the surrounding dunes and grassland are grazed by sheep and cattle. Ballyness Bay contains several important coastal habitats listed on Annex I of the E.U. Habitats Directive, including the priority habitat fixed dunes. The site is also an important wildfowl site. A full site synopsis can be found in Appendix I.

### **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: Subject site in relation to qualifying interests**



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## 6 ASSESSMENT OF LIKELY SIGNIFICANT EFFECTS

The criteria adopted for this assessment are based on a detailed field and desk assessment of the influence the proposed development may have on the Natura 2000 sites within the zone of influence and what, if any, impact this development will have on the habitats as detailed in table number 6.1

Table 6.1 provides information on the following elements of the Ballyness Bay SAC:

- a) Qualifying Interests/habitats
- b) Site Sensitivity and vulnerability based on species population and sensitivity of principal supporting habitat
- c) Current Conservation Status
- d) General Threats
- e) Specific Threats from proposed development

**6 (a):** The qualifying interests are the features for which the sites have been designated as a Natura 2000 Site under the Habitats Regulations and covers listed habitats, species and bird populations as detailed in the site synopsis and the Natura 2000 Standard Data Form.

**6 (b):** Site sensitivity and vulnerability is based on the species population in relation to the national population and also the sensitivity of the principal supporting habitat as detailed in then Natura 2000 Standard Data Form and the Site Synopsis.

**6 (c):** The conservation status of the qualifying interest is listed as detailed in the Natura 2000 Standard Data Form.

**6 (d):** The general Threats are based on information contained within the site synopsis, the Natura 2000 Standard Data Form, field visit and local information.

**6 (e):** The screening of potential threats and the likelihood of significant effects from the proposed project on the qualifying interests is based on field study and analysis of all the information available to Greentrack.

**Table 6.1**  
**Ballyness Bay SAC Number 001090**  
**Site Description and Screening Matrix**

Qualifying Interest	Site Sensitivity	Conservation Status	General Threats	Potential Threat from Proposed Development
<b>Mudflats and sandflats not covered by seawater at low tide</b> <b>[1140]</b>	Surface and marine water dependant. Moderately sensitive to hydrological change. Moderate sensitivity to pollution. Sensitive to changes in salinity and tidal regime as well as coastal development.	Excellent	The main threat to these habitats is from coastal development associated with holiday activity in this area and associated recreational activities. Pollution from farming activity is also a threat.	<b>As seen in Map 4, the subject site is located on a designated mudflat and sandflat. This qualifying interest could be damaged by mechanical activity during the transportation of sand by dump trucks to the agreed site. Therefore, it is deemed that the proposed development could pose a significant threat to this qualifying interest. This allow us to screen this qualifying interest in for further studies.</b>
<b>Estuaries</b> <b>[1130]</b>	Tidal water dependant for sediment. Sensitive to storm damage and erosion. Also very sensitive to trampling and mechanical clearing of sand.	Good	The main threat to these habitats is natural erosion and mechanical damage due to recreational activities.	There proposed development and associated activities will not pose any significant threats to this qualifying interest as there is no avenue of connectivity from the subject site to this qualifying interest. Therefore, it has been screened out of any further studies.
<b>Embryonic shifting dunes</b> <b>[2110]</b>	Sensitive to farming practices and mechanical			This qualifying interest is located adjacent to the subject site as shown in Map 4. All sand for the beach nourishment will be dredged from the pier. No sand will be removed from this habitat to facilitate the beach nourishment process. Therefore, the proposed development and associated activities will not pose any significant threats to this qualifying interest. This allows us to screen this qualifying interest out of any further studies.
<b>Shifting dunes along the shoreline with</b>				There proposed development and associated activities will not pose any significant threats to these qualifying interests as there is no

<p><b><i>Ammophila arenaria</i></b> <b>(White Dunes)</b> <b>[2120]</b></p>	<p>damage from farming and recreational activities and loss of habitat</p>			<p>avenue of connectivity from the subject site to these qualifying interests. Therefore, both have been screened out of any further studies.</p>
<p><b>Fixed coastal dunes with herbaceous vegetation (Grey dunes)</b> <b>[2130]</b></p>				
<p><b>Humid dune slacks</b> <b>[2190]</b></p>				
<p><b>Greyer's Whorl snail (<i>Vertigo geyeri</i>)</b> <b>[1013]</b></p>			<p>This qualifying interest is threatened by damage or pollution to supporting habitat caused by agricultural practices, coastal development and associated recreational activities</p>	
<p><b>This screening matrix has established that the proposed development and associated activities as detailed will not pose any significant threat to any of the qualifying interests listed within this Natura 2000 site. On this basis, the Ballyness Bay SAC has been screened out of any further studies.</b></p>				

Having established the assessment criteria, the impacts associated with the proposed development and associated works on the named Natura 2000 site, the proposed development has been assessed against all the qualifying interests. The screening matrix as detailed in Table 6.1 has established that the proposed project could have a significant effect on the qualifying interests of Ballyness Bay SAC.

## **6.2 Cumulative Effects**

According to the County Donegal Development Plan 2018-2024, the subject site is based in a Structurally Weak Rural Area. There is one current planning application in the surrounding area that need to be taken into consideration under the “in combination” effect. Planning no. 19/50962 for the proposed extension to the car park at Magheraroarty Community Centre and the construction of a children’s play area which is located 180m from the subject site. Planning for this site was granted unconditionally on 02/08/19. This application also had a Natura Impact Statement prepared by Greentrack Consultants attached to it.

## **7 CONCLUSION**

Following the assessment as detailed in this AA Screening Report, it is concluded that the proposed Project, either individually or in combination with other plans or projects, is likely to have a significant effect on the Ballyness Bay SAC. The analysis undertaken found 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 the transportation of sand by dump trucks to the agreed site.

This conclusion was reached on the basis of objective information and in view of best scientific knowledge. In light of this conclusion, it is considered that the Competent Authority, in completing its AA Screening in respect of the proposed Project, should find 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 that a Stage 2 Appropriate Assessment is required.

Date: 12/11/19



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