

Inspector's Report ABP-304685-19

Development	Permission for a wind farm with a 30 year operational life and all associated site works. The planning application was accompanied by a Natura Impact Statement and an Environmental Impact Assessment Report. Momeen & Lettergull, Co. Donegal.
Planning Authority	Donegal County Council
Planning Authority Reg. Ref.	1850156
Applicant(s)	Lettergull Windfarm Ltd.
Type of Application	Permission.
Planning Authority Decision	Refusal
Type of Appeal	First Party
Appellant(s)	Lettergull Windfarm Ltd
Observer(s)	None.
Date of Site Inspection	5 <sup>th</sup> November 2019

Inspector

Sarah Lynch

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# 1.0 Site Location and Description

- 1.1. The site is located with the townlands of Momeen and Lettergull in northeast Donegal. The development site covers a stated area of 127 hectares and is located at Lettergull hill c. 5km northeast of Raphoe.
- 1.2. The site is within an upland area of High Scenic Amenity as identified within the Donegal County Development Plan 2018-2024. The topography of the site is undulating and agriculture is the predominate use. The site is surrounded by the county and local road network which is interspersed with individual dwellings and agricultural development.
- 1.3. There is an established area of forestry located to the east of the site. Hedgerows delineate both the surrounding road network and provide field boundaries within the site. A small number of rock outcrops are present within the site with the remainder of the lands being firm under foot and well drained.

# 2.0 **Proposed Development**

- 2.1. It is proposed to construct a windfarm with a 30 year operational life, the windfarm will consist of the following:
  - 6 Wind turbines with a tip height of up to 135 metres.
  - Foundations and hardstands for turbines.
  - 1 no. borrow pit.
  - 1 no. anemometry mast of up to 100 metres.
  - Upgrade of existing and provision of new site access.
  - Electrical substation which will comprise:
    - 1 no. control building.
    - Electrical plant and equipment.
    - Waste water holding tank.
    - 1 no. temporary construction compound.

- Associated electrical and communications cabling connecting the turbines to the proposed on-site substation.
- Underground cabling to facilitate connection to the national grid.
- Car parking, benches, amenity trails and signage.

# 3.0 Planning Authority Decision

# 3.1. Decision

Donegal County Council determined to refuse permission for the following reasons:

- 1. The Council is seeking to initiate a variation process under Section 13 of the Planning and Development Act 2000-2018 relating to the deficiencies in policies in the wind energy generation policy framework. In the interim there remain significant deficiencies in the policy framework relating to wind energy that would otherwise enable consideration of this project. Therefore, having regard to the existing lacuna in Wind Energy policy, the Planning Authority considers that it is not in a position to adequately assess wind energy proposals in the policy context of the current Development Plan and National Guidelines on the matter. Therefore, in this context the Planning Authority considers that it would be premature and contrary to proper planning and sustainable development to permit the current wind farm development proposal.
- 2. The proposed windfarm development is located within an area considered for the N14 Manorcunningham to Lifford national road scheme. The Planning Authority considers that the proposed development would prejudice plans for the design of this scheme and is therefore premature pending the determination of this route. Furthermore, it considers a grant of permission for the proposed development to be at variance with the provisions of the DoECLG Spatial Planning and National Roads Guidelines for Planning Authorities Section 2.9 Protection of Alignments for Future National Road Projects. Therefore, the Planning Authority considers that it would be premature and contrary to proper planning and sustainable development to permit the current wind farm development proposal.

# 3.2. Planning Authority Reports

#### 3.2.1. Planning Reports

The planners report is consistent with the decision of the Local Authority.

- 3.2.2. Other Technical Reports
  - None

#### 3.3. Prescribed Bodies

- TII
  - The proposed scheme is located within an area considered for a future National Road Scheme N14 Manorcunningham to Lifford and may prejudice the design of this scheme, the development is therefore considered premature.
  - All loads should be checked to make sure that the national roads within the proposed haul route have the capacity to accommodate any abnormal weight load proposed where relevant.
  - In relation to cabling and potential grid connection applicant should be aware of impacts on both existing and future national road schemes.
  - A licence may be required from the road authority for any trenching or cabling proposals on the road network.
- IAA Details of aeronautical warning light to be agreed, provision of as constructed drawings, notification of crane operations 30 days prior to commencement.
- **An Taisce** the proposed development may have impacts on the following species resulting from displacement, loss of habitat and collision.
  - Golden Plover- Annex I species observed roosting within the windfarm site, should be protected.
  - Development may result in loss of foraging habitat for curlew.
  - Buzzards were noted at the site and the proposal may result in loss of foraging grounds and breeding habitat.

- Proposed development may pose a threat of collision risk to Kestrel.
- **Department Culture, Heritage and the Gaeltacht** Archaeological monitoring should be carried out.
- Derry City & Strabane District Council -
  - Turbines will be clearly visible from Derry City, Strabane Town and along the A5. The windfarm will be read cumulatively with other windfarms in Derry City and Strabane Council area and Donegal.
  - The applicant has failed to consider the impact of this transboundary application on Derry City and Strabane District. There is no visual analysis conducted from Derry City and Strabane District Council area. Only 4 photomontages have been shown for areas outside of the 5km distance from the windfarm.
- Department Housing, Planning and Local Government the Minister considers that the proposed development is likely to have significant effects on the environment in a Transboundary state (Northern Ireland). Following consultations An Bord Pleanála is requested to notify the Minister of its decision made in respect of the appeal as required under article 131(a) of the 2001 regulations.
- Strategic Planning Directorate Department for Infrastructure Northern Ireland – Responses from NI bodies as follows:
  - **Historical Environment Division** proposal is satisfactory.
  - Shared Environmental Services The NIS submitted is a reasonable assessment of potential impacts on River Foyle and Tributaries SAC and its site selection features.
  - Dfl Roads Details regarding deliveries of material from NI and will need to be consulted in relation to the transport Management Plan.
  - **DFL Rivers** No significant impact and unlikely to increase flood risk.
  - o **RSPB** 
    - Applicant consults with Bird Watch Ireland.

- Vegetation clearance should be carried outside of the bird breeding season.
- Ornithologist to be present if works are to be carried out during breeding season.
- Post construction bird monitoring to be carried out.

# Derry & City Strabane District Council Environmental Health Service

- The proposed development would be located c. 5-6km from noise sensitive receptors in NI and as such adverse noise impacts are highly unlikely.
- The development is 12km from the nearest windfarm and Carrickatane therefore cumulative noise impacts are also unlikely.
- The noise criteria for windfarms within PPS18 refers to ETSU-R-97 this criterion should be applied within the EIA when assessing noise impacts on noise sensitive receptors in Northern Ireland.

# • Loughs Agency

- Development should be constructed so as not to give rise to environmental impacts such as pollution of surface waters.
- No process water is to be used in the borrow pit operations.
- Settlement ponds to be used prior to discharge.
- Contingency plan established.

# • Department of Agriculture, Environment and Rural Affairs.

- Drainage and water are dealt with by the Loughs Agency
- Land and groundwater team are content with proposal.
- Natural Environment Division has no concerns.

# 3.4. Third Party Observations

Two no. submissions were received after the submission date and were deemed invalid.

# 4.0 **Planning History**

- 15/50968 Permission was granted for overhead electrical power lines.
- 11/60044 Permission was Granted for an EOD of 05/40401.
- 05/40401 Permission was Granted for the development of 8 no. 2MW turbines with the hub height of 80m, access roads, substation control building.

# 5.0 **Policy Context**

#### 5.1. Development Plan

#### **Donegal County Development Plan 2018-2024**

The appeal site is located in a rural area under strong urban influence which has been identified as being of High Scenic Amenity (HSA).

- Chapter 8 Natural Resource Development
- Section 8.2.23. Objectives
- E-P-12: It is the policy of the Council to:
  - (C) Reapplication In areas located outside of Natura 2000 sites, where an existing wind farm has been permitted and this permission has expired, a revised proposal will be considered within the planning unit of the previously permitted development, and where it is demonstrated that there is no net increase in turbines.

#### Areas of High Scenic Amenity (HSA)

Areas of High Scenic Amenity are landscapes of significant aesthetic, cultural, heritage and environmental quality that are unique to their locality and are a fundamental element of the landscape and identity of County Donegal. These areas have the capacity to absorb sensitively located development of scale, design and use that will enable assimilation into the receiving landscape and which does not detract from the quality of the landscape, subject to compliance with all other objectives and policies of the plan.

• Policy NH-O-7: To protect the areas of Especially High Scenic Amenity from intrusive and/or unsympathetic developments.

#### Aim

To facilitate the development of a diverse energy portfolio by the sustainable harnessing of the potential of renewable energy including ocean energy, bioenergy, solar, wind and geothermal, along with the sustainable use of oil and gas, and other emerging energy sources in accordance with National Energy policy and guidance. It is also an aim to facilitate the appropriate development of associated infrastructure to enable the harnessing of these energy resources and to promote and facilitate the development of Donegal as a Centre of Excellence for Renewable Energy.

#### Project Ireland - National Planning Framework 2040

The National Policy Position establishes the fundamental national objective of achieving transition to a competitive, low carbon, climate resilient and environmentally sustainable economy by 2050, this will be achieved by harnessing both the considerable on-shore and off-shore potential from energy sources such as wind, wave and solar.

• NSO 8 Transition to a low carbon economy

It is an objective of the plan to deliver 40% of our electricity needs from renewable sources by 2020 with a strategic aim to increase renewable deployment in line with EU targets and national policy objectives out to 2030 and beyond.

#### Ireland's Transition to a Low Carbon Energy Future 2015-2030

This document is a complete energy policy update, which sets out a framework to guide policy up to 2030. Its objective is to guide a transition, which sets out a vision for transforming Ireland's fossil fuel-based energy sector into a clean, low carbon system. It states that under Directive 2009/28/EC the government is legally obliged to ensure that by 2020, at least 16% of all energy consumed in the state is from

renewable sources, with a sub-target of 40% in the electricity generation sector. It notes that onshore wind will continue to make a significant contribution but that the next phase of Ireland's energy transition will see the deployment of additional technologies as solar, offshore wind and ocean technologies mature and become more cost-effective.

## Climate Action Plan 2019

• Section 4 - Choosing the Pathways which Create the Least Burden and Offer the Most Opportunity for Ireland.

In the power generation sector, increasing onshore and offshore wind capacity are the most economical options from the MACC for electricity production.

# Wind Energy Development Guidelines 2006

- Section 5.6 discusses noise impacts, which should be assessed by reference to the nature and character of noise sensitive locations i.e. any occupied house, hostel, health building or place of worship and may include areas of particular scenic quality or special recreational importance. In general noise is unlikely to be a significant problem where the distance from the nearest noise sensitive property is more than 500m.
- Section 5.12 notes that careful site selection, design and planning and good use of relevant software can help to reduce the possibility of shadow flicker in the first instance. It is recommended in that shadow flicker at neighbouring offices and dwellings within 500m should not exceed 30 hours per year or 30 minutes per day. The potential for shadow flicker is very low at distances greater than 10 rotor diameters from a turbine.
- Chapter 6 relates to aesthetic considerations in siting and design. Regard should be had to profile, numbers, spacing and visual impact and the landscape character. Account should be taken of inter-visibility of sites and the cumulative impact of developments.

#### Draft Wind Energy Development Guidelines 2019

- Chapter 5 considering an application for wind energy development.
  - A planning authority may consider some if not all of the following matters:
    - Environmental assessments (EIA, AA etc.)
    - Community engagement and participation aspects of the proposal
    - Grid Connection details
    - Geology and ground conditions, including peat stability; and management plans to deal with any potential material impact. Reference should be made to the National Landslide Susceptibility Map to confirm ground conditions are suitable stable for project;
    - Site drainage and hydrological effects, such as water supply and quality and watercourse crossings; Site drainage considerations for access roads/tracks, separate in addition to the impact of the actual turbines management plans to deal with any potential material impact on watercourses; the hydrological table; flood risk including mitigation measures;
    - Landscape and visual impact assessment, including the size, scale and layout and the degree to which the wind energy project is visible over certain areas and in certain views;
    - Visual impact of ancillary development, such as grid connection and access roads;
    - Potential impact of the project on natural heritage, to include direct and indirect effects on protected sites or species, on habitats of ecological sensitivity and biodiversity value and where necessary, management plans to deal with the satisfactory coexistence of the wind energy development and the particular species/habitat identified;
    - Potential impact of the project on the built heritage including archaeological and architectural heritage;

- It is recommended that consideration of carbon emissions balance is demonstrated when the development of wind energy developments requires peat extraction.
- Local environmental impacts including noise, shadow flicker, electromagnetic interference, etc.;
- Adequacy of local access road network to facilitate construction of the project and transportation of large machinery and turbine parts to site, including a traffic management plan;
- Information on any cumulative effects due to other projects, including effects on natural heritage and visual effects;
- Information on the location of quarries to be used or borrow pits proposed during the construction phase and associated remedial works thereafter;
- Disposal or elimination of waste/surplus material from construction/site clearance, particularly significant for peatland sites; and
- Decommissioning considerations.

Notable changes within the draft guidelines relate to community engagement, noise and separation distance.

# Noise

Section 5.7.4 - The "preferred draft approach", proposes noise restriction limits consistent with World Health Organisation Guidelines, proposing a relative rated noise limit of 5dB(A) above existing background noise within the range of 35 to 43dB(A), with 43dB(A) being the maximum noise limit permitted, day or night. The noise limits will apply to outdoor locations at any residential or noise sensitive properties.

# Shadow Flicker

 Section 5.8.1 - The relevant planning authority or An Bord Pleanála should require that the applicant shall provide evidence as part of the planning application that shadow flicker control mechanisms will be in place for the operational duration of the wind energy development project.

#### **Community Investment**

 Section 5.10 - The Code of Practice for Wind Energy Development in Ireland Guidelines for Community Engagement issued by the Department of Communications, Climate Action and Environment (December 2016) sets out to ensure that wind energy development in Ireland is undertaken in observance with the best industry practices, and with the full engagement of communities around the country.

#### Visual Impact

• Section 6.4- Sitting of Wind energy projects.

#### Set back

- Section 6.18.1 Appropriate Setback Distance to apply The potential for visual disturbance can be considered as dependent on the scale of the proposed turbine and the associated distance. Thus, a setback which is the function of size of the turbine should be key to setting the appropriate setback. Taking account of the various factors outlined above, a setback distance for visual amenity purposes of 4 times the tip height should apply between a wind turbine and the nearest point of the curtilage of any residential property in the vicinity of the proposed development, subject to a mandatory minimum setback of 500 metres.
- Policy SPPR 2 Set back.
- Section 6.18.2 Exceptions to the mandatory minimum setbacks An exception may be provided for a lower setback requirement from existing or permitted dwellings or other sensitive properties to new turbines where the owner(s) and occupier(s) of the relevant property or properties are agreeable to same but the noise requirements of these Guidelines must be capable of being complied with in all cases

# 5.2. Natural Heritage Designations

The nearest Natura 2000 sites are as follows:

• River Finn SAC is located c. 4.5km east of the site.

- Lough Swilly SAC & SPA are located 9.5km west of the site.
- Foyle and Tributaries is located c. 9.5km north east of the site.

# 5.3. EIA Screening

5.4. An EIAR was submitted with the applicant and is examined within Section 8 below. Transboundary consultation has been carried and responses to this consultation are outlined in Section 3.3 above.

# 6.0 The Appeal

# 6.1. Grounds of Appeal

The grounds of appeal have been prepared by MKO Consultants on behalf of the applicant, the issues raised can be summarised as follows:

- Current application was lodged on the basis of optimising and updating the previous approval.
- No. of turbines has reduced from 8 as originally approved to 6.
- Permission has been obtained for the connection to the national grid.
- There have been significant delays due to transboundary consultation.

# Policy

- Donegal County Council have stated to the applicant that all wind applications will be considered premature pending the adoption of a wind strategy, this is not acceptable.
- The applicant refers to national and regional policy and guidance in relation to the proposed development and the support afforded to wind energy within these documents.
- The applicant refers also to the Donegal Development Plan in which the proposed site under the current plan was previously identified as suitable for augmentation prior to judicial review.

- The applicant considers that notwithstanding the removal of policy as a result of the judicial review process, there is a sufficient policy framework against which wind development can be assessed.
- JR Element Power Ireland Ltd v ABP -The board refused permission based on a lack of national wind strategy and lack of local policy, the Board was found to have acted Ultra Vires. Therefore, it is not appropriate to refuse permission based on a lack of national or local policy.
- It is contended that the current Donegal Development plan contains sufficient policy support for wind energy developments.
- The EIAR submitted also provides a significant and comprehensive analysis of the suitability of the site for the development.

#### Roads

- The appeal site was included within the study area for the N14 realignment.
- The preferred route was put out for public consultation in February 2019.
- The preferred design of the N14 does not impact the hillock on which the development is proposed and is c. 1.2km from the preferred route.
- Whilst the hill at Lettergull was in the study area for the N14 it never presented a viable option due to the topography.
- Increase in traffic will be temporary for a period of 6 mths to facilitate construction.
- Whilst vehicles carrying turbines are heavy, they are designed to ensure that axle loading will not be above normal accepted limits.
- Any works required on haul route will comply with TII requirements.
- A licence may be required for any works in relation to cabling on public roads.
  Visual
- The Council put an advice note onto the decision in relation to the visual impact of the development, the applicant considers that the proposed development has been robustly assessed and appropriate mitigation measures were proposed within the EIAR.

- The advice note referred to two protected views, since the decision these views have been reassessed and photomontages submitted with the appeal, Grianan of Aileach is located 14.2km from the development and the magnitude of visual change is considered low.
- Views from the townland of Listillian were assessed and the magnitude of change was also considered to be low.
- It is of note that visual impact did not form part of the reasons for refusal.
- Assessment of visual impact resulted in a low impact on the receiving environment.

# Impacts on Ecology

- Detailed knowledge of bird distribution and flight activity within and surrounding the site has been used to predict the potential effects of the windfarm on birds.
- No significant effects are predicted on Golden Plover, Curlew, Buzzard and Kestrel or any other bird species.

# 6.2. Planning Authority Response

• Donegal County Council wish to rely on the details within the planner's report.

# 6.3. Observations

• None

# 7.0 Assessment

The proposed development is located in an area of high scenic amenity under strong urban influence as identified within the Donegal County Development Plan 2018-2024. It is important to note at the outset that the Council carried out a comprehensive assessment of the county and landscape during the preparation of the current development plan and identified and mapped suitable locations for wind energy development. However, this element of the plan has been successfully challenged and as a consequence a number of Sections inclusive of the locational mapping have been removed.

- 7.1. This is a first party appeal against the Council's decision to refuse the proposed development for reasons of prematurity pending the adoption of the new wind guidelines and variation to the Donegal County Development Plan and the potential to conflict with the alignment of the N14 works, as the site is located within the study area for these works. The issues for consideration before the Board can be summarised as follows:
  - Principle of the development
  - Conflict with the re-alignment of the N14 & access
  - Visual Impact
  - Impact on residential amenity in terms of noise and shadow flicker.
  - Other Matters
  - Appropriate Assessment
  - EIAR

# Principle of the development

- 7.2. There is a positive presumption in favour of renewable energy projects at National, Regional and Local levels. This is reflected in the Wind Energy Development Guidelines for Planning Authorities, 2006, the Regional Planning Guidelines for the Border Region 2010-2022 and draft Regional Spatial and Economic Strategy for the Northern and Western Region and the Donegal County Development Plan 2018-2024. As outlined above there is a lacuna in relation to detailed wind energy policy within the Donegal County Development Plan as a result of a legal challenge, however, the overriding policy aim for the Council, as stated within the development plan, is to facilitate the development of a diverse energy portfolio by the sustainable harnessing of the potential of renewable energy including wind and to facilitate the appropriate development of associated infrastructure to enable the harnessing of these energy resources and to promote and facilitate the development of Donegal as a Centre of Excellence for Renewable Energy.
- 7.3. Having regard to the policies and objectives of the County Development Plan, the national guidelines and the judgement in relation to JR Element Power Ltd and ABP,

I consider that there is sufficient guidance and policy available to appropriately determine the suitability of the proposed development.

7.4. Based on the foregoing I consider the principle of the development to be acceptable, provided that it does not adversely impact on the environment, the amenities of the area or on local residents.

#### Conflict with the re-alignment of the N14 & access

- 7.5. Concerns have been raised within the reasons for refusal in relation to the location of the proposed development within the study area for a section of the TEN-T Priority Route Improvement Project (N14 Manorcunningham to Lifford section). As a consequence, the Council considered the proposal to be contrary to Section 2.9 of the Spatial Planning and National Road Guidelines 2012.
- 7.6. Section 2.9 of the aforementioned guidelines refers to the identification of any land required for future national road projects in the preparation of plans and requires that a development or local area plan should identify lands required for future national roads projects and retain required lands free from development, any adjacent development of sensitive uses should be compatible with the construction and long term operation of the road.
- 7.7. I note from the Donegal Council's website that the preferred route option for the TEN-T Priority Route Improvement Project has been selected and is currently at the design and environmental evaluation stage. The preferred route information was updated in the Donegal Website on the January 2020.
- 7.8. I note that the Spatial Planning and National Road Guidelines 2012 do not explicitly prohibit development within the study area of a road project and as outlined above refers to the consideration of such projects at plan stage. The proposed development is located c. 1.6km north of the preferred route, in an upland area significantly removed from the N14. It is reasonable to presume that the road improvement works will not impact upon these lands given the topography, existing level development and the distance from the existing alignment of the N14.
- 7.9. It is also important to note that the proposed development is not a sensitive receptor and is compatible with both the construction and operation of roads infrastructure.

- 7.10. Thus, whilst I acknowledge the concerns of the Council and Transport Infrastructure Ireland, I consider the refusal of the proposed development on the basis that it would impact the proposed N14 realignment works to be unreasonable, given the nature of the proposed development and the separation distance from the preferred N14 realignment route.
- 7.11. Whilst I do not consider that the operation of the windfarm will have any impact on the long term operation of the road, I do consider that there may be potential for temporary impacts to arise in relation to increased traffic volumes associated with the construction of the windfarm. Traffic impacts and associated mitigation measures are examined within Section 10 below.
- 7.12. Overall, by reason of the foregoing I consider that the proposed development will not significantly impact the construction or operation of the TEN-T Priority Route Improvement Project (N14 Manorcunningham to Lifford section) and is acceptable in this regard.

#### **Visual Impact**

- 7.13. The proposed development is located in an area identified as being of high scenic amenity within Map 7.1.1 of the Donegal Development Plan 2018-2024 and is largely located within the Lagan Valley LCA, which comprises of undulating agricultural landscape of good quality pasture and arable lands interspersed with domestic and agricultural development. The site is bounded to the east by the Foyle Valley which affords long distance views.
- 7.14. The Donegal Development Plan outlines that areas of high scenic amenity in which the development site is located, have the capacity to absorb sensitively located development of scale that will enable assimilation into the receiving landscape and which does not detract from the quality of the landscape. It is outlined within the documents submitted that the landscape has a strong visual connection with its mirror landscape on the opposite side of the River Foyle in Northern Ireland whereby many of the windfarms within this area of Northern Ireland are visually prominent.
- 7.15. The proposed development seeks to construct 6 no. turbines, and an electricity substation and grid connection within this upland area. As aforementioned the proposed turbines will not only be a new addition to this particular site but are the most visually prominent element of the proposed development. It is of note that there are a

number of windfarm developments present within the wider landscape setting, and whilst the cumulative visual impact of the development will be carefully considered it is nonetheless important to acknowledge at the outset that the proposal will not introduce a new form of development into the wider landscape given the presence of existing turbines within view of the site.

- 7.16. Guidance in relation to the assessment of visual impacts within the current guidelines, relates to the siting, layout and landscape setting of the proposed windfarm. Section 6.3 of the 2006 guidelines refers to the positive effects of forestry within the setting of a turbine and the counterbalance that such landscape features can provide. Refence is also made to the preferable positioning of the proposed turbines on a rising slope. Visual stacking of turbines should be avoided and the location of staggered turbines in an open landscape is preferable.
- 7.17. These requirements are also contained within the draft Wind Energy Guidelines 2019, within which it is a requirement for visual impact assessment to extended to lands within a 15km radius. The draft guidelines state that the potential for visual disturbance can be considered as dependent on the scale of the proposed turbine and the associated distance. Thus a setback which is the function of size of the turbine should be key to setting the appropriate setback. A set back distance of 4 times the tip height should apply between a wind turbine and the nearest point of the curtilage of any residential property in the vicinity of the proposed development subject to a mandatory minimum set back of 500 metres.
- 7.18. Whilst visual impact was not cited as a reason for refusal by the Council, concerns in relation to the prominent location of the proposed development on a hillock which is clearly visible from the N14 were raised within the advice note included with the planning decision. The Council was particularly concerned about the impact of the development on designated views and prospects from Grianan of Aileach Fort in the townland of toulett and the N14 on the approach to Dry Arch roundabout in the townland of Listillian.
- 7.19. A comprehensive visual impact assessment was submitted with the application and extends to an area of 20km from the site, extending beyond Derry City to the Sperrin Foothills. A number of viewpoint locations have been selected for the purpose of this visual assessment which examine the potential for visual impact in detail. In response

the Council Concerns, the applicant within the grounds of appeal revisited the visual impact in relation to the aforementioned locations and provided additional photomontages and assessment carried out by a Landscape and Visual Impact Assessment Specialist and Chartered Landscape Architect in which it is stated that the impact arising from the development on these sites is imperceptible.

- 7.20. Concerns regarding the visibility of the proposed turbines were also raised by Derry City and Stranbane District Council within their submission to the appeal. The submission states that the proposed development will be visible from Derry and will be viewed cumulatively with existing windfarms in the area including within Northern Ireland. The submission also raises concerns about the number of photomontages produced and the comprehensiveness of this element of the assessment in the context of Derry and the surrounding area.
- 7.21. Potential for impacts to arise in relation to Northern Ireland have been considered within the visual assessment submitted within the EIAR document. A map illustrating the Zone of Theoretical Visibility has been produced in order to inform the visual impact assessment and as aforementioned, extends to a 20km radius of the site including Derry City and beyond to the Sperrin Foothills.
- 7.22. The ZTV map indicates that the locations at which the majority of turbines would be visible are within the 5-11km radius. The ZTV map is a topographical tool and does not take into account buildings or vegetation. In order to properly determine the actual visibility of the turbines, 13 specific locations identified within the ZTV were assessed in detail. Of the 13 locations and photomontages examined within the EIAR, visual impacts were stated as imperceptible for four viewpoints, slight from six viewpoints, and moderate from two viewpoints. Views from points no. 1 and 3 could see all 6 turbines however impacts were considered to be moderate. I note that the applicants within their appeal have stated that the visual impacts of the proposed development in relation to Strabane have been reviewed and no impacts were noted. Furthermore, additional points along the A5 have been assessed in relation to the potential for visual impacts and it was noted that existing roadside hedging prevents long range views of the site.

- 7.23. As mentioned, protected views and prospects are not shown to be impacted by the development. The overall conclusion arising from the visual impact assessment carried out is that impacts range from slight to moderate.
- 7.24. I have examined the visual impact assessment submitted and carried out a thorough site inspection of both the development site and the surrounding area and whilst I consider that long range visual impacts will not be significantly impacted by the development I have concerns regarding the visual impacts perceived from existing established development within the vicinity of the site.
- 7.25. The proposed turbines will be located on the slope of a hillock which is surrounded by the local road network, which itself is interspersed with residential and agricultural development. I note from the plans submitted that the nearest dwelling to the site is c. 344 metres from turbine no. 6 and there is a dwelling located c. 367 metres south west of turbine no. 3. A number of remaining turbines are slightly in excess of 500 metres from existing dwellings in the vicinity.
- 7.26. The turbines proposed are to reach a tip height of 135 metres, whilst the current guidelines do not specify a minimum separation distance in relation to visual amenities, it is of note that a minimum separation distance of 500 metres is required in reference to shadow flicker. The draft guidelines however, consider that the potential for visual impact is dependent on scale and the distance from the proposed turbine. It is recommended that an appropriate setback for visual amenity purposes of 4 times the tip height should apply between a turbine and the nearest point of the curtilage of a dwelling subject to a mandatory setback of 500 metres.
- 7.27. Whilst only 2 of the turbines can achieve a set back of 4 times the tip height, four can achieve a separation of in excess of 500 metres. Having regard to the limited separation distances achievable in relation to T3 and T6 which are significantly below 500 metres, I consider that visual impacts arising from these turbines would have an unacceptable impact on these properties in terms of visual impact and as such I consider that should the Board be of a mind to grant permission that these 2 turbines are omitted from the scheme.
- 7.28. Having regard to the visual impact assessment submitted, the undulating topography of the site and presence of forestry which will provide a soft visual barrier between the

development and a number of properties, I consider that the visual impacts of the remaining four turbines would not be so significant as to warrant a refusal.

7.29. I have also considered the potential for cumulative visual impacts to arise and consider, based on the information submitted and conditions observed during the site inspection, that such impacts are not likely.

#### Impact on residential amenity in terms of noise and shadow flicker.

- 7.30. The Wind Energy guidelines 2006, recommend that shadow flicker at neighbouring offices and dwellings within 500m should not exceed 30 hours per year or 30 minutes per day. In order to determine potential impacts to surrounding properties arising from shadow flicker, a 120-metre rotor diameter and a hub height of 75 metres was modelled.
- 7.31. It is stated within Section 4.7.4.1 of the EIAR submitted that the proposed turbines will be fitted with turbine control software which will ensure that the turbine does not exceed 30 hours per year or 30 minutes per day. A study area including 89 no. buildings occupied and unoccupied within a distance of 10 rotor diameters of the site were examined. A planning history search was also carried out to include buildings that have permission but are not constructed to date. The total annual flicker model assumes 100% sunshine during daytime hours. Weather data for this region indicates that on average the sun shines for 30% of daylight hours per year. Based on this data the maximum time that shadow flicker could occur is 30%.
- 7.32. The guideline thresholds have been extended to all properties within 1200 metres not just within 500 metres of the development. Of the 90 properties (no. includes permitted but not constructed developments), shadow flicker will occur at 63 no. properties 48 no. properties will experience shadow flicker in excess of the thresholds outlined within the guidelines. These outcomes are based on 100% sunshine everyday during daylight hours, which as aforementioned is not achievable at this location. It is therefore considered within Section 4.7.5.1 that the actual level of shadow flicker experienced will be limited and rare. The model also assumes that all properties have windows facing the proposed windfarm.
- 7.33. Based on the worst-case scenario the applicant has proposed mitigation measures which include the installation of a screen and /or wind turbine control measures. Alternative measures will also be agreed with the affected properties in terms of

installation of blinds, planting or screens within or adjacent to the properties. It is further stated that a SCADA control will be used in order to ensure that shadow flicker is in accordance with the limitations of the guidelines. Intensity sensors will be utilised to detect if there is sufficient sunlight to cast a shadow.

- 7.34. Cumulative shadow flicker was considered, and it is stated that there are no windfarms within 2km of the proposed development, therefore cumulative impacts will not arise.
- 7.35. Overall, based on the information submitted I am satisfied that shadow flicker can be adequately mitigated and will not significantly impact properties in the vicinity.
- 7.36. Impacts arising from noise during both the construction and operation of the development have been examined in detail within Section 10 of the EIAR assessment below. It is concluded within Section 10 of this assessment that noise emissions can be adequately controlled by condition.
- 7.37. I note that current wind guidelines (2006), consider general noise not to be a significant problem whereby the distance from the nearest noise sensitive property is more than 500 metres. The draft approach as outlined above significantly differs, and proposes noise restriction limits consistent with World Health Organisation Guidelines, proposing a relative rated noise limit of 5dB(A) above existing background noise within the range of 35 to 43dB(A), with 43dB(A) being the maximum noise limit permitted, day or night.
- 7.38. Its important to note at this juncture that I have had regard to the recent judgement Balz v An Bord Pleanála [2019], IESC 90, and in this context have had regard to both the current guidelines and draft guidelines in my assessment and examination of noise emissions. As aforementioned, impacts arising from noise are examined in detail within Section 10 of this report and, as outlined within Section 10, I consider that noise emissions can be adequately controlled by condition.
- 7.39. Overall, having regard to the foregoing and Section 10 below, I consider that impacts to residential properties can be adequately mitigated and controlled and as such significant long term impacts are not expected.

# 8.0 Appropriate Assessment

- 8.1. The application was accompanied by a NIS prepared by McCarthy Keville O'Sullivan which described the proposed development, its receiving environment and relevant European Sites in the zone of influence of the development. The NIS contained a specific screening for appropriate assessment section, and sufficient information has been provided on file and within the NIS to enable the Board to adequately carry out one. The NIS outlined the methodology used for assessing potential impacts of the development on the habitats and species within this SAC. It predicted the potential impacts for this site and its conservation objectives, set out proposed mitigation measures, assessed in-combination effects with other plans and projects and identified any residual effects on the European site and its conservation objectives.
- 8.2. The NIS was informed by a desk study which reviewed available ecological data such as online web mappers, National Bat Database, Bird Sensitivity Mapper and review of impact assessments associated with nearby development. Bird surveys were also undertaken between March 2016 and September 2017.
- 8.3. The report concluded that, taking into account the project design and the implementation of mitigation measures identified in the NIS, the proposed development will not result in adverse effects on the integrity of any Natura 2000 site.
- 8.4. Having reviewed the NIS and the supporting documentation, I am generally satisfied that it provides adequate information in respect of the baseline conditions, identifies the potential impacts, uses best scientific information and knowledge and provides details of mitigation measures. I am satisfied, that the information provided is generally sufficient to allow for appropriate assessment of the development.
- 8.5. Having regard to the information and submissions available, nature, size and location of the proposed development and its likely direct, indirect and cumulative effects, the source pathway receptor principle and sensitivities of the ecological receptors, the following European Sites were considered relevant to include for the purposes of initial screening for the requirement for Stage 2 appropriate assessment on the basis of likely significant effects. I note that the screening document submitted by the applicant included a number of other Natura 2000 sites, however these sites are within different waterbodies and are without a pathway to the development site. It was therefore not

necessary to include these sites for screening as they are outside of the zone of influence.

European Site Name & Code	Distance	Qualifying Interest	Source- pathway- receptor	Considered further in screening
River Finn SAC 002301	4.7km east 8.5km west of the site	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110] Northern Atlantic wet heaths with Erica tetralix [4010] Blanket bogs (* if active bog) [7130] Transition mires and quaking bogs [7140] Salmo salar (Salmon) [1106] Lutra lutra (Otter) [1355] Coastal lagoons [1150] Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] Molinia meadows on calcareous, peaty or clayey- silt-laden soils (Molinion caeruleae) [6410] Old sessile oak woods with llex and Blechnum in the	Hydrological link surface water drainage to Johnston stream connected to River Finn.	Yes - Potential for significant effects arising from contaminated surface water runoff from construction.
Lough Swilly SPA 004075	9km west of site	British Isles [91A0] Lutra lutra (Otter) [1355] Great Crested Grebe (Podiceps cristatus) [A005] Grey Heron (Ardea cinerea) [A028] Whooper Swan (Cygnus cygnus) [A038]	Potential to disturb foraging birds.	Yes

# 9.0 **Table 1 European sites considered for Stage 1 screening:**

Greylag Goose (Anser anser) [A043]	
Shelduck (Tadorna tadorna) [A048]	
Wigeon (Anas penelope) [A050]	
Teal (Anas crecca) [A052]	
Mallard (Anas platyrhynchos) [A053]	
Shoveler (Anas clypeata) [A056]	
Scaup (Aythya marila) [A062]	
Goldeneye (Bucephala clangula) [A067]	
Red-breasted Merganser (Mergus serrator) [A069]	
Coot (Fulica atra) [A125]	
Oystercatcher (Haematopus ostralegus) [A130]	
Knot (Calidris canutus) [A143]	
Dunlin (Calidris alpina) [A149]	
Curlew (Numenius arquata) [A160]	
Redshank (Tringa totanus) [A162]	
Greenshank (Tringa nebularia) [A164]	
Black-headed Gull (Chroicocephalus ridibundus) [A179]	
Common Gull (Larus canus) [A182]	
Sandwich Tern (Sterna sandvicensis) [A191]	
Common Tern (Sterna hirundo) [A193]	
Greenland White-fronted Goose (Anser albifrons flavirostris) [A395]	
Wetland and Waterbirds [A999]	

Lough Fern SPA 004060	c. 19km north west of site	Pochard (Aythya ferina) [A059] Wetland and Waterbirds [A999]	No pathway due to distance from development.	No
River Foyle and Tributaries SAC (NI) UK0030320		Lutra lutra (Otter) Salmo salar (Salmon) Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation	River Finn discharges to River Foyle	Yes Potential for significant effects arising from contaminated surface water runoff from construction.

- 9.1. The NIS submitted screens in the following sites for Appropriate Assessment:
  - River Finn SAC
  - Lough Swilly SAC
  - River Foyle and Tributaries SAC
  - Lough Swilly SPA
- 9.2. It is stated within the NIS submitted that there is a hydrological link between the site and Lough Swilly. I have reviewed the hydrological data and mapping for the area and note that the site is located in the Foyle catchment within the sub catchment of the St Johnston stream\_SC\_10. The development site is within a different catchment to the waterbodies draining into Lough Swilly SAC and for this reason, given the lack of hydrological link to the site I consider Lough Swilly SAC should be screened out for the purpose of Appropriate Assessment.
- 9.3. Therefore, based on my examination of the NIS report and supporting information, the scale of the proposed development, its potential to contaminate the River Finn SAC and Foyle and Tributaries SAC by way of water pollution and sedimentation from surface water runoff, and the potential to effect foraging grounds for the qualifying interests of the Lough Swilly SPA, I would conclude that a Stage 2 Appropriate Assessment is required for River Finn SAC, Foyle and Tributaries SAC and Lough

Swilly SPA. All other sites in the area can be discounted by virtue of distance from and lack of pathway to the development site.

# Stage II Appropriate Assessment

- 9.4. The following Appropriate Assessment of the implications of the proposed works alone and in combination with other relevant plans and projects will be carried out in relation to the following European sites in view of their conservation objectives:
  - River Finn SAC
  - Foyle and Tributaries SAC
  - Lough Swilly SPA.
- 9.5. The NIS submitted by Donegal County Council concluded that the proposal will not beyond reasonable scientific doubt, adversely affect the integrity of any European Site either directly or indirectly.
- 9.6. The following is a summary of the objective scientific assessment of the implications of the project on the qualifying interest features of the European sites using the best scientific knowledge in the field. All aspects of the project which could result in significant effects are assessed and mitigation measures designed to avoid or reduce any adverse effects are considered and assessed.

# 9.7. Potential for direct and indirect effects

# Water Ecology

- 9.8. The River Finn is one of the Country's most important salmonid rivers and salmon is a qualifying interest of the River Finn SAC. Similarly, otters are a qualifying interest of the River Finn SAC. Both species are vulnerable to changes in water quality and siltation.
- 9.9. Due to the location and nature of the proposed works proximate to a drainage channel which discharges to the Treantaghmucklagh River which is a tributary of the River Foyle, and having regard to the qualifying interests of both the River Finn SAC and the Foyle and Tributaries SAC, I consider that Salmon and Otter specifically are the qualifying interests at risk within these sites from the proposed development.
- 9.10. The conservation objectives for both the River Finn SAC and Foyle and Tributaries SAC aim to maintain or restore the favourable conservation condition for habitats

and/or species at these sites. The maintenance of habitats and species within the Natura 2000 sites at favourable condition will contribute to the overall maintenance of favourable conservation status of those species at a national level.

9.11. The NIS submitted acknowledges that the proposed works will give rise to a potential for indirect impacts arising from pollution of surface waters and proposes measures to mitigate these impacts which will be examined in detail below.

#### Birds

- 9.12. In addition to the foregoing, Lough Swilly, SPA supports an excellent diversity of waterfowl species in autumn and winter as well as breeding terns, gulls and ducks. The shallow waters provide suitable habitat for grebes and diving duck, while the intertidal flats are used by an abundance of wildfowl and waders. Due to the location and type of works proposed the NIS submitted identified the following birds are considered as being at risk of disturbance from the development:
  - Grey Heron
  - Whooper Swan
  - Curlew
  - Black-headed Gull
  - Common Gull
- 9.13. The conservation objectives for Lough Swilly SPA aim to maintain the favourable conservation condition of these birds and others. The NIS submitted examines the potential for impacts on birds and includes a collision risk assessment. The following birds were observed at or near to the site.

#### Whooper Swan

9.14. This bird was not recorded using habitat within the development site. Only one incidental sighting of this bird in flight was recorded during the winter survey. From the evidence collated from the surveys carried out on site it is stated within the NIS that the development site is not considered to be within a flight path of this bird species.

# Curlew

9.15. It is stated within the information submitted that only one sighting of this bird occurred during the surveys and no evidence was found to suggest that the development site is of significance to this bird.

# Black-headed Gull

9.16. This species was recorded within the development site and flying above. It is acknowledged within the NIS submitted that the potential for habitat loss whilst minimal cannot be excluded. A further assessment of habitat loss was recommended. In addition, this species was recorded flying over the site and therefore presents a collision risk with the development.

# Common Gull

- 9.17. This species was recorded within the development site and was recorded flying over the site. It is acknowledged within the NIS submitted that the potential for habitat loss whilst minimal cannot be excluded, and there is need to further examine the potential for collision.
- 9.18. The impact of all of the aforementioned effects in relation to both water ecology and birds will be discussed in detail in the context of proposed mitigation measures within the integrity test below.

# 9.19. Potential in-combination effects.

- 9.20. A review of all plans, including the Donegal County Development Plan 2018-2024, and projects that may have the potential to result in cumulative impacts was carried out by the applicant. This included the online planning register. The development was also considered in combination with the approved overhead grid connection and the potential underground connection which runs in a westerly direction towards Letterkenny substation.
- 9.21. The NIS submitted, concluded that there would be no cumulative / in-combination effects arising from the proposed development.
- 9.22. Having regard to the foregoing, I consider that in-combination effects have been properly assessed and I consider that in-combination effects are not likely to arise.

# 9.23. Mitigation Measures

- 9.24. Mitigation measures have been set out within both the NIS submitted and associated appendices such as Appendix 6 Chapter 8 of the EIAR in relation to Hydrology and hydrogeology and appendix 5 Construction Management plan. Mitigation measures include standard best practice in relation to construction, positioning of the borrow pit and construction compound at a location significantly removed from any watercourse (no less than 50 metres). The use of existing tracks where possible and a detailed water monitoring programme is set up in order to ensure that water quality is maintained. Surface water drainage will be directed to settlement ponds prior to discharge. A double skinned fuel bowser and drip tray will be used for refuelling machinery on site.
- 9.25. All wastewater will be tankered off site. Surface water from turbines will be directed to settlement ponds and buffered outfalls onto vegetated surfaces. An Environmental Manager or similar will be appointed in order to monitor all mitigation measures.
- 9.26. All mitigation measures will be assessed in relation to the potential for likely significant effects on the River Finn SAC, Foyle and Tributaries SAC and Lough Swilly SPA within the following integrity test.

#### The integrity Test

- 9.27. I have considered the NIS along with the information submitted with the application and have had regard to the mitigation measures outlined. Potential for impacts to arise in relation to the construction phase of the development relate to the movement of soils within the site and the leakage of oils and diesels or other such contaminates from construction vehicles into watercourses.
- 9.28. Plant and machinery will be regularly checked and as mentioned above, refuelling will be via a double skinned fuel bowser, spill kits will be attached to the bowser in the event of a spillage occurring. A 50m buffer is to be provided between works and any watercourse within the site and any additional road widening will occur on the opposite side of a road to any drainage present.
- 9.29. These mitigation measures are standard in nature and are known to be effective. I am therefore satisfied that the mitigation measures outlined in relation to hydrocarbon contamination of soils and waters and siltation in relation to excavation works and construction works are acceptable and will prevent any impacts to the River Finn SAC and the River Foyle and Tributaries SAC in view of these sites conservation objectives.

9.30. Potential for impacts to arise in relation to the operational stage relate to the disturbance and loss of habitat and the potential for collisions with birds to occur. Impacts on qualifying interests of the Lough Swilly SPA recorded at the development site will be dealt with individually as follows:

#### Black-headed Gull

- 9.31. The windfarm site comprises mainly of intensively farmed agricultural lands and it is stated within the Appropriate Assessment submitted that there will be no loss of potential nesting habitat associated with the proposed development. In addition, it is of note that the Bird surveys carried out did not record any foraging within the development site during the core breeding months of May and June. Having regard to the foregoing I consider that it is reasonable to conclude that the Black-headed Gull is not dependent on the development site for nesting, foraging or roosting during breeding season.
- 9.32. Foraging was recorded on 3 occasions outside of the breeding months and was stated as being associated with agricultural activities. Potential for displacement during construction activities is considered to be similar in nature and scale to that associated with ongoing intensive agriculture. The survey results would indicate that this species is habituated to ongoing disturbance at the site and therefore significant displacement is not anticipated.
- 9.33. A collision risk assessment results indicate that 1% of the SPA population are at risk. These results are commonplace where risk is considered to be low and are an accepted level of risk in such instances. Having regard to the foregoing, I consider that significant impacts on the Blackheaded Gull are unlikely to arise.

#### Common Gull

- 9.34. Foraging in relation to the Common Gull was only recorded on 4 dates between March 2016 and September 2017. It is stated within the Appropriate Assessment that foraging was associated with agricultural activity such as ploughing which temporarily increases the availability of prey.
- 9.35. Disturbance during the construction phase is anticipated to be similar in nature and scale to the ongoing agricultural activity on site. It is indicated within the Appropriate Assessment that survey results show that the species is habituated to ongoing

disturbance and that occurrence of the species is directly associated with agricultural activity. Significant displacement effects are therefore not anticipated.

9.36. Collision risk calculations equate to less than 1% of the estimated SPA wintering population per year. Similar to the Blackheaded Gull, these results are commonplace where risk is considered to be low and are an accepted level of risk in such instances. Having regard to the foregoing, I consider that significant impacts on the Common Gull are unlikely to arise.

#### **Grey Heron**

9.37. I note from the information submitted that only one sighting of the Grey Heron was recorded during the bird surveys carried out. It is suggested within the NIS submitted that the limited sighting of this bird would infer that the development site is not of significance to this species.

#### Whooper Swan

- 9.38. It is important to note that the Whooper Swan was not recorded at the site and was recorded off site at 8 wetland sites. It is stated within the NIS submitted that these sites are in excess of 2.2km from the development site, it is therefore submitted by the applicants that the site is not of relevance to this bird species.
- 9.39. On the basis of the information provided with the application, including the Natura Impact Statement, and in light of the assessment carried out, I am satisfied that the proposed development individually, or in combination with other plans or projects would not be likely to have a significant effect on European site No. 002301 and 002287 and UK0030320 in view of these sites Conservation Objectives.

#### Table 2 AA summary matrix – River Finn SAC

River Finn SAC, s	ite code: 002301					
Summary of like	ly significant effects					
Habitat	Loss					
Water C	Quality and water dependant habitats					
Disturba	ance					
Conservation Objectives: To maintain or restore the favourable conservation status of habitats and species of						
community inter	rest					
	Summary of Appropriate Assessment					
Qualifying Interest feature	Conservation Objectives Targets and attributes	Potential adverse effects	Mitigation measures	In-combination effects	Can adverse effects on integrity be excluded?	
---	---	--	---	---	--	--
Salmo salar (Salmon) [1106] Otter	To maintain favourable conditions.	Increase in siltation due to construction works.	Exclusion zone surrounding water courses. Collection of surface water, use of settlement ponds and standard best practice during construction.	Additional development in area including grid connection	Yes	
Overall conclusion: Integrity test Following the implementation of mitigation, the construction and operation of this proposed development will not adversely affect the integrity of this European site.						

#### Table 3. AA summary matrix – Foyle and Tributaries SAC

Summary of likely significant effects

- Habitat Loss
- Water Quality and water dependant habitats
- Disturbance

Conservation Objectives: To maintain or restore the favourable conservation status of habitats and species of community interest

		Summary of A			
Qualifying Interest feature	Conservation Objectives Targets and attributes	Potential adverse effects	Mitigation measures	In-combination effects	Can adverse effects on integrity be excluded?
Salmo salar (Salmon) [1106] Otter	To maintain favourable conditions.	Increase in siltation due to construction.	Exclusion zone surrounding water courses. Collection of surface water,	Additional development in area including grid connection	Yes

|--|

#### **Overall conclusion: Integrity test**

Following the implementation of mitigation, the construction and operation of this proposed development will not adversely affect the integrity of this European site.

#### Table 4. AA Summary Matrix – Lough Swilly SPA

<ul> <li>Summary of likely significant effects</li> <li>Disturbance</li> <li>Conservation Objectives: To maintain or restore the favourable conservation status of species of communinterest</li> </ul>							
		Summary of A	Summary of Appropriate Assessment				
Qualifying Interest feature	Conservation Objectives Targets and attributes	Potential adverse effects	Mitigation measures	In-combination effects	Can adverse effects on integrity be excluded?		
Great Crested Grebe (Podiceps cristatus) [A005] Grey Heron (Ardea cinerea) [A028] Whooper Swan (Cygnus cygnus) [A038] Greylag Goose (Anser anser) [A043] Shelduck (Tadorna tadorna) [A048] Wigeon (Anas penelope)	To maintain favourable conditions.	Disturbance to feeding ground or flight path of species.	None	Additional development in area including grid connection	Yes		

Teal (Anas	ر ۱		
crecca) [A052]			
Mallard (Anas platyrhynchos) [A053]			
Shoveler (Anas clypeata) [A056]			
Scaup (Aythya marila) [A062]			
Goldeneye (Bucephala clangula) [A067]			
Red-breasted Merganser (Mergus serrator) [A069]			
Coot (Fulica atra) [A125]			
Oystercatcher (Haematopus ostralegus) [A130]			
Knot (Calidris canutus) [A143]			
Dunlin (Calidris alpina) [A149]			
Curlew (Numenius arquata) [A160]			
Redshank (Tringa totanus) [A162]			
Greenshank (Tringa nebularia) [A164]			
Black-headed Gull (Chroicocephalus ridibundus) [A179]			

Common Gull						
(Larus canus)						
[A182]						
c						
Sandwich Tern						
(Sterna						
sandvicensis)						
[A191]						
Common Tern						
(Sterna hirundo)						
[A193]						
Greenland						
White-fronted						
Goose (Anser albifrons						
flavirostris)						
[A395]						
[7333]						
Wetland and						
Waterbirds						
[A999]						
Pochard (Aythya						
ferina) [A059]						
Wetland and						
Waterbirds						
[A999]						
Overall conclusion: Integrity test						
Following the implementation of mitigation, the construction and expection of this process of developments will						
	Following the implementation of mitigation, the construction and operation of this proposed development will not adversely affect the integrity of this European site.					
not adversely affect the integrity of this European site.						

# 10.0 **EIAR**

- 10.1. The application is accompanied by an Environmental Impact Assessment Report (EIAR) which was prepared by McCarty Keville O'Sullivan Ltd. The proposed development relates to the development of a 6 turbine wind energy development in the townlands of Momeen and Lettergull. Permission has been obtained from Donegal County Council for a 38kv grid connection to link the previously approved windfarm to the existing Letterkenny 110kv substation in Listillion townlands.
- 10.2. The proposed development falls within Class 3 (i) of Part 2 of schedule 5 of the planning and development Regulations 2001 as amended whereby 'Installations for the harnessing of wind power for energy production (wind farms) with more than 5 turbines or having a total output greater than 5 megawatts' require a mandatory EIA.

The proposed development exceeds these thresholds and therefore an EIAR has been submitted.

- 10.3. A number of the environmental issues relevant to this EIA have already been addressed in the Planning Assessment at Section 7.0 of this report above. This EIA section of the report should therefore, where appropriate, be read in conjunction with the relevant parts of the Planning Assessment.
- 10.4. The application falls within the scope of the amending 2014 EIA Directive (Directive 2014/52/EU) on the basis that the application was lodged after the last date for transposition in May 2017. The application also falls within the scope of the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018, as the application was lodged after these regulations come into effect on 1st September 2018.
- 10.5. The impact of the proposed development is addressed under all relevant headings with respect to the environmental factors listed in Article 3(1) of the 2014 EIA Directive. The EIAR sets out a case regarding the background to and need for the project (Section 1.2 & 1.5). The EIAR provides detail with regard to the consideration of alternatives in Section 2.12. An overview of the main interactions is provided at Section 14.2. Section 1.8 lists the main contributors / authors and the qualifications of the EIAR manager, which meet the requirements of the EIA Directive in my view. Details of the consultation entered into by the applicant with Donegal County Council as part of the preparation of the project are also set out and can be reviewed in Section 2.10.
- 10.6. Article 3 (2) of the Directive requires the consideration of the effects deriving from the vulnerability of the project to risks of major accidents and / or disasters that are relevant to the project concerned. The potential for 'unplanned events' is addressed in Section 4 Population and Human Health and the potential for 'flooding' is considered in Section 8 Hydrology and Hydrogeology, a site-specific flood risk assessment has also been submitted with the application in this regard. I consider that the requirement to consider these factors under Article 3(2) is met.
- 10.7. In terms of the content and scope of the EIAR, the information contained in the EIAR generally complies with article 94 of the Planning and Development Regulations 2001, as amended.

#### 10.8. Consideration of Alternatives

- 10.9. Section 2.12 of the submitted EIAR addresses the alternatives considered. It is stated within section 2.12.2 that the site has previously had the benefit of planning permission for 8 turbines and was considered to be an appropriate site for wind development by DCC at that time. The EIAR considers the following alternative uses for the development site. A 'Do Nothing', would see the site remain in use for agriculture, forestry and a solar array were identified as alternative uses for this site. It is stated that these uses would impact the country's ability to harness a valuable renewable energy resource.
- 10.10. Alternative turbines were considered, more turbines of a lower height were considered inefficient. Following modelling of the wind at the site higher turbine were considered most effective and efficient. The final design of the turbines has not been determined but the overall height will not exceed 135m.
- 10.11. An alternative site layout was considered, the proposed windfarm was compared to that previously permitted, and following site investigations the proposed layout is considered to be most appropriate to the site.
- 10.12. It is stated that alternative locations for the proposed ancillary buildings were also considered along with alternative access routes which included the provision of all new routes separate from existing. The use of existing routes where possible was considered the more appropriate alternative in this case.
- 10.13. Delivery of turbines and ancillary components will be received from either Killybegs or Foyle Port. Both options were assessed and found to be suitable.
- 10.14. In my opinion reasonable alternatives have been explored and the information contained in the EIAR with regard to alternatives provides a justification in environmental terms for the alternatives chosen and is in accordance with the requirements of the 2014 EIA Directive.

#### **Environmental Factors**

- 10.15. The sections below address each of the environmental factors. The headings used in the EIAR are as follows:
  - Population and Human Health
  - Biodiversity

- Land and Soil
- Water
- Climate & Air
- Noise & Vibration
- Landscape
- Material Assets
- Traffic & Transport
- Waste Management
- Interactions & Cumulative effects
- 10.16. The direct, indirect and cumulative effects of the project on the specified factors is identified, described and assessed in the following sections. In this regard I have examined the EIAR and any supplementary information and the contents of submissions received.
- 10.17. Section 2 of the EIAR discusses a scoping exercise that was carried out and a list of consultees are included within Table 2.1

# Population and Human Health

- 10.18. Section 4 addresses population and human health. Effects are considered in the context of socio-economic and health and wellbeing considerations. Census data in both Northern Ireland and the Republic of Ireland were consulted and informed the assessment.
- 10.19. Two potential grid connections were considered as part of the EIAR and include a permitted overhead connection and a proposed underground connection from the site to the Letterkenny substation.
- 10.20. It is stated within Section 4.5.4 of the EIAR that windfarms are not recognised as a source of pollution, and as such do not have ongoing emissions to environmental media. Impacts arising from natural disasters are considered low given the limited sources of pollution on site either during construction or operation. Shadow Flicker is examined in the assessment Section of this report and is not considered to give rise to significant effects due to the mitigation measures proposed. Relevant conditions

can be attached to ensure that turbines are turned off during times when such impacts may arise.

- 10.21. During the construction and operational phases, it is predicted that there will be positive impacts on the local economy due to direct and indirect job creation.
- 10.22. Impacts on health and wellbeing arising from effects of the construction and operation phases of the development specifically in relation to noise, dust and soil material removal and movement operations are considered and discussed under the respective headings of the EIAR.
- 10.23. Residual impacts on human health and population are not anticipated provided that the proposed mitigation measures are fully implemented.
- 10.24. I have considered all of the written submissions made in relation to population and human health and the relevant contents of the file including the EIAR. I am satisfied that the potential for impacts on population and human health can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the potential for direct or indirect impacts on population and human health can be ruled out. I am also satisfied that cumulative effects, in the context of existing wind development in the surrounding area and other existing and proposed development in the vicinity of the site, are not likely to arise.

# **Biodiversity**

- 10.25. Section 5 of the submitted EIAR assesses and evaluates the potential for significant impacts on biodiversity. The impact of the proposed development on European sites is addressed in detail in Section 9 of this report. The site does not overlap with or directly adjoin any European or nationally designated sites. The River Finn SAC & Foyle and Tributaries SAC are the nearest European sites with a pathway to the appeal site.
- 10.26. The risk of water pollution to the River Finn can be excluded due to the mitigation measures proposed and the separation distance from the site to the river.
- 10.27. While the potential for effects on the qualifying interests of the River Finn and Foyle and Tributaries SAC and Lough Swilly SPA is remote due to the level of separation and mitigation measures proposed, it is necessary to dispel any reasonable scientific

doubt that may exist. The NIS Report submitted considers the potential for effects on the aforementioned SACs and SPA both individually or in combination with other plans or projects and considered that the risk of significant effects is unlikely.

- 10.28. I am satisfied, based on the information submitted with the file and discussed within the Appropriate Assessment section above, that the applicant has adequately demonstrated beyond reasonable doubt that the proposed development would not adversely affect the integrity of these SACs and SPA in view of these sites Conservation Objectives.
- 10.29. Potential impacts on biodiversity associated with the proposed development include loss of habitat and disturbance or displacement of species. The assessment of impacts is supported by an ecological assessment undertaken in 2005, a multi-disciplinary walkover survey on the 13<sup>th</sup> and 14<sup>th</sup> July 2016, a dedicated mammal survey carried out on the 26<sup>th</sup> January 2017, specialist target surveys for badgers and bats in 2016 and 2017.
- 10.30. The surveys carried out found the site comprised predominantly improved agricultural grassland and arable crops. However active areas of Dry Siliceous Heath and Wet Heath mosaic were found to correspond to the E.U. Habitats Directive Annex I habitats. Much of the eastern and southern slopes of the peatland were dried out and inactive. These habitats which account for c. 5% of the site are of local significance and will not be impacted on by the development. Adequate protection of these areas can be ensured by way of condition.
- 10.31. The Treantaghmucklagh River is a tributary of the River Foyle and is located to the northwest, north and northeast of the site, drainage ditches from the surrounding lands connect into this river. The river and associated drainage ditches are considered to be of local importance on the basis of supporting semi-natural habitat types with high biodiversity value and for providing surface water connectivity to the River Foyle and tributaries SAC and SPA.
- 10.32. Results of the bat survey carried out revealed two roosts at locations 1.3km and 4.5km from the site boundary. Pipistrelle bats were noted entering 3 different buildings at dawn during the survey. None of these roosts contained large numbers of bats and were considered to be opportunistic roosts by individual bats. Existing hedgerows and trees on site were considered of moderate value to foraging and commuting bats,

whilst open pasture was considered to be negligible. Overall recorded bat activity was low.

- 10.33. Mammal surveys recorded badger prints, setts and foraging signs. The site provides good habitat for badgers and it is considered that most of the site is used by the species. The badger sett is located c. 250 metres from Turbine no. 5
- 10.34. Red fox scatts and rabbits were also recorded at the site. The Treantaghmucklagh River was surveyed for the presence of otters, none were found.
- 10.35. The EIAR examines the potential for impacts on the aforementioned habitats and species including the more common aspects of the site such as the common frog etc. It is concluded that whilst there may be some disruption during the construction phase of the development overall impacts are considered to be similar to the disturbance levels of the current agricultural practices on site.
- 10.36. In relation to badgers, all construction works are to take place at a distance of 170 metres from the sett. The development will not present any barrier to access into and around the site. Pre-construction mammal surveys will be undertaken to ascertain whether new setts have formed since surveys were undertaken, in the event that this has occurred works will be guided by the NPWS and relevant guidance.
- 10.37. Vegetation removal will be completed outside of the bird breeding season and will be replanted with native hedge/tree species. Compensatory hedging will be planted within the site in order to ensure that there is no net loss of habitat and that connectivity throughout the site is retained.
- 10.38. Overall it is stated within Section 5.6.1 that the proposed development has been designed to avoid ecologically sensitive areas, the development is located primarily within improved pasture or arable farmland and follows existing tracks where possible. All major infrastructure such as borrow pits turbine bases, substations and construction compounds will be located at a distance of over 50 metres from any watercourse. Limited crossing points will require works in relation to the proposed grid connection and it is stated that works will be carried out so as to ensure no disturbance to bankside habitat or silt run off to occur. Mitigation measures are set out in section 5.6.2 of the EIAR in this regard.

- 10.39. In terms of the cumulative effect on biodiversity, no residual significant effects were identified, no cumulative effects are anticipated as a result of the proposed project when considered in conjunction with other plans or projects in the area.
- 10.40. I have considered all of the written submissions made in relation to biodiversity and the relevant contents of the file including the EIAR. I am satisfied that the potential for impacts on biodiversity can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the potential for direct or indirect impacts on biodiversity can be ruled out. I am also satisfied that cumulative effects, in the context of existing wind development in the surrounding area and other existing and proposed development in the vicinity of the site, are not likely to arise.

#### Ornithology

- 10.41. Section 6 of the submitted EIAR assesses and evaluates the potential for significant impacts on ornithology. Bird surveys carried out between March 2016 and September 2017 provide baseline data for the assessment of potential impacts. Potential impacts include the loss of habitat and displacement to feeding or breeding routes. Surveys of all significant sites for waterfowl were conducted within 10km of the proposed development. It is of note that surveys were not carried out along the route of the grid connection as the connection will be within the carriageway or verge of the public road for the majority of its length and no impacts to birds is anticipated from this element of the development. Bird surveys were used to identify the extent to which various species frequent and/or flyover the site and to inform the Collision Risk and Displacement Effect Models for several target species.
- 10.42. The NIS report submitted considers the potential for effects on the Lough Swilly SPA both individually and in combination with other plans or projects and considered that the risk of significant effects is unlikely.
- 10.43. I am satisfied, based on the information submitted with the file and discussed within the Appropriate Assessment section above, that the applicant has adequately demonstrated beyond reasonable doubt that the proposed development would not adversely affect the integrity of this SPA in view of this site's Conservation Objectives.
- 10.44. It is stated within the EIAR that flocks of County importance were regularly recorded during vantage point watches during the wintering season, however no evidence of

breeding activity was recorded during surveys in 2016 and 2017. Breeding populations of ecological significance as per NTA criteria were not identified. It is of note that surveys undertaken assessed all bird species likely to be found in the locality as well as qualifying interests of surrounding SPA's.

10.45. A number of species were noted surrounding the site as follows:

- Common Buzzard Local Importance (higher value)
- Eurasian Sparrowhawk Local Importance (high value)
- Common Kestrel Local Importance (higher value)
- Passerines Local Importance (lower value).
- 10.46. Collision risk for all bird species does not exceed 1%. It is concluded that the proposed development will not result in any significant effects on any of the identified bird species during either the construction or operational stages. Effects from decommissioning are expected to be shorter and less obtrusive that construction. Important migratory routes were not identified in any assessments undertaken, therefore significant cumulative barrier effects are also not anticipated.
- 10.47. I have considered all of the written submissions made in relation to ornithology and the relevant contents of the file including the EIAR. I am satisfied that the potential for impacts on ornithology can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the potential for direct or indirect impacts on ornithology can be ruled out. I am also satisfied that cumulative effects, in the context of existing wind development in the surrounding area and other existing and proposed development in the vicinity of the site, are not likely to arise.

# Lands, soils and geology

10.48. Section 7 of the submitted EIAR assesses and evaluates the potential for significant impacts on lands, soils and geology. A desk study of the windfarm site, grid connection route, haul route and the surrounding study area was undertaken. A geotechnical investigation was undertaken in 2015 at the proposed site which informed the previously permitted development for 8 turbines. In addition to these surveys further geotechnical mapping and ground condition surveys were undertaken in 2017.

- 10.49. It is stated within the EIAR submitted that there are two topographic high points within the site, one on the southern end with an elevation of 180m OD and another on the northern end with an elevation of 134m OD. The site slopes from the northwest to the southeast from the ridge that runs between the two high points. The majority of the windfarm infrastructure is located on the western facing slopes of the ridge.
- 10.50. Soils within the site are described as deep well draining mineral soil derived from acidic parent material. Small sections of the site are overlain by shallow poorly draining acidic soils and rock outcrops are present to the south of the site. It is proposed to locate the borrow pit at this point in the site due to the accessibility to the required materials.
- 10.51. The bedrock underlying the majority of the site are described as precambian era marble, schists and gneisses. The boreholes undertaken encountered Schists bedrock. The bedrock encountered could be used on a sub-economic local scale for construction purposes.
- 10.52. There are no recorded geological heritage sites in the area of the proposed development. The closest site is identified as Burnfoot Spread which is located 18km to the north of the windfarm site.
- 10.53. It is stated within the EIAR submitted that there are no known areas of soil contamination on the site, no historic mines and no licenced waste facilities in the within the immediate vicinity of the site.
- 10.54. The proposed development will comprise the removal of topsoil, subsoil and shallow bedrock for additional access road and hardstanding emplacement. The proposed grid connection will be laid in a trench within the existing public roads and will therefore require excavation of some subsoil. Excavated soil will be utilised on site for landscaping and within the borrow pit. The total amount of rock to be excavated is 19,980m<sup>3</sup> and the total estimated soil to be placed within the borrow pit is 13,420m<sup>3</sup>.
- 10.55. Excavated material along the cable route will be reinstated and any tarmac road cuttings will be disposed of at a licenced waste facility.
- 10.56. Mitigation measures to reduce the disturbance of soil include the use of existing farm road network, no turbines or associated infrastructure is to be carried out on protected sites and the majority of soils disturbed are to be reused on site.

- 10.57. The use of settlement ponds will be volume neutral and all excess material will be used locally to form pond bunds and for landscaping.
- 10.58. Contamination of soils through leaks and spillages is identified as a risk of the development, however a number of measures are proposed in order to mitigate the potential for such risk. Measures including the maintenance and refuelling of vehicles will take place off site at a bunded area and will be carried out by a double skinned bowser with spill kits at hand. Fuel storage areas will be bunded and minimised on site. The electrical control building will be bunded appropriately, plant will be regularly inspected for leaks and an emergency plan for accidental spillages will be specified.
- 10.59. Silt fences are proposed within the site and are to be erected around stockpiles of soil to limit movement to surface water run off. The use of bunds around earth works and mounds are intended to prevent egress of water from the works. Stripping of topsoil will not take place during wet seasons in order to minimise erosion processes. Finally bog mats are proposed for vehicles in order to prevent rutting and ponding within the site.
- 10.60. In addition to the foregoing it is stated within Section 7.5.4 that impacts during the operational stage of the development are considered to be low. A limited amount of gravel will be required for the upkeep of internal roads and this will be brought it. It is stated within this section of the EIAR that the proposed borrow pit will be fully restored at the end of the construction phase.
- 10.61. Impacts to soils and geology during decommissioning will be limited and much reduced to that during construction. It proposed to return the lands to grassland at this time. Mitigation measures proposed are similar to those proposed within the construction phase of the development and mainly seek to prevent runoff to nearby watercourses.
- 10.62. I have considered all of the written submissions made in relation to lands, soils and geology and the relevant contents of the file including the EIAR. I am satisfied that the potential for impacts on lands, soils and geology can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the potential for direct or indirect impacts on lands, soils and geology can be ruled out. I am also satisfied that cumulative effects, in the context of existing wind development

in the surrounding area and other existing and proposed development in the vicinity of the site, are not likely to arise.

# Hydrology and Hydrogeology

- 10.63. Section 8 of the EIAR examines the potential for impact on hydrology and hydrogeology. A desk study, field mapping and a walkover were carried out in order to inform the EIAR. As mentioned within the assessment section of this report the development site is located within the River Deel catchment specifically within the Johnstown Stream surface water catchment. It is stated within Section 8.3.3 of the EIAR that the proposed underground grid connection would consist of 30 no. watercourse crossings, however these are within existing culverts/bridges and as such no instream works are required.
- 10.64. In terms of the site, there are no reoccurring flooding incidents on site, and the site is outside of the 1 in 100 year flood zone. One wet area has been identified adjacent to turbine no. 2, it is stated that this pluvial area will be dealt with by way of the proposed site drainage. Overall, having regard to the information submitted I have no concerns in relation to flooding at the site or within the surrounding area.
- 10.65. Water quality at the nearest EPA monitoring points have Q values of 3 which is poor. Field hydrochemistry measurements were undertaken within surface watercourses at the site in 2017 in two locations identified as SW1 and SW2. The level of nutrients is noticeably higher in SW1 compared to SW2. Run off from the adjacent farm is attributed for this variation in result.
- 10.66. The site is underlain by a poor aquifer with the exception of the southwestern section of the site which has been identified as a locally important aquifer. The vulnerability rate of the site is classified as extreme where the depth of overburden is less than 3m. Having regard to the information submitted I consider impacts to ground water are unlikely. Nonetheless an assessment of local wells was carried out and concluded that the likelihood of impacts was low.
- 10.67. Surface water streams are most at risk from impacts arising from the development. Mitigation measures as outlined above in relation to hydrocarbon and sedimentation are standard measures which are proven to be effective. Further mitigation measures are proposed within section 8.4.2 of the EIAR and include but are not limited to; avoidance of watercourse, the use of interceptor drains, covered stockpiles, limited

work areas, temporary sumps and attenuation ponds which include the use of a silt buster which is designed for a 1 in 100 year flood and buffered outfalls etc. Such measures will ensure that surface water channels remain protected from silts and sediments such as concrete used in the construction phase from entering the watercourses in the surrounding area.

- 10.68. The NIS report submitted considers the potential for effects on the River Finn SAC and Foyle and Tributaries SAC both individually and in combination with other plans or projects and considered that the risk of significant effects is unlikely.
- 10.69. I am satisfied, based on the information submitted with the file and discussed within the Appropriate Assessment section above, that the applicant has adequately demonstrated beyond reasonable scientific doubt that the proposed development would not adversely affect the integrity of these SACs in view of these sites Conservation Objectives.
- 10.70. Impacts arising from the decommissioning of the development, as already mentioned, will be similar and less impactful to that of the construction phase. Mitigation measures proposed are therefore adequate in relation to the decommissioning of the site.
- 10.71. With regard to the operation of the borrow pit it is proposed to remove the soil by horizontal excavation and groundwater impacts are not anticipated due to the local hydrological regime and the depths of excavation. No mitigation measures are therefore proposed in this regard.
- 10.72. The grid connection trenches will have an overall depth of 1.2 metres and as such are also not anticipated to impact groundwater.
- 10.73.1 have considered all of the written submissions made in relation to hydrology and hydrogeology and the relevant contents of the file including the EIAR. I am satisfied that the potential for impacts on hydrology and hydrogeology can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the potential for direct or indirect impacts on hydrology and hydrogeology can be ruled out. I am also satisfied that cumulative effects, in the context of existing wind development in the surrounding area and other existing and proposed development in the vicinity of the site, are not likely to arise.

#### Air & Climate

- 10.74. Section 9 examines the impacts of the development on climate and air. Baseline conditions were examined within this element of the assessment. The proposed development is located within an air quality zone D. The nearest ambient air monitor is located in Letterkenny which is c. 11 km northwest of the site and is within a zone C for the purpose of air monitoring. It is anticipated air quality at the site is below that recorded in Letterkenny given the rural location of the site.
- 10.75. Potential air quality impacts are anticipated to be short term confined to the construction phase of the development. Emissions will be solely associated with construction vehicles.
- 10.76. It is proposed to mitigate such emissions by maintaining machinery and vehicles in good working order and employing measures which reduce the number of delivery vehicles to the site. No significant effects on air quality are considered likely.
- 10.77. Baseline conditions in terms of emissions and climate change targets are outlined within Section 9.2 of the EIAR submitted. Carbon losses and savings are also examined and it is stated within Section 9.2.3 that the proposed development is located on intensively farmed agricultural lands with none of the development footprint located within a peatland. It is for this reason that the carbon balance between the use of renewable energy and the loss of carbon stored in peat is not assessed.
- 10.78. Carbon dioxide is released in the manufacture and transportation of the turbines, a carbon loss/savings analysis has therefore been undertaken in this regard. The results of this analysis indicate that the manufacturing of the turbines will give rise to 17,422 tonnes of CO<sub>2</sub> equivalent losses over its 30 year life, however, 31,987 tonnes of carbon will be displaced per annum from the largely carbon based traditional energy mix by the proposed windfarm. Over the 30 year life span of the windfarm 959,609 tonnes of carbon dioxide will be displaced from the traditional carbon based electricity generation.
- 10.79. Overall, it is stated that the proposed development will offset the carbon of the proposed development within 6.5 months.
- 10.80. The decommissioning of the windfarm has also been considered in the context of carbon savings and it is stated that this process is also paid back within months of the

operation of the windfarm and is therefore regarded as a short terms light neutral impact.

- 10.81. The overall removal of vegetation is considered as a slight negative of the project but as outlined above the carbon savings amassed from the operation of the windfarm counteract this impact. Overall a long term positive impact is anticipated from the proposed development.
- 10.82. Cumulative impacts were considered under Section 9.3, developments within the vicinity of the site were considered and it was concluded within the EIAR that cumulative impacts would not arise.
- 10.83. I have considered all of the written submissions made in relation to Climate and Air and the relevant contents of the file including the EIAR. I am satisfied that the potential for impacts on Climate and Air can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the potential for direct or indirect impacts on Climate and Air can be ruled out. I am also satisfied that cumulative effects, in the context of existing wind development in the surrounding area and other existing and proposed development in the vicinity of the site, are not likely to arise.

#### **Noise and Vibration**

- 10.84. Section 10 of the EIAR submitted examines the baseline noise conditions and outlines the predicted noise levels arising from the proposed development. 90 noise sensitive receptors were identified within 1.2 km of the proposed development. A full noise assessment and predictive modelling has been carried out by the applicant to inform the EIAR. It is stated within Section 10.5.2 that 4 no. measurement locations were monitored from 26<sup>th</sup> October 2016 to 23<sup>rd</sup> November 2016. Background noise values were recorded and correlated with the particular wind speed at the time.
- 10.85. Current Wind energy Development Guidelines (2006) permit a maximum of 45dB in relation to noise emissions. The preferred draft approach as set out within Section 5.7.4 of the draft Wind Energy Development Guidelines 2019, propose noise restriction limits consistent with World Health Organisation Guidelines of 5dB(A) above existing background noise within a range of 35 to 43Db(A) with 43dB(A) being the

maximum noise limit permitted day or night. These noise limitations are below those permitted under the 2006 guidelines.

- 10.86. Table 10.6 outlines the cumulative background (LA<sub>90</sub>) noise values observed at 4 separate locations at 8 different wind speeds. Minimum daytime noise levels recorded range between 28.2 and 52.6dB, and night-time values are between 24.9 and 52.8dB.
- 10.87. Cumulative construction noise levels audible at noise sensitive receptors within 516 metres of the development are predicted at 50dB, whilst there will be a certain level of impact I consider that given the temporary nature of the works and the limited hours of construction work that significant impacts will not arise in relation to construction noise.
- 10.88. I note that borrow pit noise levels are predicted to be at a significantly higher level. However, these operations are short term. Blasting within the borrow pit for example will occur over a 3 month period and will be limited to once a day. Vibrations from this activity will not impact surrounding properties.
- 10.89. Noise predictions in relation to the proposed grid connection are associated with construction only and will be carried out during restricted hours. Mitigation measures to protect noise sensitive locations within 20 metres of these works will be employed on a case by case basis.
- 10.90. The highest noise level in relation to the proposed substation is 27dB and as such significant noise impacts from this element of the development are not anticipated.
- 10.91. General mitigation measures are proposed in order to reduce noise levels and include measures such as the maintenance of vehicles and machinery, construction of level surfaces to reduce vehicle vibrations and limiting hours during which operations that are likely to create high noise levels are carried out. Noise abatement will also be used on machinery.
- 10.92. With regard to predicted operational noise, table 10.18 examines potential noise emissions at varying wind speeds arising from the proposed development. It is important to note at this juncture that as wind speed increases so does background noise and as such noise generated from turbines during times of high wind can be largely indistinguishable.

- 10.93. It is stated within Section 10.6.3.6 of the EIAR that daytime noise criteria of 45dB was utilised as an upper threshold for noise emissions and 43dB was utilised as the night-time threshold. As mentioned above, the draft guidelines propose a maximum of 35dB until the 5dB above background noise exceeds this or an upper limit of 43dB in relation to both day and night time noise emissions.
- 10.94. Table 10.20, of the EIAR examines predicted noise levels against the relevant criteria. I note that exceedances of noise limits do not occur at low to moderate wind speed, minor exceedances occur when winds move to the higher moderate or high wind speeds. These exceedances refer to the upper threshold of 45dB during daytime hours and do not take into account the upper thresholds as set out within the draft guidelines.
- 10.95. Exceedances in relation to wind direction are a more realistic prediction in relation to actual noise impacts. Table 10.21 to 10.28 outline expected exceedance values and I note that the highest exceedance value within these tables is 2.3dB which would be above 45dB threshold set out within the EIAR.
- 10.96. Given that the upper limit proposed within the new guidelines is 43dB during both day time and night time, the increase in relation to this threshold would be 4.3dB which equates to a noticeable difference. It is apparent from the plans submitted that there is a residential dwelling to the north west of turbine 3 (T3) which would be directly affected by this noise level.
- 10.97. I have had regard to both the current and draft guidelines in my assessment of the proposed development and the EIAR and consider that on balance, given that the upper noise limit criteria applied within the EIAR is only 2dB higher than that proposed within the draft guidelines the proposed exceedances in this instance can be adequately controlled and mitigated by the curtailment of turbine operation as set out in Section 10.6.3.10 of the EIAR.
- 10.98. It is important to note in this context that the EIAR refers to the issue of amplitude modulation and tonal noise which can arise from transient stalls in blade rotation. These sounds are low frequency and can travel extensive distances. As the final design of the turbine has not been determined, the applicant has not provided predictive modelling in relation to the potential for this issue to arise and consequently predicted noise levels are identified in the absence of any rating penalty being applied.

I acknowledge this limitation and consider that it can also be appropriately addressed by condition, should the Board be of a mind to grant permission.

10.99. Cumulative noise impacts have been considered within the EIAR and do not arise.

10.100. I have considered all of the written submissions made in relation to noise and the relevant contents of the file including the EIAR. I am satisfied that the potential for impacts on noise can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the potential for direct or indirect impacts on noise can be ruled out. I am also satisfied that cumulative effects, in the context of existing wind development in the surrounding area and other existing and proposed development in the vicinity of the site, are not likely to arise.

#### Landscape and Visual Amenity

- 10.101. Section 11 of the EIAR submitted examines the potential for impacts arising from the development to landscape and the visual amenity of the area. Field visits were undertaken in August and October 2016 and March 2017 in order to establish baseline conditions. Reference was also made to the landscape designations within the Donegal Development Plan. Visual mapping and baseline data which include viewpoint locations are based on a radial area of 20 kilometres. A zone of theoretical visibility has been established and mapped and creates the basis of the visual impact assessment for the development. Landcover comprises of improved agricultural farmland which is drained by numerous streams to the River Foyle.
- 10.102. Visual impact has been assessed in detail within Section 7 above, however it is important to reaffirm at this juncture that protected views and prospects are not significantly affected by the proposed development. Cumulative impacts were considered in the context of existing and permitted windfarm development within the vicinity of the site and it was concluded within the EIAR that cumulative impacts would not arise.
- 10.103. I have considered all of the written submissions made in relation to Landscape and Visual Amenity and the relevant contents of the file including the EIAR. I am satisfied that the potential for impacts on Landscape and Visual Amenity can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied

that the potential for direct or indirect impacts on Landscape and Visual Amenity can be ruled out. I am also satisfied that cumulative effects, in the context of existing wind development in the surrounding area and other existing and proposed development in the vicinity of the site, are not likely to arise.

### Archaeology and Cultural Heritage

- 10.104. Section 12 of the EIAR examines the potential for impacts to arise on archaeology and cultural heritage. A desktop survey was carried out in order to identify constraints or features of archaeological / cultural heritage potential within or near to the development site. A field inspection was also carried out over a number of days in February 2017. No features of archaeological or cultural heritage were identified within the site. The nearest national monument to the site is located c. 6.2km south west of the proposed windfarm. Monuments within Northern Ireland were also considered and assessed within the EIAR. The nearest site within Northern Ireland was identified at a location over 15km south east of the site and comprises a megalithic tomb (ref: TYR010:006), an assessment of rising and setting sun was undertaken in order to determine whether the proposed development would result in any impacts to this development. None were identified.
- 10.105. A number of recorded monuments were identified within 5km radius of the site, the EIAR lists all such monuments and concludes that no impacts will arise from the development of the windfarm.
- 10.106. The proposed grid connection extends from the west side of the proposed windfarm and continues in a south westerly direction along the public road into Raphoe and then turns in a north westerly direction and continues along the public road before terminating at an existing substation south east of Letterkenny. 7 no. recorded monuments were identified within 100m of the proposed grid connection. Six of these monuments are centred around the cathedral. Concerns have been raised in relation to potential grid connection works within the road at the front of the cathedral and the potential to disturb earlier monastic foundations. The proposed works at this location will be carried out on the opposite side of the road in order to avoid any archaeological material. Similarly works are proposed adjacent to a guard stone within Raphoe, it is also proposed to carry out works as far away as possible from this feature in order to avoid any impact.

- 10.107. A full list of all items within the record of protected structures within a 5 km radius of the site is outlined within the EIAR. None of which will be impacted by the development. A bridge within the Knockbrack/Lurgy townland will be impacted upon by virtue of the proposed grid connection all works are proposed to be carried out in accordance with the Architectural Heritage Protection Guidelines for Planning Authorities 2004. Significant damage will be avoided, and alternative solutions will be considered in these instances.
- 10.108. Mitigation measures are outlined in the EIAR and include pre-construction archaeological testing and monitoring of groundworks during construction. I consider these mitigations measures to be appropriate and acceptable to ensure that impacts do not arise in relation to archaeology and cultural heritage.
- 10.109. In terms of cumulative impact a number of potential impacts have been identified which are associated with the grid connection. Having regard to the mitigation measure proposed within the EIAR, I consider that cumulative impacts will not be significant.
- 10.110. I have considered all of the written submissions made in relation to archaeology and cultural heritage and the relevant contents of the file including the EIAR. I am satisfied that the potential for impacts on archaeology and cultural heritage can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the potential for direct or indirect impacts on archaeology and cultural heritage can be ruled out. I am also satisfied that cumulative effects, in the context of existing wind development in the surrounding area and other existing and proposed development in the site, are not likely to arise.

#### Material Assets - Traffic & Transport, and Telecommunications and aviation

- 10.111. Section 13 of the EIAR examines the likely significant effects on traffic and transport and telecommunications and aviation. In relation to traffic the construction phase of the development is the critical period with respect to traffic effects experienced on surrounding roads in terms of both additional traffic volumes and geometry requirements of the abnormally large loads associated with wind turbines.
- 10.112. The EIAR examines the requirements of the additional traffic both on the external highways and the junctions. Two options for delivery have been considered within the context of the EIAR, the first is whereby delivery of the turbines is via Derry Port and

the second whereby delivery is via Killybegs. Baseline traffic volumes and conditions were established and are detailed within Section 13 of the EIAR. The preferred option for delivery is via Killybegs port.

- 10.113. The full route from the port to the site has been examined and assessed. Increases in traffic volumes are expected and it is predicted that the following negative impacts will arise during the construction phase of the development; during the 6 days required to pour concrete foundations, the 58 days required for site preparation and ground works and for a further 6 days during construction when general materials are delivered to the site.
- 10.114. I note from the information submitted within the EIAR that a number of road and roundabout junctions require minor works such as the temporary relocation of signage and poles. Overhang of turbines is also identified as a potential issue at a number of junctions and will require monitoring during transportation. All such works and the timing of these works will be agreed with the planning authority prior to the commencement of development. Should the Board be of a mind to grant permission I consider that these issues can be adequately dealt with by way of condition.
- 10.115. Effects arising from the operation of the windfarm are predicted as being imperceptible given that there will be 2 members of staff on site and not every day. Impacts arising from the decommissioning of the site are expected to be negative but less than that of construction and again are for a limited period. Impact arising from the grid connection are predicted as slight to moderate and will occur over a period of months and will be localised and managed.
- 10.116. Mitigation measures seeking to minimise the effects of the development on traffic and roads infrastructure are proposed within Section 13.1.10.6 of the EIAR. Actions proposed include the preparation of a Traffic Management Plan and a Construction Management Plan which include the following actions:
  - Appointment of a traffic management co-ordinator
  - A specific delivery programme to be submitted to the Council
  - Liaison with local residents
  - Pre & Post construction condition survey
  - Garda Escort to be provided for large deliveries

- Implementation of temporary junction alterations
- Travel plan for site workers
- Temporary traffic signs
- Potential to deliver windfarm components at night.
- Wheel washing and sweeping of roads
- Re-instatement of roads where required
- 10.117. Residual impacts are considered to be slight to moderate and temporary in nature. The implementation of mitigation measures will adequately address these impacts and as such whilst I acknowledge that impacts will occur, I consider that they can be adequately controlled by condition.

### **Telecommunications and Aviation**

- 10.118. Impacts in relation to the telecommunications and aviation are examined under Section 13.2 of the EIAR submitted. Baseline conditions were established, and network providers were consulted to identify potential risks arising from the development. One potential impact on a link signal was identified and has been avoided through design. No other issues in relation to interference with telecommunications were raised by any other operator.
- 10.119. No impacts have been identified within the EIAR in relation to aviation.
- 10.120. In terms of cumulative impact a number of potential impacts have been identified which are associated with the grid connection, and in relation to the increase in traffic movements arising from the development and existing traffic volumes in the area however having regard to the mitigation measures proposed above, I consider that cumulative impacts will not be significant.
- 10.121. I have considered all of the written submissions made in relation to material assets and the relevant contents of the file including the EIAR. I am satisfied that the potential for impacts on material assets can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the potential for direct or indirect impacts on material assets can be ruled out. I am also satisfied that cumulative effects, in the context of existing wind development in the surrounding area

and other existing and proposed development in the vicinity of the site, are not likely to arise.

### Interactions between the Factors and Cumulative Impacts

- 10.122. I have considered the interrelationships between factors and whether these may as a whole affect the environment, even though the effects may be acceptable when considered on an individual basis. Section 14 of the EIAR provides a matrix of the impact interactions.
- 10.123. I consider that there is potential for population and human health to interact with all of the other factors (biodiversity, water, air and climate, noise, landscape and visual, cultural heritage and material assets – traffic). The details of all other interrelationships are set out in Section 16 of the EIAR which I have considered.
- 10.124. I am satisfied that effects as a result of interactions, indirect and cumulative effects can be avoided, managed and / or mitigated for the most part by the measures which form part of the proposed development, the proposed mitigation measures detailed in the EIAR, and with suitable conditions.

### **Reasoned Conclusion**

- 10.125. Having regard to the examination of environmental information contained above, to the EIAR and supplementary information provided by the applicant and the submissions received, the contents of which I have noted, it is considered that the main significant direct and indirect effects of the proposed development on the environment are as follows.
  - Negative impacts on human health and population include noise, traffic and dust disturbance to residents of neighbouring dwellings.
  - Benefits/positive impacts on the environment, the proposed development will have a significant positive effect on human health and population due to the displacement of CO<sub>2</sub> from the atmosphere arising from fossil fuel energy production.
  - Negative impacts on **Water** could arise as a result of accidental spillages of chemicals, hydrocarbons or other contaminants entering the drainage system and discharging to the river thereafter during the construction and operational

phases. These impacts will be mitigated by measures outlined within the application and can therefore be ruled out.

- Negative Noise and Dust impacts arise during the construction phase from construction activities. These impacts will be mitigated through adherence to best practice construction measures and cessation of turbines when noise thresholds are breached. Impacts arising from noise and dust disturbance during both the construction and operational stage can therefore be ruled out.
- Negative traffic impacts arise during the construction phase of the development, these impacts will be mitigated through the implementation of a traffic management plan and a construction management plan. Impacts arising from traffic can therefore be ruled out.
- 10.126. The EIAR has considered that the main significant direct and indirect effects of the proposed development on the environment would be primarily mitigated by environmental management measures, as appropriate. I am satisfied on the basis of the submitted information that impacts can be adequately mitigated and that no residual significant negative impacts on the environment would remain as a result of the proposed scheme. I am, therefore, of the view that the potential for unacceptable direct or indirect effects on the environment can be excluded on the basis of the submitted information.

# 11.0 Recommendation

11.1. I recommend that permission is granted subject to the following conditions:

# 12.0 Reasons and Considerations

Having regard to national policy with regard to the development of alternative and indigenous energy sources and the minimisation of emissions of greenhouses gases, the Wind Energy Development Guidelines for Planning Authorities 2006, the provisions of the Donegal County Development Plan 2018-2024 and the character of the landscape along with the history of the site and the distance to existing residential development, it is considered that the proposed development, subject to compliance with the conditions set out below, would be acceptable in terms of impact on the visual amenities and landscape character of the area, would not seriously injure the

amenities of property in the vicinity, would not be prejudicial to public health and be in accordance with the proper planning and sustainable development of the area.

# 13.0 Conditions

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.

Reason: In the interest of clarity.

- Turbines identified as T3 and T6 shall be omitted from the development.
   Reason: In the interest of visual and residential amenity
- The period during which the development hereby permitted is constructed shall be 10 years from the date of this order.
   Reason: In the interests of clarity.
- This permission shall be for a period of 30 years from the date of the first commissioning of the wind farm.
   Reason: To enable the planning authority to review its operation in the light of the circumstances then prevailing.
- 5. The developer shall ensure that all construction methods and environmental mitigation measures set out in the Environmental Impact Statement and associated documentation are implemented in full, save as may be required by conditions set out below.

**Reason:** In the interest of protection of the environment.

- 6. Wind turbine noise arising from the proposed development, by itself or in combination with other existing or permitted wind energy development in the vicinity, shall not exceed the greater of:
  - (a) 5 dB(A) above background noise levels or
  - (b) 43 dB(A) L90,10min

when measured externally at dwellings or other sensitive receptors. Prior to commencement of development, the developer shall submit to and agree in writing with the planning authority a noise compliance monitoring programme for the subject development, including any mitigation measures such as the de-rating of particular turbines. All noise measurements shall be carried out in accordance with ISO Recommendation R 1996 "Assessment of Noise with Respect to Community Response," as amended by ISO Recommendations R 1996-1. The results of the initial noise compliance monitoring shall be submitted to, and agreed in writing with, the planning authority within six months of commissioning of the wind farm **Reason:** In the interest of residential amenity.

7. Prior to commencement of development, the developer shall submit to and agree in writing with the planning authority a Shadow flicker compliance monitoring programme for the subject development, including any mitigation measures such as the use of appropriate equipment and software to suitably control shadow flicker at nearby dwellings, including control or turbine rotation, in accordance with details which shall be submitted to, and agreed in writing with, the planning authority. Shadow flicker arising from the proposed development, by itself or in combination with other existing or permitted wind energy development in the vicinity, shall not exceed 30 hours per year or 30 minutes per day at existing or permitted dwellings or other sensitive receptors.

**Reason:** In the interest of residential amenity.

8. Prior to the commencement of development, the applicant shall submit for the written agreement of the planning authority, details of an obstacle warning light scheme which can be visible to night vision equipment.

**Reason:** in the interest of aviation safety.

9. The construction of the development shall be managed in accordance with a Construction Management Plan, which shall be submitted to, and agreed in writing with the planning authority prior to commencement of development. This plan shall provide details of intended construction practice for the development, including hours of working, noise management measures and off-site disposal of construction/demolition waste.

**Reason:** In the interests of public safety and residential amenity.

10. Water supply, wastewater treatment and surface water attenuation and disposal shall comply with the requirements of the planning authority for such works and services.

**Reason:** In the interest of public health

11. The following design requirements shall be complied with:

(a) The wind turbines including masts and blades, and the wind monitoring mast, shall be finished externally in a light grey colour.

- (b) Cables within the site shall be laid underground.
- (c) The wind turbines shall be geared to ensure that the blades rotate in the same direction.

(d) No advertising material shall be placed on or otherwise be affixed to any structure on the site without a prior grant of planning permission.

**Reason:** In the interest of visual amenity.

12. The delivery of large-scale turbine components for the construction of the windfarm shall be managed in accordance with a Traffic Management Plan, which shall be submitted to, and agreed in writing with the planning authority prior to commencement of development. This plan shall provide details shall of the road network to be used by construction traffic, including over-sized loads, and detailed arrangements for the protection of bridges, culverts or other structures to be traversed, as may be required. The plan should also contain details of how the developer intends to engage with and notify the local community in advance of the delivery of oversized loads.

**Reason:** In the interests of public safety and residential amenity.

13. On full or partial decommissioning of the turbines or if the turbines cease operation for a period of more than one year, the mast and the turbine concerned shall be removed and all decommissioned structures shall be removed, and foundations covered with soil to facilitate re-vegetation, within three months of decommissioning.

**Reason:** To ensure satisfactory reinstatement of the site upon cessation of the project.

14. In the event that the proposed development causes interference with telecommunications signals, effective measures shall be introduced to minimise interference with telecommunications signals in the area. Details of these measures, which shall be at the developer's expense, shall be submitted to, and agreed in writing with, the planning authority prior to commissioning of the turbines and following consultation with the relevant authorities.

**Reason:** In the interest of protecting telecommunications signals and of residential amenity.

15. Details of aeronautical requirements shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. Prior to commissioning of the turbines, the developer shall inform the planning authority and the Irish Aviation Authority of the as constructed tip heights and co-ordinates of the turbines and wind monitoring masts.

**Reason**: In the interest of air traffic safety.

16. The developer shall ensure that all plant and machinery used during the works should be thoroughly cleaned and washed before delivery to the site to prevent the spread of hazardous invasive species and pathogens.

**Reason:** In the interest of the proper planning and sustainable development of the area.

17. The developer shall retain the services of a suitably qualified and experienced Ecologist to undertake pre-construction surveys at the various project elements, including any river crossings, immediately prior to commencing work in order to check for the presence of protected species in the vicinity.

Reason: In the interest of protecting ecology and wildlife in the area.

18. The developer shall facilitate the preservation, recording and protection of archaeological materials or features that may exist within the site. In this regard, the developer shall –

(a) Notify the planning authority in writing at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) relating to the proposed development,

(b) Employ a suitably-qualified archaeologist who shall monitor all site investigations and other excavation works, and

(c) Provide arrangements, acceptable to the planning authority, for the recording and for the removal of any archaeological material which the authority considers appropriate to remove.

In default of agreement on any of these requirements, the matter shall be referred to An Bord Pleanála for determination.

**Reason:** In order to conserve the archaeological heritage of the site and to secure the preservation and protection of any remains that may exist within the site.

19. The developer shall retain the services of a suitably qualified and experienced bird specialist to undertake appropriate annual bird surveys of this site. Details of the surveys to be undertaken and associated reporting requirements shall be developed following consultation with, and agreed in writing with, the planning authority prior to commencement of development. These reports shall be submitted on an agreed date annually for five years, with the prior written agreement of the planning authority. Copies of the reports shall be sent to the Department of Arts, Heritage and the Gaeltacht

**Reason:** To ensure appropriate monitoring of the impact of the development on the avifauna of the area.

20. Prior to commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or such other security as may be acceptable to the planning authority, to secure the reinstatement of public roads which may be damaged by the transport of materials to the site, coupled with an agreement empowering the planning authority to apply such security or part thereof to the satisfactory reinstatement of the public road. The form and amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination.

**Reason:** In the interest of traffic safety and the proper planning and sustainable development of the area.

21. Prior to commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or such other security as may be acceptable to the planning authority, to secure the satisfactory reinstatement of the site upon cessation of the project, coupled with an agreement empowering the planning authority to apply such security or part thereof to such reinstatement. The form and amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination.

**Reason:** In the interest of orderly development and visual amenity and to ensure satisfactory reinstatement of the site.

22. The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000, as amended. The contribution shall be paid prior to the commencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to the Board to determine the proper application of the terms of the Scheme.

**Reason:** It is a requirement of the Planning and Development Act 2000, as amended, that a condition requiring a contribution in accordance with the Development Contribution Scheme made under section 48 of the Act be applied to the permission.

Sarah Lynch Planning Inspector

25<sup>th</sup> May 2020