

#### Development

110kV Substation and Underground Grid Connection. An Environmental Impact Assessment Report and Natura Impact Statement accompany this application.

#### Location

Located within the townland of Barranaghs, Garryhinch, Annamore in Co. Offaly & Forest Upper, Forest Lower, Coolnavarnoga, Coolaghy, Kilbride, Ballymorris, Cooltederry and Bracklone, Co. Laois.

#### Planning Authority

Offaly County Council & Laois County Council

#### Applicant(s)

Statkraft Ireland

#### Type of Application

Application for approval under section 182A of the Planning and Development Act, 2000 as amended.

#### Prescribed Bodies

- a. [DAU – Department of Housing, Local Government and Heritage](#)
- b. [Laois County Council](#)
- c. [Offaly County Council](#)

d. [Transport Infrastructure Ireland](#)

**Observers**

1. [Eco Advocacy c/o Kieran Cummins](#)
2. [Kieran Cummins](#)

**Date of Site Inspection**

24<sup>th</sup> October 2025

**Inspector**

Donal Donnelly

# Contents

1.0 Introduction .....	6
2.0 Site Location and Description .....	6
3.0 Proposed Development .....	7
4.0 Consultations .....	8
4.1. Prescribed Bodies .....	8
4.2. Submissions .....	9
4.3. Public Submissions .....	11
4.4. Planning Authorities .....	15
4.5. Applicant's Response .....	19
5.0 Planning History .....	25
6.0 Policy Context .....	27
6.1. National Policy and Legislation .....	27
6.2. Regional Planning Policy .....	31
6.3. Local Policy Context .....	32
6.4. Natural Heritage Designations .....	34
7.0 Assessment .....	35
8.0 Planning Assessment .....	35
8.3. Policy Context/ Principle .....	36
8.4. Main Issues Raised in Submissions .....	39
9.0 Environmental Impact Assessment .....	43
9.1. Statutory Provisions .....	43
9.2. EIA Structure .....	43
9.3. Compliance with the Requirements of Article 94 and Schedule 6 of the Regulations .....	45

9.4. <b>Consultations</b> .....	47
9.5. <b>Compliance</b> .....	48
9.6. <b>Consideration of Alternatives</b> .....	48
9.7. <b>Assessment of Likely Significant Effects</b> .....	50
9.8. <b>Population and Human Health</b> .....	50
9.9. <b>Biodiversity</b> .....	58
9.10. <b>Land, Soil, Water, Air and Climate</b> .....	71
9.11. <b>Material Assets, Cultural Heritage and the Landscape</b> .....	89
9.12. <b>Risks Associated with Major Accidents and/ or Disasters</b> .....	104
9.13. <b>Cumulative Impacts and Environmental Interactions</b> .....	105
9.14. <b>Reasoned Conclusion</b> .....	108
<b>10.0 Appropriate Assessment</b> .....	109
10.4. <b>Geographical Scope and Main Characteristics</b> .....	110
10.5. <b>Screening the Need for Appropriate Assessment</b> .....	113
10.6. <b>The Natura Impact Statement and Associated Documents</b> .....	119
10.7. <b>Appropriate Assessment of Implications of the Proposed Development on Each European Site</b> .....	122
10.8. <b>Table 3 – River Barrow and River Nore SAC</b> .....	124
10.9. <b>Appropriate Assessment Conclusions</b> .....	140
<b>11.0 Conditions Assessment</b> .....	141
<b>12.0 Overall Conclusion</b> .....	142
<b>13.0 Recommendation</b> .....	144
<b>14.0 Reasons and Considerations</b> .....	144
<b>15.0 Appropriate Assessment</b> .....	146
<b>16.0 Environmental Impact Assessment:</b> .....	147

17.0 Conditions .....	149
-----------------------	-----

## 1.0 Introduction

1.1. This case concerns an application for strategic infrastructure under section 182A of the Planning and Development Act, 2000, as amended. It is made on foot of pre-application discussions with the Commission under ABP-317395-23 for a 110kV substation and 110kV underground electricity cable to facilitate the connection of the consented Dernacart Windfarm to the national grid at the consented Bracklone 110kV substation, where the Commission decided that the development would fall within the scope of section 182A of the Act and would be strategic infrastructure.

## 2.0 Site Location and Description

- 2.1. The subject site is located in the townlands of Barranaghs, Garryhinch, and Annamore in Co. Offaly and Forest Upper, Forest Lower, Coolnavarnoga, Coolaghy, Kilbride, Ballymores, Cooltederry and Bracklone, Co. Laois.
- 2.2. The route of the proposed grid connection continues from west to east from the authorised Dernacart Wind Farm along forestry roads and then onto the R423 Regional Road where it passes through Garryhinch Crossroads before turning south-east onto a local road at Portarlington Golf Club. This road crosses the River Barrow at Kilnahown Bridge and then turns north-east at Skeagh Crossroads. As the route crosses the R419, it passes Blackhall Bridge along the dry section of the canal and then approaches the southern side of Portarlington. At Portarlington, the route continues along Canal Road and joins the R420 to the east of the town. The final section of the route is located along the R420 up to the access road to Bracklone Substation.
- 2.3. From east to west, the proposed grid connection passes through surrounding lands that are continuous urban fabric, pastures, mixed forest, sport and leisure facilities, complex cultivation patterns, coniferous forestry and peat bogs (Corine Land Cover 2018).
- 2.4. The stated area of the proposed development site is 90.8 hectares. The proposed substation will be located in the townland of Barranaghs in Co. Offaly approximately 1.3km south-west of Garryhinch. The substation site is currently a mix of agricultural grasslands, scrub and marginal lands with mature and semi mature trees. There is a

laneway off the R423 along the eastern boundary of the proposed substation location and a conifer plantation lies immediately to the north.

### **3.0 Proposed Development**

- 3.1. The applicant is seeking a 10-year permission for the construction of a 110kV substation and underground grid connection for the purposes of connecting the consented Dernacart Wind Farm (ABP 310312-21) to the National Grid by connecting the proposed substation to the consented Bracklone 110kV substation.
- 3.2. The development will comprise:
  - 110kV substation with associated compound, including 2 no. single storey control and operational buildings, electrical plant, equipment, cabling, lighting, CCTV, lightning masts, diesel generator and diesel tank, and security palisade fencing;
  - 2.45km underground electric cabling systems between the wind farm site and the proposed 110kV substation overlain with 5.5m wide stone access track;
  - 10.85km of 110kV underground electrical cabling from the proposed 110kV substation to the consented Bracklone 110kV substation including enabling works, services diversions, and joint bays along the grid route;
  - New entrance and access road to substation site from the R423;
  - New clear span and box culvert/piped water course crossings;
  - Peat/spoil deposition areas; and
  - All associated felling, drainage and ancillary works necessary to facilitate the development.
- 3.3. The total construction timeframe is expected to be approximately 16 months, with the underground grid connection element of the project taking approximately 30 weeks.
- 3.4. The application to the Commission includes:
  - Completed Application Form
  - Landowner consent letters
  - Schedule of planning application drawings

- Planning application drawings
- Copy of newspaper notice (National)
- Copy of newspaper notice (Local)
- Copy of Site Notice
- Copy of pre-application Determination
- Schedule of prescribed bodies to whom notification of the application has been sent
- Copy of the notification to the prescribed bodies
- Statutory Undertaker Letter
- Environmental Impact Assessment Report (EIAR)
- AA Screening Report & Natura Impact Statement (NIS)
- Shapefile
- 8 no. memory sticks with a copy of all application documents
- Confirmation of payment of application fee of €100,000

3.5. The applicant has created a standalone website for the development:  
<https://dernacartwindfarmsid.ie/>

## 4.0 Consultations

### 4.1. Prescribed Bodies

4.1.1. The Commission advised that the following list of prescribed bodies be notified of the application for the proposed development:

- Minister for Housing, Local Government and Heritage
- Minister for the Environment, Climate and Communications
- Offaly County Council
- Laois County Council
- Transport Infrastructure Ireland

- An Taisce
- Fáilte Ireland
- Heritage Council
- An Chomhairle Ealaíon
- Irish Water
- Commission for Regulation of Utilities
- Inland Fisheries Ireland
- Health Service Executive
- Office of Public Works

## 4.2. Submissions

4.2.1. Submissions were received from the following prescribed bodies:

### DAU - Department of Housing, Local Government and Heritage

- *Archaeology*: Notes that no advance archaeological investigations have been carried out within the proposed development site to inform the EIAR, other than a walkover survey.
- Recommends the attachment of 4 no. conditions that aligns with Sample Conditions C3, C5 and C6 as set out in *OPR Practice Note PN03: Planning Conditions (October 2022)*, with appropriate site-specific additions/ adaptations.
- *Underwater Archaeology*: Recommends that a programme of pre development underwater archaeological assessment should be undertaken as a condition of any planning approval.
- Developer shall commission and underwater archaeological impact assessment report to include a desktop assessment and licenced wade/ dive survey, and final report shall be submitted to the National Monuments Service of the Department.
- *Nature Conservation*: Noted that an active badger set was found c. 30m from the proposed access track/ cable route. Advises that the routing of the cable on the public road is reconsidered to avoid negative impacts to badger. There are

concerns regarding the proposed blocking of entrance to the sett, and that the importance of this sett within the territory has not been established.

- Biodiversity chapter of EIAR states that 0,155 kms of treeline/ hedgerow (WL1/ WL2) will be lost but the development description chapter states there will be approximately 320m of hedgerow removed. The NIS states there will be 350m of hedgerow and shrub removal. Clarity is required. Routing of cable on public road will avoid majority of hedgerow/ treeline removal as well as the necessity of bridging Cottoner's Brook.
- Part of the area described as PB4 – Cutover Bog may be Raised Bog – PB1.
- Recommends that Raised Bog habitat to the north of the proposed access track and collector cable is assessed to see if it conforms to Active Raised Bog (7110) or Degraded Raised Bog still capable of Natural Regeneration (7120). If so, impact of existing drainage and turf cutting, in addition to proposed drainage must be assessed.

#### Transport Infrastructure Ireland

- Any proposed works to facilitate component delivery shall comply with TII publications and shall be subject to Road Safety Audit, as appropriate.
- Prior to construction, a full assessment of all structures on the national road network along the haul route shall be undertaken.
- Specific requirements for any exceptional abnormal loads shall be addressed where required, and any damage caused to the pavement of national road shall be rectified.
- Road user safety on the national road shall be safeguarded, and recommendations of the Road Safety Audit shall be incorporated into final designs.
- All works to the national road shall comply with TII Publications Technical Design Standards for National Roads (formerly NRA DMRB).
- In relation to any Greenway proposal in the vicinity, consultation with County Council's own internal project and/ or design staff is recommended.

#### 4.3. Public Submissions

4.3.1. A total of two valid observations were received by the Commission which are summarised as follows:

Eco Advocacy c/o Kieran Cummins

4.3.2. It is submitted that the application is premature pending satisfactory updated guidelines and a full national led SEA assessment for utility scale wind installations, as well as determination of the Judicial Review ref. 2024/290JR [Eco Advocacy CLG, Applicant -and- An Bord Pleanála, Respondent -and- Statkraft Ireland Limited, Notice Party]. The main points raised in the submission are summarised as follows:

- Application for a grid connection must consider the potential direct, indirect and cumulative impacts of both the grid connection and all associated wind energy developments on the Slieve Bloom SPA if either project lies within foraging distance of the SPA or an associated breeding pair.
- Grid connection has to be considered as part of the project and its totality - both grid connection on project as a whole require EIA and AA, including properly resourced breeding and wintering surveys.
- AA Screening Report is totally unsatisfactory – SPA is 9km away and this distance is well within foraging distance.
- There is evidence that the same population of Hen Harrier breeding within the Slieve Bloom SPA also winter on the Garryhinch Bog. Any significant impact on the population within the winter roost will therefore have a direct impact on the breeding population within the SPA.
- Unable to find any reference to Hen Harrier in the Non-Technical Summary.
- Wind energy developments in combination with habitat loss and degradation associated with commercial forestry and agricultural intensification are the leading threats and pressures on Hen Harrier. According to 2022 national Hen Harrier breeding survey, the population within the Slieve Bloom region decreased by one quarter since the 2015 survey.

- SPA is situated 8.9km south-west of the proposed development site. How can applicants state that there is no ecological connection to application site given that it is so close?
- Any kind of infrastructure project of this nature should necessitate both breeding and wintering surveys. Site has the potential to support a range of red/ amber BOCCI's Annex I bird species.
- Irwin et al. (2012) recorded breeding Hen Harriers foraging at a maximum distance of 11.4 Kilometres from their nests during breeding season. Any project within 11.4km from the boundary of the SPA, or a breeding pair associated with the SPA, has direct connectivity to the SPA and therefore should require full AA.
- Hen Harrier roost survey that was conducted as part of the bird surveying for the proposed development was insufficient to conclusively show that the site is not in use by Hen Harriers for roosting.
- Flight lines of birds going into roost can often be obstructed by taller scrub vegetation and trees. Average foraging distance from winter roosts (5.4km; McCarthy, 2022-PhD Thesis) should be considered when designing bird surveys. Hen Harrier roost watches are best conducted one hour before sunset.
- In addition to operation of turbines, the amount of human disturbance, loss of vegetation and easier access for mammalian predators would denigrate this important habitat.
- Given the significant length of road (10.32km), there will be significant disturbance of important habitat and it is asserted that a full and proper habitats assessment is required.
- Significant land take is proposed and the level of disturbance to important habitat is extremely concerning.
- Applicant should provide a list of authorised facilities from where aggregate materials will be sourced.
- It is unacceptable to leave underground cables, etc. in place after decommissioning.

- Refers to submissions under ABP-310312-21 expressing concern regarding Hen Harrier on site.

Kieran Cummins Consultant, Trammon, Enfield, Co. Meath

4.3.3. The main points raised in this submission, in addition to those raised above, are summarised as follows:

- Full AA required – possible that Hen Harrier rely on this bog for winter roosting.
- Unable to find any cumulative consideration of the planned Bord na Móna wind farm at Garryhinch.
- Understand that there was no consultation with the residential properties nearest the substation.
- It is local knowledge that Hen Harriers have been frequenting this bog – alleged study conducted by the applicants was totally inadequate or not probably resourced or extensive.
- Applicant states that run off discharges during construction could lead downstream to the River Barrow and the Natura 2000 network - this is unacceptable, especially with the River Barrow being a SAC.
- Presence of Hen Harrier constantly understated. Slieve Blooms are only a short distance away.
- Construction of roads across bogland gives rise to concerns as peat will be removed and replaced with hardcore.
- Applicant has ignored obligations under the SEA Directive at the plans and programme level.
- Current application does not comply with the EIA Directive and ECJ case law.
- There have been health issues for residents in other parts of the country and beyond from wind farms.
- Proposals would not be in compliance with the Machinery Directive: 2006/42/EC.
- Unable to find any reference to the issue of bog bodies in the EIAR.
- Clarification sought as to whether there will be battery storage on site – industrial batteries are a major fire hazard.

- Commission should refuse permission on the basis that the proposal would seriously injure the amenities or depreciate the value of property in the vicinity. Developers have no right to claim precedence over people's property and family rights.
- Horticultural land use would provide sustainable employment, unlike construction of a wind farm which only provides short term employment.
- Most sand and gravel requirements in Ireland come from Eskers. Sand being the principal constituent of concrete will be buried under wind turbines. Supplies of sand and gravel are rapidly dwindling and therefore it is essential that the wind farm be situated on naturally occurring bedrock.
- Sets out detail from various section of the Laois County Development Plan, 2017-2023 and the Mountmellick LAP on tourism and landscape character, economic development, natural heritage, flood management and implementation.
- Breakdown and quantities and sources of aggregates for access roads should be provided. Steel, concrete and rare metals are also required for the proposed development. Wind turbine industry relies on neodymium, which in legal factories has a catastrophic environmental impact. There are human rights issues with the toxic aftermath of rare earth mining.
- Volumes of concrete required, together with access roads and hard standing areas, which in turn would require massive quantities of infilling to facilitate the construction of the proposed turbines, is vast. Diesel necessary to fuel the trucks to hold this material on site would be enormous. This, together with the sustainability of consuming so much fossil fuel in the construction of proposed wind turbines, must be factored into the carbon footprint equation.
- Unable to find references to other forms of renewable alternatives which are far more sustainable (biomass, geothermal, wave energy, tidal energy, hydroelectricity etc.).
- Concerns about planning enforcement/ self-policing.

#### 4.4. Planning Authorities

4.4.1. Laois County Council and Offaly County Council submitted Planning Reports on the proposed development to the Commission, which are summarised as follows:

##### Laois County Council

- Notes that indicative grid connection option was included as part of ABP-310312-21 comprising a 16 ½ km underground grid connection route from the on-site wind farm substation to the future Bracklone 110kV substation. Sizing of substation compound no longer adequate and therefore a revised substation with larger footprint is required.
- Current proposal is for a new relocated 110kV substation in place of the permitted Dernacart 110kV substation and a revised underground grid connection cable route to that previously anticipated. Grid connection cable to be installed solely within the public road network and will have a length of 10.85 kilometres, crossing over the administrative areas of Offaly County Council and Laois County Council.
- *Population & Human Health:* Notes that settlement patterns along the proposed underground grid connection route exhibit sections of ribbon development and one off dispersed detached housing, and as the route approaches Portarlington, it transitions through higher density residential and commercial developments.
- Unlikely that the proposed development would directly or indirectly lead to any reduction in existing economic activity within the area throughout any phase.
- During construction, aggregates, concrete and surface dressing supplies will be obtained from local quarries and suppliers.
- During construction, there may be a level of effect on existing land uses within the proposed development site. Temporary effects on land use will also arise as a result of installation of the grid connection within the public road corridor.
- There will be no severance, loss of rights of way or amenities as a result of the proposed development.
- Disturbances associated with additional volumes of traffic will principally be confined to the construction phase. The grid connection will be constructed in manageable sections each day (75-100m).

- Noise generated during construction will not exceed acceptable construction noise limits at any dwelling location. During operation, noise modelling shows that the proposed development can achieve a low noise impact during daytime and nighttime.
- *Biodiversity*: Directional drilling proposed where grid route crosses the River Barrow and therefore there will be no physical interaction with the European site.
- General best practise construction mitigation measures will be followed, and works will be supervised by an Ecological Clerk of Works.
- No likely significant impacts on biodiversity during the operational phase. External security lighting will be set on motion sensors to minimise light disturbance.
- *Land & Soils*: Land take of 3 hectares is relatively small and the loss of what is essentially marginal land would not be considered significant.
- Once in place, the grid connection will not affect existing or future land uses.
- *Water*: River Barrow is at risk of not achieving WFD objectives. There are a total of 16 water crossings required to facilitate the proposed development.
- During construction, the proposed development has the potential to lead to effects on hydrology and hydrogeology unless appropriate mitigation is applied.
- Given the relatively small localised scale of the works, the volume of runoff from the construction works and felling area will be minimal in relation to the overall runoff to local water bodies.
- Due to the shallow nature of excavations, no effects on groundwater levels will occur.
- Mitigation by design has been implemented to prevent adverse impacts, and other mitigation measures will be implemented and monitored throughout construction and operation.
- *Air & Climate*: Dust emission magnitude is considered low to medium. Standard best practise will be adhered to during construction to minimise fugitive dust emissions.

- Active construction area for grid connection will be small and transient in nature as it moves along the route. Construction traffic levels are below TII criteria, which warrant a quantitative assessment of construction traffic.
- *Noise*: Construction noise predicted to not cause any significant effects. Grid connection construction noise will cause negative, slight to moderate and temporary effects at noise sensitive locations.
- Noise emissions during operation from substation are predicted to be neutral, imperceptible and long term at noise sensitive locations.
- Wind turbine noise at nearest noise sensitive locations will dissipate significantly and therefore no cumulative noise effects are predicted.
- *Archaeology and cultural heritage*: Grid route adjoins Kilnahown Bridge over the River Barrow and Blackhall Bridge over the former course of the Grand Canal are on the National Inventory of Architectural Heritage.
- There will be no direct physical impact on known recorded archaeology, upstanding known monuments, or buildings within the boundary limits of the proposed development footprint.
- Risk of inadvertent impact on unknown, buried archaeological material can be mitigated by archaeological monitoring of groundworks.
- There are no recorded monuments in close proximity to the substation site and other archaeological monuments are at sufficient distances to ensure that issues of visual impact do not arise.
- *Landscape & Visuals*: Sensitivity rating of proposed development lands is considered to be low - landscape deemed to be sufficiently robust to accommodate a wide range of development. There are no Areas of High Amenity or designated scenic views.
- *Traffic & Transportation*: While the increased volume of traffic on the local road network during construction would be substantial, this increase will be well within carrying capacity of most local road networks, with the R419 estimated at capacity.

- *Built infrastructure:* There is known underground electrical infrastructure, water and foul mains, gas distribution pipes within the route of the proposed development. Contractor will undertake detailed surveys and scans to confirm the presence of any services.
- No significant effects on existing built services and waste infrastructure will occur during construction or operational phases.
- Planning Authority considers that the proposed development is a logical follow on from the parent permission (ABP-310312-21), would be acceptable in respect of its likely effects on the environment, and would constitute an appropriate form and scale of use at this location.
- Conditions including but not limited to development contributions, bond, timescale and community gain.

Offaly County Council

- Sets out the main Development Plan provisions relating to the site and surrounding areas. Includes specific policies relating to energy development; biodiversity and landscape (designated and non-designated sites; waterways, lakes and wetland landscapes; green infrastructure strategy; landscape; natural capital; peatlands); sustainable transport; and development management standards (sight distances; Traffic and Transport Assessments and Road Safety Audits; Flood Risk Assessments Flood Zones and appropriate uses; and undergrounding of services).
- Traffic/ transport conditions recommended on road opening licence, tie ins, transport management, cable installation, road closures, pre-condition structural surveys, reinstatement, crossings, and construction traffic signage.
- Other conditions recommended on development contributions, and submission of a security bond.
- Environment & Water Services have no objection subject to conditions relating to implementation of mitigation and recommendations outlined in the Flood Risk Assessment; surface water collection and disposal; foul sewerage; waste management; noise and dust suppression; and biodiversity and landscape.

## 4.5. Applicant's Response

4.5.1. The submissions from the Planning Authorities, prescribed bodies and public observers have been circulated to the applicant. The response received from the applicant addresses each of the submissions made as follows:

Applicant's Response to Submission by Kieran Cummins (on behalf of Mountmellick Wind Turbine Impact)

- *Appropriate Assessment* – Both a Stage 1 Screening and Stage 2 NIS were completed in relation to the proposed Dernacart Wind Farm Substation and Grid Connection project to assist the Competent Authority.
- *Garryhinch Wind Farm* - Application for a wind farm at Garryhinch has not been submitted. If an application is submitted in the future, any cumulative effects between that proposal and the current proposal will be considered at that time.
- *Consultation* - Legally required level of consultation in respect of the proposed development has been carried out.
- *Hen Harrier* - Proposed development comprises predominantly underground infrastructure, which will have minimal impact on Hen Harrier during either construction or operation.
- Proposal will be constructed largely through low value habitat comprising mainly of mature conifer plantation and public road.
- Concerns raised by the submitter appear to primarily relate to the associated wind farm, which has already been assessed and is now consented.
- There has been a complete absence of any sightings of Hen Harrier within the proposed development site over the course of ecological site surveys undertaken in 2023 and 2024. No nests or roosts were discovered within the footprint of the proposed development and NPWS data request did not yield any records of known Hen Harrier nests.
- Proposed development site is located a considerable remove from the SPA.
- *Sieve Bloom SAC* – conservation interest habitats are in no way connected to the proposed development ecologically or hydrologically.

- *Run-off during construction and impact on River Barrow SAC* - Appropriate control measures have been integrated into the project to ensure there is no significant risk to surrounding watercourses.
- SAC was brought forward for further assessment in NIS and appropriate mitigation measures were recommended to avoid significant water quality effects.
- *Removal of peat* - Only a small proportion (0.22 ha) of the total footprint of the proposed development will be constructed within cutover bog.
- *SEA Directive* - There is no obligation for the applicant to undertake SEA in respect of the proposed development.
- *Irish Case Law* – Concerns raised appear to relate to wind farm development. Proposed development would not result in any additional or new adverse risks or impacts to population or human health.
- *Archaeology, Architectural and Cultural Heritage* - Archaeological Impact Assessment outlines appropriate measures to ensure that any unknown or unrecorded archaeological features are properly managed should permission be granted.
- *Batteries* - Battery storage does not form part of the proposed development.
- *Devaluation and Employment* - During construction, plant, aggregates, concrete and surface dressing supplies will be obtained from local quarries or suppliers.
- *Eskers* - any required concrete and aggregate materials will be sourced from authorised facilities.
- *Laois County Development Plan* – LCC indicated that the proposed development would be acceptable in respect of effects on the environment and would constitute an appropriate form and scale of use of this location.

#### Applicant's Response to Submission by Eco Advocacy

- *Project splitting* – Indicative grid connection option was included as part of the supporting planning documents for the wind farm and was assessed in accordance with EIA and Habitats Directive requirements.
- Due to changes in EirGrid requirements, the sizing of the substation compound for which permission had been sought (and currently granted) is no longer adequate

and therefore a revised substation with associated grid connection is being sought.

- *Hen Harrier* – As above. Proposed development will not result in any additional or new adverse risks or impact to Hen Harrier.
- *Road and Disturbance* – Grid connection cable, which will have a length of 10.85km, is all within the public road network and will not result in any disturbance of ecological habitats.
- *Aggregates* – a list of potential quarries that may serve as sources for aggregate has been provided in the EIAR.

#### Applicant's Response to Development Applications Unit (NPWS)

- *Archaeology and Underwater Archaeology* - no comments or objections regarding the recommended conditions.
- *Badger* - additional targeted badger surveys were undertaken in 2025 in the vicinity of the active sett identified in 2024. Three camera traps were deployed for nine weeks under the NWPS Licence No. 007/2025. Sett 1 had much more activity and signs of regular use in 2024.
- Sett classification was informed by the evaluation of the sett's physical characteristics together with analysis of recorded camera footage.
- It is most likely that based on the number of entrances, the sporadic use by badger, and occasional usage by fox, Sett 1 is an outlier set. Entrances 1, 2 & 3 are interconnected and were one sett, and entrances 4 & 5 did not appear connected and are unlikely to be badger setts.
- Entrances 6 & 7 could be one sett based on proximity, but based on evidence, it is likely that this sett is abandoned/ disused.
- Badger territory varies between 25 and 200 hectares and it is likely that the main sett for this group is located within the wider area away from the outlier/ outlying sett, which they were observed using only occasionally.
- Recommended in Biodiversity chapter of the EIAR that the sett entrance closest to the proposed collector cable and access track route be closed in accordance with

the measures set out in the National Roads Authority (NRA) (2005) *Guidelines for the Treatment of Badgers during the Construction of National Road Schemes*.

- Mitigation measures include pre-construction surveys; occupancy survey/ appropriate monitoring in advance of closure; and if sett is deemed inactive/ disused:
  - Soft blocking,
  - Sett exclusion,
  - Sett destruction,
  - monitoring supervision.
- If sett is deemed active then:
  - Soft blocking of inactive entrances followed by hard blocking.
  - Installation of one way gate plus proofing of active entrances.
  - If no activity, set destruction immediately after 21 day.
  - Monitoring/ supervision.
- Proposed that any destroyed setts are monitored regularly by the appointed ecologist post destruction to check for signs of badger activity and/ or evidence of attempted/ successful reoccupation. If suspected or confirmed, the appointed ecologist will engage with NPWS/ County Councils.
- *Hedgerows* – extent of hedgerow/ treeline removal along the collector route from windfarm to proposed substation is approximately 320m. Construction of new entrance to the substation will also require removal of approximately 45m of hedge and scrub vegetation.
- *Rerouting of collector cable in existing public road network* - preferred option is to install the cable off road as this route option facilitates private access between the substation and wind farm.
- Extent of hedgerow to be removed is not substantial and compensatory hedgerow can be planted to offset the loss.
- Proposed crossing of Cottoner's Brook will be achieved via a new clear span bridge which will leave the natural bed and banks undisturbed.

- Rerouting of cable route to avoid badger sett is not warranted, as this was determined to be an outlier sett and used sporadically.
- *Raised bog habitat* – No designated sites where raised bog is a Qualifying Interest or protected habitat under the Wildlife Act relating to the proposed development or study area.
- Bog habitat survey conducted on 25th June 2025 on an area of bog to the north of the collector cable. Data collected included plant species/ genus present, plant species cover abundance, vegetation height, bare soil, peat wet or dry, pools or waterlogged areas, and disturbance locally.
- Study area was generally dry and the peat hard underfoot with only one relevé with some saturated vegetation. Lawns with dense carpets of sphagnum were not observed.
- Many of the species listed in the Fossitt classification for Raised Bog (PB1) were present during the survey, most notably ling heather close to the high bog shelf where peat extraction is currently ongoing and closest to the conifer plantation where the ground is very dry. Fossett notes that the driest part of the bog are the margins, and moisture generally increases towards the centre of the peat mass.
- Description of the face-bank ecotope and the marginal ecotope appear to best describe the study area based on the dry and hard nature of the peat and the lack of wet areas/ pools.
- Based on the characteristics and microtopography, as well as the species composition, it is most likely the survey began at the face bank ecotope, which then transitioned to a marginal ecotope with increasing distance from the face-bank.
- If abundant sphagnum mosses are not present, peat will not actively form, and although there were some minor instances of sphagnum recorded within the study area, it was not dominant and there were no waterlogged areas present. It is concluded that the habitat within the study area is not an example of 'Active Raised Bog (7110)'.
- If all human activities were to cease immediately and appropriate management and rehabilitation measures were to be implemented, the degraded nature of this

bog could recover over time and therefore a link to Annex I listed habitat 'Degraded Raised Bog still capable of Natural Regeneration' (7120) habitat cannot be fully ruled out.

- Proposed collector cable and access route will not encroach on the raised bog and anyway. Route follows along an area of cutover bog and crosses an ephemeral drain into an existing conifer plantation, which has already been subjected to significant drainage.
- Collector cable and access route will be constructed on the up slope side of the bogland.
- It is not envisaged the drainage associated with the proposed collector cable and access route, or any other part of the proposed development, will have significant impact on the bogland habitat.

#### Laois County Council

- Applicant has no comments or objections to recommended conditions which are generally consistent with the design proposals and mitigation measures outlined in the EIAR.

#### Offaly County Council

- Annual contribution in respect of the proposed development is considered to be excessive given that all works within the public road network will be fully reinstated, and once the development becomes operational, the associated traffic generated will be minimal.

#### Transport Infrastructure Ireland

- Applicant confirms that any works on the national transport infrastructure required to facilitate the development have been assessed and the EIAR on the NIS and would not result in significant adverse effects on the environment. Proposal will comply with TII Publications and will be subject to RSA, as appropriate.

## 5.0 Planning History

### ***Authorised Dernacart Windfarm***

Laois County Council Reg. Ref: 20/78 (ABP-310312-21)

- 5.1. The Board overturned the Council's decision and granted a ten year permission in January 2024 for the construction of up to 8 no. wind turbines with a tip height of up to 185 metres and all associated foundations and hardstanding areas; 1 no. on-site electrical substation; 1 no. temporary construction compound; all associated underground electrical and communications cabling connecting the turbines to the proposed on-site electrical substation; provision of new site access tracks and upgrading of existing access tracks and associated drainage; erection of 1 no. permanent meteorological mast of up to 110m in heights; works to facilitate the delivery of turbines adjacent to the N80 within the townlands of Dernacart and Forest Upper to include the laying of temporary surfacing; tree felling; and all associated site development works, ancillary works and equipment.

### ***Other Relevant and Nearby Cases***

Laois County Council Reg. Ref: 22764 (ABP-318799-24)

- 5.2. Permission granted for works associated with the proposed uprate of the existing 110 kV line between structure AM106 in the townland of Bishopswood, County Offaly and the existing EM215 located at Portlaoise 110 kV substation in the townland of Clonminam, County Laois. The proposed development is approximately 21.6 km long and comprises 112 no. structures. The proposed development will comprise the replacement ("restringing") of the existing overhead line circuit conductor and wires with new higher capacity conductor wires including installation of a new fibre communication connection.

Laois County Council Reg. Ref: 20638

- 5.3. Permission granted in December 2021 for a 110 kV/MV electricity station on a c. 0.74 ha site at Bracklone.

Laois County Council Reg. Ref: 2360261

5.4. Permission granted in February 2024 at Bracklone to develop 136 no. battery storage units; 17 no. MV skids (PCS + MV/LV Transformer solution); and site access, electrical and communications cabling; and all ancillary site development, landscaping and reinstatement works, over a total site area of c. 3.4 hectares.

Laois County Council Reg. Ref: 2328

5.5. Permission sought for works associated with the proposed uprate of the existing 110kv line in the townlands of Bishopswood and Tinacrannagh, Co. Offaly. The proposed development (uprate) within the functional area of Offaly County Council relates to approximately 1.6km of the 110kv line and comprises the replacement ("restringing") of the existing overhead line circuit conductor and wires with new higher capacity conductor wires including installation of a new fibre communication connection; the replacement of 1 no. wooden polesets and 1 no. steel masts - any replacement structures will be constructed at, or immediately adjacent to the existing structures they will replace along the same alignment as existing, with the height difference will be up to 4m and they will be of a generally similar appearance, unless otherwise stated; and other associated works .

5.6. The proposed development is part of a larger project which includes uprate works to approximately 20km of 110kv line within the functional area of Laois County Council for which a separate planning application has been lodged with Laois County Council.

Offaly County Council Reg. Ref: 22/390 (ABP-318436-23)

5.7. Permission granted in July 2024 for the construction of a solar farm and associated site works at Trascan and Clondoolusk, Portarlington, Co. Offaly.

An Bord Pleanala Ref: ABP-306241

5.8. Application granted in May 2020 for leave to apply for substitute consent under section 177C of the Planning and Development Act 2000, (as amended) to regularise the planning status of Bord na Móna historic peat extraction (and ancillary works) on the milled peat production bogs. Allen Bog Group located in counties Offaly, Westmeath, Laois and Kildare.

## 6.0 Policy Context

### 6.1. National Policy and Legislation

#### Climate Action and Low Carbon Development Act, 2015, as amended

6.1.1. The Act commits Ireland to the objective of becoming a carbon-neutral economy by 2050, reducing emissions by 51% by the end of the decade. Section 17 of the Climate Action and Low Carbon Development (Amendment) Act, 2021 amends the principal act such that Section 15(1) requires:

*“(1) A relevant body shall, in so far as practicable, perform its functions in a manner consistent with—*

- a) the most recent approved climate action plan,*
- b) the most recent approved national long term climate action strategy,*
- c) the most recent approved national adaptation framework and approved sectoral adaptation plans,*
- d) the furtherance of the national climate objective, and*
- e) the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State”.*

6.1.2. “Relevant body” means a prescribed body or a public body.

#### Climate Action Plan 2024 (CAP24) and Climate Action Plan 2025 (CAP25)

6.1.3. Under the Climate Action and Low Carbon Development Act, 2015, as amended, the national climate objective requires the State to transition to a resilient, biodiversity rich, environmentally sustainable and climate neutral economy by no later than the end of 2050. This national climate objective meets Ireland’s obligations under EU and international treaties, including the Paris Agreement (2015), the European Green Deal, as well as the EU’s objective to reduce GHG emissions by at least 51% by 2030 (compared to 2018) and achieve climate neutrality by 2050.

6.1.4. To meet its targets and obligations CAP24 sets a course for Ireland to halve emissions by 2030 and reach net-zero no later than 2050. In terms of the electricity sector, a 75% reduction in emissions based on 2018 levels is required by 2030 and CAP24 provides that, central to achieving this, is the strategic increase in the share

of renewable electricity to 80% by 2030, including ambitious targets of deploying 9GW of onshore wind, 8GW of solar power and at least 5GW from offshore wind projects. CAP25 was published on 15th April, 2025 and re-affirms the previous commitment to increase the share of renewable electricity generation to 50% by 2025 and 80% by 2030, including solar targets of up to 5GWs by 2025 and 8 GWs by 2030.

Ireland's Long-term Strategy on Greenhouse Gas Emissions Reductions, 2024

6.1.5. The National long-term Climate Action Strategy, entitled Ireland's Long-term Strategy on Greenhouse Gas Emissions Reductions 2024, sets out indicative pathways, beyond 2030, towards achieving carbon neutrality for Ireland by 2050. The Strategy provides a pathway to a whole-of-society transformation and serves as a vital link between shorter-term Climate Action Plans and Carbon Budgets and the longer-term objective of the European Climate Law and Ireland's National Climate Objective.

The National Adaptation Framework: Planning for a Climate Resilient Ireland (June 2024)

6.1.6. The most recent approved national adaptation framework, the National Adaptation Framework: Planning for a Climate Resilient Ireland June 2024 (NAF) is Ireland's second statutory National Adaptation Framework (NAF) and was published on 5th of June 2024. The NAF and its successors do not identify specific locations or propose adaptation measures or projects in individual sectors, but instead, sets out the context to ensure local authorities, regions and key sectors to assess the key risks and vulnerabilities of climate change, implement climate resilience actions, and to ensure climate adaptation considerations are mainstreamed into all local, regional and national policy making.

6.1.7. The NAF identifies 13 (previously 12) priority sectors under seven lead Departments that are required to prepare sectoral adaptation plans under the Climate Act in accordance with the Sectoral Planning Guidelines for Climate Change Adaptation, which were published in 2018 and updated in 2024. The original 12 sectoral Plans prepared in 2019 and a new sectoral Plan for tourism are to be updated/prepared by end of Q3 2025. The following Electricity and Gas Sectoral Plan is relevant to the subject proposal.

## Electricity and Gas Sectoral Plan, 2019

6.1.8. The aim of the Plan is to address the risks posed by climate change to the electricity and gas networks. The plan focuses on identifying vulnerabilities such as extreme weather and changing temperature patterns and how they could affect the electricity and gas networks. Specific measures to minimise the potential negative effects of climate change are outlined, including the strengthening of the grid and ensuring reliable gas supply. The Plan also seeks to exploit opportunities and the potential benefits arising from climate change adaptation, such as increased energy efficiency and the development of new renewable energy sources.

### Project Ireland 2040: National Planning Framework (“NPF”), First Revision of the NPF and the National Development Plan (“NDP 2018-2027”)

6.1.9. Project Ireland 2040 is the Government’s long-term overarching strategy to make Ireland a better country for all and to build a more resilient and sustainable future. The NPF and the NDP combine together to form Project Ireland 2040. The NPF sets out to deliver a spatial strategy through a set of National Strategic Outcomes (“NSO’s”), including: ‘Transition to a Low Carbon and Climate Resilient Society’ which establishes a national objective of achieving transition to a competitive, low carbon, climate resilient and environmentally sustainable economy by 2050.

6.1.10. The ‘First Revision’ of the NPF introduces regional renewable electricity capacity allocations for each of the three Regional Assemblies to be achieved by 2030, which for the Eastern and Midland Regional Area is an additional 1,966MW, for onshore wind or 25% of the National share in 2030. This is the minimum required for onshore wind generation to meet the 2030 emission reductions in the electricity sector.

6.1.11. The NDP 2018-2027 sets out the investment priorities that will underpin the implementation of the National Planning Framework, through a total investment of approx. €116 billion. It recognises that Ireland’s energy system requires radical transformation in order to achieve its 2030 and 2050 targets and objectives. It recognises that investment in renewable energy sources affords Ireland an opportunity to decarbonise our energy generation, but that this must be complemented by wider measures to moderate growth in energy demand, increase energy security, diversify supply sources and facilitate more variable electricity generation on the grid.

### National Biodiversity Action Plan 2023-2030 (NBAP)

6.1.12. Ireland's 4th NBAP sets the biodiversity agenda for the period 2023 – 2030. The NBAP has a list of Objectives which promotes biodiversity as follows, Objective 1 Adopt a whole of government, whole of society approach to biodiversity; Objective 2 Meet urgent conservation and restoration needs; Objective 3 Secure nature's contribution to people; Objective 4 Enhance the evidence base for action on biodiversity; Objective 5 Strengthen Ireland's contribution to international biodiversity initiatives.

### National Energy Security Framework (April 2022)

6.1.13. The Framework addresses Ireland's energy security needs in the context of the war in Ukraine, and coordinates energy security work across the electricity, gas and oil sectors. The Framework takes account of the need to decarbonise society and the economy, and of targets set out in the Climate Action Plan to reduce emissions. Theme 3 - Reducing our Dependency on Imported Fossil Fuels, focusses on three areas of work:

- 7.1 Reducing demand for fossil fuels.
- 7.2 Replacing fossil fuels with renewables, including solar energy.
- 7.3 Diversifying fossil fuel supplies.

6.1.14. Under 7.2, the statement notes that prioritising renewables is in line with the requirements of the recast Renewable Energy Directive and the EC REPowerEU action statement. The Commission has called on Member States to ensure that renewable energy generation projects are considered to be in the overriding public interest, and the interest of public safety, and the Government supports this request.

### Wind Energy Guidelines, 2006

6.1.15. These guidelines still constitute the official strategy guidance on wind farms under the provision of Section 28 of the Planning and Development Act 2000 (as amended). Advice is set out in relation to the design, siting, spatial extent, and height of turbines in various landscape character types. Details are also included for best practice for wind farm development on peatlands and flatland areas, and guidance is also provided on matters such as noise, shadow flicker, natural heritage,

archaeology, architectural heritage, ground conditions, aircraft safety, wind take and potential cumulative effects.

#### Draft Wind Energy Guidelines, 2019

6.1.16. The Board will note that these guidelines are still in draft form and have not been officially adopted as official guidance. The Supreme Court held in *Balz & Anor v An Bord Pleanála* [2016] IESC 134, that while statutory guidelines (in this instance the 2006 guidelines) still in force and may be out of date was not an irrelevant planning consideration, and the Board in setting out its reasons and considerations in determining the application, should have its given reasons for not accepting the guidance set out in the 2019 Wind farm Guidelines.

### **6.2. Regional Planning Policy**

#### Regional Spatial and Economic Strategy for the Eastern & Midlands Region, 2019

6.2.1. This document is a 12-year strategic regional development framework that will facilitate the delivery of the NPF. The document sets out 16 regional strategic outcomes based on economic opportunity, healthy placemaking and climate action. The RSES supports the transition to low carbon and clean energy and to harness the potential for a more distributed renewables-focussed energy system to support the transition to a low carbon economy by 2050. Enhanced strategic connectivity is also emphasised to support economic development, build economic resilience and support strengthened rural communities and economies including the blue-green economy and tourism.

6.2.2. In terms of decarbonising the energy section, the RSES acknowledges that the Region will need to shift from its reliance on using fossil fuels and natural gas as its main energy source to a more diverse range of low and zero-carbon sources, including renewable energy and secondary heat sources. This includes the use of wind energy, both onshore and offshore.

6.2.3. Regional Policy Objective RPO 10.22 seeks to support the reinforcement and strengthening of the electricity transmission and distribution network to facilitate planned growth and transmission/ distribution of a renewable energy focused generation across the major demand centres to support an island population of 8 million people.

### 6.3. Local Policy Context

#### Laois County Development Plan, 2021-2027

- 6.3.1. Chapter 3 of the Development Plan sets out the Council's aim for climate action and energy which is *"to reduce our carbon footprint by integrating climate action into the planning system in support of national targets for climate policy mitigation and adaptation objectives, as well as targets for greenhouse gas emissions reductions."*
- 6.3.2. Under Section 3.5.5 – Wind Energy, issues which must be taken into consideration when dealing with applications for wind energy development include visual impact, landscape protection, impacts on residential amenity, impact on wildlife and habitats, connections to the national grid and impact of construction and ancillary infrastructure, including access roads and grid connections.
- 6.3.3. The following climate mitigation measures are included in the Development Plan:

*CM RE 2 - Promote and encourage the development of energy from renewable sources such as hydro, bio-energy, wind, solar, geothermal and landfill gas subject to compliance with normal planning and environmental criteria in co-operation with statutory and other energy providers.*

*CM RE 4 - Protect areas of recognised landscape importance and significant landscape views from construction of large scale visually intrusive energy transmission infrastructure, alternative routing or transmission methods shall be used in this instance to ensure that the assessment of energy development proposals will have regard to the impacts on public rights of way and walking routes.*

*CM RE 7 - Promote the location of wind farms and wind energy infrastructure in the 'preferred areas' as outlined on Map 3.2 to prohibit such infrastructure in areas identified as 'Areas not open for consideration' and to consider, subject to appropriate assessment, the location of wind generating infrastructure in areas 'open for consideration' and as per the Laois Wind Energy Strategy 2021-2027.*

*CM RE 17 - Promote the use of efficient energy storage systems and infrastructure that supports energy efficiency and reusable energy system*

*optimization, in accordance with proper planning and sustainable development.*

- 6.3.4. The Wind Energy Strategy for Co. Laois is set out in Appendix 5 of the Development Plan.
- 6.3.5. According to the Landscape Character Assessment, the part of the site in Co. Laois is within the Lowland Agricultural Areas and Urban Fringe Areas around Portarlington.

#### Offaly County Development Plan 2021-2027

- 6.3.6. It is the strategic aim of the climate action and energy strategy '*to achieve a transition to an economically competitive, low carbon climate resilient and environmentally sustainable county, through reducing the need to travel, promoting sustainable settlement patterns and modes of transport, and by reducing the use of non-renewable resources, whilst recognising the role of natural capital and ecosystem services in achieving this*'.
- 6.3.7. The following relevant policies are included in the Development Plan:

*CAEP-01 - Support and facilitate the development, reinforcement, renewal and expansion of the electricity transmission and distribution grid, including the development of new lines, pylons and substations as required to provide for the future physical and economic development of Offaly.*

*CAEP-04 - It is an objective of the Council to ensure the security of energy supply by supporting the potential of the wind energy (and other renewable) resources of the County in a manner that is consistent with proper planning and sustainable development of the area.*

*CAEP-05 - It is an objective of the Council to implement the Council's Wind Energy Strategy as follows:*

1. *In 'Areas Deemed Open for Consideration for Wind Energy Development' as identified in Map No. 10 'Wind Energy Strategy Designations', the development of windfarms and smaller wind energy projects will be considered;*

2. *In all other areas, wind energy developments shall not normally be permitted – except as provided for under relevant exemption provisions in the Planning and Development Regulations 2001 (as amended); and*
3. *Applications for re-powering (by replacing existing wind turbines) and extension of existing and permitted wind farms will be assessed on a case-by-case basis and will be subject to criteria listed in Development Management Standard 109 contained in Chapter 13 of Volume 1 of this County Development Plan and the Section 28 Ministerial Wind Energy Development Guidelines.*
4. *Support the reinforcement and strengthening of the electricity transmission and distribution network to facilitate planned growth and transmission/ distribution of a renewable energy focused generation across the major demand centres.*

*CAEP-23 - It is Council policy to require that environmental assessments should address reasonable alternatives for the location of new energy developments, and where existing infrastructural assets such as substations, power lines and roads already exist within the proposed development areas, then such assets should be considered for sustainable use by the proposed development where the assets have capacity to absorb the new development.*

*CAEP-25 - It is Council policy to encourage and facilitate the production of energy from renewable sources, such as from bioenergy, waste material, solar, hydro, geothermal and wind energy, subject to proper planning and environmental considerations.*

6.3.8. The proposed substation is in an area of moderate landscape sensitivity. These areas can accommodate development pressure but with limitations in the scale and magnitude.

#### **6.4. Natural Heritage Designations**

6.4.1. The following designated sites are within 10km of the proposed development site:

Site Name	Site Code	Distance (nearest point to proposed development)
Slieve Bloom Mountains SPA	004160	5.45km
River Barrow and River Nore SAC	002162	0km
Mountmellick SAC	002141	1.84km
Slieve Bloom Mountains SAC	000412	8.69km
Emo Court pNHA	000865	2.81km
Derries Wood pNHA	000416	5.22km
Grand Canal pNHA	002104	5.35km
Raheen Lough pNHA	000917	6.66km
Ridge of Portlaoise pNHA	000876	7.26km
The Great Heath of Portlaoise pNHA	000881	7.35km
Slieve Bloom Mountains pNHA	000412	8.7km
Clonreher Bog NHA	002357	7.37km

## 7.0 Assessment

7.1. Having regard to the requirements of the Planning and Development Act, 2000 (as amended), this assessment is divided into three main parts, the planning assessment, environmental impact assessment and appropriate assessment. In each assessment, where necessary, reference is made to issues raised by all parties. There is an inevitable overlap between the assessments, for example, with matters raised falling within both the planning assessment and the environmental impact assessment. In the interest of brevity, matters are not repeated but such overlaps are indicated in subsequent sections of the report.

## 8.0 Planning Assessment

8.1. The proposed development is for the purposes of connecting the already consented Dernacart Wind Farm (ABP-310312-21) to the national grid via the consented Bracklone 110kV substation. The proposed grid connection differs from that which was assessed as part of the wind farm application in that the current proposal is for a new relocated 110kV substation in place of the permitted Dernacart 110kV substation, with revised underground grid connection cable route to that previously

anticipated. The proposed grid connection cable is to be installed solely within the public road network and will have a length of 10.85 kilometres, compared to the earlier proposal that would have comprised of a 16 ½ km underground grid connection route.

8.2. Having regard to the above, and in view of national, regional and local policy guidance, and the submissions/ observations received, I consider that the main issues to be addressed in this case are as follows:

- Policy context/ principle
- Main Issues raised in submissions
- Environmental Impact Assessment
- Appropriate Assessment
- Overall Conclusion

### 8.3. **Policy Context/ Principle**

8.3.1. The Climate Action Plan (CAP24) sets out a roadmap to halve emissions by 2030 and reach net zero by no later than 2050. In terms of the electricity sector, a 75% reduction in emissions based on 2018 levels is required by 2030, and central to achieving this, is the strategic increase in the share of renewable electricity to 80% by 2030. CAP25 was published on 15th April 2025 and re-affirms the previous commitment to increase the share of renewable electricity generation to 50% by 2025 and 80% by 2030, including on shore wind targets of 6GWs by 2025 and 9GWs by 2030.

8.3.2. The proposed grid connection for the authorised windfarm, facilitating the export of electricity to the National Grid at the nearby Bracklone Substation, complies with the overarching aim of CAP25 of tackling climate breakdown by reducing greenhouse gas emissions and by contributing towards the target of having up to 80% of electricity coming from renewable sources by 2030.

8.3.3. The National Planning Framework – First Revision provides policies, actions and investment to deliver National Strategic Outcomes and priorities of the National Development Plan. These include compact growth, support and strengthening of the

economy, transitioning to a low carbon and climate resilient society, the sustainable growth of settlements, and the management of environmental resources.

8.3.4. National Strategic Outcome 8: 'Transition to a Low Carbon and Climate Resilient Society' notes that new energy systems and transmission grids will be necessary to enable a more distributed more renewables focused energy generation system, harnessing both the considerable on-shore and off-shore potential from energy sources such as wind, wave and solar. It is also recognised that the development of onshore and offshore renewable energy is critically dependent on the development of enabling infrastructure including grid facilities. In this regard, NSO 8 aims to *"reinforce the distribution and transmission network to facilitate planned growth and distribution of a more renewables focused source of energy across the major demand centres"*.

8.3.5. National Policy Objective 70 seeks to *"promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a climate neutral economy by 2050."* National Policy Objective 71 also supports the development and upgrading of the national electricity grid infrastructure, including supporting the delivery of renewable electricity generating development. The proposal will therefore comply with the NPF – First Revision by helping with the transition to a climate neutral energy future, by reducing reliance of fossil fuels and assisting with the achievement of climate action targets.

8.3.6. At a regional level, the Regional Spatial & Economic Strategy for the Eastern and Midlands Region, 2019-2031 supports the reinforcement and strengthening of the electricity transmission and distribution network to facilitate planned growth and transmission/ distribution of a renewable energy focused generation across the major demand centres to support an island population of 8 million people. This includes the facilitation of the delivery of the necessary integration of transmission network requirements to allow linkages of renewable energy proposals to the electricity transmission grid in a sustainable and timely manner.

8.3.7. At a local level, it is Laois County Council's aim for climate action and energy *"to reduce our carbon footprint by integrating climate action into the planning system in support of national targets for climate policy mitigation and adaptation objectives, as well as targets for greenhouse gas emissions reductions."* It is a local county target

to support the development of wind energy that has been permitted to date within the county by 2030. The proposed development will facilitate the connection of an authorised windfarm to the grid, thereby potentially enabling up to 40MW of renewable energy production.

8.3.8. It should also be noted that the eastern part of the grid connection in Co. Laois is not within an area that is designated as “not open for consideration” for wind energy development. The western part of the proposed development site in Co. Laois which is proposed as material storage areas at Turbines T4 and T5 is within an area “open for consideration” for wind energy development. According to the Landscape Character Assessment, the part of the site in Co. Laois is within the Lowland Agricultural Areas and Urban Fringe Areas around Portarlington. Objective CM RE seeks to “promote the location of wind farms and wind energy infrastructure in the ‘preferred areas’ as outlined on Map 3.2 and to prohibit such infrastructure in areas identified as ‘Areas not open for consideration’ and to consider, subject to appropriate assessment, the location of wind generating infrastructure in areas ‘open for consideration’ as per the Laois Wind Energy Strategy 2021-2027.”

8.3.9. It is stated in the Development Plan that there are a number of issues which must be taken into consideration when dealing with applications for wind energy development. These include visual impact, landscape protection, impacts on residential amenity, impact on wildlife and habitats, connections to the national grid and impact of construction and ancillary infrastructure including access roads and grid connections. The proposed grid connection, for the most part, utilises existing access roads and will be laid underground. Impact on wildlife and habitats will therefore be kept to a minimum. The alternative grid connection assessed at the time of the windfarm planning application would give rise to greater environmental effects owing to the greater distance involved (up to 16.5km in length).

8.3.10. A section of the proposed grid connection route also passes through Co. Offaly. It is a policy of the Development Plan (CAEP-01) to *“support and facilitate the development, reinforcement, renewal and expansion of the electricity transmission and distribution grid, including the development of new lines, pylons and substations as required to provide for the future physical and economic development of Offaly.”*

8.3.11. Part of the site to the west appears to be within an “area not deemed suitable for wind energy development”. The proposed substation seems to be situated in this designation. The Offaly Wind Energy Strategy uses a ‘step by step’ sieve mapping analysis of the key environmental, landscape and technical criteria which must be balanced in order to identify the most suitable location for wind energy development. It appears that the “area not deemed suitable for wind energy development” along the western part of the proposed grid connection is designated as such because wind speeds are below 7.5 m/s at hub height of 100m. This area does not have high landscape sensitivity, is not within an area of high amenity, and is not affected by key scenic views, prospects or key amenity routes.

8.3.12. Overall, I consider that the proposed grid connection enabling the development of the authorised Dernacart Windfarm is acceptable in principle and follows the consistent message within all levels of policy that there must be a transition to a low carbon and climate resilient society. I am therefore satisfied that the proposed development is in accordance with the policy objectives set out in various plans and documentation referred to above, and subject to the following assessment.

#### 8.4. Main Issues Raised in Submissions

8.4.1. The Commission received a total of four submissions on the proposed development, as well as submissions from both Laois County Council and Offaly County Council. Most of the issues raised in these submissions are addressed in the Environmental Impact Assessment and Appropriate Assessment below. The main points raised in submissions relate to the impact on a badger sett; removal of hedgerow/ treelines; impact on bogland; impact on the national road network; Hen Harrier and the potential direct, indirect and cumulative impacts on the Slieve Bloom SPA; cumulative considerations with other wind farms; consultation; health impacts; potential fire hazard; impact on residential amenity; and impact on natural resources.

8.4.2. The submission from the Department of Housing, Local Government and Heritage noted the presence of an active **badger sett** within 30 metres of the proposed access track/ cable route. This issue is comprehensively addressed in the applicant’s response to submission and in the EIA. The applicant determined that this is an outlier sett and used sporadically, and therefore the rerouting of cable route

to avoid the badger sett is not warranted. I am satisfied that the applicant is proposing adequate and appropriate measures for the protection of badger, including pre-construction and occupancy surveys, and if deemed necessary, measures for soft blocking, sett exclusion, sett destruction and monitoring/supervision.

8.4.3. The Department's concern regarding the removal of **hedgerow/ trees** is also adequately addressed in the response by the applicant and within the EIAR. The Department note that routing of the proposed cable on the public road will avoid the majority of hedgerow/ treeline removal, as well as the necessity of bridging Cottoner's Brook. In response, the applicant confirms that the extent of hedgerow removal amounts to 320m along the collector route from windfarm to proposed substation, and approximately 45m at the new entrance to the substation. I agree that this is not substantial within the context of the wider scheme. I am also satisfied that all reasonable alternatives for the proposed cable route have been adequately considered in the EIAR.

8.4.4. In response to the Department's submission on the potential for **raised bog habitat** on site, the applicant conducted a bog habitat survey on 25<sup>th</sup> June 2025. It was confirmed that many of the listed species under the Fossitt classification for Raised Bog (PB1) were present during the survey, most notably ling heather close to the high bog shelf where peat extraction is currently ongoing and closest to the conifer plantation where the ground is very dry. It is also highlighted that if abundant sphagnum mosses are not present, peat will not actively form, and although there were some minor instances of sphagnum recorded within the study area, it was not dominant and there were no waterlogged areas present. It is concluded that the habitat within the study area is not an example of 'Active Raised Bog (7110)'.

8.4.5. It is confirmed that the proposed collector cable and access route will not encroach on the raised bog and anyway. The route follows along an area of cutover bog and crosses an ephemeral drain into an existing conifer plantation, which has already been subjected to significant drainage. Having regard to the additional information recorded from the surveying and assessment carried out by the applicant, I agree the proposed drainage associated with the proposed collector cable and access route, or any other part of the proposed development, will not have significant impact on the bogland habitat.

8.4.6. The submission from Transport Infrastructure Ireland regarding impacts on the **national road network** is responded to by the applicant and addressed in the Material Assets – Traffic & Transport section of the EIAR. Measures to mitigate the impact of the proposed development on the road network will include temporary traffic management arrangements; regular monitoring and reinstatement of the road pavement; implementation of a Traffic Management Plan; and operation of a wheel wash facility. I concur that the proposed development will not result in significant impacts in terms of traffic and transport. I also note the applicant's confirmation that the proposal will comply with TII Publications and will be subject to RSA, as appropriate.

8.4.7. **Hen Harrier** and the potential direct, indirect and cumulative impacts on the Slieve Bloom SPA are addressed in Section 10 – Appropriate Assessment. It is concluded that the proposed development, individually or in combination with other plans or projects would not be likely to have a significant effect on Slieve Bloom Mountains SPA.

8.4.8. In terms of **cumulative considerations** with other wind farms, it is concluded in Section 10 that having regard to the limited scale of the grid connection construction works, and the low intensity of works during operational and decommissioning phases, there is no likelihood of significant adverse in-combination effects with other windfarms, including Dernacart Wind Farm, on Hen Harrier. The NIS submitted with the application identifies other plans, projects and activities occurring in the environs of the site that could act in combination with the proposed development to determine whether any potential significant cumulative effects may arise. Pressures from the surrounding environment are set out, together with relevant policies and objectives from Development Plans, and other permitted and proposed developments in the locality. It was considered that construction activities at the permitted Dernacart Windfarm, on-going agriculture, forestry, peat extraction and to a lesser extent one-off rural residential developments comprise the land-uses and activities that could potentially interact synergistically with the proposed development to result in significant cumulative or in-combination effects with the proposed development, in light of the potential effect of the project.

8.4.9. Section 9.13 of the EIA also addresses cumulative impacts and notes that 12 existing/ approved projects were considered in the EIAR for cumulative effects, as

well as a further 19 approved developments in the wider area. Cumulative effects are also set out for each environmental factor.

- 8.4.10. Overall, I would be satisfied that there is sufficient information on file for the Board to fully assess the cumulative impacts and in-combination effects of the grid connection, the authorised Dernacart Wind Farm and Bracklone substation, and any other relevant plans or projects.
- 8.4.11. It was stated in a third party submission that no **consultation** took place with residential properties nearest the substation. I have concluded in Section 9.4 that appropriate consultations have been carried out and that third parties have had the opportunity to comment on the proposed development and engage with the application process in advance of decision making.
- 8.4.12. A third party submission refers to the potential **health impacts** of wind farms. It should be noted that the wind farm is already consented, and the current proposals is essentially for enabling infrastructure. Notwithstanding this, the EIA provides a full assessment of the proposed development on population and human health. The reasoned conclusion is that there will be minor and temporary impacts on population and human health due to the generation of additional traffic on local road networks during construction with associated noise and safety implications, and this will be adequately mitigated by measures set out in the CEMP.
- 8.4.13. Clarification was sought by a third party as to whether there will be **battery storage** on the site. In response, the applicant confirms that this does not form part of the current application. Laois County Council granted permission in February 2024 at Bracklone to develop 136 no. battery storage units; 17 no. MV skids (PCS + MV/LV Transformer solution); and site access, electrical and communications cabling; and all ancillary site development, landscaping and reinstatement works, over a total site area of c.3.4 hectares (Reg. Ref: 2360261).
- 8.4.14. The potential impact of the proposed development on **residential amenity** has been fully assessed in the EIA. Sensitive receptors for noise, air quality, traffic and visual impacts included nearby houses along the proposed route I am satisfied that adequate information is available for to determined that the proposed development will not give rise to any long-term impacts on residential amenity.

8.4.15. The impact on **natural resources** was also raised by a third party. As noted in Section 9.3, the EIAR describes the construction, operational and decommissioning phases of the development, as well as the use of natural resources, emissions and wastes. I am satisfied that adequate detail has been provided to enable decision making in this regard. The impact on natural resources is covered under Soils and carbon footprint considerations fall under the section on Climate.

## **9.0 Environmental Impact Assessment**

### **9.1. Statutory Provisions**

9.1.1. The Environmental Impact Assessment Directive requires that projects that are likely to have significant effects on the environment must be suitably assessed prior to any consent decision being made. As a standalone project, the proposed development of an underground electrical cable linking the wind farm (to be constructed) to Bracklone substation does not fall under any class of development listed in Annex I or Annex II of Schedule 5 of the Planning and Development Regulations, 2001 (as amended) for the purposes of Part 10 (Environmental Impact Assessment). In terms of certain aspects of the proposed development, Class 10(dd) of Part 2 of the Fifth Schedule includes private roads that exceed 2,000m in length. The proposed development includes the construction of a wind farm collector cable and access track over a distance of 2.45km between the wind farm site and the proposed 110kV substation overlain with a 5.5m wide stone access track.

9.1.2. The proposed application is accompanied by an EIAR. The proposed grid connection also forms part of a larger windfarm development, which itself was subject to EIA, and this allows for the consideration of the cumulative environmental effects of the proposed grid connection and other existing and permitted developments. The Board is also required to consider the EIAR in compliance with the Planning and Development Act and Regulations in circumstances where an EIAR is submitted with the planning application.

### **9.2. EIA Structure**

9.2.1. This section of the report comprises the Environmental Impact Assessment (EIA) of the proposed development in accordance with Planning and Development Act 2000

(as amended) and the associated Regulations, which incorporate the European Directives on Environmental Impact Assessment (Directive 2011/92/EU as amended by 2014/52/EU). Section 171A of the Planning and Development Act, 2000 (as amended) defines EIA as:

- a. consisting of the preparation of an Environmental Impact Assessment Report (EIAR) by the applicant, the carrying out of consultations, the examination of the EIAR and relevant supplementary information by the Board, the reasoned conclusions of the Board and the integration of the reasoned conclusion into the decision of the Board, and
- b. including an examination, analysis, and evaluation, by the Board, that identifies, describes and assesses the likely direct and indirect significant effects of the proposed development on defined environmental parameters and the interaction between these factors, and which includes significant effects arising from the vulnerability of the project to risks of major accidents and/or disasters.

9.2.2. Article 94 of the Planning and Development Regulations, 2001 and associated Schedule 6 set out requirements on the contents of an EIAR. This EIA section of the report is therefore divided into two sections. The first section assesses compliance with the requirements of Article 94 and Schedule 6 of the Regulations. The second section provides an examination, analysis and evaluation of the development and an assessment of the likely direct and indirect significant effects of it on the following defined environmental parameters, having regard to the EIAR and relevant supplementary information:

- population and human health,
- biodiversity, with particular attention to species and habitats protected under the Habitats Directive and the Birds Directive,
- land, soil, water, air, and climate,
- material assets, cultural heritage, and the landscape,
- the interaction between the above factors, and
- the vulnerability of the proposed development to risks of major accidents and/or disasters.

9.2.3. It also provides a reasoned conclusion and allows for integration of the reasoned conclusions into the Board's decision, should they agree with the recommendation made.

### 9.3. **Compliance with the Requirements of Article 94 and Schedule 6 of the Regulations**

9.3.1. Compliance with the requirements of Article 94 and Schedule 6 of the Regulations is set out below.

<b>Section 94 (a) Information to be contained in an EIAR (Schedule 6, para. 1)</b>	
A description of the proposed development comprising information on the site, design, size, and other relevant features of the proposed development (including the additional information referred to under section 94(b)).	The proposed development is comprehensively described in Chapter 2 of the EIAR and depicted in the associated drawings. Information is included on the site, design, size and features of the proposed underground cabling and substation, together with details on the new access to the substation off the R423, peat/spoil deposition areas and associated forestry felling, drainage and ancillary works necessary to facilitate the proposed development. The EIAR also describes the construction, operational and decommissioning phases of the development, as well as the use of natural resources, emissions and wastes. I am satisfied that adequate detail has been provided to enable decision making.
A description of the likely significant effects on the environment of the proposed development (including the additional information referred to under section 94(b)).	An assessment of the likely significant direct, indirect, and cumulative effects of the development is carried out for each of the technical chapters of the EIAR (Chapters 4-13). I am satisfied that the assessment of significant effects is comprehensive and robust and enables decision making.
A description of the features, if any, of the proposed development and the measures, if any, envisaged to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment of the development	These are included in the EIAR under Chapter 15: Schedule of Environmental Mitigation. Volume 3 of the EIAR also contains a Construction Environmental Management Plan to communicate the environmental management

(including the additional information referred to under section 94(b)).	requirements to those with responsibility for carrying out works on site so that adverse effects of the development on the receiving environment can be minimised.
A description of the reasonable alternatives studied by the person or persons who prepared the EIAR, which are relevant to the proposed development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the proposed development on the environment (including the additional information referred to under section 94(b)).	Chapter 3 of the EIAR considers alternatives in respect of the 110kV substation site selection; the wind farm collector cable connection; and the 110kV underground grid connection cable. This chapter provides the main reasons for selecting the proposed options and a comparison of environmental effects. I consider, therefore, that the description of alternatives is reasonable, in the context of the proposed development, and satisfactory.
<b>Section 94(b) Additional information, relevant to the specific characteristics of the development and to the environmental features likely to be affected (Schedule 6, Para. 2).</b>	
A description of the baseline environment and likely evolution in the absence of the development.	A detailed description of the baseline environment is included in each of the technical chapters of the EIAR, which I am satisfied, is sufficient to enable the assessment of likely effects and to enable decision making.
A description of the forecasting methods or evidence used to identify and assess the significant effects on the environment, including details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information, and the main uncertainties involved	Forecasting methods and/or evidence to identify and assess significant effects are included in the EIAR, as required for relevant environmental topics. Technical difficulties are identified where necessary, and I am satisfied that there are no significant deficiencies that prevent decision making.
A description of the expected significant adverse effects on the environment of the proposed development deriving from its vulnerability to risks of major accidents and/or disasters which are relevant to it.	Likely significant effects of the development on the environment, arising from its vulnerability to risks of major accidents and/or disasters addressed, are described in Chapter 2 of the EIAR and are adequate to support decision making.
A summary of the information in non-technical language.	This information has been submitted as a separate standalone document (Volume 1 – Non-Technical Summary). I am satisfied that the document is concise and comprehensive and is written in a language that is easily understood by a lay member of the public.

Sources used for the description and the assessments used in the report	Sources used for the description and assessment of environmental effects are included in each technical chapter of the EIAR.
A list of the experts who contributed to the preparation of the report	The experts who prepared the technical assessments are identified in Chapter 1 and in each technical chapter of the EIAR including relevant qualifications.

## 9.4. Consultations

9.4.1. Issues were raised within submissions relating to EIA on biodiversity, habitat loss, impact on bog habitat, impact on protected bird species, archaeology, consideration of alternatives, impact on natural resources, calculation of carbon footprint equation, consideration of the development in its totality, and lack of consultation.

9.4.2. Issues concerning biodiversity including the potential for habitat loss, impact on bog habitat and impact on protected bird species are considered further within the EIA and Appropriate Assessment below. Archaeology is addressed in the Cultural Heritage section and alternatives are considered in Section 9.6. The impact on natural resources is covered under Soils and carbon footprint considerations fall under the section on Climate.

9.4.3. Issues raised in terms of the consideration of the development in its totality concern the amended grid connection route and substation location from that which was assessed in the EIA for Dernacart Wind Farm (ABP-310312-21). The route originally assessed (but not applied for), extended over 16 ½ km and the proposed route extends over a total distance of 13.3km (2.45km between wind farm and proposed substation and 10.85km from proposed substation and the consented Bracklone 110kV substation). Project splitting for the purposes of EIA does not occur when all relevant plans and projects in the surrounding area are cumulatively assessed. The cumulative impacts of the proposed development are assessed under each of the environmental factors below. In addition, the NIS assesses the implications of the grid connection individually and in combination with the whole wind farm project and any other relevant plans and projects.

9.4.4. In terms of consultation, the application has been submitted in accordance with the requirements of the Planning and Development Act 2000 (as amended) and the

Planning and Development Regulations 2001 (as amended), in respect of public notices. I note that these, the public notices, refer to all of the townlands in which the development is proposed. The planning application also includes the planning application form, letters of consent, site and newspaper notices, a schedule of submitted documents, EIA Portal Notification and a schedule of planning drawings. The planning application was also referred to internal local authority departments and to prescribed bodies by the planning authority.

- 9.4.5. Chapter 1 of the EIAR sets out details on scoping consultations with the Board, Local Authorities, and with statutory bodies and other parties. Consultation responses were received by the applicant from Inland Fisheries Ireland and Geological Survey. The Commission also received submissions from the Department of Housing, Local Government and Heritage and Transport Infrastructure Ireland. Two public submissions were received by the Commission. The Commission then invited the applicant to respond to the issues raised in submissions.
- 9.4.6. Overall, I am satisfied that appropriate consultations have been carried out and that third parties have had the opportunity to comment on the proposed development and engage with the application process in advance of decision making.

## 9.5. **Compliance**

- 9.5.1. Having regard to the foregoing, I am satisfied that the information contained in the EIAR, and the supplementary information provided by the developer is sufficient to comply with article 94 of the Planning and Development Regulations, 2001.

## 9.6. **Consideration of Alternatives**

- 9.6.1. Chapter 3 of the EIAR considers alternatives in respect of the proposed 110kV substation site selection, the wind farm collector cable connection and the 110kV underground grid connection cable.
- 9.6.2. The proposed 110kV substation is in place of the 110kV windfarm substation that was consented under the Dernacart Wind Farm permission (ABP-310312-21). Due to changes in EirGrid requirements, the sizing of the substation compound for which permission had been sought is no longer adequate and therefore a larger footprint is required.

9.6.3. Two locations were initially considered for the substation to include (Option 1) an increase the development footprint at the site of the original substation location, and (Option 2) a new site to the north-east of the original substation location. However, landowner consent was not forthcoming, and a new alternative substation location was pursued. This location is that which is now proposed immediately north of the R423 approximately 1.3km west of Garryhinch. This site was chosen following appraisal of site topography, ecology, archaeology, hydrology, flood risk, and access.

9.6.4. The alternative substation location necessitated a new collector cable connection from the wind farm. The chosen option is to install the wind farm collector cable connection off road as this route would also facilitate a private access between the substation and wind farm. Consideration was given to installing the collector cable along the public road; however, this was ruled out on the basis of the extent of road opening works over a distance of c. 4.8km. The proposed internal access tracks have been designed taking into account topography, ground conditions and using existing tracks where possible. This part of the site is relatively flat, and peat depths are quite shallow. The applicant has determined that the site is suitable for both floated and excavated road types.

9.6.5. A detailed study area constraints map was created to identify potential routes between the wind farm substation and the substation at Bracklone. Three potential routes were brought forward for initial desktop assessment. Routes through the centre of Portarlington were avoided to minimise traffic congestion and existing underground utilities. When selecting the chosen route, consideration was given to route distance, watercourse crossings, proximity to national monuments and architectural heritage, and the number of private land folios. The chosen Option 2 is the shortest route and avoids two Irish Rail overbridges, and from an engineering and environmental perspective, is considered more favourable.

9.6.6. In general, all reasonable alternatives that are relevant to the design of the project and its specific characteristics as presented are clearly set out in the EIAR. The main reasons for the chosen options and the development of the design process are included, together with the background to the statutory planning process. I would therefore be satisfied that this section of the EIAR is sufficient to comply with the

provisions of Article 94 and Paragraph 1(d) of Schedule 6 of the Planning and Development Regulations, 2001 (as amended).

## **9.7. Assessment of Likely Significant Effects**

9.7.1. This section of the report sets out an assessment of the likely environmental effects of the proposed development under the following headings, as set out in Section 171A of the Planning and Development Act, 2000, as amended.

- Population and human health,
- Biodiversity, with particular attention to species and habitats protected under the Habitats and Birds Directives (Directive 92/43/EEC and Directive 2009/147/EC respectively),
- Land, soil, water, air and climate,
- Material assets, cultural heritage and the landscape, and
- The interaction between these factors.

9.7.2. In accordance with section 171A of the Act, which defines EIA, this assessment includes an examination, analysis and evaluation of the application documents, including the EIAR, the associated drawings, documents/appendices and the submissions received and identifies, describes and assesses the likely direct and indirect significant effects (including cumulative effects) of the development on the environmental parameters set out in the Regulations and the interaction of these. Each topic section is therefore structured under the following headings:

- Issues raised.
- Examination, analysis and evaluation.
- The Assessment: direct and indirect effects.
- Conclusion.

## **9.8. Population and Human Health**

### Issues Raised

9.8.1. Issues raised in submissions pertaining to population and human health include those relating to consultation with residential properties and the potential for health

issues. It is also submitted that there is a potential fire hazard from the proposed battery storage facility and that permission should be refused on the basis that the proposal would seriously injure the amenities or depreciate the value of property in the vicinity.

9.8.2. Laois County Council note, with respect to population and human health, that settlement patterns along the proposed underground grid connection route exhibit sections of ribbon development and one off dispersed detached housing, and as the route approaches Portarlington, it transitions through higher density residential and commercial developments. It is considered unlikely that the proposed development would directly or indirectly lead to any reduction in existing economic activity within the area throughout any phase. It is also submitted that there will be no severance, loss of rights of way or amenities as a result of the proposed development. Disturbance associated with additional volumes of traffic will principally be confined to the construction phase and construction noise will not exceed acceptable construction noise limits at any dwelling location. Operational noise modelling shows that the proposed development can achieve a low noise impact during daytime and nighttime.

9.8.3. The proposed development by itself and cumulatively is assessed in terms of population and human health below.

#### Examination, Analysis and Evaluation

9.8.4. Population and Human Health is considered in Chapter 4 of the EIAR. Associated appendices include the following:

- Appendix 1 – Consultation Responses
- Appendix 2 – CEMP
- Appendix 6 – Noise Calibration Cert

9.8.5. The EIAR provides a review of the receiving environment; a prediction and characterisation of likely impacts; an evaluation of effects significance; and consideration of mitigation measures for population and human health. The methodology included desk based research and site visits to assemble information on the local receiving environment. The study area is the local receiving human environment, including those who reside, work, visit or use the local road networks in

the general area. The assessment has regard to Electoral Divisions within or located close to the proposed development site, and considers how the effects of the construction, operation and decommissioning phases could affect employment, settlement patterns, land use patterns, baseline population, demographic trends, human health and amenities.

- 9.8.6. Human health is considered in relation to health effects and environmental hazards arising from the other environmental factors. This includes the effects of dust from construction, noise during construction and operation, and traffic nuisance during construction.
- 9.8.7. In terms of the baseline environment, the proposed substation is located on agricultural and scrublands in a sparsely populated rural area. The collector cable and access track includes lands in commercial forestry, scrub and peatland, and the proposed 110kV grid cable route will be installed entirely within the carriageway of the public road.
- 9.8.8. All four Electoral Divisions that the proposed development passes through experienced a population rise between the 2016 and 2022 Census. The total population increased by 10.5% to 11,307 in 2022. Overall, the general health of the local population in the proposed development area is recorded as either 'very good' or 'good'. in 2022. The highest level of employment in the study area is within the 'commerce and trade' sector and employment within the Agriculture, Forestry, and Fishing industry is relatively low. The majority of the local population commute outside of the study area for work and education purposes. There are recreational facilities nearby at Garryhinch Forest and the River Barrow and the Emo-Portarlington cycle route passes the proposed grid route at the R419. There is also a designated walking trail approximately 540m south of the grid route at Carrick Woods.
- 9.8.9. Table 9.7.1 below summarises the likely significant effects of the proposed development on population & human health as identified in the EIAR.

Potential Population & Human Health Impacts	Potential Effects in the absence of Mitigation	Mitigation and Monitoring Measures	Residual Impact
<b>Construction</b>			
Employment/ Economic Activity	<ul style="list-style-type: none"> <li>- Aggregates, concrete and surface dressing supplies will be obtained from local quarries and suppliers, thus supporting the local economy.</li> <li>- Potential economic opportunities for local companies and businesses to provide a ranges of services including plant hire.</li> <li>- Resources and labour will mainly be sourced locally, whenever possible.</li> </ul> <p>Estimated that construction will take 16 months and may employ up to 30-40 workers.</p>	<ul style="list-style-type: none"> <li>- Construction related mitigation measures set out in CEMP.</li> </ul>	<ul style="list-style-type: none"> <li>- Short term, positive and slight impact.</li> </ul>
Population and Settlement	<ul style="list-style-type: none"> <li>- Minor number of key employees may decide to temporarily re-locate to the area in the short-term.</li> </ul>		<ul style="list-style-type: none"> <li>- Short-term neutral and imperceptible impact.</li> </ul>
Land Use Patterns	<ul style="list-style-type: none"> <li>- Existing forestry activities and harvesting within the plantation would cease for the duration of the collector cable construction works.</li> <li>- Some temporary disruption on forestry lands, peatlands and agricultural lands where the wind farm collector cables and associated infrastructure are proposed.</li> <li>- Approximately 2.8 ha of felling and 320m of hedgerow removal required within and</li> </ul>	<ul style="list-style-type: none"> <li>- Active construction area for the proposed development will be small, ranging from 100 to 200 m in length at any one time, and it will be transient in nature as it moves along the route.</li> </ul>	<ul style="list-style-type: none"> <li>- Long-term, moderate, negative impact (felling and hedgerow removal).</li> <li>- Temporary, slight, negative and localised impact (grid connection).</li> </ul>

	<p>around substation and collector cable infrastructure.</p> <ul style="list-style-type: none"> <li>- Temporary effects on land use from installation of grid connection within public road corridor. Disruption to existing traffic and access for local landowners and property owners/residents in the vicinity of the route.</li> </ul>		
Human Health	<ul style="list-style-type: none"> <li>- There will be an increase in noise levels in the vicinity of the proposed project site as a result of heavy machinery and construction work.</li> <li>- Construction noise will not exceed acceptable construction noise limit at any dwelling location.</li> <li>- Potential for temporary, negative effects in terms of dust emissions. Not likely to affect local air quality.</li> <li>- Anticipated changes in traffic volumes on the road affected by the development are below the criteria requiring a quantitative air and climate modelling assessment.</li> <li>- Disruption to existing traffic and access for local landowners and property owners/residents in the vicinity of the route.</li> </ul>	<ul style="list-style-type: none"> <li>- Noise assessment proposes measures to reduce the amount of noise reaching the noise sensitive areas in accordance with BS528-1:2009, Code of Practice for noise and vibration control on construction.</li> <li>- Temporary and appropriate traffic control and management systems to minimise traffic disruption to road users. Reinstatement of road once works are completed.</li> <li>- Mitigation in relation to traffic, noise and dust effects are outlined in the respective sections of the EIAR.</li> </ul>	<ul style="list-style-type: none"> <li>- Short-term, slight to moderate negative (noise).</li> <li>- Short-term, minor negative impact (nuisance dust).</li> <li>- Temporary short-term, negative and slight to moderate (road users).</li> </ul>
Tourism and Amenities	<ul style="list-style-type: none"> <li>- Potential impacts on Garryhinch forest recreation area.</li> <li>- Potential impacts on two cycle loops during grid connection works along R423.</li> </ul>	<ul style="list-style-type: none"> <li>- Active construction area for the proposed development will be small, ranging from 100 to 200 m in length at any one time, and it will be transient in nature as it moves along the route.</li> </ul>	<ul style="list-style-type: none"> <li>- Temporary to short-term negative and slight to moderate (Garryhinch).</li> <li>- Slight to moderate negative temporary to short term impact (cycle loops).</li> </ul>

Operational Phase			
Employment/ Economic Activity	<ul style="list-style-type: none"> <li>- Small proportion of employment associated with operations, maintenance and back-office support for substation.</li> <li>- No impact anticipated from the operational phase of the grid route and collector cable.</li> </ul>	<ul style="list-style-type: none"> <li>- No likelihood of any significant effects associated with the operational phase of the proposed development, and therefore no mitigation is proposed.</li> </ul>	<ul style="list-style-type: none"> <li>- Long-term neutral.</li> </ul>
Population and Settlement	<ul style="list-style-type: none"> <li>- No changes to population and settlement structure in the area.</li> </ul>		<ul style="list-style-type: none"> <li>- No residual impacts.</li> </ul>
Land use patterns	<ul style="list-style-type: none"> <li>- Footprint of the proposed substation and collector cable will occupy a small proportion of the development site area when operational.</li> <li>- With the exception of the permanent loss of current land uses, there will be no impact on adjoining land use activities.</li> <li>- No impact on land use from grid connection.</li> </ul>	<ul style="list-style-type: none"> <li>- No likelihood of any significant effects associated with the operational phase of the proposed development, and therefore no mitigation is proposed.</li> </ul>	<ul style="list-style-type: none"> <li>- No additional impact.</li> </ul>
Human health	<ul style="list-style-type: none"> <li>- Main noise source from substation is from the transformer(s) - noise modelling assessment undertaken shows that the proposed project can achieve a low noise impact during daytime and night-time periods.</li> <li>- Once the proposed development is operational there will be no significant direct emissions to the atmosphere.</li> <li>- Risk to the local environment and wildlife habitat from fire are considered low.</li> </ul>	<ul style="list-style-type: none"> <li>- Onsite monitoring systems will reduce the likelihood of a fire occurring within the facility.</li> <li>- In the event of a fire ignition within the facility, the fireproof construction and limited combustibility of the on site structures will restrict the growth and development of a fire to the structure of origin and reduce the risk of fire spread to adjacent equipment, surrounding vegetation or adjacent properties.</li> </ul>	<ul style="list-style-type: none"> <li>- No potential impacts to air quality.</li> <li>- Imperceptible to not significant traffic impact.</li> </ul>
Tourism and amenities	<ul style="list-style-type: none"> <li>- No likely impacts on tourism or amenities during construction.</li> </ul>	<ul style="list-style-type: none"> <li>- No likelihood of any significant effects associated with the operational phase of</li> </ul>	<ul style="list-style-type: none"> <li>- Long-term, imperceptible and neutral.</li> </ul>

		the proposed development, and therefore no mitigation is proposed.	
<b>Do Nothing:</b>			
<ul style="list-style-type: none"> <li>- If the proposed grid connection does not proceed, effects on the environment will not occur and the baseline environment will only change in line with trends.</li> </ul>			
<b>Decommissioning:</b>			
<ul style="list-style-type: none"> <li>- Employment/ Economic Activity: will mirror those of the construction phase but to a lesser extent giving rise to a temporary to short-term positive impact.</li> <li>- Population and Settlement: similar to construction phase but with reduced magnitude, producing a slight temporary to short-term increase in population. Grid route will remain in situ following decommissioning.</li> <li>- Land Use Patterns: Access tracks will be left in situ for agricultural and forestry land uses. Impact on surrounding land uses will be temporary to short-term, slight and negative.</li> <li>- Human Health: similar to those associated with construction phase but will likely be of a reduced magnitude.</li> <li>- Tourism and Amenities: similar to those associated with construction phase but will likely be of a reduced magnitude.</li> </ul>			
<b>Cumulative Effects:</b>			
<ul style="list-style-type: none"> <li>- Potential cumulative impacts on the local population and human health, specifically noise, dust, and traffic are discussed in relevant sections.</li> <li>- During construction, there is potential for cumulative effects on noise, dust, and traffic impacts associated with both the permitted Dernacart wind farm and Bracklone substation, as construction activities for the proposed development may coincide. Cumulative impacts will be managed by implementing the mitigation measures in the EIAR. Works have already commenced on the Bracklone substation and therefore cumulative construction effects are unlikely.</li> <li>- Grid connection works will be carried out in 75-100m sections each day and road corridors will be fully reinstated, thereby eliminating any potential cumulative operational phase effects.</li> <li>- Once mitigation measures are implemented during the construction phase, no cumulative effects on air and climate are expected.</li> <li>- Dernacart Wind Farm works are located approximately 2.3km from the proposed substation site, thereby minimising any potential cumulative noise and dust effects due to the considerable distance between the two projects.</li> </ul>			

Table 9.7.1 – Consideration of Impacts, Significance and Mitigation Measures for Population and Human Health

### The Assessment: Direct and Indirect Effects

9.8.10. I have examined, analysed, and evaluated Chapter 4 of the EIAR, and all of the associated documentation and submissions on file in respect of effects on population and human health. I am satisfied that the applicant has presented a good understanding of the baseline environment, and that the key impacts in respect of likely effects on population and human, have been identified.

9.8.11. I am also satisfied that matters pertaining to employment/ economic activity; population and settlement; land use patterns; human health; and tourism and amenities are the only sensitive aspects that may potentially be impacted by the proposed development for the population and human health environmental factors. The main indirect and cumulative effect will be positive in nature and will relate to the improvement to the local economy due to the community benefit fund from Dernacart Windfarm, which the proposed grid connection will facilitate. Negative effects will be neutral/ imperceptible due to the small scale and duration of the proposed development during the construction phase, amounting to approximately 30 weeks for the underground grid connection element; the lightly used local road network; and the sparse population in large parts of the area. Adverse cumulative impacts with Dernacart Windfarm will be minimised due to the separation distance between the wind farm and proposed substation site. Works have already commenced on Bracklone Substation and therefore cumulative construction effects are unlikely. The grid connection will be constructed in sections and full reinstatement will eliminate any potential cumulative operational phase effects.

9.8.12. Following the assessment, it can be concluded that the proposed development will have no significant negative impact on people and communities. There will be no significant effects on population and human health with any existing, permitted or proposed project/ plan.

### Conclusion

9.8.13. Having regard to the foregoing, it is considered the main direct and indirect effects on population and human health are as follows:

- Minor and temporary impact on **Population and Human Health** due to the generation of additional traffic on local road networks during construction with

associated noise and safety implications. This will be mitigated by measures set out in the CEMP and Traffic Management Plan.

## 9.9. **Biodiversity**

### Issues Raised

- 9.9.1. The Department of Housing, Local Government and Heritage notes that an active badger set was found within 30 metres of the proposed access track/ cable route. There are concerns regarding the proposed blocking of entrance to the sett, and that the importance of this sett within the territory has not been established.
- 9.9.2. The Department also highlights a number of discrepancies within documentation in terms of the amount of treeline/ hedgerow removal. It is considered that the routing of cable on the public road will avoid the majority of hedgerow/ treeline removal, as well as the necessity of bridging Cottoner's Brook.
- 9.9.3. It is also recommended by the Department that the raised bog habitat to the north of the proposed access track and collector cable is assessed to see if it conforms to Active Raised Bog (7110) or Degraded Raised Bog still capable of Natural Regeneration (7120). If so, impact of existing drainage and turf cutting, in addition to proposed drainage must be assessed.
- 9.9.4. Issues were raised in third party submissions relating to Hen Harrier and the inadequate assessment of the species, given the site's proximity to the Slieve Bloom SPA and Garryhinch Bog, which is used for winter roosting. It is also submitted that the laying of the infrastructure along the road over 10.32km will cause significant habitat loss and disturbance, and that human activity and predator access could also degrade habitat. The other main environmental issue raised in submissions was the risk of runoff to the River Barrow SAC. An Appropriate Assessment of the implications of the proposed development on European sites is carried out in Section 10 of this report.
- 9.9.5. The submission from Laois County Council refers to proposed directional drilling where the grid route crosses the River Barrow, resulting in no physical interaction with the European site. It is noted that general best practise construction mitigation measures will be followed, and works will be supervised by an Ecological Clerk of

Works. No likely significant impacts on biodiversity during the operational phase are envisaged by Laois County Council.

9.9.6. During the construction phase, there is potential for effects on hydrology and hydrogeology unless appropriate mitigation is applied. It is noted that a total of 16 water crossings are required to facilitate the proposed development. However, given the relatively small, localised scale of the works, Laois County Council consider that the volume of runoff from the construction works and felling area will be minimal in relation to the overall runoff to local water bodies. In addition, no effects on groundwater levels are foreseen due to the shallow nature of excavations. It is accepted that mitigation by design has been implemented to prevent adverse impacts, and other mitigation measures will be implemented and monitored throughout construction and operation.

9.9.7. In response to submissions, the applicant highlights that the proposed development comprises predominantly underground infrastructure, which will have minimal impact on Hen Harrier during either construction or operation. It is also emphasised that there has been a complete absence of any sightings of Hen Harrier within the proposed development site over the course of ecological site surveys undertaken in 2023 and 2024, and no nests or roosts were discovered within the footprint of the proposed development. Appropriate control measures have been integrated into the project to ensure there is no significant risk to surrounding watercourses and only a small portion of the total footprint of the proposed development will be constructed within cutover bog.

9.9.8. In response to concerns regarding badger, the applicant has submitted mitigation measures to include pre-construction surveys; occupancy survey/ appropriate monitoring in advance of closure; and measures such as soft blocking, sett exclusion, sett destruction, and monitoring supervision. It is considered that the rerouting of cable route to avoid the badger sett is not warranted, as this was determined to be an outlier sett and used sporadically. The preferred option is to install the cable off road along the western section, as this route option facilitates private access between the substation and wind farm. It is also submitted by the applicant that the extent of hedgerow to be removed is not substantial and compensatory hedgerow can be planted to offset the loss.

9.9.9. It is concluded by the applicant that the habitat within the study area is not an example of 'Active Raised Bog (7110)'. It is also confirmed that the proposed collector cable and access route will not encroach on the raised bog; the route follows along an area of cutover bog and crosses an ephemeral drain into an existing conifer plantation, which has already been subjected to significant drainage. It is not therefore considered that the drainage associated with the proposed collector cable and access route, or any other part of the proposed development, will have significant impact on the bogland habitat.

#### Examination, Analysis and Evaluation

9.9.10. Biodiversity is addressed in Chapter 5 of the EIAR. Associated appendices include the following:

- Appendix 7 – Bat Data

9.9.11. Potential sensitive aspects identified in the EIAR are designated sites, habitats, rare and protected flora, bats, other mammals, birds, amphibians and reptiles, macro-invertebrates, fish and fish habitats, invasive species, and human activity. These habitats and associated flora, fauna, and other ecological features or resources were evaluated to determine the sensitive ecological receptors that may be affected by the proposed development. This included the River Barrow and River Nore SAC, Mixed Broadleaved Woodland (WD1), Depositing/lowland river (FW2), River Barrow, Scrub (WS1), Cutover bog [Recolonising] (PB4 [R]), Mixed broadleaf/conifer woodland (WD2), Scrub (WS1)/Dense bracken (HD1), Mosaic – Cutover bog (PB4)/Scrub (WS1)/Wet grassland (GS4), Bog woodland (WN7)/Scrub (WS1), Scrub (WS1)/Wet grassland (GS4), Treeline/Hedgerow (WL1/WL2), Bats, European Otter, Badger, White-clawed crayfish, Atlantic salmon, and all invasive alien species within and adjacent to the proposed development.

9.9.12. The desk study for included an assessment of aerial photography, EPA, online mapping, NPWS online datasets and literature, National Biodiversity Data Centre online mapping, IFI online fish sampling reports and datasets, Ireland Red List No. 10: Vascular Plants (Wyse-Jackson et. al. 2016), GSI area maps, and Bat Conservation Ireland data. Information from the Dernacart Wind Farm EIAR (ABP-310312-21) was also considered, including the Natural Power Bat Report 2018.

9.9.13. Multi-disciplinary ecological site walkover surveys of initially proposed substation locations were conducted on 18th, 19th and 20th July 2023. Camera traps and static bat units were also deployed at this time. Watercourses potentially impacted were surveyed for fish habitat suitability on 3rd August 2023, and further multi-disciplinary ecological walkover surveys were carried out of the updated development on 11th and 12th October, and on 30th November. Site visits were then carried out on 11th, 12th, and 20th April 2024 to check bat roost suitability and to deploy static bat units along the underground wind farm collector cable and access road and at 110kV substation area. Set up and collection of camera traps were carried out at this time, along with a visit to two additional areas of the proposed peat/ spoil deposition at the consent Dernacart Wind Farm site. As well as the passive automated bat surveys and bat roost inspection surveys, surveys were carried out for other mammal activity such as prints, droppings, burrow-holes, dens/setts, feeding signs and trails. All birds, amphibians, reptiles and macroinvertebrates encountered during all site visits were also recorded.

9.9.14. The existing environment comprises a mix of agricultural grasslands, scrub and marginal lands with mature and semi mature trees at the location of the proposed substation. The proposed access track and underground cabling from the wind farm to the substation traverses commercial forestry, scrub and peatland. The physical environment either side of the public road, along which the underground grid connection will be laid, is described as a patchwork farmland, with fields enclosed by hedgerows, along with boglands and conifer plantation with sections of ribbon development.

9.9.15. In terms of local hydrology, the proposed development site is within the Barrow catchment. The 110kV substation and associated compound is within the Barrow\_050 river sub basin, and the underground collector cable and access track are within the Cottoners Brook\_010 and Barrow\_050 river sub basins. The underground grid connection cable is within the Barrow\_060, Clonygowan\_010, Barrow\_070, and Barrow\_080 river sub basins. The proposed development will cross a total of 16 no. watercourses.

9.9.16. No instream works will be undertaken within any watercourse. Crossing No. 1 and No. 5 will be achieved by the addition of new clear span structures and the River Barrow will be directionally drilled.

9.9.17. The Appropriate Assessment of European Sites is carried out in Section 10.

9.9.18. Table 9.9.1 below summarises the likely significant effects of the proposed development on biodiversity as identified in the EIAR.

Potential Biodiversity Impacts	Potential Effects in the absence of Mitigation	Mitigation and Monitoring Measures	Residual Impact
<b>Construction</b>			
Habitat loss	<ul style="list-style-type: none"> <li>- Direct habitat loss for KERs {Mixed Broadleaved Woodland (WD1), Scrub (WS1), Cutover bog [Recolonising] (PB4 [R]), Mixed broadleaf/conifer woodland (WD2), Scrub (WS1)/Dense bracken (HD1), Mosaic – Cutover bog (PB4)/Scrub (WS1)/Wet grassland (GS4), Bog woodland (WN7)/Scrub (WS1), Scrub (WS1)/Wet grassland (GS4), Treeline/Hedgerow (WL1/WL2)}, assessed as permanent, likely, not significant to slight and negative.</li> </ul>	<p><i>Mitigation by Design:</i></p> <ul style="list-style-type: none"> <li>- Substation layout allows for retention of perimeter hedgerow and treelines.</li> <li>- Site layout has been designed insofar as possible to allow for a 20m setback buffer between the development footprint and the from any drainage network and watercourses.</li> <li>- 110kV underground grid route is almost entirely confined to the existing road network.</li> <li>- Active construction area will generally be only along a 100m stretch of any roadway at any one time.</li> <li>- Avoidance of instream works due to horizontal directional drilling and over-bridge in road solutions to cross watercourses.</li> </ul>	<ul style="list-style-type: none"> <li>- No significant residual effects.</li> </ul>
Habitat alteration/ disturbance	<ul style="list-style-type: none"> <li>- Habitat alteration/ disturbance for KERs (apart from Depositing/ lowland river (FW2) Cottoner's Brook), assessed as temporary to short-term, likely, not significant and negative.</li> <li>- Habitat alteration/ disturbance for Depositing/ lowland rivers (FW2) Cottoner's Brook and River Barrow assessed as temporary to short-term, likely, moderate and negative.</li> </ul>	<p><i>Mitigation by Management:</i></p> <ul style="list-style-type: none"> <li>- Development of CEMP including, but not limited to, environmental controls on water quality/sediment and erosion; noise, vibration, dust and air; management of construction and demolition waste; fuel and oils management; management of concrete; and emergency response plan.</li> </ul>	<ul style="list-style-type: none"> <li>- No significant residual effects apart from Depositing/ lowland river (FW2) and River Barrow which will have temporary, not significant, negative residual effects.</li> </ul>
Invasive alien plant species	<ul style="list-style-type: none"> <li>- Risk of spread/introduction of invasive alien plant species to site (through soil disturbance, vegetation disturbance and general construction activity and movement of plant/machinery). Assessed as a medium-term, likely, moderate, negative</li> </ul>		<ul style="list-style-type: none"> <li>- No significant residual effects.</li> </ul>

	effect.		
Surface water runoff and discharges from construction working Areas	<ul style="list-style-type: none"> <li>- Excavation and soil movement and the potential for suspended solids contamination of surface waters.</li> <li>- Rainfall during excavation can cause runoff laden with fine sediment to be carried into watercourses, affecting aquatic life in Cottoner's Brook and to a lesser extent the River Barrow.</li> </ul>	<ul style="list-style-type: none"> <li>- Employment of Project Ecologist/ Ecological Clerk of Works (ECoW) during construction.</li> <li>- General protection of water quality with regards to temporary site compound/ parking; construction runoff and sediment control; construction wheel-wash facilities; management of fuel/ oil, etc.; and management of concrete.</li> <li>- Management of construction waste.</li> <li>- Storage of materials following best practice at all times.</li> </ul>	<ul style="list-style-type: none"> <li>- No significant residual effects.</li> </ul>
Bats	<ul style="list-style-type: none"> <li>- Loss of potential roosting features (No. 2 'low - Moderate' category trees). Assessed as permanent, moderate to significant, negative.</li> <li>- Loss of scrub, woodland, hedgerow and treeline which provide foraging opportunities for bats and act as commuting corridors. Assessed as permanent, moderate negative.</li> <li>- Direct/indirect disturbance and/or displacement effects on bats could arise as a result of increased lighting, noise/vibration, human activity, loss/alteration of habitat and/or mortality/physical injury of roosting (resting) bats. Potential to occur in Kilnahow Bridge over the River Barrow.</li> <li>- Foraging bats could be subject to disturbance/ displacement effects via other sources such as construction lighting.</li> </ul>	<ul style="list-style-type: none"> <li>- Biosecurity measures for reducing the risk of introduction or spread of invasive species.</li> <li>- Management of alien invasive species to include pre-construction survey, and preparation of construction stage alien invasive plant species management plan setting out clear processes for the eradication, control and containment of and of these species on site.</li> <li>- General protection of habitats including minimisation of vegetation removal, marking out of works areas and access, and making operatives aware of proximity of SAC.</li> <li>- General protection of fauna including measures for controlling movement of construction vehicles and personnel; designated materials and waste areas; vegetation and tree removal outside of restricted bird nesting period; checking of any area for vegetation clearance by</li> </ul>	<ul style="list-style-type: none"> <li>- Potential roost loss effects are assessed as permanent, slight to moderate, negative residual effects.</li> <li>- Loss/alteration of bat foraging habitat effects are assessed as permanent, slight to moderate, negative residual effects.</li> <li>- Potential disturbance/ displacement effects are assessed as temporary to short-term, slight, negative residual effects.</li> <li>- No significant residual effects.</li> </ul>

European Otter	<ul style="list-style-type: none"> <li>- Work carried out at water crossings which can impact water quality downstream, so there is some potential for secondary effects. Assessed as permanent, slight and negative.</li> <li>- Potential direct disturbance and/or displacement effects to otter as a result of increased noise, lighting and human activity during the construction phase. Assessed as temporary to short-term, slight and negative.</li> <li>- Potential for indirect disturbance and/or displacement effects to otter via potential water quality impacts and/or indirect alteration of foraging/commuting habitat.</li> </ul>	<p>ECoW; switching off of temporary construction lighting outside daylight hours; and restriction of construction activities to daylight hours.</p> <ul style="list-style-type: none"> <li>- Measures for the protection of bats in accordance with best practise guidance.</li> <li>- Construction phase mitigation measures for bats, including pre-construction bat surveys; tree felling/ vegetation removal; bat-boxes (loss of potential roost sites); lighting; and landscaping recommendations (planting of native species where possible).</li> <li>- Protection of otter to include preconstruction surveying and compliance with best practice guidance.</li> </ul>	<ul style="list-style-type: none"> <li>- Loss of habitat effects assessed as permanent, imperceptible, negative residual effects.</li> <li>- Potential disturbance/displacement effects assessed as temporary to short-term, not significant, negative residual effects.</li> </ul>
Badger	<ul style="list-style-type: none"> <li>- Habitat loss /loss or damage of existing breeding/resting sites: One 3-entrance badger sett was identified within the boundary of the site. There will be a requirement for heavy construction work in this area, and one entrance may be blocked and lost to facilitate the works. Assessed as permanent, moderate and negative.</li> <li>- Loss/alteration of suitable badger foraging/breeding/resting habitat facilitate the development. Assessed as permanent, moderate and negative.</li> <li>- Direct/indirect disturbance and/or displacement effects as a result of increased noise, vibration, lighting, human activity, use of chemicals, barriers to foraging areas and/or damage/disturbance/injury of badger or damage to the sett. Assessed as temporary, slight and negative.</li> </ul>	<ul style="list-style-type: none"> <li>- Protection of badger to include pre-construction surveys; compliance with General Guidelines for Site Works in the Vicinity of Badger Setts (NRA, 2005).</li> <li>- Summary of mitigation measures at identified setts which will be impacted by the proposal: <ul style="list-style-type: none"> <li>• Conduct pre-construction surveys.</li> <li>• Conduct occupancy survey/appropriate monitoring in advance of closure.</li> <li>• If sett deemed inactive/disused, then: <ul style="list-style-type: none"> <li>- Soft blocking</li> <li>- Sett exclusion (if necessary)</li> <li>- Sett destruction</li> <li>- Monitoring/supervision</li> </ul> </li> <li>• If sett deemed active, then:</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>- Loss/closure of existing badger sett entrance/exit assessed as permanent, slight, negative residual effects.</li> <li>- Habitat effects assessed as permanent, slight, negative residual effects.</li> <li>- Potential disturbance/displacement effects assessed as temporary to short-term, not-significant to</li> </ul>

		<ul style="list-style-type: none"> <li>- Soft blocking of inactive entrances, followed by hard blocking.</li> <li>- Installation of one-way gates plus proofing on active entrances (gates left in-situ for minimum 21-day period).</li> <li>- If no activity, sett destruction immediately after 21-day period.</li> <li>- Monitoring/supervision</li> </ul> <p>- Protection of Aquatic Species and Otter: All water quality mitigation measures will be implemented to ensure there are no negative impacts to water quality during the construction phase of the proposed development.</p>	<p>slight, negative residual effects.</p> <ul style="list-style-type: none"> <li>- No significant residual effects.</li> </ul> <p>- Loss of habitat effects assessed as permanent, imperceptible, negative residual effects.</p> <ul style="list-style-type: none"> <li>- Potential disturbance/displacement effects assessed as temporary to short-term, not significant, negative residual effects.</li> <li>- No significant residual effects.</li> </ul>
White-clawed crayfish	<ul style="list-style-type: none"> <li>- There will not be any direct habitat loss but work carried out at water crossings can impact water quality downstream and give rise to the potential for secondary effects. Assessed as permanent, slight and negative.</li> <li>- Potential for direct/indirect disturbance and/or displacement effects as a result of negative impacts to water quality. Assessed as temporary, short-term, slight and negative.</li> </ul>		<ul style="list-style-type: none"> <li>- Loss of habitat effects assessed as permanent, imperceptible, negative residual effects.</li> <li>- Potential disturbance/displacement effects assessed as temporary to short-term, not significant, negative residual effects.</li> <li>- No significant residual effects.</li> </ul>
Atlantic salmon	<ul style="list-style-type: none"> <li>- There will not be any direct habitat loss but work carried out at water crossings can impact water quality downstream and give rise to the potential for secondary effects. Assessed as permanent, moderate and negative.</li> <li>- Potential for direct/indirect disturbance and/or displacement effects as a result of negative impacts to water quality. Assessed as temporary, short-term, slight and negative.</li> </ul>		<ul style="list-style-type: none"> <li>- Loss of habitat effects assessed as permanent, imperceptible, negative residual effects.</li> <li>- Potential disturbance/displacement effects assessed as temporary to short-term, not significant,</li> </ul>

			negative residual effects.  - No significant residual effects.
<b>Operation</b>			
Habitats	- Significant impacts not anticipated. No additional habitat loss is required as part of the operational phase.	- Once the underground collector cable and access route is constructed there will be no static lighting in place during the operational phase.	- No significant residual effects.
Bats	- Disturbance or displacement effects to bats as a result of increased noise and human activity during the operational phase of the proposed development are assessed as short-term, not significant and negative.	- 110kV substation will have minimal lighting and where appropriate, external security lighting should be set on motion sensors. - No changes to the current lighting along the 110kV underground grid route and therefore this section will remain as it does at present.	- No significant residual effects.
Badger	- Potential disturbance/ displacement effects on badgers as a result of increased noise levels/human activity at the site are assessed as temporary, not significant, and negative.		- No significant residual effects.
<b>Do Nothing:</b>			
- If the proposed development does not progress, it is likely that the current land-use practices within the site and within the wider landholding, will continue.			
<b>Decommissioning:</b>			
- Grid cable and substation will remain a permanent part of the national grid infrastructure and therefore decommissioning is not foreseen. - Should decommission occur, impacts would be similar to those outlined during the construction phase.			
<b>Cumulative Effects:</b>			
- Majority of Dernacart Wind Farm development is located in a separate catchment (T1-T4, T7 and T8) and only two turbines are within the catchment area where the underground collector cable, access track and substation are to be located.			

- Only portion of the proposed development that falls within the catchment area that the consented Bracklone 110kV substation is located is a portion of the underground grid connection cable.
- The potential cumulative water quality and quantity effects of the proposed development during the construction and operational phase will not have significant effects on downstream watercourses due to the fact the proposed development is mainly located in a separate sub catchment.
- Implementation of environmental protection measures and drainage design of the proposed development, and the measures in the EIAR for the Dernacart Wind Farm and the Bracklone substation mitigation measures will prevent any significant cumulative effects.
- There are no other plans or projects in close proximity to cumulatively impact hydrology and hydrogeology.

**Table 9.9.1 – Consideration of Impacts, Significance and Mitigation Measures for Biodiversity**

### The Assessment: Direct and Indirect Impacts

9.9.19. I have examined, analysed, and evaluated Chapter 5 of the EIAR, all of the associated documentation (notably the Bat Data in Appendix 7), and submissions on file in respect of effects on biodiversity. I am satisfied that the applicant has demonstrated a good understanding of the baseline environment and the likely environmental effects of the development.

9.9.20. The proposed grid connection comprises an underground wind farm collector cable and access track; a 110kV substation; and a 110kV underground grid cable route. The proposed wind farm collector cable and access track passes through mainly mixed broadleaf woodland, conifer plantation, scrub and peatland over a distance of 2.45km. The proposed 110kV substation is located mainly on existing scrub, dense bracken and bog woodland and occupies approximately 1 hectare. The 110kV underground electrical cabling will be located within the public road network from the proposed 110kV substation to the consented Bracklone 110kV substation over a distance of c. 10.85km.

9.9.21. A total of 16 no. water crossings are proposed along the route; however, no instream works will be undertaken within any watercourse. Two crossings will be achieved by the addition of new clear span structures so as to leave the natural bed and banks undisturbed.

9.9.22. The proposed development was assessed in the EIAR for the following direct and indirect impacts:

- Habitat loss/ alteration
- Indirect water quality effects
- Direct species interference/ disturbance/ displacement
- Indirect species disturbance/ displacement (construction and operation)

9.9.23. Having regard to the application of standard best practice mitigation measures, as set out in the EIAR, the site-specific and species-specific measures referred to above, together with the scale and duration of the proposed works and the largely imperceptible impacts on terrestrial habitat, birds, mammals, and aquatic habitats and species, I am satisfied that significant effects on biodiversity will not arise. Habitats in the vicinity of the development site are mostly of 'local importance (lower

and higher value)', with only the River Barrow being of international importance. Horizontal directional drilling will be used to cross this river and therefore no instream works are proposed. Fauna utilising the site are common in the Irish context and all are of Local importance (lower value) apart from bats, badger, white-clawed crayfish, and Atlantic salmon, which are of Local importance (higher value).

- 9.9.24. Mitigation by design ensures a surface water management system forms an integral part of the project. This includes 20m setback buffers from any drainage network and watercourses. The substation layout also allows for the retention of perimeter hedgerow and trees. General best practice construction mitigation measures will be followed and the works will be supervised by an Ecological Check of Works to ensure that all environmental controls and mitigation are implemented in full.
- 9.9.25. Following the submission of concerns by the Department regarding the impact on the nearby badger sett, the applicant determined that this is an outlier sett and used sporadically, and therefore the rerouting of cable route to avoid the badger sett is not warranted. It is also confirmed that the proposed collector cable and access route will not encroach on the raised bog and that drainage associated with the proposed collector cable and access route, or any other part of the proposed development, will not have a significant impact on the bogland habitat.
- 9.9.26. In terms of cumulative impacts, the proposed development, in combination with the authorised Dernacart Windfarm and Bracklone Substation, will not give rise to impacts greater than slight on biodiversity. The majority of Dernacart Wind Farm is in a separate catchment. Thus, the potential cumulative water quality and quantity effects of the proposed development during the construction and operational phase will not have significant effects on downstream watercourses.

### Conclusion

- 9.9.27. Having regard to the foregoing, it is considered there are no significant impacts on biodiversity. Notwithstanding this, any potential for cumulative impact will be mitigated as follows:
  - No cumulative **Biodiversity** impacts with authorised Dernacart Windfarm and Bracklone Substation on instream aquatic habitat quality and flow regimes.Mitigation will nonetheless be implemented to protect water quality through works

scheduling, invasive species management, and measures to mitigate against the release of suspended solids, fuels and oils, and cements.

## 9.10. Land, Soil, Water, Air and Climate

### Issues Raised

- 9.10.1. A number of issues were raised in a submission pertaining to these environmental factors. It is considered that significant land take is required for the proposed development and that a list of authorised facilities should be provided from where aggregate materials for the construction phase will be sourced. There are concerns regarding runoff discharges during construction and with the carbon, climate and health impacts of wind farms.
- 9.10.2. Laois County Council highlight that during construction, the proposed development has the potential to lead to effects on hydrology and hydrogeology unless appropriate mitigation is applied. However, given the relatively small, localised scale of the works, the volume of runoff from the construction works and felling area is considered to be minimal in relation to the overall runoff to local water bodies. Dust emission magnitude is also considered by the Local Authority to be low to medium, and it is noted that standard best practice will be adhered to during construction to minimise fugitive dust emissions. It is also highlighted that the active construction area for the proposed grid connection will be small and transient in nature as it moves along the route. Construction noise is not predicted to cause any significant effects and it is noted by the Local Authority that noise emissions during operation from the substation is predicted to be neutral, imperceptible and long term at noise sensitive locations. In addition, wind turbine noise at nearest noise sensitive locations will dissipate significantly and therefore no cumulative noise effects are predicted.
- 9.10.3. The Environmental & Water Section of Offaly County Council has no objections to the proposed development subject to conditions relating to implementation of mitigation and recommendations outlined in the Flood Risk Assessment; surface water collection and disposal; foul sewerage; waste management; noise and dust suppression; and biodiversity and landscape.

9.10.4. In response to submissions, the applicant states that appropriate control measures have been integrated into the project to ensure there is no significant risk to surrounding watercourses. It is also noted that any required concrete and aggregate materials will be sourced from authorised facilities.

#### Examination, Analysis and Evaluation

9.10.5. Land and Soils are addressed in Chapter 6 and Water in Chapter 7 of the EIAR. Air Quality and Climate are covered in Chapter 8, and Noise and Vibration in Chapter 9.

9.10.6. Associated appendices to these chapters include the following:

- Appendix 4 – Flood Risk Assessment
- Appendix 5 – Peat Stability Assessment
- Appendix 6 – Noise Calibration Cert

9.10.7. The proposed development is located in a rural area and the existing land cover on the site consist of degraded bogs, marginal grassland, forestry and scrublands. Bedrock underlying the subject site is a combination of limestone and shale, and soils comprise cutover peat at the substation site and proposed route of the collector cable, with the proposed grid route connection underlain by a mosaic of soil and subsoil. The total site area is 90.8 hectares; however, the permanent land take for the substation and wind farm collector cable services road will be c. 3 hectares. The proposed substation sits at an elevation of 70m OD and the highest elevation of the proposed underground windfarm collector cable and access track is 80m OD.

9.10.8. Works that will affect Land, Soil, Water, Air and Climate include the construction of a new watercourse crossing at Cottoners Brook; earthworks and drainage infrastructure associated with the construction of the collector cable and new access road; cable trenching and ducting; aggregate placement, grading and compaction; installation of site drainage systems; bulk earthworks; laying of substation compound base and equipment foundations; and horizontal directional drilling under watercourse crossings.

9.10.9. Use of natural resources will include land take, aggregate and water. Approximately 2.8 hectares of commercial forestry will be felled to accommodate the underground collector cable and new access/service road from the windfarm to the 110kV substation. Replacement forestry will be planted at off-site approved lands. All

aggregate materials will be sourced from authorised facilities and water needs for construction activities will be limited to concrete truck chute washing, wheel wash, dust suppression and sanitary facilities and potable water.

- 9.10.10. The Peat Stability Risk Assessment involved the completion of 75 peat probes across the site, which determined peat depth ranging from 0.25m to 3.68m. Ground slope was found to be low across the entire site. The outcome of the assessment was that the risk of peat slide is negligible.
- 9.10.11. The main surface water feature in the study area is the River Barrow, which the proposed development will pass under at Kilnahown. The wind farm collector cable will also cross Cottoner's Brook, and the grid connection will also be installed under mapped watercourses including Clonygowan (IE\_SE\_14C510940); unnamed tributary of the River Barrow (IE\_SE\_14B010700); Rathmore 14 (IE\_SE\_14B010700); and River Barrow (IE\_SE\_14B010700). In total, the proposed development will cross 16 no. watercourses. The site is within the Barrow catchment. The substation and western half of the route is within the Barrow\_SC\_010 sub-catchment and the eastern part of the site is in the Barrow\_SC\_020 sub-catchment. The peat deposition areas to the west are within Barrow\_SC\_010. There is a hydrological pathway to the River Barrow and River Nore SAC through the local drainage system. This designated site is very sensitive in terms of potential impacts.
- 9.10.12. The proposed development is located within the Portlaoise (IE\_SE\_G\_107); and Bagenalstown Upper (IE\_SE\_G\_153) groundwater bodies. The collector cable, access road and 110kV Substation are located within a locally important aquifer - bedrock which is moderately productive only in local zones. Most of the 110kV grid connection cable route is within an aquifer described as regionally important - karstified (diffuse). The start and end sections of the grid connection cable are also located within a locally important aquifer - bedrock which is moderately productive only in local zones. The windfarm collector cable and access road and the proposed 110kV substation is underlain by aquifers of high vulnerability and the majority of the 110kV underground grid connection cable route is underlain by an aquifer of moderate vulnerability.

9.10.13. Chemical water quality monitoring is carried out by the EPA at five water quality monitoring stations in proximity to the proposed development. There are also Q value monitoring stations along the River Barrow nearby. The River Barrow (although not at risk through the proposed development site) is at risk of not achieving the WFD objectives. All surface waters within and near the proposed development site are of moderate sensitivity as indicated by the Biotic Indices of Q3 – Q4 at the sampling sites.

9.10.14. According to OPW fluvial flood mapping, there is a low to medium probability for flooding at the location of the wind farm collector cable and the proposed substation. The potential for flooding also exists along portions of the 110kV grid connection route at watercourse crossings. The Flood Risk Assessment carried out for the site concludes that the proposed substation is located within Flood Zone C.

9.10.15. A baseline air monitoring study was undertaken in order to characterise the existing ambient environment along the proposed grid connection route. Predictive calculations and impact assessments on likely construction phase air quality impacts and traffic impacts have been undertaken at the nearest sensitive locations to the construction work area. Sensitive receptors include houses and ecologically sensitive areas. There are more than 100 sensitive residential receptors living along the proposed grid connection route. EPA validated air monitoring data for 2022 was used to reflect ambient air quality data at the proposed development site.

9.10.16. Air temperature, rainfall and wind speed records were obtained from the nearest automatic weather station at Mullingar. Ireland's GHG emissions in 2022 were estimated to be 60.76 million tonnes carbon dioxide equivalent (Mt CO<sub>2</sub>eq) which is 1.9% lower than emissions in 2021. However, 47% of Ireland's Carbon Budget for 2021-2025 has been used in the first 2 years, and an extremely challenging annual reduction of 12.4% is required for each of the remaining years if Ireland is to stay within the Budget.

9.10.17. The main noise source from a substation during the operational phase is from the transformer(s), which is generally recognisable as a steady hum. Noise emissions from the grid connection and wind farm underground collector cable and access track will only occur during the construction phase. Baseline noise data was collected on 22nd and 23rd February 2024 for the purposes of quantifying the

existing noise environment at the nearest noise-sensitive locations. Six residential locations were identified for this purpose.

9.10.18. Table 9.10.1 below summarises the likely significant effects of the proposed development on Land, Soil, Water, Air and Climate as identified in the EIAR.

Potential Land, Soil, Water, Air and Climate Impacts	Potential Effects in the absence of Mitigation	Mitigation and Monitoring Measures	Residual Impact
<b>Construction</b>			
<b>LAND &amp; SOILS</b>			
Land Take	<ul style="list-style-type: none"> <li>- Permanent land take of c. 4ha for 110kV substation and wind farm collector cable.</li> <li>- Temporary land take of scrubland for construction compound.</li> <li>- Overall impact of land take assessed as negative, not significant, localised and permanent.</li> </ul>	<ul style="list-style-type: none"> <li>- Appointed contractor will review all methodologies, equipment, construction vehicle loads and safety procedures and produce temporary works designs which take into account peat stability.</li> <li>- Appropriate engineering controls, such as the installation of drainage system with settlement / stilling ponds, silt traps, check dams and interceptor drains, will be carried out in tandem with, and where possible, prior to, any excavation work to mitigate potential impacts.</li> <li>- Timing of the construction phase soil stripping and excavation works will take account of predicted weather, particularly rainfall.</li> <li>- Minimising the area of exposed ground.</li> <li>- Wheel wash facilities will be available on site and bunded container for the storage of fuels, lubricants, oils etc. Spill kits will be maintained on site.</li> <li>- Refuelling construction machinery and vehicles in designated refuelling areas using a prescribed refuelling procedure and implementation of fuel management plan.</li> </ul>	<ul style="list-style-type: none"> <li>- Not significant.</li> </ul>
Peat, Subsoil and Topsoil Excavation	<ul style="list-style-type: none"> <li>- Approximately 60,175m<sup>3</sup> of excavated soils and peats will be generated during the construction of the substation and wind farm underground collector cable and access track – to be retained and reused on site or stored in designated peat deposition areas.</li> <li>- Peat deposition areas selected by taking account of flat topography, good containment given local ground conditions, no risk of slippage due the flat topography and the avoidance of any natural drains.</li> <li>- Spoil excavated from the public road estimated to be approximately 15,305m<sup>3</sup>. 8145m<sup>3</sup> will be surface paving material that will be removed to a suitable approved waste facility.</li> <li>- Impact from peat, subsoil and topsoil excavation assessed as negative, moderate, localised and permanent.</li> </ul>	<ul style="list-style-type: none"> <li>- Appointed contractor will review all methodologies, equipment, construction vehicle loads and safety procedures and produce temporary works designs which take into account peat stability.</li> <li>- Appropriate engineering controls, such as the installation of drainage system with settlement / stilling ponds, silt traps, check dams and interceptor drains, will be carried out in tandem with, and where possible, prior to, any excavation work to mitigate potential impacts.</li> <li>- Timing of the construction phase soil stripping and excavation works will take account of predicted weather, particularly rainfall.</li> <li>- Minimising the area of exposed ground.</li> <li>- Wheel wash facilities will be available on site and bunded container for the storage of fuels, lubricants, oils etc. Spill kits will be maintained on site.</li> <li>- Refuelling construction machinery and vehicles in designated refuelling areas using a prescribed refuelling procedure and implementation of fuel management plan.</li> </ul>	<ul style="list-style-type: none"> <li>- Not significant.</li> </ul>

Geological Resources	<ul style="list-style-type: none"> <li>- Large amounts of aggregates and concrete will be used during construction that will be mainly resourced from authorised facilities.</li> <li>- Volumes not considered significant in a regional context and is assessed as neutral, not significant, localised and permanent.</li> </ul>	<ul style="list-style-type: none"> <li>- Drainage and treatment system will be managed and monitored, particularly after extreme rainfall events.</li> <li>- Stockpiles of stripped topsoil will be in locations with minimum trafficking to prevent damage and dusting.</li> <li>- Access track cleaning will be undertaken regularly during wet weather to reduce the volume of sediment runoff to the treatment system.</li> </ul>	- Not significant.
Accidental Spills & Contamination/ Pollution	<ul style="list-style-type: none"> <li>- Construction materials, including any hazardous substances such as fuel and oil, have the potential to affect the soil and geological environment should a spill occur. Accumulation of spills can be a pollution risk.</li> <li>- Cement/ concrete, wastewater and contaminated runoff can also pose threats to the land and soils environment.</li> <li>- Impact of accidental spillages assessed as negative, moderate, localised and temporary to short-term.</li> </ul>	<ul style="list-style-type: none"> <li>- Surface water management system will be constructed to attenuate run-off, guard against soil erosion and safeguard downstream water quality.</li> <li>- All soils, subsoils, peat and stone generated from excavation works will be retained on site within the development boundary and reused in bunding, landscaping and reinstatement of the temporary construction compound - excess spoil material will be stored on site in designated peat deposition areas.</li> </ul>	- Not significant/ slight.
Soil Erosion, Soil Compaction & Soil Stability	<ul style="list-style-type: none"> <li>- Soil erosion may occur on site due to earthworks, stockpiling of soils and extra surface water run-off.</li> <li>- Movement of construction vehicles may remove topsoil which may lead to soil erosion.</li> <li>- Soil compaction may occur due to movement of overland traffic, resulting in reduced rate of water infiltration and drainage, expulsion of air within the soil, and change in soil strength.</li> <li>- Slippages can lead to erosion, contamination, sedimentation, instability of the land, and waste generation. Stockpiled</li> </ul>	<ul style="list-style-type: none"> <li>- Compound, vehicles, stockpiled materials and heavy machinery will be removed once commissioning is complete.</li> <li>- Design measures in the form of a peat stability monitoring programme to further mitigate and manage risk.</li> <li>- All temporary cuts/excavations will be carried out such that they are stable or adequately supported and temporary works will be such that they do not adversely interfere with existing drainage channels/regimes.</li> </ul>	- Slight

	<p>material is at risk of slipping if no mitigation measures are implemented.</p> <ul style="list-style-type: none"> <li>- Impact of soil erosion, soil compaction and soil stability assessed as negative, moderate, localised, and short-term.</li> </ul>	<ul style="list-style-type: none"> <li>- Earthworks will be constructed to safe stable angles in accordance with the detailed design and best practice. Plant and materials will not be positioned or trafficked in a manner that would surcharge existing or newly-formed slopes.</li> </ul>	
Peat Instability & Failure	<ul style="list-style-type: none"> <li>- Peat Landslide Risk Assessment concluded that the calculated risk level associated with peat landslides at the proposed development side is negligible.</li> </ul>	<ul style="list-style-type: none"> <li>- Everyone on the site should be aware of peat stability and report any sign of misalignment in monitoring posts. The methodology of all civil works should be reviewed by the Geotechnical Engineer.</li> </ul>	- Not significant.
Tree Felling & Hedgerow Removal	<ul style="list-style-type: none"> <li>- Overall felling of approximately 2.8ha of commercial forestry required.</li> <li>- New entrance and access road for the proposed substation will require the removal of 45 metres of hedgerow and scrub vegetation.</li> <li>- Tree felling can cause extensive soil disturbance and expose underlying overburden. Use of machinery can adjust soil loading and compression, influencing surface water runoff and soil erosion rates.</li> <li>- Tree felling and hedgerow removal assessed as a negative, moderate, localised, and short-term.</li> </ul>	<ul style="list-style-type: none"> <li>- Following of general measures incorporated into the construction phase of the project to assist in the management of the risks for this site.</li> <li>- With the siting of infrastructure using mitigation by avoidance, higher risk parts of the site have been avoided and sightline monitoring is therefore considered appropriate.</li> <li>- Where removal of woodland and hedgerows is unavoidable, brash mats will be used where practicable to support vehicles on soft ground, reducing soil erosion and avoiding the formation of rutted areas, in which surface water ponding can occur.</li> </ul>	- Not significant.
<b>WATER</b>			
Earthworks and Tree Felling resulting in Suspended Solids Entrainment in Surface Waters	<ul style="list-style-type: none"> <li>- Drainage and seepage water, stockpiled excavated material, entrainment of sediment from the excavations, and erosion of sediment from emplaced site drainage channels.</li> </ul>	<ul style="list-style-type: none"> <li>- All tree felling will be undertaken in accordance with a tree felling licence, using good working practices as outlined by the Department of Agriculture, Food and the Marine (DAFM) Standards for Felling and Reforestation (2019).</li> </ul>	- Not significant

	<ul style="list-style-type: none"> <li>- Increase in sediment load leads to increased turbidity which in turn could affect the water quality and fish stocks of downstream water bodies.</li> <li>- Given the relatively small, localised scale of the works, the volume of runoff from the construction works and felling area will be minimal in relation to the overall runoff to local waterbodies.</li> </ul>	<ul style="list-style-type: none"> <li>- Temporary silt fencing/silt trap arrangements will be placed within existing roadside/field drainage features along the grid connection to capture any suspended sediments from the works area.</li> <li>- Soils, subsoils, peat and stone generated from excavation works will be retained on site and reused.</li> </ul>	
Excavation works resulting in an effect on groundwater levels and local wells and springs	<ul style="list-style-type: none"> <li>- Dewatering of water ingress into excavations has the potential to impact on local groundwater levels. Due to the shallow nature of the excavations and the connection cable route along existing roads and services, no effects on groundwater levels will occur.</li> </ul>	<ul style="list-style-type: none"> <li>- No mitigation necessary.</li> </ul>	- Imperceptible
Potential release of hydrocarbons during construction and storage	<ul style="list-style-type: none"> <li>- Accidental spillage during refuelling of construction vehicles with petroleum hydrocarbons is a significant pollution risk to groundwater, surface water and associated ecosystems, and to terrestrial ecology. The accumulation of small spills of fuels and lubricants during routine use can also be a pollution risk.</li> </ul>	<ul style="list-style-type: none"> <li>- No refuelling will take place near water resources and the welfare and storage units will have a built-in spill containment sump to prevent any liquid spills from escaping the container.</li> <li>- Storage areas will be bunded appropriately for the fuel storage volume for the time period of the construction and fitted with a storm drainage system and an appropriate oil interceptor.</li> <li>- Drainage systems will be constructed to prevent any contaminated runoff from entering the receiving environment.</li> </ul>	- Not significant
Release of cement based products	<ul style="list-style-type: none"> <li>- Entry of cement-based products into surface water runoff or seepage to groundwater represents a risk to the aquatic</li> </ul>	<ul style="list-style-type: none"> <li>- No batching of wet-cement products on site.</li> </ul>	- Not significant

	<p>and groundwater environment during grid connection works.</p> <ul style="list-style-type: none"> <li>- Batching of wet concrete on site and washing out of transport and placement machinery are the activities most likely to generate a risk of cement-based pollution.</li> </ul>	<ul style="list-style-type: none"> <li>- On-site washing of concrete truck barrels will not be allowed. Washing of the chutes at the rear of the trucks may be permitted in the designated and lined chute wash area.</li> <li>- Pour site will be kept free of standing water and plastic covers will be ready in case of sudden rainfall event.</li> </ul>	
Morphological changes to surface watercourses & drainage patterns from drilling, crossings and culverts	<ul style="list-style-type: none"> <li>- Diversion, culverting and bridge crossing of surface watercourses can result in morphological changes, changes to drainage patterns and alteration of aquatic habitats.</li> <li>- Construction of structures over water courses has the potential to significantly interfere with water quality and flows.</li> </ul>	<ul style="list-style-type: none"> <li>- Drainage system to be implemented and piping clean water under the service road allows the clean water to follow the course it would have taken before construction, thus mimicking the existing surface water over land flow pattern of the site and not altering the natural existing hydrological regime.</li> <li>- Horizontal Directional Drilling measures include drilling fluid containment; use of non-toxic drilling fluid; monitoring of drilling process; and containment of frac-out material and removal off site.</li> <li>- General best practice pollution prevention measures including protection of riparian zone; no stockpiling in constraints zone; no works in periods of high rainfall; employment of bog mats; buffer zones from watercourses; spill kits and silt fencing.</li> </ul>	- Not significant
Potential effects on hydrology and designated sites	<ul style="list-style-type: none"> <li>- Surface water effects on downstream designated sites are unlikely to be significant due to dilution/assimilation capacity effects over such distances and the implementation of drainage management and mitigation measures to be implemented on site.</li> </ul>	<ul style="list-style-type: none"> <li>- Above mitigation will provide the necessary protection to these hydrologically sensitive areas (drainage control measures, sediment control measures and mitigation measures related to spills/chemical releases).</li> </ul>	- Imperceptible

		<ul style="list-style-type: none"> <li>- Any impact on local streams and rivers would be very localised and over a very short time period.</li> <li>- There will be no significant dewatering; minimal ground disturbance is proposed; and no deep foundations are required.</li> </ul>	
<b>AIR QUALITY &amp; CLIMATE</b>			
Dust and Air Quality	<ul style="list-style-type: none"> <li>- Potential dust deposition, resulting in the soiling of surfaces.</li> <li>- Potential for visible dust plumes, which are evidence of dust emissions.</li> <li>- Potential for elevated PM10 and PM2.5 concentrations, as a result of dust generating activities on-site.</li> <li>- Potential for increase in concentrations of airborne particles and nitrogen dioxide due to exhaust emissions from diesel powered vehicles and equipment used on-site.</li> <li>- Earthworks primarily involving excavating material, haulage, tipping and stockpiling. May also involve levelling the site and landscaping.</li> <li>- Trackout involving the movement of dust and dirt from a construction/demolition site onto the public road network.</li> <li>- In the absence of mitigation, dust effects are predicted to be negative, not significant, short-term, localised and direct on sensitive receptors.</li> </ul>	<ul style="list-style-type: none"> <li>- Hard surface roads will be swept.</li> <li>- Any road that has the potential to give rise to fugitive dust must be regularly watered.</li> <li>- Vehicles exiting the site shall make use of a wheel wash facility.</li> <li>- Vehicles using site roads will have their speed restricted.</li> <li>- Regular inspection of public roads for cleanliness.</li> <li>- Material handling systems and site stockpiling of materials will be designed and laid out to minimise exposure to wind.</li> <li>- Adequate inspection of trucks to ensure no potential for dust emissions.</li> <li>- Regular maintenance of plant and equipment.</li> <li>- All site vehicles and machinery will be switched off when not in use.</li> </ul>	- Imperceptible
Traffic/ Vehicle Emissions	<ul style="list-style-type: none"> <li>- Construction stage traffic has been reviewed and a detailed air quality assessment has been scoped out as none of the road links impacted by the proposed</li> </ul>		- Imperceptible

	development satisfy the TII REM assessment criteria.		
Climate Change	- Potential for a number of greenhouse gas emissions to atmosphere during construction.		- Imperceptible
<b>NOISE</b>			
Construction Phase Substation Noise	- Resultant theoretical worst-case noise emission level at the nearest receptor, NSL1, is 59dB (A), which is below the construction noise thresholds of 65 dB (A) for daytime. Assessed as negative, not significant and temporary at the nearest NSLs.	- As there will be no significant effects there is no requirement for specific construction phase mitigation measures. - Working hours during the construction phase will be limited to 07:00 to 07:00 Monday to Friday and 07:00 to 01:00 Saturday. - Best practice in the form of BS5228 – 1&2:2009 + A1 2014, Code of Practice for the Control of Noise and Vibration on Construction and Open Sites will be adopted.	- Imperceptible
Construction Phase 110kV underground Grid cable	- Dwellings along the route will experience elevated noise levels from the excavation and road re surfacing machinery during the period it takes to pass the receptor. - Noise emissions are already elevated on the road due to passing traffic. - Noise emissions for a 30 to 50 tonne tracked excavator (main item of plant) is 79dB at 10m. - As the works are linear the noise levels will decrease quickly as the works proceed along the road. - Assessed as negative, slight to moderate and temporary at NSLs.	- The main control measures will be control of noise at source using the following methods in line with Clause 8 'Control of noise' of BS 5228-1:2009+A1:2014. - Best practice measures relating to staff training, shut down of machinery, plant start-up, maintenance of internal access road, orientation of plant and drop heights.	- Not significant
Construction Phase Wind Farm Collector	- Similar noise emissions to the grid connection works; however, works do not pass in close proximity to NSLs.		- Imperceptible

Cable and Access Track Noise	<ul style="list-style-type: none"> <li>- Predicted noise pressure level of tree felling at nearest NSL (350m) is 49 dB LAeq, 1hr which is well below the construction noise threshold limit, 65 dB LAeq, 1hr. Assessed as negative, not significant and temporary.</li> </ul>		
Construction Phase Traffic Noise	<ul style="list-style-type: none"> <li>- During the proposed 16 months construction duration, AADT volumes on the R423 would increase by 63 vehicles, including 33 heavy vehicles, which equates to an AADT increase of 2.3%.</li> <li>- Grid construction works would see AADT volumes increase by 6.8% on the L50183, 3.63% on the L3153, 0.9% on the R419, up to 2.2% on the L3158, and 0.6% on the R420.</li> <li>- During the six weeks peak construction heavy vehicle traffic generation, the peak daily increase in daily traffic volumes on the R423 generated by peak construction would be up to 396 vehicles, including up to 366 heavy vehicles, which equates to an increase of 16.6%.</li> <li>- Additional construction traffic assessed as negative, not significant and temporary at NSLs.</li> </ul>		<ul style="list-style-type: none"> <li>- Imperceptible</li> </ul>
<b>Operational Phase</b>			
Land & Soils	<ul style="list-style-type: none"> <li>- Significant effects not anticipated. No additional land take required as part of operational phase.</li> <li>- Small amount of granular material may be required to maintain access tracks – assessed as neutral, imperceptible,</li> </ul>	<ul style="list-style-type: none"> <li>- Use of aggregate from authorised quarries for use in road and hardstand maintenance.</li> <li>- Substation transformer and oil storage tanks will be contained in a concrete bund capable of holding 110% of the oil in the transformer and storage tanks.</li> </ul>	<ul style="list-style-type: none"> <li>- Not significant.</li> </ul>

	<p>localised, permanent.</p> <ul style="list-style-type: none"> <li>- Some construction traffic may be necessary for maintenance. Transformer in substation is oil cooled and there is potential for spills – assessed as negative, moderate, localised and temporary/ short-term.</li> </ul>		
Water	<ul style="list-style-type: none"> <li>- With all construction works being complete, drainage and runoff will be clean and therefore no impacts will occur.</li> <li>- Maintenance works would be very minor in scale.</li> <li>- Increase in the rate of surface water run-off due to the increase in hard surface areas at the proposed substation could lead to an increase in flood risk downgradient of the site.</li> </ul>	<ul style="list-style-type: none"> <li>- Mitigation measures will be put in place during any maintenance works throughout the operational phase, including drainage control measures, sediment control measures and mitigation measures related to spills/chemical releases.</li> <li>- Runoff control measures have been designed in the context of storm events of varying duration and intensity.</li> <li>- Site-specific drainage system will cater for the additional run off and reduce the velocities of flow.</li> <li>- Maintenance regime will include inspection of drains, cross-drains and pipes for any blockages; outfalls to existing field drains and watercourse; existing roadside swales and gullies for any obstructions; and progress of the re-establishment of vegetation.</li> <li>- Programme of surface water quality monitoring will be prepared in consultation with Inland Fisheries Ireland.</li> </ul>	<ul style="list-style-type: none"> <li>- Imperceptible</li> </ul>
Air Quality & Dust, Vehicle Emissions and Climate	<ul style="list-style-type: none"> <li>- Minor dust and exhaust emissions from maintenance vehicles (light goods vehicles) estimated at 10 - 12 visits per month.</li> </ul>	<ul style="list-style-type: none"> <li>- No mitigation measures.</li> </ul>	<ul style="list-style-type: none"> <li>- Imperceptible</li> </ul>

	<ul style="list-style-type: none"> <li>- Once operational, there will be no significant direct emissions to the atmosphere.</li> </ul>		
Substation Noise	<ul style="list-style-type: none"> <li>- Predicted noise emissions at the nearest NSL, NSL1 is 36 dB (A), which is below the operational targets when the proposed development is operating. In reality, noise levels will be lower than predicted due to the conservative assumptions used in the prediction methodology. Assessed as neutral, imperceptible and long-term.</li> </ul>	<ul style="list-style-type: none"> <li>- No mitigation required.</li> </ul>	<ul style="list-style-type: none"> <li>- Imperceptible</li> </ul>
Traffic Noise	<ul style="list-style-type: none"> <li>- Additional traffic during the operational phase will not increase by the order of 25%, which is required for a 1dB increase. Assessed as neutral, imperceptible and long-term.</li> </ul>		<ul style="list-style-type: none"> <li>- Imperceptible</li> </ul>
<b>Do Nothing:</b>			
<ul style="list-style-type: none"> <li>- The land-use along the proposed development route comprising forestry, road transport, agriculture and residential will remain unchanged. There will be no alteration of the existing land and soils regime.</li> <li>- There will be no alteration of the existing hydrological or hydrogeological regime.</li> <li>- Opportunity to offset Greenhouse Gas Emissions (GHG) from fossil fuel based energy sources would be lost.</li> <li>- Noise environment unlikely to change significantly.</li> </ul>			
<b>Decommissioning:</b>			
<ul style="list-style-type: none"> <li>- Grid cable and substation will remain a permanent part of the national grid infrastructure. In the event that the development is to be decommissioned, the removal of the aboveground components of the substation, along with the foundations and collector cable at depths of &lt;1m below ground surface will result in impacts similar to those associated with construction but of reduced magnitude.</li> <li>- During decommissioning, it may be possible to reverse or at least reduce some of the potential impacts caused during construction by rehabilitating the developed area, removing all structures backfilling, grading and reseeding.</li> <li>- Impacts such as possible soil compaction and contamination by fuel leaks will remain but will be of reduced magnitude.</li> <li>- Mitigation measures applied during decommissioning activities will be similar to those applied during construction, where relevant. Some of the impacts will be avoided by leaving elements of the wind farm infrastructure in place.</li> </ul>			

- Any hazardous material such as oils or lubricants will be removed in accordance with Waste Management standards.
- Dust generating and vehicle related emissions will be a lot less during the decommissioning phase.

**Cumulative Effects:**

- Potential for the Dernacart Wind Farm and Bracklone 110kV substation to be constructed at the same time, which may cause a slight cumulative effect as a result from the demand for fill material from local quarries.
- EIAR for Dernacart Wind Farm concluded that, with the implementation of appropriate mitigation, the residual impact on land and soils would be imperceptible.
- EIAR for Dernacart Wind Farm concluded that, with the implementation of appropriate mitigation, there would be no significant effects on hydrology and geohydrology. Majority of the wind farm (T1-T4, T7 and T8) is located in a separate catchment area (Barrow\_SC\_010) to the proposed development.
- Only portion of the proposed development that falls within the Barrow\_SC\_020 sub-catchment, within which the consented Bracklone 110kV substation is to be located, is a portion of the underground grid connection cable.
- Drainage plan was compiled as part of Bracklone substation project to prevent any significant impacts on hydrology and hydrogeology.
- Mitigation measures outlined in the EIAR for Dernacart Wind Farm, including the Construction Environmental Management Plan will ensure that the cumulative impact to nearby receptors will not be significant.
- Wind turbine noise from the nearest NSL to the permitted development substation will dissipate significantly over a 2.1km distance and therefore no cumulative noise effects are predicted.
- Given the very short timeframe that works will overlap with the Dernacart Wind Farm works, significant cumulative noise impacts are not anticipated.

**Table 9.10.1 – Consideration of Impacts, Significance and Mitigation Measures for Land, Soil, Water, Air and Climate**

### The Assessment: Direct and Indirect Effects

9.10.19. I have examined, analysed, and evaluated Chapters 6, 7, 8 and 9 of the EIAR, all of the Appendices to these Chapters and the associated Construction Environmental Management Plan and Flood Risk Assessment. I am satisfied that the applicant has provided sufficient survey data to enable assessment of likely effects on land, soil, water, air and climate. Further, having regard to the detailed assessment carried out, the location of the development, the authorised development in the area of the site and the proposed mitigation measures, which are standard good practice measures and which are proven to be effective in particular at preventing adverse effects on water flows, hydromorphology and water quality, I am satisfied that no significant, adverse direct, indirect, or cumulative effects on soils, geology and hydrogeology; hydrology; air quality; climate; and noise and vibration will arise as a consequence of the development.

9.10.20. The EIAR considers the potential land, soil, water, air and climate impacts could occur during the construction phase from land take; peat, subsoil and topsoil excavation; geological resources; accidental spills & contamination/ pollution; soil erosion, soil compaction and soil stability; peat instability and failure; tree felling & hedgerow removal; earthworks and tree felling resulting in suspended solids entrainment in surface waters; excavation works resulting in an effect on groundwater levels and local wells and springs; potential release of hydrocarbons during construction and storage; release of cement based products; morphological changes to watercourses and drainage patterns from drilling, crossings and culverts; potential effects on hydrology and designated sites; dust and air quality; traffic/ vehicle emissions; climate change; construction phase substation noise; construction phase 110kv underground grid cable; construction phase wind farm collector cable and access track noise; and construction phase traffic noise.

9.10.21. During the operational phase, it is considered that there is potential for impacts on land and soils; water; air quality, vehicle emissions and climate; substation noise; and traffic noise.

9.10.22. Other aspects under the Land, Soil, Water, Air and Climate were scoped out for further assessment because the effects of the proposed grid connection, individually and in combination with other scoped in plans and projects, would be neutral or there

would be no likely effects, e.g. sources of vibration during either the construction or operational phases.

- 9.10.23. Impacts on soils & bedrock could potentially occur from excavations potentially causing erosion, compaction, drainage and contamination. However, I would be in agreement that there will be no likely or perceptible impacts in this regard. Most of the proposed works will take place along public roads. The trench for the cabling will be shallow and narrow and all effects on soils will be relatively localised and temporary.
- 9.10.24. I would also concur that impacts on river waterbodies, groundwater bodies, and designated downstream water dependant sites would be imperceptible at worst when mitigation measures are implemented. The proposed grid connection will cross 16 no. watercourses; however, no instream works are proposed. The proposal will not impact on any waterbody nor cause a deterioration of the WFD status. No cumulative impacts on water are likely due to the different sub basins draining the site, implementation of the Construction Environmental Management Plan and mitigation for Dernacart Windfarm, including measures such as the storage of oils/fuels/chemicals in bunded containers.
- 9.10.25. There will be insignificant impacts on air locally and imperceptible increases in noise during construction and operational phases. I would also be in agreement that there is an imperceptible potential for dust soiling or human health impacts as a result of earthworks, construction or trackout activities given the scale and location of the proposed works. Noise emissions from the proposed substation will not be discernible at the nearest dwelling and I agree that cumulative impacts with the windfarm works will not be significant having regard to the separation distances, the temporary duration of construction works, and the small level of increases in cumulative construction dust and noise.
- 9.10.26. I consider that the only significant impact arising from the proposed development is the beneficial increase in renewable electricity generation when the proposed grid connection is considered cumulatively with the authorised Dernacart Windfarm. The authorised Dernacart Windfarm will avoid the emission of greenhouse gases which would have resulted from generating the same amount of electricity by fossil fuel

plant. Trees to be felled will be replanted elsewhere at an approved site and this will ensure no net loss of carbon sequestering trees.

### Conclusion

9.10.27. Having regard to the foregoing, it is considered the main significant direct and indirect effects on land, soils, water, air and climate are as follows:

- Beneficial cumulative impact of the proposed grid connection and Dernacart Windfarm on **Climate** through the supply of renewable electricity and reduction of emissions from fossil fuel burning for energy production every year for the lifetime of the windfarm.

## **9.11. Material Assets, Cultural Heritage and the Landscape**

### Issues Raised

9.11.1. The Department of Housing, Local Government and Heritage notes that no advance archaeological investigations have been carried out within the proposed development site to inform the EIAR, other than a walkover survey. Four conditions aligning with OPR sample conditions are recommended together with a programme of pre-development underwater archaeological assessment.

9.11.2. Transport Infrastructure Ireland states that any proposed works to facilitate component delivery shall comply with TII publications and shall be subject to Road Safety Audit, as appropriate. A full assessment of all structures on the national road network along the haul route shall be undertaken and any specific requirements for exceptional abnormal loads shall be addressed.

9.11.3. Laois County Council highlights that the proposed grid route adjoins Kilnahown Bridge over the River Barrow and Blackhall Bridge over the former course of the Grand Canal, both of which are on the National Inventory of Architectural Heritage. However, it is stated that there will be no direct physical impact on known recorded archaeology, upstanding known monuments, or buildings within the boundary limits of the proposed development footprint.

9.11.4. The landscape sensitivity rating of the proposed development lands is considered to be low and Laois County Council deem the lands to be sufficiently robust to accommodate a wide range of development.

9.11.5. In terms of material assets, Laois County Council state that while the increased volume of traffic on the local road network during construction would be substantial, this increase will be well within carrying capacity of most local road networks, with the R419 estimated at capacity. There is known underground electrical infrastructure, water and foul mains, and gas distribution pipes within the route of the proposed development and therefore the contractor shall undertake detailed surveys and scans to confirm the presence of any services.

9.11.6. The only issue pertaining to material assets, cultural heritage and the landscape within public submissions relates to the sourcing of aggregate materials. It is submitted that a breakdown of the quantities and sources of aggregates for access roads should be provided, together with the volumes of concrete, steel and other metals required.

9.11.7. In response to the issues raised, the applicant confirms that the Archaeological Impact Assessment outlines appropriate measures to ensure that any unknown or unrecorded archaeological features are properly managed should permission be granted. Any required concrete and aggregate materials will be sourced from authorised facilities and a list of potential quarries that may serve as sources for aggregate has been provided in the EIAR. It is also confirmed that the proposal will comply with TII Publications and will be subject to RSA, as appropriate. The applicant considers that the annual contribution in respect of the proposed development, as recommended by Offaly County Council, is excessive given that all works within the public road network will be fully reinstated, and once the development becomes operational, the associated traffic generated will be minimal.

#### Examination, Analysis and Evaluation

9.11.8. Chapters in the EIAR pertaining to material assets, cultural heritage and the landscape include Chapter 10 – Cultural Heritage, Chapter 11 – Landscape & Visual, Chapter 12 – Material Assets: Traffic & Transport, and Chapter 13 – Material Assets: Built Infrastructure. Associated appendices include the following:

- Appendix 3 – Traffic Management Plan

9.11.9. The former Garryhinch Demesne lies to the south of the R423 and the former demesne landscape is now developed as a golf course. Among the remnants of the former demesne landscape are an isolated ice-house (NIAH 14933011) and a tree

ring which is a Recorded Monument (OF033-014). The gateway to Clonyhurk Church (NIAH 14933007) is located at Garryhinch Crossroads and a post box (NIAH 14933009) is built into a wall on the southern side. Kilnahown Bridge (NIAH 14933012 and RPS 52-05 Offaly & 825 Laois) is located over the River Barrow and consists of a four-arched masonry bridge built of random rubble in c. 1795. Blackhall Canal bridge (NIAH 12800401 and RPS 542, Laois) is also a prominent cultural heritage feature. Canal Road leading from this bridge is the infilled former course of the canal. There are no known archaeological sites or monuments within the boundary or in the immediate vicinity of the proposed development.

9.11.10. Typical land cover along the proposed wind farm collector cable route includes modified agricultural land and forestry including trackways, degraded and cutaway peatland and conifer plantations. Along the proposed underground grid cable route, landcover consists entirely of local and regional road corridors, with grass or vegetated verges or sections of wall, footpaths, tree lines and hedgerow vegetation. The proposed substation site is located on flat and very wet land. There are a number of water features along the proposed grid route, including the River Barrow and most of these are well hidden by vegetation. As the route approaches Portarlington, it transitions through residential and commercial developments.

9.11.11. In terms of landscape character, the site of the proposed development in Co. Laois is within LCT2 “Lowland Agricultural Areas”, while also entering into LCT 5 ‘Urban Fringe Areas’. The assigned sensitivity rating for Lowland Agricultural Areas and Urban Fringes is low sensitivity, with the areas being described as having *“...capacity to generally accommodate a wide range of uses without significant adverse effects on the appearance or character of the area”*. There are no designated ‘Areas of High Amenity’ in proximity to the proposed development lands within Co. Offaly. The development lands for the proposed wind farm collector cable and access road are mostly located within low sensitivity areas, and a section of the route passes through or within proximity to an area classed to be of moderate sensitivity. There is only one designated amenity view and prospect of potential relevance to the proposed development. This view is from the N80 in the townlands of Stradbally with views towards Rock of Dunamase which is over 13km to the south of the proposed development site. There is a designated group of trees considered of significant value to the environment at Garryhinch Church.

9.11.12. Existing baseline traffic volumes on the surrounding local road network have been established from on-site traffic surveys and automatic traffic counter data. The proposed underground grid connection route extends from the proposed substation site to the permitted Bracklone substation site along the existing R423, L50183, L71762, L3153, R419, L3158 and R420 public roads. The R423, R419 and R420 are all currently operating within their estimated capacity. Speed limits along the road network ranges between 50 km/hr and 80 km/hr. In the wider area, the M7 is located to the south and the N80 is to the west.

9.11.13. In terms of future conditions, the R423 would continue to operate well within its estimated TII rural road link AADT capacity, for the predicted 2026, 2031 and 2041 AADT volumes. The R419 would continue to operate within its estimated TII rural road link AADT capacity, for the predicted 2026 AADT volumes, and in excess capacity in 2031 and 2041. The R420 would continue to operate well within its estimated urban/suburban road link capacity for future design years.

9.11.14. The scope of the assessment for built services includes electricity, telecommunications, gas, water supply infrastructure, sewage, construction waste and operational waste.

9.11.15. A number of grid infrastructure reinforcement projects are contained in the Transmission Development Plan (TDP) 2018-2027 for Co. Laois. This includes the Coolnabacky- Portlaoise 110 kV Line Upate. The proposed grid connection encounters underground electrical infrastructure lines along the L3158 until the intersection with the R420, and along the R420 towards Bracklone substation.

9.11.16. The Saorview coverage map indicates that the Saorview service coverage is currently good within and around the site. Mobile phone communications masts in the area are provided by Vodafone, Three, Eircom and Imagine Communications Ireland.

9.11.17. There are medium pressure gas distribution pipes along the section of the proposed underground grid route from R419 to the consented Bracklone 110kV substation. The nearest public water main is located on the R423 approximately 1.8km east of the proposed substation site. There is known water mains infrastructure within the carriageway along the grid connection route. Portarlington Wastewater Treatment Plant is located immediately north of the permitted Bracklone substation. The

wastewater network is located along the proposed 110kV grid cable route at the L3158 before passing an industrial facility in Portarlington. There are several waste collection, treatment, recovery, and disposal facilities within both Co. Laois and Co. Offaly.

9.11.18. Table 9.11.1 below summarises the likely significant effects of the proposed development on Material Assets, Cultural Heritage and the Landscape as identified in the EIAR.

Potential Material Assets, Cultural Heritage and Landscape Impacts	Potential Effects in the absence of Mitigation	Mitigation and Monitoring Measures	Residual Impact
<b>Construction</b>			
Cultural Heritage	<ul style="list-style-type: none"> <li>- No direct impact on upstanding known monuments or buildings.</li> <li>- Potential for impact on previously unidentified subsurface features and the subterrain build features of the Grand Canal.</li> </ul>	<ul style="list-style-type: none"> <li>- Appointed contractor will make provision for archaeological monitoring to be carried out under licence to ensure the full recognition of, and the proper excavation and recording of all archaeological soils features, finds and deposits which may be disturbed in the course of the works.</li> <li>- Mitigation to offset the risk of damage to Kilnahown Bridge and Blackhall Bridge, and subsurface elements of the former course of the Grand Canal, in particular will include recording, protection and monitoring of the sensitive fabric prior to and for the duration of the construction phase.</li> <li>- Condition of planning stating that the risk of inadvertent impact on hitherto unknown buried archaeological material can be mitigated by archaeological monitoring of ground works.</li> </ul>	<ul style="list-style-type: none"> <li>- Imperceptible/ not significant.</li> </ul>
Landscape and Visual	<p><i>Landscape:</i></p> <ul style="list-style-type: none"> <li>- Permanent physical landscape effects to the site's land cover from proposed substation and wind farm collector cable, which are not readily reversible.</li> <li>- No loss of significantly unique landscape features and the magnitude of construction</li> </ul>	<ul style="list-style-type: none"> <li>- Principal mitigation measures have been embedded in the design process to reduce as far as possible landscape and visual effects.</li> <li>- Proposed substation and wind farm collector cable and associated access road has been set back from the public road</li> </ul>	<ul style="list-style-type: none"> <li>- Moderate/ slight residual impact from change in landscape character due to removal of vegetation cover and excavations,</li> </ul>

	<p>stage landscape effects would be limited to the development site.</p> <ul style="list-style-type: none"> <li>- Magnitude of construction stage landscape effects is deemed to be medium within the immediate surrounds of the site which rapidly reduces to low and then negligible in the wider surrounds of the study area.</li> </ul> <p>Significance of construction impacts assessed to be moderate to slight within the immediate surrounds.</p> <ul style="list-style-type: none"> <li>- Laying of an underground cable within the road network corridor will cause temporary landscape impacts at the construction stage.</li> <li>- Only a small section of underground grid cable works will be worked on each day (75m – 100m) which reduces the extent of any impacts.</li> <li>- No direct or long-term effects on features of high sensitivity along the route – trees and adjacent walls and built heritage elements will be avoided and unaffected.</li> <li>- Significance of construction stage impacts deemed to be not significant to slight.</li> </ul> <p><i>Visual:</i></p> <ul style="list-style-type: none"> <li>- Magnitude of construction stage visual effects is deemed to be low within the immediate surrounds of the site, owing to the remote location and low number of resident visual receptors and the transient nature of visual receptors utilising the R423.</li> <li>- For the substation, visibility from most of the surrounding landscape will be limited by the existing vegetation in the local landscape.</li> </ul>	<p>network and would be sited in a visually contained section of the site.</p> <ul style="list-style-type: none"> <li>- Early engagement with the local authority to decide on how the sections of public road are managed during the laying of the underground grid trenching, so as to avoid disruption and any potential impacts on landscape and visual amenity.</li> <li>- Retention of existing hedgerow boundaries around the substation site</li> </ul>	<p>as well as visual impacts on sensitive receptors due to the introduction of new buildings and built structures.</p> <ul style="list-style-type: none"> <li>- Slight/ not significant impacts from underground grid cable.</li> </ul>
--	--	---	---

	<ul style="list-style-type: none"> <li>- Significance of construction stage impacts is deemed to be moderate-slight within the immediate surrounds.</li> <li>- Little or no visual change to the overall road corridor, and the visual change will be very localised and temporary.</li> </ul>		
Material Assets – Traffic & Transport	<ul style="list-style-type: none"> <li>- Temporary construction materials storage for the grid connection route along the public road network may be provided at existing site locations convenient to the works locations, as the 10.85 kms route works progress, which would be subject to the pre-approval of the planning authority prior to the work.</li> <li>- Expected peak staff would be up to 40 construction personnel, which would generate approximately 30 car and van trips, both to and from the site each working day, on the basis of an average vehicle occupancy rate of 1.33 personnel per vehicle.</li> <li>- 16 months construction would require the importation of a total of up to 11,584 loads of construction materials plus the removal of 814 loads from the grid connection works along the public road network to a licensed waste facility.</li> <li>- Highest 18 vehicles per hour during the six weeks substation formation and access road/track works.</li> <li>- Highest 36 vehicles per hour proposed construction works traffic volumes.</li> </ul>	<ul style="list-style-type: none"> <li>- A stop/go alternating direction temporary traffic management arrangement would be provided during grid connection works along the public road network, to facilitate the grid connection construction works.</li> <li>- Temporary construction traffic management arrangements would be provided in accordance with the DoT Traffic Signs Manual Chapter 8 Temporary Traffic Measures and Signs for Roadworks, with the prior approval of the planning authority.</li> <li>- Grid route is approximately 10.85 kms long with an expected 75 metres of works to be completed each day.</li> <li>- Road pavements would be regularly monitored and reinstated in accordance with the requirements of the planning authority.</li> <li>- Traffic Management Plan to be implemented on public roads.</li> <li>- The road surface of the public roads will be reinstated to the required standards.</li> <li>- Construction wheel wash facility will be provided at the construction compound to wash truck tyres leaving the construction site.</li> </ul>	<ul style="list-style-type: none"> <li>- Slight-moderate, local, temporary/ short-term.</li> </ul>

	<ul style="list-style-type: none"> <li>- During the proposed 16 months construction duration, the proposed construction works would increase AADT volumes on the R423 by 63 vehicles, including 33 heavy vehicles, which equates to an AADT increase of 2.3%.</li> <li>- During the six weeks peak construction heavy vehicle traffic generation, the peak daily increase in daily traffic volumes on the R423 generated by peak construction would be up to 396 vehicles, including up to 366 heavy vehicles, which equates to an increase of 16.6%, on the conservative assumption.</li> <li>- Predicted increases in AADT volumes on the existing R423, R419 and R420 Regional Roads, during the proposed development 16 months construction phase, are less than the volumetric threshold (5%) identified by TII in their TTA Assessment Guidelines for consideration of sensitive locations.</li> <li>- The R423 would continue to operate well within its estimated TII rural road link AADT capacity, for the predicted 2026 AADT volumes. The R419 would operate at its estimated TII rural road link AADT capacity. Expected construction duration for the grid connection works along the R419 is two to three days.</li> <li>- R420 would continue to operate well within its estimated urban/suburban road link capacity.</li> </ul>		
Material Assets – Built Services	<ul style="list-style-type: none"> <li>- It will be necessary to excavate close to existing underground services such as gas</li> </ul>	<ul style="list-style-type: none"> <li>- Waste removal from the site will be</li> </ul>	<ul style="list-style-type: none"> <li>- Imperceptible</li> </ul>

	<p>networks, telecommunications, or existing cables. The excavations could cause negative effects to built services infrastructure. Assessed as negative, not significant to imperceptible effect.</p> <ul style="list-style-type: none"> <li>- Proposed development will have no impact on water or wastewater infrastructure.</li> <li>- Services provider like Vodafone, Eircom, and Three are not in close proximity to the site but rather are situated in the wider area. Any excavation close to the existing telecommunication services infrastructure will likely result in a negative, slight to imperceptible effects.</li> <li>- Construction phase, waste materials such as hardcore, concrete, spare steel reinforcement, cable wires, shuttering timber, and building materials may be generated.</li> </ul>	<p>conducted by approved contractors and directed to permitted facilities for recycling or disposal.</p> <ul style="list-style-type: none"> <li>- All relevant bodies i.e. ESB Networks, EirGrid, Gas Networks Ireland, Eir, Laois County Council/Offaly County Council etc. will be re-contacted and drawings for all existing underground services along the proposed development sought prior to the commencement of the proposed development.</li> <li>- Contractor will undertake detailed surveys and scans of the proposed development site to confirm the presence of any services.</li> <li>- Contractor will be obliged to put measures in place to ensure that there are no significant interruptions to existing services and all services.</li> <li>- Construction works in the vicinity of utility networks will be carried out in accordance with the utility providers method statement and service providers Codes of Practice, as well as best practice in accordance with the CEMP.</li> </ul>	
<b>Operational Phase</b>			
Cultural Heritage	<ul style="list-style-type: none"> <li>- Only potential impacts will arise from the substation site.</li> <li>- No Recorded Monuments in close proximity to the substation site and other archaeological monuments are at sufficient distances to ensure that issues of visual impact do not arise.</li> </ul>	<ul style="list-style-type: none"> <li>- No mitigation</li> </ul>	<ul style="list-style-type: none"> <li>- Imperceptible/ not significant.</li> </ul>

	<ul style="list-style-type: none"> <li>- No operational impacts on archaeology or cultural heritage associated with the wind farm collector cable and access road and the underground 110kV grid cable.</li> </ul>		
Landscape and Visual	<p><i>Landscape:</i></p> <ul style="list-style-type: none"> <li>- Change in landscape type from a rural landscape to a built structure at substation and wind farm collector cable. Landscape is sufficiently robust to accommodate this development.</li> <li>- In the wider landscape, only slight/neutral, negative and long-term character effects would occur as the prevailing land use activities would be able to continue.</li> <li>- Proposed development would not materially conflict or contravene any policy objectives set out for the landscape character area.</li> <li>- Operational phase landscape effects where the proposed cable is laid within the road corridor are not likely to arise.</li> </ul> <p><i>Visual:</i></p> <ul style="list-style-type: none"> <li>- Initial visual impact of the built development on the landscape would be perceived as negative due to the change from a field to a built structure at the substation/ wind farm collector cable. Views will be substantially screened to potential visual receptors due hedgerow vegetation and trees.</li> <li>- Significance of operational impacts is deemed to be moderate to slight within the immediate surrounds of the substation site.</li> </ul>	<ul style="list-style-type: none"> <li>- Lighting at the substation should be motion activated lighting to avoid excessive light spillage beyond the boundary fencing.</li> <li>- Removal of hedgerow vegetation across the development footprint should be offset by the proposed planting of new hedgerow along the southern and western perimeters of the proposed substation site development to aid in the enhancement of existing perimeter screening.</li> </ul>	<ul style="list-style-type: none"> <li>- Moderate/ slight impacts associated with substation and wind farm collector cable due to change in character and visual impacts.</li> <li>- Imperceptible impacts associated with the underground grid cable.</li> </ul>

	<ul style="list-style-type: none"> <li>- Operational phase visual effects from the underground grid connection not likely to arise. Any maintenance operations are unlikely to result in visual effects and would be similar to temporary road works.</li> <li>- Consented Bracklone 110kV substation, which the proposed underground grid cable is to connect into, is currently under construction. Therefore, there is no possibility of cumulative landscape or visual impact.</li> </ul>		
Material Assets – Traffic & Transport	<ul style="list-style-type: none"> <li>- The proposed development will have up to two operational staff and will generate negligible operational traffic volumes. Occasional traffic will be generated by routine inspection and maintenance.</li> </ul>	<ul style="list-style-type: none"> <li>- No mitigation</li> </ul>	<ul style="list-style-type: none"> <li>- Imperceptible to no significant</li> </ul>
Material Assets – Built Services	<ul style="list-style-type: none"> <li>- No adverse impacts.</li> <li>- New substation and grid infrastructure will become a new national grid infrastructure asset facilitating the supply of renewable energy to the national grid. This is considered to be a significant positive impact.</li> </ul>	<ul style="list-style-type: none"> <li>- No mitigation</li> </ul>	<ul style="list-style-type: none"> <li>- Imperceptible</li> <li>- Positive significant (grid infrastructure)</li> </ul>
<b>Do Nothing:</b>			
<ul style="list-style-type: none"> <li>- Existing road and track network will be maintained and continue to function as a road; the main land uses in the study area – agriculture and residential – will continue; and coniferous forestry, will continue, with the cycle of felling and re-planting.</li> <li>- If the proposed development did not proceed, there would be no change to the existing material assets, other than ongoing maintenance of existing built services and road network.</li> </ul>			
<b>Decommissioning:</b>			

- As appropriate measures to mitigate potential impact on the cultural heritage and archaeology will have been implemented in the course of the construction phase, no issues pertaining to cultural heritage and archaeology are likely to arise during the decommissioning phase.
- Traffic and transportation effects would be similar to construction phase albeit at a lesser extent should decommissioning occur.
- Potential impacts associated with the decommissioning phase regarding water, wastewater activity and waste will mirror those of the construction phase but to a lesser extent.

**Cumulative Effects:**

- No cumulative impacts on archaeology and cultural heritage.
- Potential for the permitted Dernacart Wind Farm and the proposed 110kV substation and wind farm collector cable to be constructed at the same time which may cause a slight cumulative landscape and visual effect as a result of changes due to removal of vegetation cover and increased activity in the area. However, additional construction of the proposed development unlikely to be distinguishable.
- There would be no additional cumulative increase in predicted traffic volumes assess in the EIAR for Dernacart Windfarm, with the subject proposed development, as the Dernacart Wind Farm EIAR included the permitted substation and underground grid connection to the Bracklone substation.
- R420 would continue to operate well within its estimated urban/suburban road link capacity, with the cumulative development of Bracklone Substation.
- On the basis of the EPA EIAR Guidelines, the cumulative impacts with other proposed developments will be slight to moderate negative effects and temporary to short term.
- During the construction phase, there may arise some cumulative effects on built infrastructure – not considered significant.

**Table 9.11.1 – Consideration of Impacts, Significance and Mitigation Measures for Material Assets, Cultural Heritage and the Landscape**

### The Assessment: Direct and Indirect Effects

9.11.19. I have examined, analysed, and evaluated Chapters 10, 11, 12 and 13 of the EIAR, all of the Appendices to these Chapters and the Construction Environmental Management Plan. I am satisfied that the applicant has provided sufficient survey data to enable assessment of likely effects on archaeology, architectural heritage and cultural heritage; traffic and transport; material assets; and landscape and visual. Further, having regard to the detailed assessment carried out, the location of the development, the authorised development in the area of the site and the proposed mitigation measures, which are standard good practice measures and which are proven to be effective in particular at preventing adverse effects on archaeology and disruption to traffic/ transport and utilities, I am satisfied that no significant, adverse direct, indirect, or cumulative effects on the environmental factors will occur in the long term.

9.11.20. In terms of material assets, the main sensitive aspect is the public road and the potential for damage to local road pavements, boundaries and buried structures/ utilities. I concur that other aspects of material assets will not be significantly affected by the proposed development. Subject to mitigation, there will be no impacts on underground utilities and a significant positive impact will occur from the installation of new electricity infrastructure.

9.11.21. Existing traffic volumes in the surrounding road network are low and the proposed grid connection will be constructed in 75m sections. I agree that the impact on local road pavements, boundaries and buried structures will be insignificant. No public roads will be widened and there is sufficient road capacity for all deliveries. A Traffic Management Plan is appended to the Material Assets chapter of the EIAR. This report sets out duties and responsibilities, traffic management and control procedures, and proposed lane closures, site access, and road pavement monitoring details. Traffic studies carried out for the proposed development indicate that while the increased traffic volume on the local road network during the construction phase would be substantial, this increase will be well within the carrying capacity of most of the local road networks. Furthermore, development traffic effects on the local road networks will be temporary and will have no effect on the capacity of the road network in the long term.

9.11.22. There is no potential for significant impacts on archaeology, architectural heritage and cultural heritage during construction of the proposed development. There are no Recorded Legally Protected Sites in the construction works area, and any new above-ground structures only relate to the proposed substation. Thus, there will be no visual impact on the setting of any heritage site. Notwithstanding this, monitoring will be carried out to ensure the compliance of the construction works with the Construction Environmental Management Plan, with engagement with archaeologists, as necessary.

9.11.23. A number of architectural heritage sites were identified along the proposed grid connection route. I would agree that there will be no significant impact on these features having regard the proposed mitigation. In particular, mitigation to offset the risk of damage to Kilnahown Bridge and Blackhall Bridge, and subsurface elements of the former course of the Grand Canal, will include recording, protection and monitoring of the sensitive fabric prior to and for the duration of the construction phase.

9.11.24. The landscape surrounding the proposed development has a medium-low sensitivity. I concur that the proposed substation will be adequately screened and the overall intensity and human activity during construction will be insignificant and very occasional during operation. The landscape and visual impacts of the proposed development will therefore be imperceptible to slight. Overall, the effects along the cable route will be brief and fully reversible through reinstatement.

### Conclusion

9.11.25. Having regard to the foregoing, it is considered the main significant direct and indirect effects on material assets, cultural heritage and the landscape are as follows:

- Significant positive impacts on **Material Assets – Built Services** by way of construction of new electricity grid infrastructure.
- Potential for adverse impacts on **Material Assets – Traffic and Transport** by way of increased traffic volumes on the local road network during construction. This increase will be well within the carrying capacity of most local road networks and will be temporary, with no effect on the capacity of the road network in the long term. Traffic impacts will also be mitigated by the Traffic Management Plan,

which sets out duties and responsibilities, traffic management and control procedures, and proposed lane closures, site access, and road pavement monitoring details.

## **9.12. Risks Associated with Major Accidents and/ or Disasters**

- 9.12.1. The risks of major accidents and/ or disasters is assessed at a number of locations in the EIAR. A general assessment is provided in Section 2.12 where it is concluded that there is no risk for the project to cause major accidents and/or disasters and that the proposed project is not vulnerable to potential disasters/accidents, including natural disasters and man-made disasters. In this regard, it is noted that the nature of construction works is standard and not particularly complex, with each element of the proposed project constructed in accordance with the Safety and Health at Work Act 2005 and any subsequent regulations or amendments, and with the requirements of the Health and Welfare at Work (Construction) Regulations, (SI 291 of 2013), any subsequent amendments and any other relevant Health and Safety legislation to ensure that the construction areas, site environs and public roads remain safe for all users. Monitoring and control during both construction and operational phases will also provide a level of safety that reduces the potential risk of major accidents.
- 9.12.2. There is potential for fire and/ or ground contamination, in particular at the substation, from the presence of electrical generating equipment and electrical cables along with the storage and use of various oils (diesel fuels, lubricating oils, hydraulic fluids). Lightning and surge protection will cover the electrical equipment at the substation and strict and exact operational protocols will provide for the elimination of risk. Fire risk is addressed in Section 2.4.10 of the EIAR. In the event of an electrical anomaly within the compound, it is stated that control systems will provide measures to reduce the chance of fire ignition and should a fire develop, limited combustibility of the substation structure and contents would reduce the risk of fire spread to adjacent units, surrounding vegetation or adjacent properties.
- 9.12.3. The risk of downstream flooding is low due to the small increase in run-off and the proposed drainage design, which will ensure that run-off will replicate predevelopment greenfield conditions. Given the relatively low lying site topography,

there is no particular risk of land slide. A Flood Risk Assessment and a Peat Stability Risk Assessment have been conducted for the proposed development. The Flood Risk Assessment identifies the site as being within Flood Zone C, which is considered appropriate for the proposed development. The proposed development will not have an adverse impact on flooding elsewhere and it is noted that there is no evidence of previous flooding on site. The Peat Stability Risk Assessment included a quantitative risk assessment factor of safety analysis (Infinite Slope Stability Analysis), and application of the Peat Slide Hazard Rating System (PHRS) (Nichol, 2006), which concluded that the risk level is negligible. A peat stability monitoring programme during construction has been proposed in order to further mitigate and manage risk.

9.12.4. Overall, I am satisfied that given the nature of the proposed development, and the mitigation measures proposed, together with the low probability of a major accident/natural disaster, it is not likely that significant effects on the environment would arise in this regard. There are no cumulative impacts that would combine to result in significant residual environmental impacts.

### **9.13. Cumulative Impacts and Environmental Interactions**

9.13.1. The proposed grid connection is part of a whole wind farm project, which includes the authorised Dernacart Wind Farm for up to 8 no. wind turbines with a tip height of up to 185m and all associated foundations and hardstanding areas; 1 no. on-site electrical substation; all associated underground electrical and communications cabling connecting the turbines to the proposed on-site electrical substation; provision of new site access tracks and upgrading of existing access tracks and associated drainage; erection of 1 no. permanent meteorological mast; and works to facilitate the delivery of turbines adjacent to the N80 (ABP-310312-21). Permission was also granted by Laois County Council (Reg. Ref: 20638) for a 110 kV/MV electricity station on a c. 0.74 ha site at Bracklone. The purpose of the proposed development is to connect the authorised Dernacart Wind Farm to the National Grid via the permitted 110kV Bracklone substation.

9.13.2. A scoping exercise was carried out of projects and activities for inclusion in cumulative evaluations. This included a desk study to identify other existing and

proposed projects where potential cumulative impacts could occur with the proposed substation and grid connection development. Key criteria considered for this exercise were the types of potential impacts associated with the proposed development, common resources affected, receptors impacted, project timeframes (where available) and scale of development.

- 9.13.3. A total of 12 existing/ approved projects were considered in the EIAR for cumulative effects. This included the consented Dernacart Wind Farm and the Bracklone 110kV substation. A further 19 approved developments in the wider area were also considered for cumulative effects.
- 9.13.4. There is potential for cumulative noise, dust, and traffic impacts associated with both the permitted Dernacart wind farm and Bracklone substation, as construction activities for these projects may coincide with the proposed development. It is noteworthy, however, that works have already commenced on the Bracklone substation and therefore any cumulative construction effects in respect of this development are unlikely. It should also be noted that proposed grid works along the public road will be carried out in 75-100m sections each day and therefore no significant construction stage cumulative impacts are likely.
- 9.13.5. Cumulative noise and air quality impacts during the construction phase will not be significant following implementation of mitigation measures for each respective project. There will also be considerable separation between the authorised Dernacart Wind Farm project and proposed grid connection, which in itself will mitigate any potential cumulative construction noise and dust impacts. There are no predicted adverse operational stage cumulative impacts.
- 9.13.6. In terms of cumulative impacts on the water environment, it is noted that most of the consented wind farm (T1-T4, T7 and T8) is located in a separate catchment area (Barrow\_SC\_010) to the proposed substation and grid connection development. Only two turbines are located within the Barrow\_SC\_030 catchment area where the underground collector cable, access track and substation are to be located. The consented Bracklone 110kV substation is within the Barrow\_SC\_020 sub-catchment and only a portion of the proposed grid connection also falls within this catchment. The EIAR for the Dernacart Wind Farm concluded that, with the implementation of appropriate mitigation, there would be no significant effects on hydrology and

hydrogeology. A drainage plan was also included as part of Bracklone substation project to prevent any significant impacts on hydrology and hydrogeology. There are no other plans or projects in close proximity to cumulatively impact on downstream watercourses.

9.13.7. Other environmental factors were considered for cumulative impacts. With exception of the Dernacart Wind Farm and the Bracklone substation, for which the cumulative impacts have already been assessed, there are no other plans or projects in proximity to the proposed development site which may cause cumulative impacts on the land and soils environment, cultural heritage, material assets and landscape and visual. A combination of the authorised wind farm and the proposed development would lead to more industrial elements in the landscape. However, these elements will be visually contained and will not result in a change to the overall rural nature of the area. In response to a third party submission, the applicant confirmed that an application for a wind farm at Garryhinch has not been submitted, and if an application is submitted in the future, any cumulative effects between that proposal and the current proposal will be considered at that time.

9.13.8. Finally, the proposed substation, collector cable and grid connection all serve to connect the permitted Dernacart Wind Farm to the electricity grid, thereby providing a source of zero carbon, climate resilient and sustainable electricity supply. This is a significant positive, long-term cumulative impact.

9.13.9. Chapter 14 of the EIAR sets out the cross-factor interactions between environmental factors during the construction and operational stages of the proposed development. The key interactive impacts are as follows:

- Population and Human Health – potential interactive impacts through temporary nuisance through construction dust and noise; operational noise from the substation and wind farm; impacts from water pollution; adverse operational phase visual impacts in the landscape; and increased construction traffic. These interactive affects are not significant. The contribution to the electricity supply with the provision of a clean energy source is considered a positive effect.
- Biodiversity – effects on soils, water and air could result in potential cross-factor effects through habitat loss, fragmentation or degradation, loss of flora species, physical injury, aquatic habitat degradation, and disturbance and displacement.

These interactive affects will not be significant and will be further mitigated by measures set out in the EIAR and NIS.

- Land and Soils - potential for previously unrecorded sites of archaeological interest to be disturbed during excavation works. Effects will be minimised or avoided through specific mitigation measures.
- Landscape and Visual - potential to alter the landscape setting of recorded sites and monuments in the area. The proposed substation and grid development is not situated within a designated landscape and therefore the interrelated effects will not be significant.

9.13.10. I agree that the likely significance of these combined and interrelated impacts has been assessed, and mitigated where required, within the individual assessment chapters. Overall, I would be satisfied with the methodology provided within the EIAR for interactions and cumulative assessment. Construction stage interactions will mostly be short term and any mitigation for one environmental factor can be applicable to other environmental factors. The subject development is assessed with all the other relevant plans and projects in the wider area, and overall, this provides for a robust and complete assessment of the proposed scheme by itself and any cumulative interactions with projects and activities in the area. I am therefore satisfied that sufficient information has been acquired to fully inform the cumulative assessment of the proposed development with other relevant projects and activities.

#### 9.14. **Reasoned Conclusion**

9.14.1. Having regard to the examination of environmental information contained above, and in particular to the EIAR and supplementary information provided by the developer, and the submissions from third parties and from prescribed bodies in the course of the application, it is considered that the main significant direct and indirect effects of the proposed development on the environment are as follows:

- Minor and temporary impact on **Population and Human Health** due to the generation of additional traffic on local road networks during construction with associated noise and safety implications. This will be mitigated by measures set out in the CEMP and Traffic Management Plan.

- No cumulative **Biodiversity** impacts with authorised Dernacart Windfarm and Bracklone Substation on instream aquatic habitat quality and flow regimes. Mitigation will nonetheless be implemented to protect water quality through works scheduling, invasive species management, and measures to mitigate against the release of suspended solids, fuels and oils, and cements.
- Beneficial cumulative impact of the proposed grid connection and Dernacart Windfarm on **Climate** through the supply of renewable electricity and reduction of emissions from fossil fuel burning for energy production every year for the lifetime of the windfarm.
- Significant positive impacts on **Material Assets – Built Services** by way of construction of new electricity grid infrastructure.
- Potential for adverse impacts on **Material Assets – Traffic and Transport** by way of increased traffic volumes on the local road network during construction. This increase will be well within the carrying capacity of most local road networks and will be temporary, with no effect on the capacity of the road network in the long term. Traffic impacts will also be mitigated by the Traffic Management Plan, which sets out duties and responsibilities, traffic management and control procedures, and proposed lane closures, site access, and road pavement monitoring details.

## 10.0 Appropriate Assessment

10.1. The areas addressed in this section are as follows:

- Compliance with Articles 6(3) of the EU Habitats Directive
- Geographical Scope and Main Characteristics
- Screening the need for Appropriate Assessment
- The Natura Impact Statement and associated documents
- Appropriate Assessment of implications of the proposed development on each European site

10.2. **Compliance with Articles 6(3) of the EU Habitats Directive:** The Habitats Directive deals with the Conservation of Natural Habitats and of Wild Fauna and

Flora throughout the European Union. Article 6(3) of this Directive requires that any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. The competent authority must be satisfied that the proposal will not adversely affect the integrity of the European site.

- 10.3. The proposed development comprising the development of underground electrical cabling linking a wind farm (to be constructed) to a substation (under construction), with associated and ancillary site development works is not directly connected with or necessary to the management of any European site and is therefore subject to the provisions of Article 6(3).

#### **10.4. Geographical Scope and Main Characteristics**

- 10.4.1. The proposed development comprises the construction of a 110kV substation and underground grid connection for the purposes of connecting the consented Dernacart Wind Farm (ABP 310312-21) to the National Grid. The proposal will involve the laying of underground cabling between the wind farm site to the proposed substation over a distance of 2.45km along a 5.5m wide stone access track; the laying of 110kV underground electrical cabling from the proposed substation to the consented Bracklone substation over a distance of 10.85km; new clear span and box culvert/piped water course crossings; peat/spoil deposition areas; and all associated felling, drainage and ancillary works necessary to facilitate the development. The expected construction timeline is 16 months.
- 10.4.2. A total of 16 water crossings are proposed, four of which are along the wind farm collector cable and access road, one at the site entrance to the substation, and the remaining 11 along the 110kV underground cable route. No in-stream works are proposed, with two crossings being achieved by new clear span structures. Horizontal directional drilling is also proposed.
- 10.4.3. The site of the proposed substation currently comprises a mix of agricultural grasslands, scrub and marginal lands with mature and semi mature trees and bound on all sides by existing mature hedgerows. The proposed access track and

underground electrical cabling from the Dernacart Wind Farm traverses commercial forestry plantation, scrub and peatland. The 110kV grid connection will be installed within the public road. Corine (2018) landcover mapping shows that the proposed development passes mainly through pastures, with pockets of non-irrigated land and mixed forest. Peat bogs are situated to the west and discontinuous urban fabric to the east.

- 10.4.4. The site is located within the Water Framework Directive Barrow (14) Catchment and the Barrow\_SC\_030 sub-catchment. The proposed substation is within the Barrow\_050 river sub-basin and the underground collector cable and access track are within the Cottoners Brook \_010 and Barrow\_050 river sub basins. The underground gird connection is within the Barrow\_060, Clonygowan\_010, Barrow\_070 and Barrow\_080 river sub basins.
- 10.4.5. Habitats along the proposed development route include Other artificial lakes and ponds (FL8) at one of the two peat deposition areas to the west; Mixed Broadleaved Woodland (WD1) at the western-most portion of the grid route; Depositing/lowland river (FW2) being the watercourses draining the site; Conifer plantation (WD4) within parts of the site and the wider area; Scrub (WS1) at the underground collector cable and access track and within the proposed substation lands; Cutover bog (PB4) through which the underground collector cable and access track passes through for a short distance; Cutover bog [Recolonising] (PB4 [R]) and Mixed broadleaf/conifer woodland (WD2) through which the underground collector cable and access track passes through on a few occasions; Scrub (WS1)/ Dense bracken (HD1) along the underground collector cable and access track and within the 110kV substation area; Spoil and bare ground (ED2) and Mosaic – Cutover bog (PB4)/ Scrub (WS1)/ Wet grassland (GS4) along the mid-section of the underground collector cable and access track; Drainage ditches (FW4), which are common throughout the site; Bog woodland (WN7)/ Scrub (WS1) in the north-eastern corner of the substation site; Scrub (WS1)/ Wet grassland (GS4) along the cutover bog and alongside bog woodland; Improved agricultural grassland (GA1) in the substation area; Treeline/Hedgerow (WL1/WL2) and Drainage ditches/ Treeline/ Hedgerow (FW4/ WL1/WL2), which are common in the area; Stone walls and other stonework (BL1) at the River Barrow crossing; and Buildings and artificial surfaces (BL3)), which are common along the route. The total site area is 90.8 hectares and the permanent

land take for the substation and wind farm collector cable services road will be c. 3 hectares.

- 10.4.6. Ecological field surveys were undertaken at the proposed development site to establish ecological features and resources, and any rare/protected species and habitats. Bird species were observed and evidence of non-volant mammals and otter were searched for. Watercourses were surveyed and a marsh fritillary survey at wet grassland areas was carried out. Camera traps and static bat units were set up and the site was inspected for bat roost suitability. An invasive alien species survey took place and the area for the proposed peat/ spoil deposition were also inspected. All surveys took place between 18<sup>th</sup> July 2023 and 20<sup>th</sup> April 2024.
- 10.4.7. Records for rare and protected flora include marsh saxifrage and lesser centaury in Hectads N50 and N51, within which the 110kV underground grid cable route is located. However, the underground cable route will be within the existing public road and the artificial nature of this habitat would not support these two species. Large white-moss was not observed along the underground wind farm collector cable and access road but may be present.
- 10.4.8. No evidence of otter was recorded during walkover surveys. Apart from Cottoner's Brook and the River Barrow, the watercourses in the study area have little/no potential for salmonids and have limited capacity to support adequate biomass for otter. Cottoner's Brook likely supports a population of brown trout and the River Barrow is the most important watercourse for salmon. Clonygown and Rathmore Streams may also have a small population of brown trout and the River Barrow, Cottoner's Brook, Clonygown and Rathmore Streams likely support brook lampreys, and possibly European eel.
- 10.4.9. Kestrel (*Falco tinnunculus*), snipe (*Gallinago gallinago*) and woodcock (*Scolopax rusticola*) were observed to have breeding territories within the study area from bird surveys and results for Dernacart Wind Farm. No hen harriers were recorded during the winter roost checks.
- 10.4.10. The nearest European Site is the River Barrow and River Nore SAC, which the proposed development crosses at Kilnahown Bridge. Mountmellick SAC and Slieve Bloom Mountains SAC are 1.84km and 8.69km from the site respectively. Slieve Bloom Mountains SPA is approximately 5.45km from the site.

## 10.5. Screening the Need for Appropriate Assessment

10.5.1. The first test of Article 6(3) is to establish if the proposed development could result in likely significant effects to a European site. This is considered stage 1 of the appropriate assessment process i.e., *screening*. The screening stage is intended to be a preliminary examination. If the possibility of significant effects cannot be excluded on the basis of objective information, without extensive investigation or the application of mitigation, a plan or project should be considered to have a likely significant effect and Appropriate Assessment carried out.

10.5.2. Having regard to the information and submissions available, the nature, size and location of the proposed development and its likely direct, indirect and cumulative effects, the source pathway receptor principle and sensitivities of the ecological receptors, the European sites set out in Table 1 below are considered relevant to include for the purposes of initial screening for the requirement for Stage 2 appropriate assessment on the basis of likely significant effects. A total of four European sites are included (3 SACs & 1 SPAs) for initial screening.

10.5.3. European sites considered for Stage 1 screening:

European site (SAC/SPA)	Site code	Distance to Proposed Development	Connections (source, pathway, receptor)	Considered further in Screening (Y/N)
River Barrow and River Nore SAC	002162	0	Possible connections	Y
Mountmellick SAC	002141	1.84km	No potential connections	N
Slieve Bloom Mountains SAC	000412	8.69km	No potential connections	N
Slieve Bloom Mountains SPA	004160	5.45km	No potential connections	N

Table 1 – Summary Table of European sites considered in Screening for Appropriate Assessment

10.5.4. The applicant's AA Screening Report concluded that there is potential for effects on the qualifying interests of the **River Barrow and River Nore SAC**.

10.5.5. Having reviewed the documentation and submissions on file, I am satisfied that the information allows for a complete examination and identification of any potential

significant effects of the development, alone, or in combination with other plans and projects on European sites. Based on my examination of the AA Screening Report and other supporting information, the NPWS website, aerial and satellite imagery, the scale of the proposed development and likely effects, separation distances and functional relationships between the proposed scheme and the European sites, their conservation objectives, and taken in conjunction with my assessment of the subject site and the surrounding area, I conclude that a Stage 2 Appropriate Assessment is required for the following European site in view of the conservation objectives of this site:

- River Barrow and River Nore SAC

10.5.6. Table 2 below provides a screening summary matrix where there is a possibility of significant effects from the proposed development, or where the possibility of significant effects cannot be excluded without further detailed assessment.

<p><b>Site name</b></p> <p><b>Qualifying Interest feature</b></p>	<p><b>Is there a possibility of significant effects in view of the conservation objectives of the site?</b></p> <p><b>General impact categories presented</b></p>		
	Habitat loss/ modification	Water quality and water dependent habitats (pollution)	Disturbance/ displacement barrier effects
<p><b>River Barrow and River Nore SAC (002162)</b></p> <p><i>Qualifying Interests:</i></p> <p>Estuaries [1130]</p> <p>Mudflats and sandflats not covered by seawater at low tide [1140]</p> <p>Reefs [1170]</p> <p>Salicornia and other annuals colonising mud and sand [1310]</p> <p>Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330]</p> <p>Mediterranean salt meadows (<i>Juncetalia maritimii</i>) [1410]</p> <p>Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation [3260]</p>	<p>Potential for indirect impact to QI habitat through loss or degradation of terrestrial or aquatic habitats, or loss of connectivity of habitats, within or ex-situ SAC sites (via reductions in water quality or the spread of invasive species).</p>	<p>- Potential for indirect impacts to QI species through loss, reduction, fragmentation or loss of connectivity of suitable habitat or reduction in prey item species (via reductions in water quality, changes in flow, or spread of invasive species). There is downstream hydrological connectivity to River Barrow and River Nore SAC from the proposed grid connection works.</p>	<p>- Potential for direct or indirect impacts to QI species via mortality, disturbance or displacement</p>

<p>European dry heaths [4030]</p> <p>Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430]</p> <p>Petrifying springs with tufa formation (Cratoneurion) [7220]</p> <p>Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0]</p> <p>Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae) [91E0]</p> <p><i>Vertigo moulinsiana</i> (Desmoulin's Whorl Snail) [1016]</p> <p><i>Margaritifera margaritifera</i> (Freshwater Pearl Mussel) [1029]</p> <p><i>Austropotamobius pallipes</i> (White-clawed Crayfish) [1092]</p> <p><i>Petromyzon marinus</i> (Sea Lamprey) [1095]</p> <p><i>Lampetra planeri</i> (Brook Lamprey) [1096]</p> <p><i>Lampetra fluviatilis</i> (River Lamprey) [1099]</p> <p><i>Alosa fallax fallax</i> (Twaite Shad) [1103]</p> <p><i>Salmo salar</i> (Salmon) [1106]</p> <p><i>Lutra lutra</i> (Otter) [1355]</p>			
---	--	--	--

Vandenboschia speciosa (Killarney Fern) [6985]			
---	--	--	--

**Table 2 Screening summary matrix: European sites for which there is a possibility of significant effects (or where the possibility of significant effects cannot be excluded without further detailed assessment)**

10.5.7. The remaining sites can be screened out from further assessment because of the scale of the proposed works, the nature of the Conservation Objectives, Qualifying and Special Conservation Interests, the separation distances and the lack of a substantive ecological linkage, hydrologically or otherwise, between the proposed works and the European sites.

10.5.8. The proposed grid connection does not overlap with any of the European sites and there is no potential to cause direct habitat loss, fragmentation or disturbance in any of the Special Areas of Conservation screened out within the study area due to the location of the works outside of any such European sites. Indirect terrestrial or aquatic habitat loss or degradation will not occur in all sites screened out due to the absence of hydrological connectivity and/ or the separation distance between construction works, or any operational stage work.

10.5.9. Hen Harrier is the only SCI species for the Slieve Bloom Mountains SPA. This species was not recorded during site visits for the proposed development or the Dernacart Wind Farm development in 2018 and 2019. There are also no records of known nests received from a NPWS data request, and there are no breeding records from NBDC data. A third party submission received by the Commission considers that the Hen Harrier roost survey was insufficient to conclusively show that the site is not in use by Hen Harriers for roosting. It is submitted that the same population of Hen Harriers that breed within Slieve Bloom SPA also winter at Garryhinch Bog and that any kind of infrastructure project of this nature should necessitate both breeding and wintering surveys.

10.5.10. In response to this submission, the applicant states that the proposed development comprises predominantly underground infrastructure, which will have minimal impact on Hen Harrier during either construction or operation. The proposed development will be constructed largely through low value habitat comprising mainly of mature conifer plantation and public road and the concerns raised by the submitter appear to primarily relate to the associated wind farm, which has already been assessed and is now consented.

10.5.11. I note that the Slieve Bloom SPA is located as close as 5.45km, which is considerably closer than the distance outlined in the SPA of 9.7km. Notwithstanding this, I would be in agreement that there is reasonable rationale for excluding the

Slieve Bloom SPA from further assessment. The core foraging range for breeding Hen Harrier is 2km from the nest. I note that the survey effort extended across summer and winter months and there has been a complete absence of any sightings of Hen Harrier. Furthermore, no Hen Harriers were recorded during the winter roost checks for the 2018 winter seasons for the permitted Dernacart Wind Farm. It should be noted that the wind farm development is closer to the SPA than the proposed development site and only the River Barrow and River Nore SAC was screened in for Appropriate Assessment for this development.

- 10.5.12. Overall, I would be satisfied that having regard to the above and given the limited scale of the grid connection works, and the low intensity of works during operational and decommissioning phases, there is no likelihood of significant adverse in-combination effects with other windfarms, including Dernacart Wind Farm on this species. I also note that the NPWS did not make any comment on Hen Harrier within its submission to the Commission on the current proposal.
- 10.5.13. It is therefore reasonable to conclude that on the basis of the information on the file, which I consider adequate in order to issue a screening determination, that the proposed development, individually or in combination with other plans or projects would not be likely to have a significant effect on Slieve Bloom Mountains SPA (004160), Mountmellick SAC (002141) and Slieve Bloom Mountains SAC in view of the sites' conservation objectives and a Stage 2 Appropriate Assessment for these sites is not required. I am therefore satisfied that no additional sites other than those assessed in the NIS need to be brought forward for Appropriate Assessment.
- 10.5.14. Having carried out Screening for Appropriate Assessment of the project, it has been concluded that the project individually, or in combination with other plans or projects, could have a significant effect on European site No. 002162 in view of the site's Conservation Objectives, and Appropriate Assessment is therefore required.

## **10.6. The Natura Impact Statement and Associated Documents**

- 10.6.1. The application was accompanied by a Screening for Appropriate Assessment and Natura Impact Statement dated 1<sup>st</sup> July 2024. The NIS examines the effects of the proposed grid connection alone and in combination with the Dernacart Wind Farm and Bracklone substation projects, and with other projects and activities, on the

integrity of the European Site in respect of its conservation objectives and their structure and function.

10.6.2. In general, I am satisfied that the NIS submitted with the planning application adequately describes the proposed development, the project site and the surrounding area. The Stage 1 Screening Assessment concluded that a Stage 2 Appropriate Assessment (NIS) was required. The NIS outlined the methodology used for assessing potential impacts on the habitats and species within the European Site that have the potential to be affected by the proposed development. It predicted the potential impacts for the site and its conservation objectives, suggested mitigation measures, assessed in-combination effects with other plans and projects and identified any residual effects on the European site and its conservation objectives.

10.6.3. The NIS was informed by the following studies, surveys and consultations:

- Desktop Study:
  - Ordnance Survey Ireland (OSI) aerial photography, 1:50000 mapping, GeoHive and online satellite imagery sources
  - National Parks and Wildlife Service (NPWS)
  - Central Statistics Office (CSO) – Census of Agriculture
  - BirdWatch Ireland
  - Bat Conservation Ireland (BCI)
  - Teagasc soil area maps (NBDC website)
  - Geological Survey Ireland (GSI) area maps
  - Environmental Protection Agency (EPA) water quality data
  - Inland Fisheries Ireland (IFI) online fish sampling reports and fish data
  - Review of requested records from NPWS Rare and Protected Species database
  - Laois County Development Plan 2022 – 2028
  - Documents prepared as part of the planning applications for the consented Dernacart Windfarm (Planning Ref 20/78, ABP-310312-21)

- Other sources and research
- Data Requests:
  - Concise and site-specific information on species records available for relevant hectads retrieved from the National Biodiversity Data Centre (NBDC) online database.
  - NPWS for Sensitive Data Access for relevant hectads
- Field Surveys:
  - Site walkover of previous proposed substation options and driven survey of grid route. Set up camera traps and static bat units (18th, 19th and 20th July 2023);
  - Survey of watercourses potentially impacted by the proposed development (3rd August 2023);
  - Further surveys of updated site layout including underground wind farm collector cable and access road, and 110kV substation location. Site walkover of updated sections, mapping habitats and signs of mammals. Set up camera traps (11th and 12th October 2023);
  - Following amendment of a portion of underground wind farm collector cable and access road being moved northwards to avoid wet grassland habitat: Site walkover of updated route. Collect camera traps left out in October, (30th November 2023)
  - Site visit to check bat roost suitability and to deploy static bat units along the underground wind farm collector cable and access road and at 110kV substation area; set up/collect camera traps; carry out marsh fritillary survey at wet grassland area; and visit two additional areas for proposed peat/spoil deposition at the consented Dernacart Wind Farm site where Turbines 4 and 5 are to be located, (11th and 12th, 20th April 2024).
  - Invasive alien plant species (IAPS) surveys of the proposed grid route.
- Guidance Documents:
  - Assessment of plans and projects in relation to Natura 2000 sites – Methodological guidance on the provisions of Article 6(3) and (4) of the

Habitats Directive 92/43/EEC(2021/C 437/01), the European Commission Guidance 'Managing Natura 2000 Sites' Brussels, 21.11.2018 C (2018) 7621 final (EC, 2019).

- Appropriate Assessment of Plans & Projects - Guidance for Planning Authorities prepared by the NPWS (DoEHLG, 2009 (rev. 2010) and the Planning Regulator: Appropriate Assessment Screening for Development Management, OPR Practice Note PN01 Office of the Planning Regulator, 2021.

10.6.4. The NIS concluded that, following an examination, analysis and evaluation of the relevant information, including in particular the nature of the predicted impacts from the proposed development, and with the implementation of the mitigation measures proposed, that the proposed development will not adversely affect (either directly or indirectly) the integrity of any European site, either alone or in combination with other plans or projects, and there is no reasonable scientific doubt in relation to this conclusion.

10.6.5. Having reviewed the NIS and the supporting documentation, I am satisfied that it provides adequate information in respect of the baseline conditions, clearly identifies the potential impacts, and uses best scientific information and knowledge. Details of mitigation measures are provided, and they are summarised in the NIS. I am satisfied that the information allows for a complete assessment of any adverse effects of the development, on the conservation objectives of the relevant European sites alone, or in combination with other plans and projects:

#### **10.7. Appropriate Assessment of Implications of the Proposed Development on Each European Site**

10.7.1. The following is an assessment of the implications of the project on the relevant conservation objectives of the European sites using the best available scientific knowledge in the field. All aspects of the project which could result in significant effects are identified and mitigation measures designed to avoid or reduce any adverse effects are examined and assessed.

10.7.2. I have relied on the following guidance:

- DoEHLG (2009). Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities. Department of the Environment, Heritage and Local Government, National Parks and Wildlife Service;
- EC (2002) Assessment of plans and projects significantly affecting Natura 2000 sites. Methodological guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EC;
- EC (2018) Managing Natura 2000 sites. The provisions of Article 6 of the Habitats Directive 92/43/EEC;

10.7.3. **Relevant European sites:** The following site is subject to appropriate assessment:

- River Barrow and River Nore SAC (002162)

10.7.4. A description of this site and its Conservation Objectives and Qualifying Interests, including any relevant attributes and targets for the sites, are set out in the NIS and outlined in Table 3 below. I have also examined the Natura 2000 data forms as relevant and the Conservation Objectives supporting documents for this site available through the NPWS website ([www.npws.ie](http://www.npws.ie)).

10.7.5. **Aspects of the proposed development:** The main aspects of the proposed development that could adversely affect the conservation objectives of the European site include:

- Water quality and resource
- Habitat loss/alteration
- Disturbance and/or displacement of species
- Habitat or species fragmentation

10.7.6. **Table 3** summarises the appropriate assessment and site integrity test. The conservation objectives, targets and attributes as relevant to the identified potential significant effects are examined and assessed in relation to the aspects of the proposal (alone and in combination with other plans and projects). Mitigation measures are examined, and clear, precise and definitive conclusions reached in terms of adverse effects on the integrity of European sites.

## 10.8. Table 3 – River Barrow and River Nore SAC

Table 3

### River Barrow and River Nore SAC (Site code: 0002162)

#### Key Issues:

- Water quality
- Habitat loss or alteration
- Disturbance and/ or displacement of species
- Habitat or species fragmentation

**Conservation Objectives:** [https://www.npws.ie/sites/default/files/protected-sites/conservation\\_objectives/CO002162.pdf](https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO002162.pdf)

Summary of Appropriate Assessment					
Conservation Objective	Targets & Attributes (as relevant)	Potential adverse effects	In-combination effects of Plans & Programmes/ Major Projects	Mitigation Measures	Can adverse effects on site integrity be excluded?
<b>To restore the favourable conservation condition of the following:</b>	<b>The favourable conservation status of a species is achieved when:</b>				
Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]	No decline in habitat distribution; stable/ increasing habitat area; maintain/ restore natural circulation of sediments/ organic matter; natural tidal regime; maintain/ restore creek and pan structure; maintain	Given the scale and extent of the proposed development, and the dilution potential of the River Barrow, it is not considered that the	-	-	Yes

	range of saltmarsh habitat zonations including transitional zones; maintain structural variation within sward; maintain >90% outside creeks vegetated; maintain range of sub-communities with typical species listed in Saltmarsh Monitoring Project; and no significant expansion of <i>Spartina</i> . No new sites for this species and an annual spread of less than 1% where it is already known to occur.	proposal has the potential to significantly impact on this habitat. QI habitats mostly occur along the coast and are mainly influenced by marine processes.			
Mediterranean salt meadows ( <i>Juncetalia maritimi</i> ) [1410]	No decline in habitat distribution; stable/ increasing habitat area; maintain/ restore natural circulation of sediments/ organic matter; maintain creek and pan structure and natural tidal regime; maintain range of saltmarsh habitat zonations including transitional zones; maintain structural variation within sward; maintain >90% of areas outside creeks vegetated; maintain range of sub-communities with typical species; and no significant expansion of <i>Spartina</i> .	Given the scale and extent of the proposed development, and the dilution potential of the River Barrow, it is not considered that the proposal has the potential to significantly impact on this habitat. QI habitats mostly occur along the coast and are mainly influenced by marine processes.	-	-	Yes
Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0]	Stable/ increasing habitat area and woodland size; no decline in habitat distribution; diverse woodland structure, extent of community types and natural regeneration; at least 30m <sup>3</sup> /ha of fallen timber greater than	Given the scale, extent and location of the proposed development, it is not considered that the proposal has the potential to significantly	-	-	Yes

	10cm diameter; 30 snags/ha; both categories should include stems greater than 40cm diameter; no decline in veteran trees, indicators of local distinctiveness and native tree cover; variety of typical native species present, depending on woodland type, including oak; and negative indicator species, particularly non-native invasive species, absent or under control.	impact on this habitat. QI habitat not noted during the course of field surveys for the proposed development and nearest downstream mapped occurrence from Conservation Objectives is over 90km.			
Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae) [91E0]	Stable/ increasing habitat area and woodland size; no decline in habitat distribution; diverse woodland structure, extent of community types and natural regeneration; maintain appropriate hydrological regime; criterial relating to dead wood, veteran trees and local distinctiveness; and a variety of vegetation composition and absence/ control of negative indicator species.	Given the scale, extent and location of the proposed development, it is not considered that the proposal has the potential to significantly impact on this habitat. QI habitat not noted during the course of field surveys for the proposed development and nearest downstream mapped occurrence from Conservation Objectives is over 30km.	-	-	Yes
Margaritifera margaritifera (Freshwater Pearl Mussel) [1029]	Restore distribution to 3.91km (Ballymurphy), 9.45km (Mountain) and 21.13km (Nore); restore population to at least 1,000 adult mussels (Ballymurphy), 4,000 adult mussels (Mountain) and 5,000 adult mussels (Nore); restore 20% of population to ≤65mm in	There is no connectivity from the proposed development and wider windfarm development to the Nore populations of this species. The mapped Mountain and Ballymurphy populations of this SCI species from	-	-	Yes

	<p>length and at least 5% to ≤30mm in length; ≤5% decline from previous no. of adults counted; dead shells &lt;1% of adult population and scattered in distribution; restore suitable habitat in more than 3.91km in the Ballymurphy, 5.3km in the Mountain and 16.72km in the Nore system and any additional stretches necessary for salmonid spawning; restore condition of suitable habitat; restore water quality macroinvertebrates; restore substratum quality- filamentous algae; restore substratum quality; restore appropriate hydrological regime; maintain sufficient juvenile salmonids to host glochidial larvae; and restore the area and condition of fringing habitats necessary to support the population.</p>	<p>the conservation objectives are located more than 85km downstream and within upstream tributaries. Given the scale and extent of the proposed development, and the dilution potential of the River Barrow, it is not considered that the proposal has the potential to significantly impact on this species. Aquatic surveys carried out by MWP in August 2023 did not note any populations of the species present in the vicinity of any of the water crossings associated with the proposed project. Furthermore aquatic surveys carried out for the permitted Dernacart windfarm in 2018 similarly did not note the presence of the species in the waters draining the proposed development.</p>			
Petromyzon marinus (Sea Lamprey) [1095]	<p>Greater than 75% of main stem length of rivers accessible from estuary; at least 3 age/ size groups present; juvenile density at least 1/m<sup>2</sup>; no decline in extent and distribution of</p>	<p>Potential hydrological connection between the proposed development site and the SAC through which there is potential for water quality impacts</p>	<p>- In the absence of mitigation measures, there is increased potential for reductions in water quality during construction due to</p>	<p>- Protection of water quality / run-off and sediment control: Drainage system will be implemented along all internal site access</p>	<p>Yes With the effective implementation of mitigation measures, the proposed</p>

	<p>spawning beds; more than 50% of sample sites positive.</p>	<p>to occur, particularly during construction. Adverse water quality impacts could exert indirect impacts on aquatic/water-dependant habitats and species protected within the SAC and may adversely affect the integrity of the site. Potential for habitat alteration (or indirect habitat loss) of riverbeds downstream from sediments suspended in overland flows that may clog up gravels suitable for lamprey. A reduction in water quality can reduce the suitability of the river habitat resulting in disturbance/displacement of the species.</p>	<p>release of sediment or contaminants to downstream watercourses.</p> <ul style="list-style-type: none"> <li>- In the absence of mitigation measures, there is increased potential for the dispersal of invasive species.</li> <li>- Also potential for adverse in-combination effects with other projects and activities within the catchment, including agriculture, forestry and peat extraction.</li> <li>- EIAR and NIS for Dernacart Wind Farm concluded that, with the implementation of appropriate mitigation, there would be no significant effects on hydrology and hydrogeology.</li> <li>- NIS for Bracklone 110kV substation concluded that following the implementation of mitigation measures, the development would not have any adverse effects to the integrity of any European site (i.e. the hydrological connection to the River Barrow And River Nore SAC.</li> </ul>	<p>roads, storage areas, substation hardstand areas and site construction temporary compounds.</p> <ul style="list-style-type: none"> <li>- Protection of water quality / waste management - Construction Phase Waste Management Plan will be developed.</li> <li>- Protection of water quality / surface water monitoring - biological water quality monitoring will take place prior to, during and after the construction phase.</li> <li>- Protection of water quality / management of fuels/oils.</li> <li>- Protection of water quality / management of concrete.</li> <li>- Protection of water quality / management of excavated materials.</li> <li>- Protection of water quality / storage and stockpiles.</li> <li>- Management of invasive species during construction</li> </ul>	<p>development will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats or species of this SAC and will not therefore affect its integrity.</p>
--	---	---	---	---	---

			<ul style="list-style-type: none"> <li>- Dernacart Wind Farm and Bracklone 110kV substation are both partially within different sub-catchments.</li> <li>- There are no other known planned projects in close proximity to cumulatively impact hydrology and hydrogeology.</li> </ul>	<p>and decommissioning phases.</p> <ul style="list-style-type: none"> <li>- Emergency plans and risks of accidents.</li> <li>- Management of surface water discharges during the operational phase.</li> <li>- Protection of water quality during decommissioning phase.</li> </ul>	
<ul style="list-style-type: none"> <li>- <i>Lampetra planeri</i> (Brook Lamprey) [1096]</li> <li>- <i>Lampetra fluviatilis</i> (River Lamprey) [1099]</li> </ul>	<p>Access to all watercourses down to 1<sup>st</sup> order streams (Brook Lamprey); greater than 75% of main stem and major tributaries down to second order accessible from estuary (River Lamprey); at least 3 age/size groups present; main catchment juvenile density at least 2/m<sup>2</sup>; no decline in extent and distribution of spawning beds; more than 50% of sample sites positive.</p>	<p>Potential hydrological connection between the proposed development site and the SAC through which there is potential for water quality impacts to occur, particularly during construction. Adverse water quality impacts could exert indirect impacts on aquatic/water-dependant habitats and species protected within the SAC and may adversely affect the integrity of the site. Potential for habitat alteration (or indirect habitat loss) of riverbeds downstream from sediments suspended in overland flows that may clog up gravels suitable for lamprey.</p>	As above	As above	<p>Yes</p> <p>With the effective implementation of mitigation measures, the proposed development will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats or species of this SAC and will not therefore affect its integrity.</p>

		A reduction in water quality can reduce the suitability of the river habitat resulting in disturbance/displacement of the species.			
Alosa fallax (Twaite Shad) [1103]	Greater than 75% of main stem length of rivers accessible from estuary; more than one age class present; no decline in extent and distribution of spawning habitats; oxygen levels no lower than 5mg/l; and maintain stable gravel substrate with very little fine material, free of filamentous algal growth and macrophyte growth.	Potential hydrological connection between the proposed development site and the SAC through which there is potential for water quality impacts to occur, particularly during construction. Adverse water quality impacts could exert indirect impacts on aquatic/water-dependant habitats and species protected within the SAC and may adversely affect the integrity of the site. Potential for habitat alteration (or indirect habitat loss) of riverbeds downstream from sediments suspended in overland flows that may clog up gravels suitable for twaite shad. A reduction in water quality can reduce the suitability of the river habitat resulting in disturbance/displacement of the species.	As above	As above	<p>Yes</p> <p>With the effective implementation of mitigation measures, the proposed development will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats or species of this SAC and will not therefore affect its integrity.</p>

Salmo salar (Salmon) [1106]	100% of river channels down to 2 <sup>nd</sup> order accessible from estuary; conservation limit for each system consistently exceeded; maintain or exceed 0+ fry mean catchment-wide abundance threshold value- currently set at 17 salmon fry/5 minutes sampling; no significant decline in out-migrating smolt abundance; no decline in no. & distribution of spawning redds due to anthropogenic causes; and water quality at least Q4 at all sampled sites.	Potential hydrological connection between the proposed development site and the SAC through which there is potential for water quality impacts to occur, particularly during construction. Adverse water quality impacts could exert indirect impacts on aquatic/water-dependant habitats and species protected within the SAC and may adversely affect the integrity of the site. Potential for habitat alteration (or indirect habitat loss) of riverbeds downstream from sediments suspended in overland flows that may clog up gravels suitable for spawning salmon. A reduction in water quality can reduce the suitability of the river habitat resulting in disturbance/displacement of the species.	As above	As above	Yes  With the effective implementation of mitigation measures, the proposed development will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats or species of this SAC and will not therefore affect its integrity.
Lutra lutra (Otter) [1355]	No significant decline in distribution or extent of terrestrial, marine and freshwater habitat; and no significant decline in couching sites and holts, and available fish biomass.	Potential hydrological connection between the proposed development site and the SAC through which there is potential for water quality impacts to occur, particularly	As above	- As above - Protection of mammals/ pre-construction monitoring. - Protection of mammals during	Yes  With the effective implementation of mitigation measures, the proposed development will not

		<p>during construction. This creates the potential for otter to be indirectly affected through a reduction in prey source and habitat availability. Construction works may also temporarily displace commuting or foraging otters.</p> <p>Any disturbance or displacement impacts due to fugitive noise from machinery and/or human activity during site preparation and construction will be temporary and will be restricted to the immediate vicinity of the proposed development site.</p>		<p>decommissioning phase.</p>	<p>have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats or species of this SAC and will not therefore affect its integrity.</p>
<p><b>To maintain the favourable conservation condition of the following:</b></p>					
Estuaries [1130]	Permanent habitat area is stable or increasing, subject to natural processes; conserve muddy estuarine community complex, sand to muddy fine sand community complex, fine sand with <i>Fabulina fabula</i> community, and sheltered to moderately exposed intertidal	Given the scale and extent of the proposed development, and the dilution potential of the River Barrow, it is not considered that the proposal has the potential to significantly	-	-	Yes

	reef community complex; and conserve the extent and high quality of <i>Sabellaria alveolata</i> reef community, subject to natural processes.	impact on this habitat. QI habitats mostly occur along the coast and are mainly influenced by marine processes.			
Mudflats and sandflats not covered by seawater at low tide [1140]	Stable or increasing habitat area, subject to natural processes; and conserve the following community types in a natural condition: muddy estuarine community complex; sand to muddy fine sand community complex.	Given the scale and extent of the proposed development, and the dilution potential of the River Barrow, it is not considered that the proposal has the potential to significantly impact on this habitat. QI habitats mostly occur along the coast and are mainly influenced by marine processes.	-	-	Yes
Reefs [1170]	Permanent habitat area and distribution stable or increasing, subject to natural processes; conserve the following community type in a natural condition: sheltered to moderately exposed intertidal reef community complex in a natural condition, subject to natural processes; and conserve the extent and high quality of <i>Sabellaria alveolata</i> reef community, subject to natural processes.	Given the scale and extent of the proposed development, and the dilution potential of the River Barrow, it is not considered that the proposal has the potential to significantly impact on this habitat. QI habitats mostly occur along the coast and are mainly influenced by marine processes.	-	-	Yes
Salicornia and other annuals colonising mud and sand [1310]	No decline in habitat distribution; stable/ increasing habitat area; maintain/ restore natural circulation of sediments/	Given the scale and extent of the proposed development, and the dilution potential of the	-	-	Yes

	organic matter; maintain natural tidal regime; maintain/ restore creek and pan structure subject to natural processes, including erosion and succession; maintain range of saltmarsh habitat zonations including transitional zones, subject to natural processes including erosion and succession; maintain structural variation within sward; maintain more than 90% of area outside creeks vegetated; maintain range of sub-communities with typical species listed in Saltmarsh Monitoring Project; and no significant expansion of <i>Spartina</i> . No new sites for this species and an annual spread of less than 1% where it is already known to occur.	River Barrow, it is not considered that the proposal has the potential to significantly impact on this habitat. QI habitats mostly occur along the coast and are mainly influenced by marine processes.			
Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation [3260]	Stable/ increasing habitat area; no decline in habitat distribution; maintain appropriate hydrological regime; groundwater flow to the habitat should be permanent and sufficient to maintain tufa formation; substratum should be dominated by large particles and free from fine sediments; groundwater and surface water should have sufficient concentrations of minerals to allow deposition and persistence of tufa deposits; concentration of suspended	Potential hydrological connection between the proposed development site and the SAC through which there is potential for water quality impacts to occur, particularly during construction. Adverse water quality impacts could exert indirect impacts on aquatic/water-dependant habitats and species protected within the SAC and may adversely affect the integrity of the site.	As above	As above	Yes  With the effective implementation of mitigation measures, the proposed development will not have any adverse effect on the conservation objectives, or favourable conservation condition of the QI habitats or species of this SAC and will

	<p>solids in the water column should be sufficiently low to prevent excessive deposition of fine sediments; concentration of nutrients in the water column should be sufficiently low to prevent changes in species composition or habitat condition; typical species of the relevant habitat sub-type should be present and in good condition; and area of active floodplain at and upstream of the habitat should be maintained.</p>	<p>Sediment laden run-off may arise from disturbed areas during groundworks, and nutrient enrichment and excess algal growth can lead to oxygen depletion in aquatic environment. Accidental fuel/oil spills or uncontrolled emissions of cementitious material/wastewater or other harmful substances also pose a risk to water quality and habitat condition.</p>			<p>not therefore affect its integrity.</p>
European dry heaths [4031]	<p>No decline in habitat distribution; stable/ increasing habitat area; no significant change in soil nutrient status; cover of characteristic sub-shrub indicator species at least 25%; cover of senescent gorse less than 50%; long shoots of bilberry with signs of browsing collectively less than 33%; cover of scattered native trees and shrub less than 20%; number of positive indicator species at least 2 and cover at least 60%; number of bryophyte or non-crustose lichen species present at least 2; cover of bracken less than 10%; cover of agricultural weed species and non-native species less than 1%; no decline in distribution or</p>	<p>Given the scale, extent and location of the proposed development, it is not considered that the proposal has the potential to significantly impact on this habitat. QI habitat not noted during the course of field surveys for the proposed development.</p>	-	-	Yes

	population sizes of rare, threatened or scarce species; cover of disturbed bare ground less than 10%; and no signs of burning within sensitive areas.				
Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430]	No decline in habitat distribution; stable/ increasing habitat area; maintain appropriate hydrological regimes; 30-70% of sward is between 40 and 150cm in height; broadleaf herb component of vegetation between 40 and 90%; at least 5 positive indicator species present; and negative indicator species, particularly non-native invasive species, absent or under control.	Given the scale, extent and location of the proposed development, it is not considered that the proposal has the potential to significantly impact on this habitat. QI habitat not noted during the course of field surveys for the proposed development.	-	-	Yes
Petrifying springs with tufa formation (Cratoneurion) [7220]	No decline in habitat distribution; stable/ increasing habitat area; maintain appropriate hydrological regimes; maintain oligotrophic and calcareous conditions; and maintain typical species.	Given the scale, extent and location of the proposed development, it is not considered that the proposal has the potential to significantly impact on this habitat. QI habitat not noted during the course of field surveys for the proposed development and the only mapped occurrence of this habitat from Conservation Objectives is within the River Nore and not hydrologically connected to the proposed development.	-	-	Yes

Desmoulin's Whorl Snail <i>Vertigo moulinsiana</i> [1016]	No decline in occupied sites; at least 5 adults snails in at least 50% of samples; adult snails present in at least 60% of samples per site; minimum of 1ha of suitable habitat per site; 90% of samples in habitat classes I and II; and 90% of samples in moisture class 3-4.	The mapped population from the conservation objectives of this SCI species in the Barrow catchment are located more than 80km downstream. Given the scale and extent of the proposed development, and the dilution potential of the River Barrow, it is not considered that the proposal has the potential to significantly impact on this species. Furthermore, there is no supporting habitat for the qualifying interest within the proposed development footprint, and therefore it is concluded there is no likelihood of a potential significant effect of the qualifying interest.	-	-	Yes
Austropotamobius pallipes (White-clawed Crayfish) [1092]	No reduction from baseline distribution; juveniles and/ or females with eggs in at least 50% of positive samples; no alien crayfish and no instances of disease; sampling of water quality by EPA; and no decline in habitat heterogeneity or habitat quality.	Records exist of this species occurring within all three hectads encompassing the site. This species is most likely limited to the Cottoners brook and the River Barrow. Adverse water quality impacts could exert indirect impacts on	As above	As above	Yes  With the effective implementation of mitigation measures, the proposed development will not have any adverse effect on the conservation objectives, or

		<p>aquatic/water-dependant habitats and species protected within the SAC and may adversely affect the integrity of the site. A reduction in water quality can reduce the suitability of the river habitat resulting in disturbance/displacement of the species.</p>			<p>favourable conservation condition of the QI habitats or species of this SAC and will not therefore affect its integrity.</p>
Killarney Fern ( <i>Trichomanes speciosum</i> ) [1421]	<p>No decline in distribution; maintain at least three colonies of gametophyte, and at least one sporophyte colony of over 35 fronds; at least one of the locations to have a population structure comprising sporophyte, unfurling fronds, 'juvenile' sporophyte and gametophyte generations; no loss of suitable habitat, such as shaded rock crevices, caves or gullies in or near to, known colonies. No loss of woodland canopy at or near to known locations; maintain hydrological conditions at the locations so that all colonies are in dripping or damp seeping habitats, and water is visible at all locations; no increase humidity; no changes in shading due to anthropogenic impacts; and invasive species absent or under control.</p>	<p>Given the scale, extent and location of the proposed development, it is not considered that the proposal has the potential to significantly impact on this habitat. QI habitat not noted during the course of field surveys for the proposed development and nearest downstream mapped occurrence from Conservation Objectives is over 90km.</p>	-	-	Yes

### **Overall Conclusion: Integrity test**

The applicant determined that following the implementation of mitigation, the construction and operation of the proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site.

Based on the information provided, I am satisfied that adverse effects can be excluded for the River Barrow and River Nore SAC and that no effects of any significance will occur.

The proposed grid connection crosses the River Barrow and River Nore SAC at Kilnahown Bridge. There is hydrological connection linking the proposed project site to this SAC via the drains/watercourses that drain the study area. Other watercourses that the proposed grid route crosses ultimately flow into the River Barrow. No in-stream works are proposed at any watercourses; however, conservation objective targets for the qualifying interest habitats and species could be undermined through reduction in water quality; habitat alteration (or indirect habitat loss) of riverbeds downstream; indirect disturbance or displacement from potential water contamination; and spread of invasive species during the construction phase in combination with other plans and projects.

No habitat loss within the European designated sites will occur and adverse in-combination effects from water contamination and spread of invasive species can be effectively prevented by mitigation measures ensuring the protection of downstream watercourses that drain to the River Barrow. These mitigation measures will include the appointment of an Ecological Clerk of Works and completion of works in accordance with the Construction Environmental Management Plan; silt fencing and drainage and siltation control measures at all spoil storage areas; measures to prevent accidental pollution; and measures for the scheduling of works in short sections. A suite of water quality protection measures also form part of the authorised Dernacart Windfarm and Bracklone Substation developments.

Based on the information submitted, surveys carried out analysis provided, I am satisfied that no uncertainty remains.

**The proposed development would not delay or prevent the attainment of the Conservation objectives of the River Barrow and River Nore SAC and adverse effects on site integrity can be excluded.**

## 10.9. Appropriate Assessment Conclusions

10.9.1. Having carried out screening for appropriate assessment of the proposed 110kV substation; underground electric cabling systems and access track between the consented Dernacart Wind Farm and the proposed submission; and 110kV underground electrical cabling from the proposed 110kV substation to the consented Bracklone 110kV substation in the townlands of Barranaghs, Garryhinch, and Annamore in Co. Offaly and Forest Upper, Forest Lower, Coolnavarnoga, Coolaghy, Kilbride, Ballymore's, Cooltederry and Bracklone, Co. Laois, it was concluded that it may result in significant effects on the River Barrow and River Nore SAC. Consequently, an appropriate assessment was required of the implications of the project on the qualifying features of this site in light of its conservation objectives.

10.9.2. Following an appropriate assessment, it has been ascertained that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of this European site, or any other European site, in view of the site's Conservation Objectives. No reasonable scientific doubt remains as to the absence of such effects.

10.9.3. This conclusion is based on:

- A full and detailed assessment of all aspects of the proposed project including proposed mitigation measures and ecological monitoring in relation to the Conservation Objectives of the River Barrow and River Nore SAC.
- Detailed assessment of all aspects of the proposed development that could result in significant effects on the European site within a zone of influence of the proposed scheme.
- Application of mitigation measures designed to avoid adverse effects on site integrity and likely effectiveness of same.
- Detailed assessment of in combination effects with other plans and projects including historical projects, current proposals and future plans.
- No reasonable scientific doubt as to the absence of adverse effects on the integrity of the River Barrow and River Nore SAC.

## 11.0 Conditions Assessment

- 11.1. It is noted that several parties including the planning authorities and prescribed bodies, seek the imposition of conditions should the Commission be minded to approve the proposed development. The Commission should note that the conditions do not raise any significant issues in relation to the principle of the proposed development and were largely focused on detailed design and service issues.
- 11.2. Laois County Council recommend that in the event of permission being granted, an appropriate set of conditions be included, such as those relating to development contributions, bond, timescale, community gain, reinstatement, drainage, traffic management, Construction Environmental Management Plan, and ecology and biodiversity oversight. Offaly County Council provide detailed sets of conditions from Edenderry Municipal Office, the Roads Section and the Environmental and Water Services Section.
- 11.3. Many of the conditions that the Local Authorities have requested are seeking to implement the presented design or mitigation measures already proposed by the applicant. They are also covered by the general conditions which the Commission typically applies, e.g. Condition 2, which seeks to implement measures proposed in the EIAR, NIS and any associated documents will ensure the appropriate management of the construction phase and render the attachment of such conditions unnecessary.
- 11.4. Offaly County Council recommend the attachment of the condition stating that "*the developer shall pay to the Planning Authority a Financial Contribution as a Special Contribution under Section 48 (2)(c ) of the Planning and Development Act 2000, as amended, in respect of roads strengthening and upgrading of the R423. The amount of the contribution shall be €30,333.33 per annum index linked. The contribution shall be paid annually within three months of the date of this grant of planning permission or in such payments as the Planning Authority may facilitate.*" The Planning Authority consider it reasonable that the developer should contribute towards the specific exceptional costs which are incurred by the Planning Authority which are not covered in the Development Contribution Scheme and which will benefit the proposed development.

11.5. In response to this, the applicant submits that an annual contribution in respect of the proposed development is considered to be excessive given that all works within the public road network will be fully reinstated, and once the development becomes operational, the associated traffic generated will be minimal. I would be in agreement that the applicant is committed to fully reinstating any damage that may be caused to the local road network. It is stated in the Traffic Management Plan that road pavements would be regularly monitored and reinstated in accordance with the requirements of Laois County Council and Offaly County Council. Any road strengthening or upgrading that may become necessary before commencement of construction works could be addressed between the applicant and Planning Authority at that time. I note that road improvements do not fall under the scope of the proposed development works as applied for. I recommend the attachment of a general development contributions contribution and a condition relating the payment of a security bond.

11.6. The Development Applications Unit, Department of Housing, Local Government and Heritage recommends the attachment of conditions relating to archaeology in accordance with the OPR Practice Note PN03: Planning Conditions (October 2022). It is also recommended that a programme of pre development underwater archaeological assessment should be undertaken as a condition of any planning approval. I recommend the attachment of OPR Condition C3 with amendment to include pre-development underwater archaeological assessment.

## 12.0 Overall Conclusion

12.1. There is a consistent message throughout all levels of policy that there must be a transition to a low carbon and climate resilient society. This requires an increase in renewable energy generation and associated infrastructure, including wind and solar farms, grid reinforcement, storage development and interconnection. National Policy Objective 70 of the National Planning Framework – First Revision seeks to *“promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a low carbon economy by 2050.”* Regional Policy Objectives RPO 10.19 to RPO 10.24 of the Regional Spatial & Economic Strategy for the Eastern and Midlands Region seek to ensure the development of the energy networks in a safe and secure way to meet

projected demand levels, to meet Government Policy, to ensure a long-term, sustainable and competitive energy future for Ireland, and to enable energy service providers to deliver their statutory function.

- 12.2. At a local level, it is Laois County Council's aim for climate action and energy “*to reduce our carbon footprint by integrating climate action into the planning system in support of national targets for climate policy mitigation and adaptation objectives, as well as targets for greenhouse gas emissions reductions.*” Within the current Offaly County Development Plan, it is a strategic aim of the climate action and energy strategy ‘*to achieve a transition to an economically competitive, low carbon climate resilient and environmentally sustainable county, through reducing the need to travel, promoting sustainable settlement patterns and modes of transport, and by reducing the use of non-renewable resources, whilst recognising the role of natural capital and ecosystem services in achieving this.*’
- 12.3. This is a direct application to the Commission for approval of a 110kV substation and 110kV underground electricity cable to facilitate the connection of the consented Dernacart Windfarm to the national grid at the consented Bracklone 110kV substation. The proposed grid connection differs from that which was assessed as part of the wind farm application in that the current proposal is for a new relocated 110kV substation in place of the permitted Dernacart 110kV substation, with revised underground grid connection cable route to that previously anticipated.
- 12.4. The proposed grid connection is assessed both individually and cumulatively within the EIA and Appropriate Assessment with all other relevant plans and projects. The main impacts of the proposed development, in combination with the authorised Dernacart Wind Farm, relate to the construction phase, where there is potential for effects to waterbodies and designated downstream water dependant sites. There will be other construction related impacts, including traffic diversions, noise and air quality impacts. However, it has been evaluated that these impacts would not be significant when mitigation measures are implemented. No cumulative impacts on water are likely due to the different sub basins draining the site, implementation of the Construction Environmental Management Plan, and measures such as the storage of oils/fuels/chemicals in bunded containers.

- 12.5. During the operational phase, the main beneficial impact of the proposed development, in combination with the authorised windfarm will be on climate through the supply of renewable electricity, thereby reducing emissions from fossil fuel burning for energy production every year for the lifetime of the windfarm.
- 12.6. In terms of appropriate assessment, the main aspects of the proposed development that could adversely affect the conservation objectives of European sites include water quality impacts, habitat degradation via pollution from run-off entering watercourses which are hydrologically linked to the SAC and supporting habitat; and disturbance and displacement impacts on SCI species. However, it has been ascertained that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of any European site in view of the sites' Conservation Objectives
- 12.7. Overall, I consider that the EIAR and NIS provides the Board with adequate information to fully assess the cumulative impacts and in-combination effects of the proposed grid connection and any other relevant plans or projects. I am satisfied that these works are acceptable in principle and that the proposal complies with local, regional and national policy with respect to renewable energy and climate resilience. On balance, the proposed development may give rise to some cumulative impacts, particularly during construction, but these impacts will be adequately mitigated and are largely outweighed by the positive impact the proposal will have in terms facilitating the generation of renewable energy for the region.

## **13.0 Recommendation**

- 13.1. On the basis of the above assessment, I recommend that the Commission should approve the proposed development for the reasons and considerations set out below.

## **14.0 Reasons and Considerations**

The Board reached its decision in accordance with its duties under Section 15(1) of the Climate Action and Low Carbon Development Act 2015, as amended, and the requirement to, in so far as practicable, perform its functions in a manner consistent

with inter alia the Climate Action Plan 2025 and the furtherance of the national climate objective.

And in coming to its decision, the Board had regard to the following:

- European legislation, including of particular relevance:
  - Directive 92/43/EEC (Habitats Directive) and Directive 79/409/EEC as amended by 2009/147/EC (Birds Directive) which set the requirements for Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union.
  - EU Renewable Energy Directive 2009/28/EC which aims to promote the use of renewable energy and amending Directive EU/2023/2413 which aims to speed up the EU's clean energy transition as implemented by European Union (Planning and Development) (Renewable Energy) Regulations 2025 (S.I. 274 of 2025)
  - Directive 2011/92/EU (The EIA Directive) as amended by Directive 2014/52/EU as implemented by Article 94 and Schedule 6 (paragraphs 1 and 2) of the Planning Regulations as amended.
  - Directive 2000/60/EC, the Water Framework Directive and the requirement to exercise its functions in a manner which is consistent with the provisions of the Directive and which achieves or promotes compliance with the requirements of the Directive.
- National and regional planning and related policy, including:
  - National policy with regard to the development of alternative and indigenous energy sources and minimisation of emissions from greenhouse gases, particularly the NPF First Revision 2025 and National Policy Objective 70.
  - Wind Energy Guidelines: Guidelines for Planning Authorities 2006 and the draft guidelines published in 2019.
  - The objectives and targets of the National Biodiversity Action Plan 2023-2030.
- Regional and local planning policy, including:
  - Regional Spatial Economic Strategy for the Eastern & Midlands Region;

- Laois County Development Plan 2021-2027.
- Offaly County Development Plan 2021-2027.
- Other relevant national policy and guidance documents.
- The nature, scale and design of the proposed development as set out in the planning application and the pattern of development in the vicinity.
- The likely consequences for the environment and the proper planning and sustainable development of the area in which it is proposed to carry out the proposed development and the likely significant effects of the proposed development on European sites.
- The submissions and observations made in connection with the planning application.
- The report and the recommendation of the Inspector, including the examination, analysis and evaluation undertaken in relation to appropriate assessment and environmental impact assessment.

It is considered that the proposed development would accord with European, national, regional and local planning and that it is acceptable in respect of its likely effects on the environment and its likely consequences for the proper planning and sustainable development of the area.

## 15.0 Appropriate Assessment

The Board agreed with and adopted the screening assessment and conclusion carried out in the inspector's report that the River Barrow and River Nore SAC [002162] is the European site for which there is a likelihood of significant effects.

The Board considered the Natura Impact Statement and all other relevant submissions and carried out an appropriate assessment of the implications of the proposal for the River Barrow and River Nore SAC [002162], in view of the Site's Conservation Objectives. The Board considered that the information before it was adequate to allow the carrying out of an appropriate assessment.

In completing the assessment, the Board considered, in particular, the likely direct and indirect impacts arising from the proposal both individually or in combination with other plans or projects, specifically upon the European site,

- i. Mitigation measures which are included as part of the current proposal,
- ii. Conservation Objectives for this European site, and
- iii. Views of prescribed bodies in this regard.

In completing the appropriate assessment, the Board accepted and adopted the appropriate assessment carried out in the Inspector's report in respect of the potential effects of the proposed development on the integrity of the aforementioned European site, having regard to the Site's conservation objectives.

In overall conclusion, the Board was satisfied that the proposed development, by itself or in combination with other plans or projects, would not adversely affect the integrity of the European site, in view of the site's conservation objectives.

## **16.0 Environmental Impact Assessment:**

The Commission completed an Environmental Impact Assessment of the proposed development taking into account:

- (i) the nature, scale and extent of the proposed development,
- (ii) the Environmental Impact Assessment Report and associated documentation submitted in support of the application,
- (iii) the submissions made in the course of the application; and
- (iv) the inspector's report.

The Board considered that the Environmental Impact Assessment Report, supported by the documentation submitted by the applicant, adequately considers alternatives to the proposed development and identifies and describes adequately the direct, indirect, secondary and cumulative effects of the proposed development on the environment.

The Board agreed with the examination, set out in the inspector's report, of the information contained in the Environmental Impact Assessment Report and

associated documentation submitted by the applicant and submissions made in the course of the application.

The Board considered, and agreed with the inspector's reasoned conclusions, that the main significant direct and indirect effects of the proposed development on the environment are as follows:

- Minor and temporary impact on **Population and Human Health** due to the generation of additional traffic on local road networks during construction with associated noise and safety implications. This will be mitigated by measures set out in the CEMP and Traffic Management Plan.
- No cumulative **Biodiversity** impacts with authorised Dernacart Windfarm and Bracklone Substation on instream aquatic habitat quality and flow regimes. Mitigation will nonetheless be implemented to protect water quality through works scheduling, invasive species management, and measures to mitigate against the release of suspended solids, fuels and oils, and cements.
- Beneficial cumulative impact of the proposed grid connection and Dernacart Windfarm on **Climate** through the supply of renewable electricity and reduction of emissions from fossil fuel burning for energy production every year for the lifetime of the windfarm.
- Significant positive impacts on **Material Assets – Built Services** by way of construction of new electricity grid infrastructure.
- Potential for adverse impacts on **Material Assets – Traffic and Transport** by way of increased traffic volumes on the local road network during construction. This increase will be well within the carrying capacity of most local road networks and will be temporary, with no effect on the capacity of the road network in the long term. Traffic impacts will also be mitigated by the Traffic Management Plan, which sets out duties and responsibilities, traffic management and control procedures, and proposed lane closures, site access, and road pavement monitoring details.

The Board completed an environmental impact assessment in relation to the proposed development and concluded that, subject to the implementation of the mitigation measures set out in the Environmental Impact Assessment Report, and

subject to compliance with the conditions set out below, the effects on the environment of the proposed development, by itself and in combination with other development in the vicinity, would be acceptable. In doing so, the Board adopted the report and conclusions of the inspector.

### **Proper Planning and Sustainable Development:**

It is considered that, subject to compliance with the conditions set out below, the proposed development would be in accordance with European, National, Regional and Local planning and related policy, would be consistent with the provision of the Climate Action Plan 2025 and would make a positive contribution towards Ireland's renewable energy and security of energy supply requirements. Furthermore, the proposed development would have an acceptable impact on the environment and on the amenities of the area. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

## **17.0 Conditions**

1.	<p>The development shall be carried out in accordance with the plans and particulars lodged with the application, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.</p> <p><b>Reason:</b> In the interests of clarity.</p>
2.	<p>(a) All mitigation, environmental commitments and monitoring measures identified in the Environmental Impact Assessment Report shall be implemented in full as part of the proposed development.</p> <p>(b) All mitigation and environmental commitments identified in the Natura Impact Statement shall be implemented in full as part of the proposed development.</p>

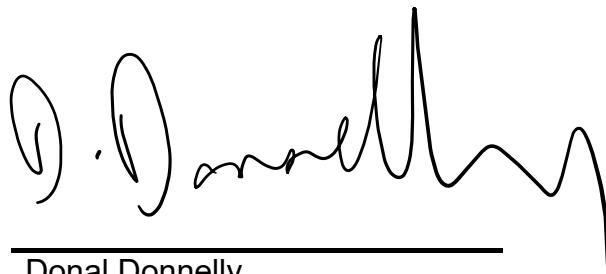
	<p><b>Reason:</b> In the interest of development control, public information, and clarity.</p>
3.	<p>The period during which the development hereby permitted may be carried out shall be 10 years from the date of this order.</p> <p><b>Reason:</b> Having regard to the nature of the development, the Board considers it appropriate to specify a period of validity of this permission in excess of five years.</p>
4.	<p>The construction of the development shall be managed in accordance with a Construction Environmental Management Plan, which shall be submitted to, and agreed in writing with, the Planning Authority prior to commencement of development. This plan shall provide details of intended construction practice for the development, including hours of working, noise and dust management measures, off-site disposal of construction/demolition waste, measures for the storage of oils and fuels on site, measures for the protection of ground and surface waters, and arrangements for temporary signage/ traffic management.</p> <p><b>Reason:</b> In the interests of public safety and residential amenity.</p>
5.	<p>The developer shall engage a suitably qualified archaeologist (licensed under the National Monuments Acts) to carry out pre-development archaeological testing in areas of proposed ground disturbance and to submit an archaeological impact assessment report for the written agreement of the planning authority, following consultation with the National Monuments Service, in advance of any site preparation works or groundworks, including site investigation works/topsoil stripping/ site clearance/dredging/underwater works and/or construction works. The report shall include an archaeological impact statement and mitigation strategy, as well as a desktop assessment and licenced wade/ dive survey. Where archaeological material is shown to be present, avoidance, preservation in-situ, preservation by record [archaeological excavation] and/or monitoring may be required. Any further archaeological mitigation requirements specified by the planning authority, following consultation with the National Monuments Service, shall be complied with by the developer.</p>

	<p>No site preparation and/or construction works shall be carried out on site until the archaeologist's report has been submitted to and approval to proceed is agreed in writing with the planning authority. The planning authority and the National Monuments Service shall be furnished with a final archaeological report describing the results of any subsequent archaeological investigative works and/or monitoring following the completion of all archaeological work on site and the completion of any necessary post-excavation work. All resulting and associated archaeological costs shall be borne by the developer.</p> <p><b>Reason:</b> To ensure the continued preservation [either in situ or by record] of places, caves, sites, features or other objects of archaeological interest.</p>
6.	<p>Prior to commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or such other security as may be acceptable to the planning authority, to secure the satisfactory reinstatement of the site upon cessation of the project coupled with an agreement empowering the planning authority to apply such security or part thereof to such reinstatement. The form and amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination.</p> <p><b>Reason:</b> To ensure satisfactory reinstatement of the site.</p>
7.	<p>The developer shall pay to the Planning Authority a financial contribution in respect of public infrastructure and facilities benefiting the development in the area of the planning authority that is provided or intended to be provided by or on behalf of the Authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000, as amended. The contribution shall be paid prior to commencement of development or in such phased payments as the Planning Authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed between the Planning Authority and the developer or, in the fault of such</p>

agreement, the matter shall be referred to An Bord Pleanála to determine the proper application of the terms of the Scheme.

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

I confirm that this report represents my professional planning assessment, judgement and opinion on the matter assigned to me and that no person has influenced or sought to influence me, directly or indirectly, following my professional assessment and recommendation set out in my report in an improper or inappropriate way.

A handwritten signature in black ink, appearing to read "D. Donnelly".

Donal Donnelly

Senior Planning Inspector

18<sup>th</sup> December 2025