

Inspector's Report RL06F.RL3561.

Question	Whether the temporary development, of ZephIR 2300 LiDAR technology at Roackabill Island is or is not development or is not exempted development. Rockabill Island, Co Dublin.
Declaration	
Planning Authority	Fingal County Council
Planning Authority Reg. Ref.	FS5/044/16.
Applicant for Declaration	Gaelectric Development LTD.
Planning Authority Decision	Split Decision.
Referral	
Referred by	Gaelectric Development LTD.
Owner/ Occupier	Commissioners of Irish Lights.
Observer(s)	None.
Date of Site Inspection	06 th of July 2017.

Inspector

Karen Hamilton.

1.0 Site Location and Description

- 1.1. Rockabill Island comprises of two islands, Rock and Bill, located in the western Irish Sea, c. 6.5km from the nearest mainland point of the Dublin coast and 4.5km from Skerries. The southern, largest, island contains a lighthouse, a protected structure (RPS No. 772), which is 32m in height and is accompanied by three outbuildings with heights ranging from 3-6m.
- 1.2. Both islands are composed of granite, and are rocky with little vegetation around the edges. There is a walled area around both the lighthouse and outbuilding which, in additional to access paths, includes vegetation which is managed for the benefits of the Tern colony during the months between March and August.

2.0 The Question

- 2.1. Whether the temporary development of ZephIR (Z300) LiDAR technology at Rockabill Island is or is not development or is or is not exempted development.
- 2.2. The proposal includes the temporary deployment of a ZephIR (Z300) LiDAR for the duration of 15 months to measure wind speeds and characteristics of wind shear. It is a ground based system with a maximum height of 1.4m and requires an associated power solution consisting of a diesel generator to charge the associated battery, and a cable. This power solution will be housed in the existing power room of the light house at Rockabill Island, Co. Dublin for Gaelectric Development Limited.

3.0 **Planning Authority Declaration**

3.1. Declaration

Under Section 5(1) of the Planning and Development Act 2000,

 The planning authority considers the proposal for the placing of a battery, a diesel generator to charge the battery, a cable to power the LiDAR device within the Rockabill lighthouse (RPS No. 772) and the curtilage of same, and the maintenance of the power source constitutes DEVELOPMENT which IS EXEMPTED DEVELOPMENT having regard to Section 57 (1) of the Planning and Development Act 2000, as amended. The Planning Authority considers the temporary placing and maintenance of a LiDAR device on Rockabill Island constitutes DEVELOPMENT which IS NOT EXEMPTED DEVELOPMENT having regard to Section 3(1) and Section 4(4) of the Planning and Development Act 2000, as amended.

3.2. Planning Authority Reports

3.2.1. Planning Reports

The report of the area planner refers to the material change of use of the placing of the LiDAR structure on the site, Class 16, temporary works associated with development, and Class 20A, erection of a mast for mapping meteorological conditions of the Planning and Development Regulations, 2001. The planner concludes that the LiDAR device is not associated with any development therefore not within the scope of Class 16 and it cannot be assessed under the scope of Class 20A as it is not a "mast". In addition, the planner determined that the placing of the LiDAR device on the site required and Appropriate Assessment.

The planner requested further information, listed below, on the proposed cabling from the device to the battery in the lighthouse (protected structure).

- Revisions to the installation of the power cable by utilising an existing covered ducting on the islands which runs under the light keeper's cottage, therefore excluding the need to fix the proposed cable to any structure,
- Confirmation and submission of photographs and particulars supporting that the proposed routing for the cable was from within the lighthouse, under the light keeper's cottage and across the garden area.

The planner concluded that although these works where development, they were exempted development as there would be no material alteration to the lighthouse.

3.2.2. Other Technical Reports

Conservation Officer- Following the submission of further information the Conservation Officer had no objection to the proposal.

Heritage Officer- The Heritage Officer did not accept the development was exempted development based on the lack of evidence to demonstrate there would be no direct impact on Rockabill Island SPA.

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4.0 Planning History

No relevant planning history on the site.

Relevant history file for erection of 2 wind monitoring masts

RL05E.RL3419

Whether the erection of 2 window monitoring masts is nor is not exempted development at a) Lismulladuff, Killygordan and b) Balltarrell Mountain, Killygordan, Co. Donegal.

Referral received from the planning authority in relation to an enforcement case and the planning inspector considered Class 20 (a), mapping for meteorological conditions, of Part 1 and Class 19 of Part 3 of Schedule 2 under temporary structures and use. A condition and limitation of class 20 (a) states that *"not more than one such mast shall be erected within the site*"

The Board concluded the erection of multiple masts for meteorological conditions in a site is not exempted development.

5.0 Policy Context

5.1. Fingal County Development Plan 2017-2023

Rockabill Island is designed as a High Amenity Area where it is an objective to "Protect and enhance high amenity areas".

Vision: Protect these highly sensitive and scenic locations from inappropriate development and reinforce their character, distinctiveness and sense of place. In recognition of the amenity potential of these areas opportunities to increase public access will be explored.

Protected Areas

Table BD01: Rockabill Island, Special Protection Area (SPA), proposed National Heritage Area (p NHA) and Water Framework Directive Register of Protected Areas (WFDRPA).

Objective NH15- Strictly protect areas designated or proposed to be designated as Natura 2000 sites (i.e. Special Areas of Conservation (SACs) and Special Protection Areas (SPAs); also known as European sites) including any areas that may be proposed for designation or designated during the period of this Plan.

County Geological Sites

GH01- Rockabill

 Objective NH30- Protect and enhance the geological and geomorphological heritage of the County Geological Sites listed in Table GH01 and indicated on Green Infrastructure Maps.

The Islands, Rockabill

Designated as High Amenity Area (HA)

- Objective NH50 Protect and enhance the special landscape character and exceptional landscape value of the islands, including their biodiversity, archaeological and architectural heritage.
- Objective NH51- Protect High Amenity areas from inappropriate development and reinforce their character, distinctiveness and sense of place.
- Objective NH52- Ensure that development reflects and reinforces the distinctiveness and sense of place of High Amenity areas, including the retention of important features or characteristics, taking into account the various elements which contribute to its distinctiveness such as geology and landform, habitats, scenic quality, settlement pattern, historic heritage, local vernacular heritage, land-use and tranquillity.

5.2. Natural Heritage Designations

The site is located within Rockabill Special Protection Area (site code 004014) and Rockabill to Dalkey Special Area of Conservation (site code 003000).

Conservation Objectives Rockabill SPA

Reefs

Phocoena phocoena (Harbour Porpoise)

• Conservation Objectives Rockabill to Dalkey SAC

Purple Sandpiper Roseate Tern Common Tern Artic Tern

6.0 The Referral

6.1. Referrer's Case

Gealectric Ireland Ltd disagree with the determination of the planning authority and the submission may be summarised as follows:

- The LiDAR device will be placed on a concrete path which is a location accepted by Birdwatch Ireland (managing the Tern Colony).
- The device will be installed outside the breeding season, and the device will be cleaned (non-toxic solution) by Birdwatch Ireland who have representatives on the Island during the breeding season.
- The laser emitted from the LiDAR is an "eye safe IR Laser" not-visible and outside the human and avian spectrum.
- The planner had excluded the device as it used a narrow definition of "mast" under Class 20A of Part 1 (mapping of meteorological conditions). The information gathered from the device will be used to prepare and off-shore wind farm application and also toward data for SEAI Wind Atlas.

- The period of use will be restricted to the stipulation in Class 20A, not erected longer than a period exceeding 15months in any period.
- The area within the walled area to the front of the outbuildings is not an amenity area as there are no permeant residents on the island.

6.2. Planning Authority Response

A response form the planning authority was received and may be summarised as follows:

- It is not accepted that the scope of Class 20A (mast for the purposes of mapping meteorological conditions) has been narrowly interpreted, the development legislation does not make reference to the inclusion of other plant and/or machinery. It is reasonable to assume the context of the term "mast" as the common definition.
- The applicant has submitted a reduction in the time in order to comply with the limitations of Class 20A although this is not relevant as the proposed development constitutes a material change of use.
- The proposed development does not come within the scope of Class 16 for exempted development.
- Comments from the Heritage Officer state that there has been no evidence to suggest an expert has chosen the location of the device, no evidence to substantiate claims that the cleaning product would not affect birds or any agreements with Birdwatch Ireland to maintain or clean. There is no evidence to suggest the placing of the LiDAR unit would not cause disturbance to the birds, therefore the proposed development requires an Appropriate Assessment.

6.3. Owner/ occupier's response

Rockabill Island is owned by the Commissioners of Irish Lights who submitted a letter of consent for the works with the planning application. No further responses were received.

7.0 Statutory Provisions

7.1. Planning and Development Act, 2000

Section 2, the following interpretation of "works":

"...includes any act or operation of construction, excavation, demolition, extension, alteration, repair or renewal....."

Section 3 (1), states the following:

"In this Act "development" means, except where the context otherwise requires, the carrying out of any works on, in, over or under land or the making of any material change in the use of any structures or other land."

Section 4 (1)(a)- (i) set out what is exempted development for the purpose of the Act.

Section 4 (2) provides for the making of the Regulations, Planning and Development Regulations, 2001.

Section 4(4) states the following:

"Notwithstanding.....any regulations under subsection (2), development shall not be exempted development if an environmental impact assessment or an appropriate assessment of the development is required."

Section 5 (3) (A) states the following:

"Where a declaration is issued under this section, any person issued with a declaration under subsection (2)(a) may, on payment to the Board of such a fee as may be prescribed, refer a declaration for review by the Board within 4weeks of the date of issuing the declaration."

Section 57 (1) states the following:

"...the carrying out of works to a protected structure, or a proposed protected structure shall not be exempted development only if those works would not materially affect the character of- a) the structure, or b) any element of the structure which contributes to its special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest."

7.2. Planning and Development Regulations, 2001

Article (6) (1) Exempted development, states the following:

"Subject to article 9, development of a class specified in column 1 of Part 1 of Schedule 2 shall be exempted development for the purposes of the Act, provided that such development complies with the conditions and limitations specified in column 2 of the said Part 1 opposite the mention of that class in the said column 1."

Article (9) Restrictions on exemption, states the following:

Development to which article 6 relates shall not be exempted development for the purposes of the Act—

(a) if the carrying out of such development would-

(vi) interfere with the character of a landscape, or a view or prospect of special amenity value or special interest, the preservation of which is an objective of a development plan for the area in which the development is proposed or, pending the variation of a development plan or the making of a new development plan, in the draft variation of the development plan or the draft development plan,

(vii) consist of or comprise the excavation, alteration or demolition (other than peat extraction) of places, caves, sites, features or other objects of archaeological, geological, historical, scientific or ecological interest, the preservation, conservation or protection of which is an objective of a development plan or local area plan for the area in which the development is proposed or, pending the variation of a development plan or local area plan, or the making of a new development plan or local area plan, in the draft variation of the development plan or the local area plan or the draft development plan or draft local area plan,

(viiB) comprise development in relation to which a planning authority or An Bord Pleanála is the competent authority in relation to appropriate assessment and the development would require an appropriate assessment because it would be likely to have a significant effect on the integrity of a European site."

Part 1 of Schedule 2 of Exempted Development of the Regulations, states the following:

Temporary Structures and Uses.

CLASS 16

The erection, construction or placing on land on, in, over or under which, or on land adjoining which, development consisting of works (other than mining) is being or is about to be, carried out pursuant to a permission under the Act or as exempted development, of structures, works, plant or machinery needed temporarily in connection with that development during the period in which it is being carried out. Such structures, works, plant or machinery shall be removed at the expiration of the period and the land shall be reinstated save to such extent as may be authorised or required by a permission under the Act.

CLASS 20A

The erection of a mast for mapping meteorological conditions.

1. No such mast shall be erected for a period exceeding 15 months in any 24month period.

- 2. The total mast height shall not exceed 80 metres.
- 3. The mast shall be a distance of not less than:
 - (a) the total structure height plus:
 - (i) 5 metres from any party boundary,
 - (ii) 20 metres from any non-electrical overhead cables,
 - (iii) 20 metres from any 38kV electricity distribution lines,

(iv) 30 metres from the centreline of any electricity transmission line of 110kV or more.

(b) 5 kilometres from the nearest airport or aerodrome, or any communication, navigation and surveillance facilities designated by the Irish Aviation Authority, save with the consent in writing of the Authority and compliance with any condition relating to the provision of aviation obstacle warning lighting.

4. Not more than one such mast shall be erected within the site.

5. All mast components shall have a matt, non-reflective finish and the blade shall be made of material that does not deflect telecommunications signals.

6. No sign, advertisement or object, not required for the functioning or safety of the mast shall be attached to or exhibited on the mast.

8.0 Assessment

The question to be addresses under this referral is as follows:

"Whether the temporary development of ZephIR (Z300) LiDAR technology at Rockabill Island is or is not development or is or is not exempted development."

8.1. Is or is not development

There are two separate components of this proposed development, in the first instance I will consider the placing of and use of the ZephIR (Z300) LiDAR technology and then the connection of the LiDAR device to the power generator in the lighthouse, each of these have been addressed separately below.

8.1.1. LiDAR device

LIDAR, which stands for Light Detection and Ranging, is a remote sensing method that uses light in the form of a pulsed laser to measure ranges. The purpose of the device is to measure wind speed, generating data for an Environmental Impact States (EIS) for a potential wind farm and the information, it will also be used by Sustainable Energy Authority Ireland (SEAI) for the Wind Atlas. The device is a 1.4m high structure (1.06m²) which will be placed on an existing concrete path to the front (west) of the current outbuildings, within the garden walls, ancillary to the original lighthouse keeper's residence. The power connection, discussed below, runs along

the path to an existing underground ducting connection. I consider the current change of the area from amenity for a wind measuring device is a material change of use, therefore under Section 3(1) of the Act, the placing of the LiDAR device on the site is development.

8.1.2. Cabling and Connection to the Battery

The power for the LiDAR device is sourced from an existing generator in the lighthouse. Following the submission of further information, altering the cable route, it was confirmed that the LiDAR unit would be contained in an existing covered ducting which would connect an existing battering in the lighthouse. Section 3(1) of the Act refers to development as the carrying out of any works, on, in, over or under land. The LiDAR device cannot operate without the power connection; therefore, I consider they are interlinked. Based on the use of the existing ducting to power a device, which is a material change of use, and the laying of additional cabling throughout the site, I consider the proposal is "development" as defined under Section 3(1) of the Act.

8.2. Is or is not exempted development

The applicant has submitted that although the LiDAR device and associated connection is development, the placing of these on site is deemed exempted development under Class 16 & Class 20 A of the Regulations as discussed below.

8.2.1. Class 16 of the Regulations.

The applicant submits the proposed LiDAR device will be placed on site for a period of 15months, originally proposed for 24 months. The purpose of the device is to measure wind speeds which will assist the preparations of an EIS for a potential wind farm application. The initial referral to the planning authority referenced Class 16, temporary structures associated with a permission or an exempted development. I note there is currently no permission or established relevant exempted development in Class 16. Therefore, I do not consider Class 16 relevant for the determination of this referral.

8.2.2. Class 20A of the Regulations.

The erection of a mast for mapping meteorological conditions is exempted Under Class 20A of Part 1 (exempted development – general) subject to conditions and limitations. The applicant submits that the data collected will inform an EIS and provide data for the SEAI Wind Atlas. The Planning Authority excluded the determination of the device as a "mast" based on the definition contained within the Collins English Dictionary as a "tall pole for supporting something". I note the supplementary information on the LiDAR device refers to the placing of the structure on both a pole/mast or on the ground. In this instance the applicant considers the location close to the ground will be sufficient to collect the relevant data. I consider the definition of mast for the purpose of compliance with Class 20A may be referenced within the scope of the limitations i.e. the height restriction (80m) and location of the structure, which the device complies with. In addition, I note the grounds of appeal have proposed a reduction of the period of time erected from 24 to 15months so as to comply with the limitations of Class 20A. I consider the LiDAR device may be considered as a "mast" for the purpose of Class 20A. Therefore, based on the compliance with the limitations and conditions of Class 20A I consider the LiDAR device is exempted development.

8.2.3. Cabling and Connection to Battery

The lighthouse is a protected structure (RPS No 772). Section 57 (1) states that works to a protected structure shall only be exempted development if the works would not materially affect the character of the structure or the features of interest. As stated above the proposed cabling will utilise the existing ducting throughout the site and into the lighthouse. I note the report of the Conservation Officer has no objection to the proposed development. Based on the location of the cabling along the side of a footpath and the use of existing ducting, I do not consider the proposed development will alter any of the features of interest of the lighthouse, therefore I consider the proposed development exempted development.

8.3. Restrictions on exempted development

Rockabill Island is a designated SPA, p NHA and WFDPA. The conservation objectives of the site include the Purple Sandpiper, Roseate Tern, Common Tern

and Artic Tern. A site inspection was carried out during the breeding season in the presence of representatives from Birdwatch Ireland who inhabit the island during this season to manage the Tern Colony. I noted the majority of the lands on the island where used as nesting grounds for these protected species.

Article 9 of the Regulations includes restrictions on exempted development. Development which comprises of alterations of features of ecological interest or would require an appropriate assessment because it would be likely to significantly affect the integrity of a European Site, shall not be exempted development. A screening assessment has been submitted with the referral which concludes that the use of the existing concrete path is not required as an appropriate nesting habitat, the device will be installed in the winter months outside the breeding season and the device will only need wiped clean with non-toxic solution. The report of the Heritage Officer states that there is insufficient information submitted in the screening assessment to undertake a full assessment and the installation of the LiDAR remote sensing device is likely to cause disturbance on the breeding birds of the island.

The information submitted from the testing laboratory "lasermet" includes the following definition of the ZephIR "The tested product is a device for measuring wind speed. It emits laser radiation at 1575nm in a beam of small convergence which is scanned in a circle to form a "cone" in the air. The radiation is directly accessible." The screening assessment did not make reference to this information.

I note the location of the concrete path for the device, the cabling along the side of the path, utilising existing ducting and I do not consider the location will have a negative impact on the nesting habitat of any breeding birds. The supplementary information submitted on the device requires minimum maintenance, therefore the proposal to wipe the device by Birdwatch Ireland representatives with non- toxic solution, which I consider reasonable. The grounds of appeal submit the "laser" is an eye safe IR laser, is not visible, has been deployed in puffin sanctuaries without issue and is outside both the human and avian spectrum, this has not been supported by any scientific evidence. An additional statement from the agent who undertook the screening for appropriate assessment addressed some of the issues raised by the Heritage Officer, namely the location of the device, cleaning of the device and site visits on the site, it did not include any further reference to the impact of the laser. I consider the absence of any reference and scientific evidence of the

impact of the laser which "*emits laser radiation at 1575nm in a beam*" on those protected species in the screening assessment inappropriate and I cannot conclude without any scientific doubt that the LiDAR device will have no likely significant impact on the conservation objectives of the Rockabill Island SPA and a stage 2 assessment is required. Therefore, I consider an Appropriate Assessment is required and based on Section 4 (4) of the Act and Article 9 (1) (a) (viiB) of the Regulations, the proposed development is not exempted development.

9.0 **Recommendation**

9.1. I recommend that the Board should decide this referral in accordance with the following draft order.

WHEREAS a question has arisen as to whether the temporary development of ZephIR (Z300) LiDAR technology at Rockabill Island is or is not development or is or is not exempted development:

AND WHEREAS Gaelectric Developments Ltd. requested a declaration on this question from Fingal County Council and the Council issued a declaration on the 23rd day of February, 2017 stating that the matter was development and was not exempted development:

AND WHEREAS referred this declaration for review to An Bord Pleanála on the 21st day of March, 2017:

AND WHEREAS An Bord Pleanála, in considering this referral, had regard particularly to –

- (a) Section 2(1) of the Planning and Development Act, 2000, as amended,
- (b) Section 3(1) of the Planning and Development Act, 2000, as amended,
- (c) Section 4(1)(a) of the Planning and Development Act, 2000, as

amended,

- (d) Section 4 (4) of the Planning and Development Act, 2000, as amended,
- (e) Section 57 (1) of the Planning and Development Act, 2000, as amended,
- (f) article 6(1) and article 9(1) (a) (viiB) of the Planning and Development Regulations, 2001, as amended,
- (g) Parts 1 and 3 of Schedule 2 to the Planning and Development Regulations, 2001, as amended,
- (h) the original referrers submission and subsequent submission,
- (i) the original screening assessment and subsequent supporting statement,
- (j) the planning authority's assessment,
- (k) the report of the inspector.

AND WHEREAS An Bord Pleanála has concluded that:

- (a) The placing and/or installation of a battery, a diesel generator to charge the battery, a cable to power the LiDAR device within the Rockabill Lighthouse (RPS No.772) and the curtilage of same, constitutes development which is exempted development having regard to Section 57 (1) of the Planning and Development Act, as amended.
- (b) The temporary placing and use of the LiDAR device on Rockabill Island constitutes development which is not exempted development having regard to Section 4(4) of the Planning and Development Act, as amended.

NOW THEREFORE An Bord Pleanála, in exercise of the powers conferred

on it by section 5 (3) (a) of the 2000 Act, hereby decides that the temporary development of ZephIR (Z300) LiDAR technology at Rockabill Island is development and is not exempted development.

Karen Hamilton Planning Inspector

14th of July 2017.