An Bord Pleanála

Inspector's Report

ABP-305861-19

Development	10 year duration for a proposed wind energy and grid connection project. The planning application was accompanied by an Environmental Impact Assessment Report (EIAR) and by a Natura Impact Statement (NIS).
Location	Carrowmore, Quigley's Point, Inishowen, Co. Donegal.
Planning Authority	Donegal County Council
Planning Authority Reg. Ref.	1851230
Applicant(s)	Inishgaoth Ltd.
Type of Application	Permission.
Planning Authority Decision	Refuse
Type of Appeal	First Party
Appellant(s)	Inisgaoth Ltd.
Observer(s)	None.

Date of Site Inspection	11th March 2020.
Inspector	Sarah Lynch

Contents

1.0 Site Location and Description

1.1. The site is located c. 5.5km northwest of Quigleys point and 8km south of Carndonagh. The prevailing land type is characterised by peatlands and the prevailing land use is commercial forestry and wind energy. The proposed wind development will be located on two land parcels in the townland of Carrowmore and Glentogher and the associated grid connection will traverse a number of townlands prior to reaching the final connection point at the existing Trillick Substation outside of Buncrana. The development will be located in areas identified within the Donegal Development Plan 2018-2024 as High Scenic Amenity and Moderate Scenic Amenity but is outside of any Protected Views.

1.2. The development commences at the L1731 local road to the north west of the R240, which is a narrow country road bounded by an upland mountain and moorland landscape. Development along this route comprises dispersed dwellings, wind energy development, agricultural buildings and commercial forestry.

1.3. The route of the proposed grid connection passes along this local road and passes the edge of the Camowen River Bog NHA and the Fullerton/Pollan reservoir to the south of Lake Turk and Illies Hill Bog NHA, prior to turning south over the hillside near to the existing Sorne Hill Wind Farm where it connects to a local road in the townland of Tullydish upper. The route then proceeds along the local road network to the final point at the Trillick Substation.

1.4. The proposed development will not occur within any Natura 2000 sites. Turbines will be located in upland peatland areas at a height of 190-230m altitude and the proposed route connection for the majority of the route will be located within the road verge.

2.0 Proposed Development

2.1. A 10 year planning permission is sought for the following development which will have a 30 year operational life:

- 6 no. wind turbines of up to 124.9 metres in height
- 1 permanent lattice anemometer mast of 80 metres in height
- Widening and strengthening of existing access track

- 1 no. electrical 38kV substation with control building
- Carparking and compound area with related communications and electrical equipment with underground feeder cables.
- 2 no. spoil deposition areas
- Upgrade of 3 existing entrances
- 2 no. temporary construction compounds
- 2 no. temporary borrow pits with associated works and equipment
- Underground 38 kV grid connection cable and associated works extending c. 17.620km in length.

3.0 Planning Authority Decision

3.1. Decision

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

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.

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

- CFO – no objection
- Road Design – no objection subject to conditions
- EER – condition survey of roads pre and post construction subject to a security bond. The presence of HV cabling would impact road users and road network.

3.3. **Prescribed Bodies**

- IAA – Details of aeronautical warning light to be agreed, provision of as constructed drawings, notification of crane operations 30 days prior to commencement.
- IFI – no objections subject to conditions
- Dept of Defence – no objections subject to provision of high intensity lighting and restrictions on obstruction lighting.
- Department Culture, Heritage and the Gaeltacht (Wildlife) – Further clarification required in relation to displacement of Merlin and Curlew.
- Department Culture, Heritage and the Gaeltacht (Archaeology) – Archaeological monitoring.

4.0 **Planning History**

18/50380 – Permission was refused for a ten year permission for 1 turbine for a number of reasons which include the following:

- Contrary to location policy for turbines
- Visual intrusion and overbearing visual impact
- Failure to demonstrate that the proposed development would not have a significant impact on the conservation status of the NHA.

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 7 – Natural and built Heritage
- 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.

Areas of Moderate Scenic Amenity (MSA)

Areas of Moderate Scenic Amenity are primarily landscapes outside Local Area Plan Boundaries and Settlement framework boundaries, that have a unique, rural and generally agricultural quality. These areas have the capacity to absorb additional development that is suitably located, sited and designed subject to compliance with all other objectives and policies of the Plan.

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 co-existence 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- Siting 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

Guidelines for Assessment of Ecological Impacts of National Roads Schemes, NRA, 2009

- Section 3.3.1 Geographic context for determining value

5.2. Natural Heritage Designations

The nearest Natura 2000 sites are as follows:

- Lough Swilly SAC is located c. 2.5km west of the site (Grid Connection element of development)
- Lough Foyle SPA which is located c. 4.8km to the east of the site.
- Magheradrumman Bog SAC is located 3.8km north east of the site

5.3. EIA Screening

5.4. An EIAR was submitted with the application and is examined within Section 8 below. The proposed development is located c. 13km north west of Northern Ireland, Article 7(4) of amended EIA Directive (2014/52/EU), requires transboundary consultation to be entered into whereby significant direct or indirect effects are considered likely. I am satisfied, based on the information submitted, the separation distance of the proposed development and having regard to existing established development in the area, that such effects do not arise and as such transboundary consultation is not required in this instance.

6.0 The Appeal

6.1. Grounds of Appeal

The grounds of appeal have been prepared by Canavan Associates on behalf of the applicant. The issues raised can be summarised as follows:

- The applicant has been unfairly forced to make the appeal as the development plan variation process should be complete.
- It is not accepted that there is lacuna in wind energy policies within the Development Plan.
- National and regional policy supports such development.
- The appeal site is located in an area in which wind energy was previously open for consideration.
- The applicant was advised that the site was suitable for wind energy by the local authority.
- Extensive studies have been carried out in the area and an area of habitat management has been agreed with the landowner.
- The EIAR provides a detailed and comprehensive analysis of the suitability of the site for the development as proposed.
- The NIS determines that the proposal will not adversely affect the integrity of any Natura 2000 sites.

- There are no other reasons for refusal and no objections apart from a birds query by NPWS which has been responded to.
- The proposed turbines will read visually with existing and permitted wind energy in the area and the underground cable will have no visual impact.
- The majority of the lands for proposed turbines will be located in an area of moderate scenic value. The development plan identifies these areas as having capacity to absorb additional development.
- A community fund is to be set up.
- Any height turbine would be acceptable in this landscape.
- Impacts of HV cabling within road network are a road opening licence issue as per the planners report.
- Transport route for turbines will avoid use of National Road Network and will be carried out in accordance with the agreement of the roads section.
- The area is established for wind energy development.
- Wind energy is required for Ireland to deliver on climate action commitments.
- The closest property is 670 metres from the proposed wind farm and therefore noise issues will not arise.
- Closest turbine to regional road is c. 2km.
- Turbines are not in proximity to overhead cables.
- Decommissioning and reinstatement have been addressed and include provision for habitat restorative measures and the removal of above ground structures and equipment.
- Cumulative shadow flicker analysis has shown that impacts at nearby residents will not be significant.
- The county's exposed position on the western seaboard is ideal for harnessing wind energy.
- Visual Impacts within 10km are considered, impacts beyond this are not considered to arise.

- The planners report raises no issue with the nature of the development or predicted environmental impacts of a development.
- Bird impact assessment concludes that impacts are not likely.
- Adequate mitigation measures are proposed to prevent any impacts to waters and birds.
- Reference is made to Element Power Ltd. V ABP judgement.
- Borrow pits will be located in areas largely out of sight and will be back filled on completion.

6.2. **Planning Authority Response**

Donegal County Council responded to the grounds of appeal and wish to rely on the contents of the planners report in this context.

6.3. **Observations**

- None

7.0 Assessment

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. It is important to acknowledge at the outset that unsolicited information was received by the Council from the applicant in the form of a response to concerns raised within a submission by the Department of Culture, Heritage, and the Gaeltacht, this information is considered in the context of the following assessment.

7.2. It is of further importance to note at the outset that I have serious concerns in relation to the impact of the development on the underlying hydrological regime of both the site and the surrounding area and the potential for the development to significantly impact areas of Wet Heath and Blanket bog which are listed for protection in Annex I of the Habitats Directive. This issue is examined in detail within the EIAR assessment below. The issues for consideration before the Board are summarised as follows:

- Principle of the development
- Visual Impact
- Impact on residential amenity in terms of noise and shadow flicker.
- Appropriate Assessment
- EIAR

Principle of the development

7.3. 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 Regional Spatial and Economic Strategy for the Northern and Western Region and the Donegal County Development Plan 2018-2024. As outlined above it is considered by Donegal County Council that there is a lacuna in relation to detailed wind energy policy within the Development Plan for the area as a result of a legal challenge. I have reviewed the Donegal Development Plan and note that the overriding policy aim for the Council, as stated within the 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.

7.4. 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.

7.5. Based on the foregoing I consider the principle of the development to be in accordance with the overriding policy objective of the Donegal Development Plan, however, impacts on the environment and the amenities of the area and local residents will require examination in order to determine the overall suitability of the proposed development.

Visual Amenity

7.6. As mentioned above it is proposed to erect 6 no. turbines to a height of 124.9 metres and all associated structures within the development site including the provision of a c.17.6km grid connection. The development will be located in an area identified as Moderate Scenic Amenity and an area identified as being of High Scenic Amenity. The lands are located in an upland area c. 5km north west of Quigleys Point whereby the predominant use of lands is forestry and agriculture. The surrounding lands are sparsely populated with a low level of residential development.

7.7. The development site does not interfere with any Protected Views and it is stated within the Donegal Development Plan that such areas of high scenic amenity 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 important to note at this juncture 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 important to acknowledge at the outset that the proposal will not introduce a new form of development into the wider landscape.

7.8. 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.

7.9. These requirements are also contained within the draft Wind Energy Guidelines 2019, within which it is a requirement for visual impact assessment to extend 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 setback 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.

7.10. It is important to note at this juncture that the Donegal Development Plan requires a setback of 10 times the tip height of the proposed turbine from residential properties and other centres of human habitation. This requirement is at variance with national policy and I note previous decisions by the Board such as that granted at Meenbog ref: ABP 300460, applied national guidance standards. Accordingly, such standards will also apply to the assessment of the proposed development.

7.11. Whilst the visual impact of the development was not cited as a reason for refusal by the Council, I consider it necessary to properly examine this issue given the scenic nature of the receiving environment.

7.12. A comprehensive visual impact assessment was submitted with the application and extends to an area of 20km from the site. 14 no. viewpoint locations have been selected for the purpose of this visual assessment which examine the potential for visual impact in detail. Potential for impacts to arise in relation to Northern Ireland have been considered within the visual assessment submitted within the EIAR document and were found to be negligible.

7.13. As outlined above in Section 5.3 Article 7(4) of amended EIA Directive (2014/52/EU), requires transboundary consultation to be entered into whereby significant direct or indirect effects are considered likely. I am satisfied, based on the separation distance of the proposed development and having regard to existing established development in the area, that such effects do not arise and as such transboundary consultation is not required in this instance.

7.14. 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. The ZTV map indicates that the locations at which the majority of turbines would be visible are within the 5-10km 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, 14 specific locations identified within the ZTV were assessed in detail. Of the 14 locations and photomontages examined within the EIAR, visual impacts for singular turbines were examined and 8 no. were stated as slight to minor, 6 had minor to moderate impacts and none had profound or major impacts.

7.15. I note from the information submitted that 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.

7.16. 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 I am satisfied that long range visual impacts will not be significantly impacted, and given the proposed separation distances from proposed turbines to existing residential development in the area, impacts to such properties will also not be significant. Overall, the visual impact of both the proposed development in isolation and the cumulative impact given the existing layout and spread of turbines in the wider landscape is not considered to be significant.

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

7.17. 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. It is stated within Section 5.1 of the EIAR submitted that only 4 houses are present within 10 rotor diameters of the proposed development. Of these 4 dwellings 2 are at risk of experiencing shadow flicker. The predicted worse case scenario ranges from 19.8 total hours of shadow flicker per year (at north facing windows) to 23.36 total hours (at west facing windows).

7.18. In terms of maximum daily duration predicted shadow flicker effects range from 0.52 hours or 31.2 minutes at H32 to 0.53 hours or 32.4 minutes

7.19. A planning history search was 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.

7.20. The aforementioned worse case scenario results were therefore modified to take account of local weather conditions and sunlight hours. Results of this modified model demonstrate shadow flicker effects ranging from 23.23 to 19.18 hours per year and 38.16 and 33.65 minutes per day.

7.21. A range of mitigation measures to maintain shadow flicker below the guidelines thresholds are proposed by the applicant which include the provision of landscaping

and other vegetative screening. Alternative measures could also be agreed with the affected properties in terms of installation of blinds or multi directional lighting and the implementation of a shutdown module in the relevant turbine thus removing potential for this effect.

7.22. Based on the information submitted I am satisfied that shadow flicker can be adequately mitigated and will not significantly impact properties in the vicinity.

7.23. Impacts arising from noise during both the construction and operation of the development have been examined in detail within Section 12 of the EIAR assessment outlined in section 9 of this report below. It is concluded within Section 9 of this report that significant effects arising from noise emissions are not likely.

7.24. 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.

7.25. It is 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.

7.26. Overall, having regard to the foregoing and Section 9 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 NM Ecology 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, the National Biodiversity Data Centre and the Environmental Protection Agency web viewer. Field surveys were also undertaken between 2015 and 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, I consider the following European Sites relevant to include for the purposes of my initial screening for the requirement for Stage 2 appropriate assessment on the basis of likely significant effects**.**

Table 1 European sites considered for Stage 1 screening:

European Site Name & Code	**Distance**	**Qualifying Interest**	**Source-pathway-receptor**	**Considered further in screening**
Lough Swilly SAC 002287	2.5km west of the site	Coastal lagoons [1150] Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]	Hydrological pathway via watercourses	**Yes** Potential for effects arising

		Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410] Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] Lutra lutra (Otter) [1355]		from water pollution.
Lough Swilly SPA 004075	3km west of site	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) [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]	Potential to disturb foraging birds.	**Yes**

		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]		
Magheradrumman Bog SAC 000168	3.8km north east of the site	Northern Atlantic wet heaths with Erica tetralix [4010] Blanket bogs (* if active bog) [7130]	No hydrological pathway	**No**.
Lough Foyle SPA 004087	4.8km south east of the windfarm	Red-throated Diver (Gavia stellata) [A001] Great Crested Grebe (Podiceps cristatus) [A005] Bewick's Swan (Cygnus columbianus bewickii) [A037] Whooper Swan (Cygnus cygnus) [A038] Greylag Goose (Anser anser) [A043] Light-bellied Brent Goose (Branta bernicla hrota) [A046] Shelduck (Tadorna tadorna) [A048] Wigeon (Anas penelope) [A050] Teal (Anas crecca) [A052] Mallard (Anas platyrhynchos) [A053] Eider (Somateria mollissima) [A063]	Potential to disturb foraging birds.	**Yes**

		Red-breasted Merganser (Mergus serrator) [A069] Oystercatcher (Haematopus ostralegus) [A130] Golden Plover (Pluvialis apricaria) [A140] Lapwing (Vanellus vanellus) [A142] Knot (Calidris canutus) [A143] Dunlin (Calidris alpina) [A149] Bar-tailed Godwit (Limosa lapponica) [A157] Curlew (Numenius arquata) [A160] Redshank (Tringa totanus) [A162] Black-headed Gull (Chroicocephalus ridibundus) [A179] Common Gull (Larus canus) [A182] Herring Gull (Larus argentatus) [A184] Wetland and Waterbirds [A999]		
Trawbreaga Bay SPA 004034	11.5km north of site	Barnacle Goose (Branta leucopsis) [A045] Light-bellied Brent Goose (Branta bernicla hrota) [A046] Chough (Pyrrhocorax pyrrhocorax) [A346] Wetland and Waterbirds [A999]	Hydrological pathway via watercourses	**Yes**
North Inishowen Coast SAC	11.5km north	Mudflats and sandflats not covered by seawater at low tide [1140] Perennial vegetation of stony banks [1220]	Unlikely due to the distance from the SAC and the dilution and dispersion	**No**

		Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Machairs (* in Ireland) [21A0] European dry heaths [4030] Vertigo angustior (Narrow-mouthed Whorl Snail) [1014] Lutra lutra (Otter) [1355]	effect of the sea.	

8.6. The NIS submitted by the applicant screens in the following sites for Appropriate Assessment:

- Lough Swilly SAC
- Lough Swilly SPA
- North Inishowen Coast SAC
- Trawbreagha Bay SPA
- Lough Foyle SPA

8.7. It is stated within the NIS submitted that there is a hydrological link between the site and all of the above Natura 2000 sites due connectivity between the development site and these Natura 2000 sites via a network of water courses which ultimately drain to the Natura 2000 sites outlined above. It is of note that the Inishowen Coast SAC is located c. 11.5km north of the site and I consider that given the distance from the site and having regard to the dilution and dispersion effect of the sea that significant effects arising from the development are unlikely. I do not, therefore, consider it necessary to include this site within a stage 2 Appropriate Assessment. I note from the applicants NIS that Magheradrumman Bog SAC is screened out for stage 2 Appropriate Assessment by virtue of distance and lack of a pathway from the appeal site, I consider this to be reasonable and do not consider that significant effects will arise.

8.8. Therefore, based on my examination of the NIS report and supporting information, the scale of the proposed development, its potential to contaminate the Lough Swilly SAC, by way of water pollution and sedimentation from surface water runoff, and the

potential to effect foraging grounds for the qualifying interests of Lough Swilly SPA, Trawbreagha Bay SPA, Lough Foyle SPA, I would conclude that a Stage 2 Appropriate Assessment is required for Lough Swilly SAC, Lough Swilly SPA, Trawbreagha Bay SPA, Lough Foyle SPA. It is important to note that mitigation measures have not been considered in the Appropriate Assessment Screening.

Stage II Appropriate Assessment

8.9. 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:

- Lough Swilly SAC
- Lough Swilly SPA
- Trawbreagha Bay SPA
- Lough Foyle SPA

8.10. The NIS submitted by the applicant concluded that the proposal will not, adversely affect the integrity of any European Site.

8.11. The following is a summary of the objective scientific assessment of the implications of the project on the conservation objectives for 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.

8.12. **Potential for direct and indirect effects**

Water Ecology

8.13. Otters are a qualifying interest of Lough Swilly SAC. Otters are vulnerable to changes in water quality and siltation. Due to the location and nature of the proposed works within the Burnfoot_SC_010 water catchment, I consider that Otter specifically is the qualifying interests at risk within this site from the proposed development.

8.14. The conservation objectives for Lough Swilly SAC aims to maintain or restore the favourable conservation condition for habitats and/or species at this site. 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.

8.15. 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

8.16. In addition to the foregoing, Lough Swilly SPA, Trawbreagha Bay SPA and Lough Foyle SPA support an excellent diversity of waterfowl species in autumn and winter as well as breeding species during summer months.

8.17. Areas of 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 that wetland habitat and overwintering and breeding birds to be at risk of disturbance from the development.

8.18. The overriding conservation objectives for the SPAs listed above aims to maintain the favourable conservation condition of these birds and habitats. The NIS submitted examines the potential for impacts on birds. It is stated within the NIS submitted that two years of breeding and non-breeding season surveys were carried out at the proposed development site covering the 2015-16 and 2016-17 non breeding seasons (October to February) and the 2016 and 2017 breeding seasons (March to August).

8.19. Walkover surveys were carried out within 800m from turbine locations as curlew are known to feed in the wider area. 5 vantage points were selected to give clear views of the lands of the proposed windfarm. The area was larger in year 1 and was reduced in size in year two based on the results of year 1 surveys.

8.20. It was concluded after 2 years of surveys that the development site is not within the flight path of the birds for which the SPAs are designated and therefore there is no pathway for collision, displacement or other disturbance of these birds.

8.21. **Potential in-combination effects.**

8.22. In combination effects are examined within the NIS submitted in relation to the full development proposed. It is noted that the proposed development is in close proximity to the existing Sorne Hill Wind farm and the proposed grid connection route will follow the existing access tracks for this windfarm in order to reduce any cumulative/in

combination effects. I am satisfied given the route of the proposed grid connection largely being within the road verge and existing tracks, that in combination effects from this element of the development will be minimal.

8.23. As outlined within the NIS submitted, there are a number of existing established windfarms present in the wider area and there are also a number of permitted and proposed turbines within 15km of the development site. A total of 11 windfarms or single turbine sites have been recorded either in operation or under construction. These comprise 68 no. commercial sized wind turbines and an additional 10 wind farms or single turbine site that have been granted permission but have not been built as yet. It is stated that if these turbines are built they will result in an additional 26 turbines in the landscape resulting in a total of 94 turbines within a 15km radius. Within 5km of the site there are 34 operational, granted or under construction turbines with 15 of these currently operational. Within 2.5km there are 14 operational turbines. The permitted Carrowglen Wind Farm project if built will provide for an additional 6 turbines and it is the assertion of the applicant that this increase is not considered to be significant.

8.24. This site holds similar bird assemblages to that of the proposed development and it is proposed that these sites would not be built at the same time in order to allow for temporary displacement of birds during the construction phases of both developments. Cumulative impacts in relation to habitat loss are considered to be low within the NIS submitted and impacts in relation to collision are also considered to be low due to the flight behaviour of the species identified in the area.

8.25. A hydrological cumulative impact assessment of the proposed development has been carried out and forms part of the EIAR submitted, a review of all projects that may have the potential to result in cumulative impacts was included within this assessment. Cumulative hydrological impacts arising from the construction of projects were identified as the element of the project with most potential to give rise to impacts. The applicant states within the NIS that the proposed development would be constructed at a different time to permitted turbines in the area and given the total number of turbines existing and permitted within the water catchment area equates to one turbine every 2.8km^2 it is therefore concluded within the NIS submitted that there would be no cumulative / in-combination effects arising from the proposed development.

8.26. Overall having regard to the foregoing, I consider that in-combination effects have been properly assessed and I consider that provided the works are carried out in a phased manner separately to other permitted development in the area significant in-combination effects are not likely to arise.

8.27. **Mitigation Measures**

8.28. Mitigation measures have been set out within the NIS submitted and include standard best practice in relation to construction. Measures include the avoidance of any construction within 50 metres of any watercourse and provide a 15 metre vegetative buffer zone between the works area and the watercourse. The use of silt fences, silt bags, and interceptor drains will protect watercourses further and discharges will be to vegetated slopes. Silt buster will also be used as required.

8.29. Cleaning of cement chutes will be cleaned at designated locations more than 50 metres from watercourses and a detailed water monitoring programme will be set up in order to ensure that water quality is maintained. Surface water drainage will be directed to settlement ponds prior to discharge. All maintenance and refuelling will take place off site at the developers compound and vehicles will be checked regularly for leaks.

8.30. 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.

8.31. Avoidance of areas where breeding birds are close to and exclusion zones around nest found during routine walkovers, will protect birds found on site during construction. Works are proposed to be commenced prior to breeding season and in some instances will not be carried out at all during breeding season. In addition it is proposed to stagger construction works so as not conflict with construction works of other permitted windfarm development. This will allow for temporary phased displacement which will not significantly impact bird species in the area.

8.32. All mitigation measures will be assessed in relation to the potential for likely significant effects on the Lough Swilly SAC, Lough Swilly SPA, Trawbreagha Bay SPA and Lough Foyle SPA within the following integrity test.

The integrity Test

8.33. 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 water contamination or sediment outfalls during the construction phase of the development of the wind farm and grid connection relate to the movement of soils within the overall site and the leakage of oils and diesels or other such contaminates from construction vehicles into watercourses.

8.34. Plant and machinery will be regularly checked and as mentioned above, refuelling will occur at the developers compound which will be in excess of 50 metres from any watercourse. Spill kits will be available in the event of a spillage occurring.

8.35. A 50m buffer is to be provided between works and any watercourse within the site

8.36. 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 Lough Swilly SAC, Lough Swilly SPA, Trawbreagha Bay SPA and Lough Foyle SPA in view of these sites conservation objectives.

8.37. Potential for impacts to arise in relation to the construction and operational stage in relation to the disturbance and loss of habitat of bird species and the potential for collisions with birds to occur are examined as follows. It is apparent from the Bird surveys carried out and submitted within the EIAR that only a small number of birds which are included within the qualifying interests of the Lough Swilly SPA, Trawbreagha Bay SPA and Lough Foyle SPA were recorded at the development site. These birds will be dealt with individually as follows:

Curlew

8.38. Only four pairs of curlew are known to breed in Donegal with two breeding at a known site on the north west side of the Fullerton Dam which is 1.3km from the western part of the proposed development. Given that there are less than 150 pairs of breeding curlew remaining in Ireland it is imperative to protect this species from further decline. In the context of the foregoing the pairs at the breeding site adjacent to the development site are of national and local importance for curlew populations.

8.39. Curlew birds were recorded near to the site on a number of occasions during both breeding season and non-breeding season. It appears that incidents of sightings were at the highest during breeding season with a maximum number of 3 birds seen at any one time. The historical breeding site is located c. 1.3km to the west of the development site and the birds were heard calling from this site during the breeding season in 2015-16. Activity was most frequent at a location c. 700 metres south west of the closest turbine. It is stated within the NIS submitted that curlew did not react to predators flying over head and as such the area was not considered to be a breeding site and was most likely used for foraging.

8.40. Impacts to Curlew may arise during construction and operation of the proposed development. It is stated within the NIS that although the identified feeding grounds are only a small part of the overall site used by curlew, any loss of habitat is deemed as a potential significant effect given the conservation status and the local and national importance of the breeding site in this locality. The proposed development will be in excess of 800m of any known curlew breeding site and curlew were only observed feeding at an area c. 700m from the location of the most western turbine.

8.41. Curlew are sensitive to disturbances from construction of wind development within a range of 800m from construction activity. Given that the breeding site is in excess of 1.3km from the site and that feeding has been observed within 700m I consider that potential for significant effects is low given the separation distances provided for.

8.42. Collision risk posed by the proposed windfarm is considered to be low and will not have a significant impact on local populations.

8.43. Mitigation measures proposed to protect curlew include the prevention of construction activity taking place near the western part of the site during breeding season. A predator control program will be designed and carried out in order to improve the breeding success of pairs. This program will continue for 5 years. It is further proposed to commence works in the eastern part of the site prior to the 1st March in order to allow breeding birds to become habituated to increased activity. Habitat renewal and regeneration will occur in an area of degraded bog whereby drains will be blocked and grazing managed in order to create an area of active raised bog which will improve habitat conditions for the curlew and other species.

8.44. Further measures include mowing of lands close to works which will be carried out prior to March in order to discourage nesting. A pre-construction bird survey and weekly walkover of all areas will be carried out to ensure impacts are avoided. All nests recorded will be mapped and a work exclusion zone will be provided around it. Buffer zones will be species specific and an 800m buffer zone will be provided for curlew if found within the site.

8.45. Having regard to the foregoing and taking into account the mitigation measures proposed I am satisfied that the applicant has demonstrated significant effects to the curlew are not likely in view of this qualifying interest's conservation objectives.

Whooper Swan

8.46. It is stated within the information submitted that Whooper swans use Fullerton Dam at the early part of the non-breeding season to roost and feed on. They were most frequently recorded at the north western shore of the dam and were recorded flying over the area on a regular basis to commute to and from other feed sites. The survey results indicate that the development area for the windfarm holds relatively few whoopers and it is stated within the NIS that the site is not important for the wider local population. The maximum number of swans observed at the dam was 17, whereas Lough Foyle supports a mean of 900 whoopers and Lough Swilly SPA holds approximately 1,600.

8.47. Impacts arising from the construction phase are not anticipated given the distance from the feeding site and the development. Similarly impacts arising from the operational stage are also not considered likely as the roosting site are in excess of 600 metres from the turbines and the flight path observed during the surveys did not pass over the turbine site and followed the lower elevation areas in a north east direction towards Glentogher Valley where it is assumed they follow the valley to Lough Foyle. Very few were noted flying into or out of the direction of Lough Swilly SPA.

8.48. Having regard to the foregoing I consider that significant impacts to this qualifying interest are unlikely given that this species was not observed flying over the turbine site and the separation distances between the roost sites and the development.

Golden Plover

8.49. Golden Plover were also observed at the site at either end of the breeding season. It is stated that the site is not an important over-wintering site for the species. The site is said to be used as a brief stopover whilst on transit back to breeding grounds in Scandinavia. Given the nature of the use and the limited sightings of this species at the site it is reasonable to assume that the Golden Plover is not dependent on the development site for nesting, foraging or roosting during breeding season and as such whilst displacement may arise during construction I consider that significant impacts are unlikely.

8.50. Hen Harrier were observed at the site once during breeding season in 2016 and 2017 and once during non-breeding season in January 2016. The species do not breed near to the site. Individuals observed were considered to be roving individuals that only rarely visit the site. A number of other species were recorded at the site and will be assessed within the EIAR section of this report.

8.51. 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. 002287, 004075, 004087 and 004034 in view of these sites Conservation Objectives. It is of note in this context that the applicant held pre-planning discussions with Bird Watch Ireland and no observations to the appeal have been received in relation to birds.

Table 2 AA summary matrix – Lough Swilly SAC

Lough Swilly SAC, site code: 002287 **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 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?**

Otter	To maintain favourable conditions.	Increase in siltation and pollution due to construction works could have an impact to foraging/nesting at this site.	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 – Trawbreaga Bay SPA

Trawbreaga Bay SPA, site code: 004034 **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 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?**
Barnacle Goose (Branta leucopsis) [A045] Light-bellied Brent Goose (Branta bernicla hrota) [A046] Chough (Pyrrhocorax	To maintain favourable conditions.	Increase in siltation and water pollution due to construction could result in impacts to foraging/nesting at this site.	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

pyrrhocorax) [A346] Wetland and Waterbirds [A999]					
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

Lough Swilly SPA, site code: **004075** **Summary of likely significant effects** • **Disturbance** **Conservation Objectives: To maintain or restore the favourable conservation status of species of community interest**					
		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) [A050]	To maintain favourable conditions.	Disturbance to feeding or breeding ground or collision risk in flight path of species.	Avoidance of some works during breeding season. Regular monitoring of site for nests and provision of exclusion zone if found.	Additional development in area including grid connection	Yes

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] Pochard (Aythya ferina) [A059] Wetland and Waterbirds [A999]					
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 5 Summary Matrix: Lough Foyle SPA

Lough Foyle SPA, site code: 004087 **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 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?**

Red-throated Diver (Gavia stellata) [A001] Great Crested Grebe (Podiceps cristatus) [A005] Bewick's Swan (Cygnus columbianus bewickii) [A037] Whooper Swan (Cygnus cygnus) [A038] Greylag Goose (Anser anser) [A043] Light-bellied Brent Goose (Branta bernicla hrota) [A046] Shelduck (Tadorna tadorna) [A048] Wigeon (Anas penelope) [A050] Teal (Anas crecca) [A052] Mallard (Anas platyrhynchos) [A053] Eider (Somateria mollissima) [A063] Red-breasted Merganser (Mergus serrator) [A069] Oystercatcher (Haematopus ostralegus) [A130] Golden Plover (Pluvialis apricaria) [A140]	To maintain favourable conditions.	Disturbance to feeding or breeding ground or collision risk in flight path of species.	Avoidance of some works during breeding season. Regular monitoring of site for nests and provision of exclusion zone if found	Additional development in area including grid connection	**Yes**

Lapwing (Vanellus vanellus) [A142] Knot (Calidris canutus) [A143] Dunlin (Calidris alpina) [A149] Bar-tailed Godwit (Limosa lapponica) [A157] Curlew (Numenius arquata) [A160] Redshank (Tringa totanus) [A162] Black-headed Gull (Chroicocephalus ridibundus) [A179] Common Gull (Larus canus) [A182] Herring Gull (Larus argentatus) [A184] Wetland and Waterbirds [A999]					
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.					

9.0 **EIAR**

9.1. The application is accompanied by an Environmental Impact Assessment Report (EIAR) which was prepared by Canavan Associates Ltd. The proposed development relates to the development of a 6 turbine wind energy development in the townlands

of Carrowmore and Glentogher and a grid connection from the turbine site to an existing substation at Trillick .

9.2. 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.

9.3. 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.

9.4. 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.

9.5. 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). The EIAR provides detail with regard to the consideration of alternatives in Section 5.4. An overview of the main interactions is provided at Section 19. Annex 18 of Volume II of the EIAR 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 and other prescribed bodies as part of the preparation of the project are also set out and can be reviewed in Annex 1 of Volume II of the EIAR.

9.6. 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

18 Health and Safety and the potential for 'flooding' is considered in Section 11 water. I consider that the requirement to consider these factors under Article 3(2) is met.

9.7. 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.

9.8. **Consideration of Alternatives**

9.9. Section 5.3.2 of the submitted EIAR addresses the alternatives considered. It is stated within the NIS submitted that the consideration of the proposed site was informed from the outset by national, regional and local policy constraints. As well as site specific environmental and planning constraints. A number of sites were discounted from the outset after mapping these constraints. Alternative quantum and locations of turbines were considered and following investigation of the site and surrounds the proposed 6 turbines were considered most appropriate in this instance.

9.10. Lands to the southwest were omitted after preliminary surveys found active bog habitat present and in addition lands to the north west of T1 were also discounted due to the identification of habitat of conservation concern.

9.11. Consultation with telecommunications and aviation operators influenced the position of turbines within the site as did the cumulative visual impact assessment of turbines over a 20km radius of the site.

9.12. Alternative routes and type of development for the grid connection were considered such as the use of overhead cables and it was considered that the route as proposed provides for the shortest route and the one of least cumulative impact.

9.13. The use of one large construction compound was also considered and after reviewing the operation of this it was decided to provide two smaller compounds within the eastern element and one within the western element of the site.

9.14. The use of borrow pits on the site were considered more appropriate as opposed to the extraction and transportation of large quantities of material from local quarries.

9.15. The EIAR considers the following alternative uses for the development site. A 'Do Nothing', would see the site remain in use for agriculture and forestry. It is stated that

these uses would impact the country's ability to harness a valuable renewable energy resource.

9.16. 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

9.17. The sections below address each of the environmental factors. The headings used in the EIAR are as follows:

- Population and Human Health
- Biodiversity: Habitats, Mammals and Bats
- Ornithology
- Fisheries
- Land and Soils
- Water
- Noise and Vibration
- Air quality and Climate
- Roads and Traffic
- Built Services
- Cultural Heritage
- The Landscape
- Health and Safety
- Interactions of Impacts

9.18. 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.

9.19. Volume 2 of the EIAR discusses a scoping exercise that was carried out and a list of consultees are included.

Population and Human Health

9.20. Section 6 addresses population and human health. Effects are considered in the context of socio-economic and health and wellbeing considerations. CSO data was utilised to inform the socio-economic profile of the area. The EIAR included an examination of the population and employment characteristics of the area and states that Donegal County is the second most deprived county in the country after Limerick.

9.21. 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. The development will also potentially contribute an estimated €93,000 annually to the local authority in terms of rates and €46,000 per turbine in relation to development contributions.

9.22. 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.

9.23. Residual impacts on human health and population are not anticipated provided that the proposed mitigation measures are fully implemented. Shadow flicker has been modelled and no turbine will give rise to shadow flicker in excess of 30 hours per year or 30 minutes per day.

9.24. An information event and local postal notice was issued in order to engage the local community and seek their input in relation to the development. It is stated that this event was well attended and a community fund will be set up in order for contributions to be made over the life of the development to services and facilities within the community.

9.25. 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

9.26. Section 7 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 8 of this report. The site does not overlap with or directly adjoin any European or nationally designated sites. Lough Swilly SAC & SPA Trawbreagha Bay SPA and Lough Foyle SPA are the nearest European sites with a pathway to the appeal site.

9.27. The risk of water pollution to these sites can be excluded due to the mitigation measures proposed and the separation distance from the site to the sites.

9.28. While the potential for effects on the qualifying interests of these sites 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.

9.29. 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 SPAs and SAC in view of these sites Conservation Objectives.

9.30. Potential impacts on biodiversity associated with the proposed development include loss of habitat and disturbance or displacement of species. It is important to note at this juncture that impacts effecting the hydrological regime of the area are examined in section 11 of the EIAR and an assessment of the impacts on relevant habitat will be assessed in further detail under this heading below.

9.31. The assessment of impacts is supported by an ecological assessment, a desk top study was carried out on in 2018 and walkover surveys were carried out between November 2015 and October 2017. A drive through survey of the grid connection route was also carried out in June 2018.

9.32. The surveys carried out found the site is characterised by heaths, acid grasslands and conifer plantations. Much of the upland areas found in the general area support upland blanket bog while poorly drained natural depressions in lowland areas support lowland blanket bog. Many of these areas have been disturbed by peat harvesting. Upland areas, including those within the site, are unsuitable for most forms of agriculture and the predominant use is for sheep grazing. The majority of the site is underlain by peat soils of varying depths.

9.33. Large expanses of unmodified blanket bog have been identified on the lowest lying ground in the north western section of the site and in the south west of the eastern section of the site. Peat depths of more than 4 metres have been recorded in the site. Areas of highest depths have been avoided in the design of the application. Blanket bog listed in Annex I of the EC Habitats Directive and unmodified habitats are considered to be of high conservation value in Ireland, all blanket bog within the site is of county importance.

9.34. The remainder of bogland within the site consists of cutover bog which has been drained and cut over a period of 30-50 years. It is suggested that these areas would have originally been high quality blanket bog but are now significantly degraded. In their current state these areas are of low ecological status.

9.35. Wet Heath is said to be widespread throughout the site with peat depths of 0.3 - 1m. Wet heath is also listed on Annex I of the EC Habitats Directive. The current status of Wet Heath is classified as bad and declining. It is stated within the EIAR submitted that Wet Heath is common and widespread throughout the Inishowen Peninsula and is therefore considered to be of local importance.

9.36. This statement is of concern, I have reviewed the Guidelines for Assessment of Ecological Impacts of National Roads Schemes and had specific regard to Section 3.3.1 in which it is stated that sites containing area or areas of the habitat types listed in Annex I of the Habitats Directive that do not fulfil the criteria for valuation as of International or National importance are identified as being of County Importance.

Given the inclusion of Wet Heath within Annex I, I therefore do not accept that this area is merely of local importance and that the removal of c. 6ha of this habitat is therefore inconsequential.

9.37. Not only will the proposed development result in the loss of 6ha of Wet Heath habitat, the removal of this habitat will undoubtedly have an impact on the hydrological regime of the area and the fluctuation of the water table in the vicinity of the site and has the potential to impact adjoining areas of blanket bog and additional areas of wet heath. Whilst hydrology is discussed below under a separate heading, this element of the EIAR focuses on flooding issues and impacts on the subcatchment of the area. No in depth analysis has been carried out in relation to the impact of the development on the hydrogeology of the site and surrounds. The EIAR fails to adequately examine the consequential loss of 6ha of wet heath to the surrounding hydrological regime and boglands. It also fails to examine the potential impact of the proposed drainage system on the site and surrounds. Dramatic changes to hydrology in boglands can have disastrous effects for the habitat and can ultimately result in the indirect loss of these habitats.

9.38. A badger sett was observed and a camera was placed at the entrance from the 29th October 2016 to 4th November 2016, only a lone badger was observed passing the sett. The sett was not occupied at any time during the survey. Other terrestrial mammals were sought out during surveys such as hares, red squirrel and pine martins but none were observed. It was therefore considered within the EIAR that the development site is not of any importance to these species. Notwithstanding the foregoing the badger sett identified will be in excess of 250 metres from any proposed works and as such is not considered that impacts are likely to arise from either construction, operational or decommissioning phase of the development.

9.39. Results of the bat survey carried out revealed two roosts used by individuals of common species located at the eastern part of the site. The conifer plantations around the site are used on a seasonal basis by common pipistrelle and soprano pipistrelle. The bogland and heath are not suitable habitat for bats and development within this area is therefore considered negligible. Overall recorded bat activity was low and significant impacts are not considered likely.

9.40. 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 low. Vegetation removal will be completed outside of the bird breeding season and will be replanted with native hedge/tree species.

9.41. Overall it is stated within Section 5.6.1 that the proposed development has been designed to avoid ecologically sensitive areas, unmodified blanket bog has been avoided by design and development will take place in areas such as ecologically poor wet grasslands.

9.42. It is outlined within the EIAR that certain impacts are unavoidable and the proposed development will result in impacts to the following:

- 6 ha of wet heath
- 4.1ha of cutover bog
- 0.07ha poor flush
- 0.005 broadleaf scrub
- 80m coniferous treeline

9.43. No impacts to watercourses are anticipated as works for the proposed grid connection will run over or under existing bridges.

9.44. It is important to note at this juncture that it is stated within the EIAR that Crockahenny alkaline fen and Loughanvrickabrack pond appear to be spring fed. Disturbances to the hydrological regime can have significant impacts on the operation of springs and as such it is outlined within Section 7.5 that no development is to take place in the vicinity of these pond features.

9.45. The development is located primarily within areas of limited peat depth 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 both the NIS and section 11 of the EIAR in this regard.

9.46. The design and layout of turbines and associated infrastructure has sought to avoid areas of high ecological value. Areas of unmodified blanket bog have been excluded from the development. However, residual impacts include the loss 6ha of wet heath which equates to 4.5% of this type of habitat present in the landholding and 4.1 ha of cutover bog, equating to 6.4% of this land type in the landholding. As mentioned above, it is stated within Section 7.5.1 of the EIAR that the loss of this habitat is of Local Significance as this type of habitat is common within the surrounding landscape. The EIAR therefore states that no direct or indirect impacts are predicted on any habitats of county ecological significance.

9.47. I have reviewed the Guidelines for Assessment of Ecological Impacts of National Roads Schemes and have had particular regard to Section 3.3.1 in which it is stated that sites containing area or areas of the habitat types listed in Annex I of the Habitats Directive that do not fulfil the criteria for valuation as of International or National importance are classified as being of County Importance. Given that the Annex I habitat is viable within the development site and includes areas such as blanket bog, this habitat also has the potential to be of National Importance also.

9.48. Having regard to the foregoing I have serious concerns in relation to both the removal of such a significant area of Wet Heath which is Annex I habitat and the potential for significant indirect effects to occur to the adjoining areas of blanket bog due to changes in the hydrological regime created by the proposed development.

9.49. The information submitted therefore, not only incorrectly categorises the Wet Heath as being of local importance, but also fails to adequately demonstrate that the proposed development will not have a significant effect on the Annex I listed blanket bog habitat in the immediate vicinity of the development.

9.50. Whilst I acknowledge the applicants' proposal to restore and protect 24ha of degraded peatland in order to compensate for this loss, I do not consider the removal of such a significant areas of Annex I habitat to be appropriate in this instance. It must be acknowledged also, that such restoration plans are not guaranteed to succeed and the proposed development therefore has the potential for significant environmental

impacts within this sensitive landscape which supports a diverse mix of wildlife species and birds.

9.51. Cumulative effects are not anticipated by the applicant, however the proposed development would result in a cumulative loss of habitat for wildlife and bird species and whilst the loss may not be significant it is important to acknowledge that a the proposed development will exacerbate the overall cumulative loss when considered in conjunction with other permitted and established windfarm development in the area. The proposed grid connection for the large part will be located within the roadside and I do not consider impacts from this element of the development to be significant, nor do I have concerns in relation to significant cumulative effects arsing from this element of the development.

9.52. 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 not 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 or with suitable conditions. Potential for direct or indirect impacts on biodiversity cannot be ruled out. I am however, satisfied that cumulative effects, in the context the proposed grid connection and other existing and proposed development in the vicinity of the site, are not likely to arise.

Ornithology

9.53. Section 8 of the submitted EIAR assesses and evaluates the potential for significant impacts on ornithology. Bird surveys carried out over a 2 year period between 2015-16 and 2016-17 provide baseline data for the assessment of potential impacts. Potential impacts include the loss of habitat and displacement to feeding or breeding routes.

9.54. It is of note that surveys were only carried out along the route of the grid connection where the route deviates from the public road and access tracks and traverses a short section of an upland area 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.

9.55. The NIS report submitted considers the potential for effects on the Lough Swilly SPA, Trawbreagha Bay SPA and Lough Foyle SPA both individually and in combination with other plans or projects and considered that the risk of significant effects is unlikely.

9.56. 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 SPAs in view of the sites Conservation Objectives.

9.57. It is stated within the EIAR that a number of common birds which are categorised as being of low nature conservation importance were recorded during surveys. These species breed widely throughout the country and are not expected to be impacted by the development. A number of species with high conservation status but with a low association with the site include, mistle thrush, grey wagtail, jack snipe, golden eagle, and stonechat. Only one golden eagle was observed during year 1 and having regard to the limited sighting of this bird it is considered within the EIAR that the site is not used by this species.

9.58. Similarly, some raptor species were occasionally recorded on site including hen harrier, peregrine, falcon, kestrel and sparrowhawk. The site is not a breeding ground for hen harrier and peregrine were only observed once during the surveys. Kestrel were observed foraging on the site on a more frequent basis but not regularly. It is stated within the EIAR that these birds breed c. 3km from the site and that the appeal site is not considered to be a regular feeding ground. Sparrowhawk are also considered to breed within 2km of the site but it is not considered within the EIAR that the site is of significance to this species.

9.59. Red listed meadow pipit and amber listed skylark occur of the site in strong numbers during breeding seasons. It is expected that the proposed development will result in temporary displacement during construction phase. It is stated within the EIAR that the development site is only a small area of the lands available to these species and they have been shown to display low behavioural sensitivity to development.

9.60. 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.

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

- Buzzard
- Merlin
- Curlew
- Snipe
- Whooper Swan
- Golden Plover

9.62. As mentioned above impacts in relation to the Golden Plover, Curlew and Whooper Swan have been examined within the Appropriate Assessment Section of this report and therefore it is recommended that this section is read in conjunction with the Appropriate Assessment.

9.63. In relation to Buzzard and Merlin it is stated that the use of the site is inconsistent and only a limited number of birds were observed over the 2 years. Direct habitat loss for Merlin is c. 3.49% of the total suitable foraging area which amounts to 54km^2. An additional 6.5% of temporary habitat loss during construction is predicted but is considered worse case scenario having regard to the use of other sites by Merlin whereby activity is in significantly closer proximity to the birds. Impacts to these species are therefore considered to be low.

9.64. Snipe were observed during both breeding seasons and two breeding territories were recorded in the western section of the site in 2016. One within the windfarm site and one just outside. In year 2 of the survey the breeding site within the development boundary was inactive. All breeding sites are located 400m from proposed turbines.

9.65. Collision risk for all bird species is not considered to be significant due to the flight behaviour of the birds observed during the survey. 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.

9.66. 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

9.67. 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 2017 and 2018 by Whitford Geoservices Ltd on behalf of the applicant at the proposed site.

9.68. It is stated within the EIAR submitted that the lands are located in an upland area which comprises of rolling hills 200-400m in height and include a high point of 650m. The lands as outlined above are characterised by heaths, acid grasslands, and conifer plantations, with upland blanket bog, cut over bog and wet dwarf shrub heath being the dominant habitats. The underlying geology of the cable route is identified as Fahan Grit formation and Fahan slate formation with short incursions of Culdaff Limestone and Upper Crena Quartzite formation.

9.69. 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 within the immediate vicinity of the site.

9.70. A peat stability survey was carried out and peat probes were undertaken in tight grids centred on each turbine location and along the centre line of proposed access routes. Additional peat probing was carried out at the proposed spoil deposition areas and to augment the previous data where changes were made to the original layout.

9.71. Peat depth at the Carrowglen site was found to be 1.03m. With a range of 0.00m to 4.40m within the proposed development area. It is proposed within table 10.5 of the EIAR submitted that floating roads will be constructed whereby peat depths are in excess of 1.5 metres. Excavation will occur in areas of depths less than this and foundations laid on the underlying firm natural soils, it is stated that this method is

applicable to all of the proposed windfarm access roads aside from a 225m stretch whereby peat depths are high.

9.72. Based on the information submitted and the peat slippage analysis carried out, it is apparent that the proposed turbine locations pose an insignificant threat to peat slide. In addition all of the proposed access tracks, with the exception of one between T2 and T3, also pose an insignificant threat to peat slippage.

9.73. 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 material to be excavated is in the region of 56,500m^3.

9.74. Excavated material along the cable route will be reinstated and any tarmac road cuttings will be disposed of at a licenced waste facility.

9.75. Mitigation measures to reduce the disturbance of soil include the use of existing tracks, 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.

9.76. The use of settlement ponds will be volume neutral and all excess material will be used locally to form pond bunds and for landscaping.

9.77. It is important to note at this juncture that the overall impact of removing 6ha of Wet Heath landscape and the resultant impacts on surrounding blanket bog conditions is not discussed within this section of the EIAR in the context of soils. My concerns in this regard are outlined above and as such will not be repeated within this element of the EIAR assessment.

9.78. 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.

9.79. 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.

9.80. 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 in. 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.

9.81. Impacts to soils and geology during decommissioning will be limited and much reduced to that during construction. Mitigation measures proposed are similar to those proposed within the construction phase of the development and mainly seek to prevent runoff to nearby watercourses.

9.82. 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 as outlined within the foregoing biodiversity section. I am not satisfied that the potential for impacts on soils can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures or with suitable conditions. I am therefore not satisfied that the potential for direct or indirect impacts on lands, soils and geology can be ruled out. I am however 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

9.83. Section 11 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 western section, south western and grid connection site of the development site are all located within the Lough Swilly surface water catchment. The eastern part of the site is located in the Culdaff-Clonmany-Donagh-Coastal catchment. Both of these catchments are located within the North Western International River Basin District.

9.84. 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 in the eastern part of the site and it is stated that this pluvial area will be dealt with by way of the

proposed site drainage. The proposed grid connection will include 14 no. watercourse crossing, no in channel works are proposed and this element of the development is not susceptible to flooding. Overall, having regard to the information submitted I have no concerns in relation to flooding at the site or within the surrounding area.

9.85. 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, results found that samples were slightly acidic which is typical of peatlands.

9.86. The site is underlain to the east and the southern part of the western section by an aquifer of extreme vulnerability due to the level of outcrops present and low depth of overburden and the northern section of the western landholding by an aquifer of moderate vulnerability. 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.

9.87. 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 11.6 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.

9.88. The NIS report submitted considers the potential for effects on any Natura 2000 sites both individually and in combination with other plans or projects and considered that the risk of significant effects is unlikely.

9.89. 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 SPAs and SAC in view of these sites Conservation Objectives.

9.90. 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.

9.91. With regard to the operation of the borrow pit it is stated within the EIAR that 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. As mentioned above in other sections of the EIAR assessment, I have serious concerns in relation to the lack of information provided in relation to the impacts arising from the removal of a significant areas of Wet Heath and the resultant impact that this will have on the hydrological regime of this landscape which is significantly sensitive to extreme fluctuations in ground water levels. Changes to the hydrological regime can result in the direct loss of Wet Heath habitat and blanket bog which are protected under Annex I of the Habitats Directive and are in a bad state and in decline in Ireland. Not only will the removal of such habitat impact this overall hydrological regime in the area but the insertion of drainage throughout the site will have further potential to impact the hydrology of the area. The applicant has failed to demonstrate within the information submitted that surrounding areas of blanket bog and wet heath will be adequately protected from impact. I therefore consider the proposed development to be unacceptable in this regard.

9.92. In relation to the grid connection, trenches will have an overall depth of 1.2 metres and as such are also not anticipated to impact groundwater. Directional drilling will occur under stream beds in order to prevent direct impacts on the watercourses and adequate mitigation measures are proposed within Section 11.6.10 which will protect watercourses during such works.

9.93. I 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 not 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 or with suitable conditions. I am therefore not satisfied that the potential for direct or indirect impacts on hydrology and hydrogeology can be ruled out. I am also not satisfied, based on the lack of information provided, 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

9.94. Section 13 examines the impacts of the development on climate and air. 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.

9.95. 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.

9.96. Baseline conditions in terms of emissions and climate change targets are outlined within Section 13.3 of the EIAR submitted. Carbon losses and savings are also examined and it is stated within Section 13.4.1 that the proposed development will result in the excavation of peat in areas of wet heath and cutover bog and will have localised impacts on poor flush, broadleaf scrub and treelines. Habitat regeneration and enhancement of 24 ha will be provided over degraded blanket bog in the north of the site. Cessation of bog cutting over 11 ha will also occur. Overall, the EIAR considers that as blanket bog has a higher ecological value to wet heath and cutover bog the proposed rehabilitated area will more than compensate for the loss of wet heath and cutoverbog.

9.97. A carbon saving analysis was carried out and it is stated within Section 13.4.2 of the EIAR that the proposed development will displace c. 29,457 tonnes of carbon per annum. Therefore, it is estimated that 883,710 tonnes of carbon will be displaced over the operational life of the windfarm.

9.98. The decommissioning of the windfarm has also been considered in the context of air and climate change and it is stated that impacts will be minor and for a limited period. Overall impacts are not considered to be significant.

9.99. Cumulative impacts were considered under Section 13.5.4, developments within the vicinity of the site were considered and it was concluded within the EIAR that cumulative impacts would not arise.

9.100. I note that no analysis has been carried out in terms of the quantum of carbon storage to be lost as a result of both the removal and drainage of peatland areas. In addition,

as outlined above I have serious concerns in relation to the impacts of the development on the hydrological regime of the surrounding area and the potential to significantly impact existing blanket bog. In the context of such doubt the EIAR fails to adequately demonstrate that the proposed development would not exacerbate climate change through the loss of carbon to the atmosphere and as such in the absence of such information I consider the proposed development to be unacceptable in this regard.

9.101. 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 not 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 or with suitable conditions. I am therefore not satisfied that the potential for direct or indirect impacts on Climate and Air can be ruled out. I am also not 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

9.102. Section 12 of the EIAR submitted examines the baseline noise conditions and outlines the predicted noise levels arising from the proposed development. 52 noise sensitive receptors were identified within 2.1 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 12.3 that 2 no. measurement locations were monitored from 15th December 2016 to the 5th January 2017. Background noise values were recorded and correlated with the particular wind speed at the time.

9.103. 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.

9.104. Table 12.6 outlines the predicted noise levels at all 52 dwellings. The highest predicted noise level will be audible at H16 F1 at 38.3dB. Maximum predicted noise emissions

from the operation of the proposed turbines are significantly less than that permitted under both the current and draft wind energy guidelines and as such significant noise impacts will not arise. Cumulative noise emission were also modelled and are not considered to be significant.

9.105. Cumulative construction noise levels audible at noise sensitive receptors within 676 metres of the development are predicted at 44dB, 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.

9.106. I note that borrow pit noise levels were not included in the predictive modelling, however this impact will be for a limited period of time and I am satisfied that blasting can be adequately controlled by condition.

9.107. Noise predictions in relation to the proposed grid connection are associated with construction only and will be carried out during restricted hours.

9.108. I note that the EIAR does not refer to 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.

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

9.110. 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

9.111. Section 17 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 order to establish baseline conditions. Reference was also made to the landscape designations within the Donegal Development Plan and the Landscape Character Assessment for the County. Visual mapping and baseline data which include viewpoint locations are based on a radial area of 20 kilometres.

9.112. The wind turbines and infrastructure are located in two distinct land parcels limited to the townlands of Carrowmore and Glentogher. The undergrounded grid connection route extends east over 17km passing through the valleys of the Crana River and Mill Water from the proposed turbines to the existing Trillick Substation.

9.113. The surrounding area as outlined within the assessment section of this report is surrounded by rolling hills to the east, north and south ranging from 200m to 400m and up to 650m at Slieve Snaght.

9.114. It is stated within Section 17.3.6 that the 10km radius of the site is where there would be most visibility of the proposed wind turbines, beyond this would be a medium range with generally blade tips potentially visible. The applicant has therefore concentrated the visual impact assessment within this approximate range. Whilst I note that the draft guidelines require such assessments to be carried out over a 20km radius I am satisfied that the applicant has adequately considered impacts within this range and consider it acceptable to then concentrate a more in depth analysis on a more restrictive radius of 10km.

9.115. The area within 10km of the proposed development is said to be sparsely populated which was evident at the time of my site inspection.

9.116. It is of note that the potential for visual impacts to arise in Northern Ireland have also been considered and were determined, given the distance and location of the proposed development, to be negligible.

9.117. All constructed and permitted dwellings within a 2km radius of the site were assessed. It is of note that the nearest dwelling to the western turbines are in excess of 1.7km and turbines within the eastern section of the site area 676m from the nearest dwelling.

It is of note that consent letters in relation from the three nearest dwellings to the turbines have been submitted.

9.118. Potential for visual impacts to arise has been examined in detail within Section 7 above and therefore this element of the EIAR should be read in conjunction with the relevant assessment section above. However, notwithstanding this, 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.

9.119. 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

9.120. Section 16 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 on the 16th November 2017. No unrecorded features of archaeological or cultural heritage were identified within the site. 3 recorded monuments are located within the development site consisting of 2 no. Megalithic tombs and a Hilltop enclosure. 7 no. additional monuments are present within a 0.2km and 1.8km distance of the site.

9.121. The 3 no. monuments identified within the site will be located c. 600 metres from the l location of the wind turbines. However, there is a potential for direct negative impacts. No sites of archaeological significance or cultural significance are within the grid connection route, however there is potential for negative impacts to occur to

undisturbed unrecorded subsurface archaeology. Similarly, there is a potential to disturb unrecorded subsurface archaeology along the haul route where road widening is to occur. Impacts arising from operation are negligible and impacts in relation to decommissioning are considered to be positive.

9.122. 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.

9.123. 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.

9.124. 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 vicinity of the site, are not likely to arise.

Material Assets – Traffic & Transport, and Telecommunications and aviation

9.125. Section 14 of the EIAR examines the likely significant effects on traffic and transport. 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.

9.126. The EIAR examines the requirements of the additional traffic both on the external highways and the junctions. Given the location of the proposed development, the Foyle Port was found to be the most suitable due to its proximity and the limited number of junctions. It is also mentioned in the EIAR that this route has been used to deliver a number of turbines in the surrounding area and is somewhat established for such deliveries.

9.127. No significant works are required to facilitate the delivery of the proposed turbines from Northern Ireland and as stated above within Section 7, Article 7(4) of amended EIA Directive (2014/52/EU) requires transboundary consultation to be entered into in instances where significant direct or indirect effects are considered likely. I am satisfied that the relocation of a limited number of road signs will not give rise to significant environmental effects and as such transboundary consultation is not necessary in this instance.

9.128. A traffic survey was carried out by Canavan Associates on the 10th and 21st February 2018. 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; 131 trips of abnormal loads, 4,206 loads of construction material will be required over a 12 month period equating to 350 loads per month and on completion of construction it is predicted that 43 loads will be required to remove construction material.

9.129. 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.

9.130. Effects arising from the operation of the windfarm are predicted as being negligible given that visits to the site will only be in relation to routine inspections and maintenance and are expected to amount to 1 trip per day. Impacts arising from the decommissioning of the site are expected to be negative but significantly 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.

9.131. 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

9.132. 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 should the board be of a mind to grant permission.

Telecommunications and Aviation

9.133. Impacts in relation to the telecommunications and aviation are examined under Section 15 of the EIAR submitted. Baseline conditions were established, and network providers were consulted to identify potential risks arising from the development. No issues in relation to interference with telecommunications were raised by any other operator.

9.134. No impacts have been identified within the EIAR in relation to aviation.

9.135. 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.

9.136. I have considered all of the written submissions made in relation to material assets (Transport, Aviation, services and telecommunications) 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.

Health and Safety

9.137. Section 18 of the EIAR examines impacts to the health and safety of employees and impacts to both the employees and public arising from major accidents. It is stated that all required health and safety documents will be drawn up and the site will be secured at all times. During the operational stage of the windfarm, in the event that issues arise, all wind turbines can be remotely controlled and shut down. I note that the nearest dwellings to the site are located in excess of 600 metres from the site and as such I am satisfied that the safety of residents in the area can be adequately provided for.

9.138. In addition, mitigation measures proposed in relation to the proposed grid connection are standard in nature and have been proven to be effective and are therefore considered to be acceptable.

9.139. I have considered all of the written submissions made in relation to Health and Safety (Major Accident) and the relevant contents of the file including the EIAR. I am satisfied that the potential for impacts on Health and Safety 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 Health and Safety 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

9.140. 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 19 of the EIAR provides a matrix of the impact interactions.

9.141. 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 19 of the EIAR which I have considered.

9.142. As outlined in the above EIAR assessment I have concerns in relation to the interactions of hydrology and biodiversity with regard to Annex I habitats. The proposed development will not only result in the removal of 6ha of Wet Heath but has the potential to significantly alter the hydrological regime of the site and surrounds which could result in the deterioration and/or loss of Blanket Bog within and surrounding the site.

9.143. The loss of such boglands will give rise to impacts on climate change by way of releasing carbon to the atmosphere and the loss of an effective carbon store.

9.144. Thus, having regard to the foregoing I am not satisfied that effects as a result of interactions can be avoided, managed or mitigated for.

Reasoned Conclusion

9.145. 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** arising from construction include noise, traffic and dust disturbance to residents of neighbouring dwellings. All of these impacts are low to moderate. Adequate mitigation measures are proposed to ensure that these impacts are not significant and include adequate mitigation for operational noise.
- Benefits/positive impacts on the **Air and Climate**, the proposed development will have a significant positive effect on human health and population due to

the displacement of CO_2 from the atmosphere arising from fossil fuel energy production.

- Potential negative impacts on air and climate relate to the release of carbon to the atmosphere as a result of the potential for impacts on the functioning and viability of blanket bog and other peatland habitats to arise. Such impacts are considered significant and unacceptable.
- 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.
- Further impacts on water relate to changes to the hydrological regime of the area and the resultant impacts that this may have on the Annex I peatland habitat in the area and associated biodiversity. Such impacts are considered significant and unacceptable.
- Negative impacts to Lands and Soils relate to the removal of 6ha of Wet Heath habitat, the status of which is bad and deteriorating and is listed for protection within Annex I of the Habitats Directive. The removal of this Wet Heath has the potential to impact and alter the hydrological regime of the lands and therefore poses a threat to existing viable Blanket Bog in the site and surrounds which is also listed for protection within Annex I of the Habitats Directive. Such impacts are considered significant and unacceptable.
- 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. Noise disturbance from the operation of turbines is not likely to arise given the separation distances between turbines and residential properties. 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.

9.146. 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. However, as outlined within the EIAR assessment I have serious concerns in relation to the removal of 6ha of Wet Heath which is an Annex I habitat. In addition, I also have concerns in relation to the potential for significant effects to occur on the surrounding blanket bog as a result in changes to the hydrological regime within the development site. I therefore consider that residual significant effects 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 cannot be excluded on the basis of the submitted information.

10.0 **Recommendation**

10.1. I recommend that permission is refused for the following reasons:

11.0 **Reasons and Considerations**

The proposed development would result in the removal of 6ha of Wet Heath habitat the status of which is bad and deteriorating, and is listed for protection under Annex I of the Habitats Directive 92/43/EEC. This is unacceptable. The Board is not satisfied on the basis of the information provided with the application and appeal that the proposed development by virtue of the removal of this habitat and the drainage works proposed, would not result in significant changes to the hydrological regime of lands, and by doing so, significantly impact Blanket Bog and Wet Heath habitat. The proposed development would therefore be contrary to the provisions of the Habitats Directive 92/43/EEC and the Donegal County Development Plan 2018-2024 and would be contrary to the proper planning and sustainable development of the area.

Sarah Lynch
Senior Planning Inspector

14th August 2020