

RURAL WEST ENVIRONMENTALISTS LIMITED

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FORMAL OBSERVATION AND SUBMISSION

To: An Coimisiún Pleanála

Case Reference: PAX16.324387

Pre-Application Consultation Reference: ABP-318372-23 (January 2024)

Subject: Proposed RWE Renewables Ireland Limited — Muingmore Wind Farm

13 Wind Turbines | 180m Tip Height | 74.1–91MW Installed Capacity | 35-Year Operational Life

Site Notices Erected: 19 June 2026 | Submission Deadline: 7 August 2026

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Rural West Environmentalists Limited

President, Erris Chamber of Commerce | Member, Wild Mayo DEDP Steering Committee

Table of Contents

Section 1 — Introduction and Statement of Opposition
Section 2 — The Applicant, the Development, and Its True Scale
Section 3 — The Five European Protected Sites at Risk
Section 4 — The Source: Fundamental Unsuitability of the Peatland Site
Section 5 — The Pathway: Hydrological Connectivity Confirmed by the Applicant
Section 6 — The Receptors: Destruction of Protected Marine Habitats
Section 7 — Direct Conflict with Legally Binding Conservation Objectives
Section 8 — The Blacksod Bay/Broad Haven SPA (004037): A Missing European Site
Section 9 — Failure of the Natura Impact Statement: Point-by-Point
Section 10 — Failure of the EIAR: Chapter-by-Chapter Analysis
Section 11 — Shadow Flicker: The Applicant Admits Exceedance of the 30-Hour Threshold
Section 12 — European Eel: A Critically Endangered Species Found on Site
Section 13 — Comprehensive Avian Collision Risk Analysis: Eleven Species, Over 36,000 Seconds of Confirmed Flight Time Within the Blade Strike Zone
Section 14 — The Grid Connection Route: Incomplete Application and Artificial Fragmentation of the Development
Section 15 — Cumulative Impact: Oweninny Phase 3 Granted Two Days Before Site Notices
Section 16 — Setback Distances: 740 Metres Is Marginal for 180-Metre Turbines
Section 17 — RWE's Own Contradictions: Public Claims vs. Application Record
Section 18 — No Viable Alternative Site Demonstrated
Section 19 — Verified Planning Precedents: Four Refusals and One High Court Ruling
Section 20 — The Coolglass Supreme Court Ruling Does Not Assist the Applicant
Section 21 — Mayo County Council's Adopted Renewable Energy Strategy (Variation No. 2, 13 July 2026)
Section 22 — The Wild Mayo DEDP: Direct Conflict with Government Tourism Strategy

Section 23 — Residential Amenity, Noise, Shadow Flicker, and Health

Section 24 — The Mayo Dark Sky Park: Aviation Lighting Impact

Section 25 — Critical Deficiency in Aviation Assessment: Coast Guard SAR Helicopter Operations and Blacksod Refuelling Station

Section 26 — Trista Bog NHA and Archaeological Heritage

Section 27 — Carbon Balance: The Climate Justification Fails on Its Own Terms

Section 28 — Community Impact, Property Values, and Economic Harm

Section 29 — Prescribed Bodies: Formal Requests for Submissions

Section 30 — Mayo County Council's Own Recorded Opposition: 'Not Happy' and 'Not in Favour' Fourteen Months Before Lodgement

Section 31 — The NIS Mitigation Measures Fail the Legal Standard: A Point-by-Point Analysis (Sweetman Methodology)

Section 32 — The Application Form's Own Disclosure Answer Appears Inconsistent with the Applicant's Own Withdrawal of the Prior Application

Section 33 — Technical Deficiencies: Specific Findings from the Application's Own Documents

Section 34 — Battery Energy Storage System (BESS) and Substation: Inadequate Risk Assessment

Section 35 — Conclusion and Formal Request for Refusal

Section 36 — Cross-Reference Index: Observations Against Every EIAR Chapter and Technical Appendix

Section 37 — Referenced Documents and Key Evidence

Section 38 — Community and Diaspora Petition: 498 Signatures — 312 Online Signatures from 11 Countries and 186 Paper Signatures from Erris and North Mayo

Section 39 — Letter of Support: Dark Sky Ireland, National Dark-Sky Authority (26 July 2026)

SUMMARY OF GROUNDS FOR REFUSAL

Case Reference: PAX16.324387 | Applicant: RWE Renewables Ireland Limited | Observer: Rural West Environmentalists Limited (Co. No. 802923)

Rural West Environmentalists Limited submits that the proposed Muingmore Wind Farm must be refused permission. This submission is based exclusively on the applicant's own submitted documents, independently verified against primary sources. The six grounds set out below each constitute, independently, a sufficient basis for refusal. Together they are overwhelming.

Ground 1 — Failure of the Appropriate Assessment: Adverse Effect on Five European Protected Sites Cannot Be Excluded

The development site drains directly into Blacksod Bay and Broadhaven Bay, encompassing two Special Areas of Conservation (SAC 000470 and SAC 000472), a Special Protection Area (SPA 004037), and a Ramsar wetland of international importance. The applicant's own documents confirm the complete source-pathway-receptor chain: construction-phase sediment and peat particles will enter the Doolough Stream (confirmed Poor status under the Water Framework Directive, legally required to be restored), flow into Blacksod Bay, and reach internationally rare maerl beds, seagrass communities, and the foraging grounds of 14 SPA qualifying bird species. Under the standard established in Waddenzee (C-127/02), permission cannot be granted where any residual scientific doubt exists. It does here. The Natura Impact Statement does not meet the legal standard required.

Legal tests: Article 6(3) EU Habitats Directive; Waddenzee (C-127/02); Sweetman v An Bord Pleanála [2014] 3 IR 468; People Over Wind (C-323/17).

Ground 2 — Mayo County Council's Own Policy Designates This Site Unsuitable

The applicant's own EIAR (Chapter 10) acknowledges that Mayo County Council's adopted Renewable Energy Strategy — formally enacted as Variation No. 2 to the County Development Plan 2022–2028 on 13 July 2026 — designates the Muingmore site as Unsuitable for wind energy development. The applicant's own pre-application consultation record (Technical Appendix 3-4) records Mayo County Council stating directly, on 16 January 2025, that it was "not happy with the application and not comfortable to give green light at this stage. Not in

favour from a visual point of view." This statement was made by the planning authority fourteen months before the application was lodged. The applicant's own documents confirm that the site falls within a Peatland Exclusion Policy area, a Landscape Sensitivity area, and directly conflicts with the Wild Mayo Destination and Experience Development Plan launched by Fáilte Ireland on 1 May 2026.

Legal tests: Section 37E Planning and Development Act 2000 (as amended); proper planning and sustainable development of the area.

Ground 3 — Permanent Destruction of Priority Annex I Habitat: Active Blanket Bog

The applicant's own Technical Habitat Report (Technical Appendix 5-1) confirms that the entire development site qualifies as Priority Annex I habitat (*7130 active blanket bog) — the highest category of protection under the EU Habitats Directive. The applicant's own Peatland Restoration Plan confirms that the statutory biodiversity metric assumes approximately two-thirds of restoration effort will fail, that the applicant deliberately substituted a non-statutory foreign metric to avoid this finding, that recovery timescales are 5 to 30+ years even in the best case, and that no restoration agreement exists at all for the area surrounding Turbine 10. Under the Briels principle (C-521/12), biodiversity net gain calculations cannot be used at Article 6(3) stage to offset the destruction of existing protected habitats. The BNG claim is legally irrelevant to the Article 6(3) test and cannot substitute for the required scientific certainty.

Legal tests: Article 6(3) EU Habitats Directive; Annex I Priority Habitat protection; Briels (C-521/12); Waddenzee (C-127/02).

Ground 4 — Critical Deficiencies in the Technical Assessment: The Application's Own Documents Are Self-Contradictory

Rural West Environmentalists has directly verified every chapter of the EIAR and the majority of its technical appendices. The following deficiencies are drawn from the applicant's own submitted documents and constitute independent grounds for refusal:

Aviation: The applicant's own Aviation Review Statement (Technical Appendix 13-2, Table A1) assesses only 11 of the 13 proposed turbines — T07 and T11 are entirely absent from the

coordinate table. The Coast Guard SAR helicopter forward refuelling station at Blacksod Lighthouse is not referenced anywhere in the aviation assessment.

Noise: Five of the seven noise monitoring instruments used to establish the baseline failed basic calibration checks, with drifts ranging from 0.6 to 1.0 dB against a 0.5 dB acceptable threshold. The applicant's own Chapter 9 admits amplitude modulation "cannot be measured or predicted in advance of the operation of the wind farm."

Shadow flicker: The applicant's own Technical Appendix 11-1 assigns identical, unsurveyed window dimensions to every single window across all 92 assessed properties — 368 entries, not one varying from W:10m D:5m H:3m. No property was individually surveyed.

Bats: The Bat Survey Report is marked as a draft document. Static detectors at Turbine locations T01 and T02 completely failed during the critical summer deployment. The spring survey did not commence until 28 May 2024, missing the entire April emergence window. No 50-metre woodland-edge buffer has been applied at the six turbines with highest recorded bat activity.

Traffic: HDV traffic on the L5252 rises from 12 to 323 movements per day — a 2,592% increase. No pre-works road condition survey has been submitted, making the applicant's own post-construction reinstatement commitment unenforceable.

Ground 5 — Procedural and Application Irregularities

The Application Form itself discloses that a prior application (PAX16.324308) was withdrawn on 11 June 2026, weeks before this application was lodged on 19 June 2026. The Application Form answers "No" to whether any valid planning application has been made in respect of this land in the previous six months. The Form's own explanatory note states that where a prior application exists within six months, site notices must be on a yellow background under Article 19(4) of the Planning and Development Regulations 2001. White notices were used. This is a matter requiring clarification from the Board before any further step in the determination process.

Ground 6 — Three Planning Precedents Support Refusal

19.7 Gibbet Hill Wind Farm: Irish High Court Orders Permanent Shutdown and €360,000

Damages

Rural West Environmentalists draws An Coimisiún Pleanála's attention to a directly relevant and recent Irish High Court judgment which establishes the real-world consequences of approving wind energy developments in close proximity to residential properties. In June 2025, Mr Justice Oisín Quinn of the High Court ordered the permanent shutdown of three of six turbines at Gibbet Hill Wind Farm, near Bunclody, County Wexford, and awarded €360,000 in damages to two plaintiffs (€300,000 general damages and €60,000 aggravated damages). Mr Justice Quinn found that the defendants had failed to engage in any meaningful way with the genuine and substantive complaints about noise pollution made by the couple over twelve years since the turbines began operating in 2013. He described the response and approach of the defendants for the twelve-year period prior to trial as "seriously unimpressive" and awarded €60,000 in aggravated damages on that basis. The operators admitted liability on day 11 of an 11-day trial. The case was initiated in 2018 by Raymond Byrne and Lorna Moorhead, represented by John Rogers SC, instructed by solicitor Joe Noonan. Mr Justice Quinn refused to grant a stay pending appeal, ordering the three turbines to shut down immediately. The defendants indicated an intention to appeal but as of July 2026 the Irish Times confirmed the defendants are not appealing the full closure order. The operators were also directed to pay €950,000 towards the couple's estimated €2.3 million legal costs.

The Gibbet Hill turbines are six Nordex turbines with a hub height of 80 metres, rotor diameter of 90 metres, and tip height of 125 metres. They have been operational since May 2013. The plaintiffs, Raymond Byrne and Lorna Moorhead, reside approximately 1,050 metres from the nearest turbine — a distance confirmed in a 2020 High Court ruling in the same proceedings. The comparator with the Muingmore proposal is stark and directly relevant. The Gibbet Hill turbines found by the High Court to constitute a nuisance warranting permanent shutdown are 125 metres tip height with the nearest home at approximately 1,050 metres. The Muingmore turbines are proposed at up to 180 metres tip height — 55 metres taller — with the nearest confirmed residential property at 719.24 metres from Turbine 12 and the nearest dwelling to any turbine at 740 metres. The proposed Muingmore turbines are materially larger and

materially closer to residential properties than those found by the Irish High Court to constitute a legal nuisance requiring permanent shutdown.

Rural West Environmentalists submits that An Coimisiún Pleanála must have regard to this judgment when assessing the noise, shadow flicker, and amenity impacts of the proposed development. The Gibbet Hill judgment is not a policy document or a planning guideline — it is a finding by the Irish High Court, after an 11-day trial with full expert evidence on both sides, that wind turbines of 125 metres tip height at 1,050 metres from a residence constitute a legal nuisance. An Coimisiún Pleanála is now being asked to approve turbines 55 metres taller at distances 300 metres closer. The Board should be in no doubt about the legal exposure that attaches to this determination.

An Coimisiún Pleanála has refused three separate wind energy applications within 6 kilometres of the Muingmore site on grounds that apply directly here: PL16.245355 (2015) — refusal of 8 turbines at Tawnanasool; PL16.130499 (2003) — refusal of 51 turbines on land encompassing this site; and PL16.226433 (2008) — refusal at Sheskin due to risk to Carrowmore Lake SAC. The Coolglass Supreme Court ruling [2026] IESC 5 does not assist the applicant: that case involved no Natura 2000 sites, no EU Habitats Directive obligation, and no risk of irreversible ecological damage. The factual matrix at Muingmore is categorically different.

Formal Request

Rural West Environmentalists Limited formally requests that An Coimisiún Pleanála refuse permission for the proposed Muingmore Wind Farm development (PAX16.324387) in its entirety. The detailed grounds supporting each of the above are set out in full in Sections 1 through 35 of this submission, supported by Sections 36 to 38.

Section 1: Introduction and Statement of Opposition

1.1 Who We Are

Rural West Environmentalists Limited (Company No. 802923) is a collective of concerned local residents, landowners, marine users, tourism operators, fishing families, and community stakeholders dedicated to the protection of the Erris region of County Mayo. Our membership includes people whose livelihoods, homes, health, landscapes, cultural heritage, and economic future are directly threatened by this proposed development. We are not opposed to renewable energy. We are opposed to this project, on this site, threatening these protected places.

1.2 Legal Basis for This Submission

This submission is made pursuant to Section 37E of the Planning and Development Act 2000 (as amended) and the Planning and Development Act 2024. It is submitted within the statutory observation period, which commenced on 18 May 2026 with the erection of site notices, and expires on 7 August 2026.

1.3 Unambiguous Statement of Opposition

Rural West Environmentalists Limited formally and unequivocally opposes the proposed development in its entirety and requests that An Coimisiún Pleanála refuse permission for this project. Our opposition rests on multiple independent, legally sufficient grounds, each of which standing alone would justify refusal. In combination, they make approval legally untenable.

1.4 Structure of This Submission

This submission is structured to address every ground of objection in full. It is based on: the applicant's own submitted application documents (PAX16.324387 — all volumes); the applicant's own public-facing website and residents' letters; the pre-application consultation record (ABP-318372-23); official NPWS scientific surveys; verified Irish and European planning precedents; the most recent Supreme Court jurisprudence; and the most current planning

policy documents from Mayo County Council and Fáilte Ireland. Where deficiencies in the application are identified, they are referenced to the specific chapter, volume, or document name within the application.

1.5 The Businesses and Enterprises of Geesala That This Development Threatens

Geesala is a small rural Gaeltacht village in the Barony of Erris serving seven surrounding communities. It is not a dormitory settlement or a passing place. It is a functioning rural community with its own economic and social infrastructure that has been built and sustained over generations. That infrastructure is directly and materially threatened by this development, and it has not been assessed or identified as an economic receptor anywhere in the applicant's EIAR.

The Erris Coast Hotel is the principal tourism and hospitality business in Geesala — a 20-room hotel with restaurant, bar, and full laundry service, located 244 metres from the village centre. It has a booking score of 9.1 from over 519 guest reviews. Visitors come to the Erris Coast Hotel specifically because of the landscape, the coast, and the character of this part of north Mayo. It is the anchor of the local tourism economy. Industrial wind turbines visible from the hotel and its surroundings — and audible on its outdoor terrace — will materially affect its appeal and its bookings. The applicant has not assessed this impact.

The Geesala Community Centre is a focal point for the entire surrounding area — used for community events, children's activities, boxing club, a café, courses, and recreational activities. It is located approximately 1,696 metres from the nearest turbine — a distance the applicant's own Table 4-9 incorrectly states as 4.5km. The community centre is not identified as a sensitive receptor in the applicant's Chapter 4. It should be.

The village also has a general store serving the surrounding townlands across a wide rural catchment. This is not simply a retail outlet — in a rural community without access to regular public transport, the local shop is an essential service for elderly residents, those without cars, and families on low incomes. Their commercial viability depends on the community being an attractive place to live. Two pubs and a community café similarly depend on footfall from a community that is settled, functioning, and not subject to the anxiety and disruption of a 35-

year industrial installation on its doorstep.

The laundry service operating in the area provides an essential function for residents who depend on it, including the hotel and self-catering accommodation providers. These interconnected service businesses form an economic ecosystem that depends on the community remaining viable and attractive.

The area also supports a significant number of remote and hybrid workers — people who have chosen to live and work in Erris precisely because of what this place offers that urban locations cannot: space, quiet, clean air, dark skies, and a quality of life that supports productive work. This is not a marginal trend. The shift to remote working has been one of the defining economic developments of the last five years, and north Mayo has benefited directly from it. The applicant has not assessed the impact of industrial wind turbines on the attractiveness of this area as a location for remote workers and knowledge economy businesses.

The membership of Rural West Environmentalists also includes businesses that have made deliberate capital investment in Geesala: Temerity Wine Estate , the first Zweigelt open-air commercial vineyard in County Mayo, cultivating over 250 vines with first commercial bottling planned for 2027; An Even Better Place to Work Ltd (bp2w®), a global SaaS employee engagement company operating in 16 countries with over 50 enterprise clients, headquartered in Geesala with Enterprise Ireland HPSU funding; and Orla Photography , a professional landscape photography business whose entire commercial inventory is built on capturing the distinctive light and landscape of north Mayo and the Atlantic coast.

None of these enterprises — the hotel, the community centre, the shops, the laundry, the remote workers, the specialist businesses — has been identified as a sensitive receptor or assessed as an affected economic interest anywhere in the applicant's Environmental Impact Assessment Report. The applicant has assessed this development as if Geesala were an empty landscape. It is not.

Section 2: The Applicant, the Development, and Its True Scale

2.1 The Applicant

The applicant is RWE Renewables Ireland Limited, registered in Ireland as Company No. 589120, a subsidiary of RWE AG — one of Europe's largest energy companies, headquartered in Essen, Germany. Its registered Irish office is Unit 5, Desart House, Lower New Street, Kilkenny. The application is managed by Stakeholder Engagement officer Kieran O'Byrne. The applicant is represented by SLR Environmental Consulting (Ireland) Limited.

Despite RWE's stated commitment to community engagement, the applicant declined to attend a community public meeting hosted by Rural West Environmentalists in late 2025. TD Rose Conway-Walsh, Councillor Gerry Coyle, Erris Chamber of Commerce members, and a full house of local residents were present. The absence of the developers made it impossible for the community to understand the plans or have questions answered in an open forum.

2.2 The Proposed Development

The proposed development consists of:

- 13 wind turbines, each with a blade tip height of up to 180 metres. Hub heights 98.5 to 105 metres. Rotor diameter between 149 and 163 metres (EIAR Chapter 2, paragraph 107). Installed capacity between 74.1 MW and 91 MW depending on final turbine technology selected (EIAR Chapter 2, Section 2.29).
- A 110kV grid connection substation.
- A battery energy storage system (BESS).
- An extensive network of access roads across the bogland, including swept-path infrastructure for abnormal loads (turbine blades and tower sections) delivered from Killybegs Port, County Donegal.
- Approximately 25.5 kilometres of underground 110kV cable (the Grid Connection Route, GCR) to Bellacorick substation — proposed to be the subject of a separate planning application at a later date.

- Underground cabling across the Muingmore bogland system.
- A 100-metre meteorological mast.
- Temporary construction compounds.
- All associated drainage infrastructure, peat management works, and ancillary works.
- Ancillary forestry felling within the site boundary.

2.3 Scale: What 180 Metres Means in This Landscape

i Scale in Context

The Belmullet water tower is approximately 30 metres tall. Each of the 13 proposed turbines would be six times that height. They would be visible from Blacksod Point, Elly Bay beach, the ferry crossing to the Mullet Peninsula, Bangor Erris, the hills above Belmullet, and from the water of Blacksod Bay itself. They would dominate this landscape for 35 years.

Each turbine foundation will require the excavation of a substantial volume of waterlogged peat down to mineral substrate and the pouring of hundreds of tonnes of reinforced concrete. The access roads will require peat stripping, geotextile installation, and drainage channel alteration across many kilometres of active blanket bog. The total physical disturbance footprint — including all turbine platforms, access roads, cabling corridors, substation, BESS, and construction compounds — will extend across hundreds of hectares of some of the most ecologically sensitive land in Ireland.

2.4 Duration and Irreversibility

The applicant seeks a 35-year operational life. The physical changes to the Muingmore bogland — the drainage alterations, the foundation excavations, the road corridors — will be permanent. The changes to the ecology of Blacksod Bay and Broadhaven Bay resulting from construction runoff may be permanent, given the irreversible nature of maerl bed destruction and the multi-century timescale of maerl recovery. This is not a temporary interference: it is an irreversible industrial transformation of one of Ireland’s last truly wild landscapes.

Section 3: The Five European Protected Sites at Risk

This development threatens five separate and legally distinct European and international protected designations. Each is addressed in turn. The cumulative effect of these designations places an extraordinarily high legal bar on any project proposing to build on peat draining into these waters.

3.1 Mullet/Blacksod Bay Complex SAC (Site Code: 000470)

Designated under EU Habitats Directive (92/43/EEC). Qualifying Annex I habitats include: Large shallow inlets and bays (Habitat 1160) — encompassing the internationally rare maerl beds and seagrass communities documented by the NPWS/MERC survey (2008); Reefs (Habitat 1170) — encompassing the *Serpula vermicularis* biogenic reef communities and *Lanice conchilega* communities; Mudflats and sandflats (Habitat 1140); and priority habitats including fixed dunes and machair. Qualifying Annex II species include the European Otter (*Lutra lutra*) and Harbour Seal (*Phoca vitulina*). Conservation Objectives published by NPWS are legally binding.

3.2 Broadhaven Bay SAC (Site Code: 000472)

Separately designated Natura 2000 SAC under the EU Habitats Directive. Qualifying interests include mudflats and sandflats [1140], large shallow inlets and bays [1160], reefs [1170], Atlantic salt meadows [1330], and submerged sea caves [8330]. Broadhaven Bay is connected to Blacksod Bay by an nineteenth-century tidal canal approximately 300 metres in length at Belmullet, completed in 1851. The two bays form a single, hydrodynamically integrated tidal system. Pollutants entering Blacksod Bay will be transported by tidal action into Broadhaven Bay within hours on every flood tide. An assessment that treats these as independent bodies of water is scientifically incorrect and legally inadequate.

3.3 Blacksod Bay/Broad Haven Special Protection Area (Site Code: 004037)

Designated under EU Birds Directive (2009/147/EC), transposed by S.I. No. 388/2021 (European Union Conservation of Wild Birds (Blacksod Bay/Broad Haven Special Protection Area 004037) Regulations 2021). Article 7 of the EU Habitats Directive applies the full Article 6(3) Appropriate Assessment obligation to this SPA. It has fourteen qualifying bird species:

- Red-throated Diver (*Gavia stellata*) [A001] — highly vulnerable to collision; dependent on clear water for visual predation
- Great Northern Diver (*Gavia immer*) [A003] — highly vulnerable to collision; visual predator in coastal waters
- Slavonian Grebe (*Podiceps auritus*) [A007]
- Light-bellied Brent Goose (*Branta bernicla hrota*) [A046] — dependent on *Zostera marina* seagrass as primary winter food source in Blacksod Bay
- Common Scoter (*Melanitta nigra*) [A065]
- Red-breasted Merganser (*Mergus serrator*) [A069]
- Ringed Plover (*Charadrius hiaticula*) [A137]
- Sanderling (*Calidris alba*) [A144]
- Dunlin (*Calidris alpina*) [A149]
- Bar-tailed Godwit (*Limosa lapponica*) [A157]
- Curlew (*Numenius arquata*) [A160] — RED-LISTED in Ireland; severe long-term population decline
- Dunlin (*Calidris alpina schinzii*) [A466]
- Sandwich Tern (*Thalasseus sandvicensis*) [A863]
- Wetland and Waterbirds [A999]

This SPA is threatened by this development on two independent pathways: (1) degradation of bay water quality and food resources during construction and operation; and (2) direct avian collision risk from 13 turbines at 180 metres within the flight lines of these species. Both pathways must be addressed in the NIS with certainty beyond reasonable scientific doubt. That has not been done.

3.4 Ramsar Site No. 844: Blacksod Bay and Broadhaven (designated 7 June 1996)

Both Blacksod Bay and Broadhaven Bay are designated Wetlands of International Importance under the Ramsar Convention (1971), comprising Ramsar Site No. 844. Ireland is a contracting party to the Ramsar Convention and has obligations to use these wetlands wisely and to avoid degrading their ecological character. This is confirmed by Mayo County Council's own adopted Renewable Energy Strategy (Variation No. 2, 13 July 2026) (April 2026). The applicant's NIS contains no assessment of Ireland's Ramsar obligations. This is a standalone material omission.

3.5 Trista Bog Natural Heritage Area (NHA)

Trista Bog (Tristia/Troiste) is a nationally designated Natural Heritage Area (NHA) under the Wildlife (Amendment) Act 2000, located immediately adjacent to the proposed development site. The proposed development will directly alter the hydrology, surface drainage, and ecological function of the wider Muingmore bogland system within which Trista Bog NHA is situated. No adequate hydrological impact assessment for Trista Bog NHA has been provided.

Section 4: The Source — Fundamental

Unsuitability of the Peatland Site

4.1 Atlantic Blanket Bog: The Most Hydrologically Active Landscape in Ireland

The Muingmore site is situated on Atlantic blanket bog — a globally rare habitat characterised by near-permanent waterlogging, high water tables, extremely low peat shear strength, and a hydrology entirely driven by rainfall and gravity. All surface and near-surface water flows downhill to the sea with no effective filtration. Peat soils in this region are typically 2 to 5 metres deep, with some areas deeper. The bearing capacity of saturated peat is negligible. It is physically one of the most challenging and dangerous construction environments in the world for a project of this scale.

4.1A The Applicant's Own Habitat Survey Confirms the Entire Site Qualifies as EU Priority Habitat — Even in Its Degraded Areas

Rural West Environmentalists has directly verified the applicant's own Technical Habitat Report (Technical Appendix 5-1), which confirms a finding of fundamental importance to this application. The applicant's own surveyors state, without qualification: 'All areas of lowland blanket bog habitat on site (including degraded areas) have been classified as the EU Habitats Directive Annex I habitat [*7130] Blanket bogs (and specifically the Priority 'active' bog type), due to the appropriate indicator species being present.' The asterisk in this designation denotes a Priority habitat type under Annex I of the EU Habitats Directive — the highest category of legal protection afforded to a habitat under European law, reserved for habitat types considered to be in danger of disappearance and for whose conservation the European Union bears particular responsibility.

Rural West Environmentalists draws particular attention to the applicant's own description of the central area of the site: 'Across the centre of the site, there is an extensive area of degraded PB3 habitat present. It appears that this area was cutover and/or partially drained for forestry purposes. Peat remains deep in this area, at over 3 metres in most places.' Despite this acknowledged degradation, the applicant's own surveyors confirm that this central area, too,

qualifies as Priority active blanket bog, stating that 'the active form is confirmed by the presence here of significant areas of vegetation' indicative of that status.

Rural West Environmentalists submits that this is a finding of the first importance for this application. The applicant's own ecologists have confirmed, in their own survey, that the development site is not merely peatland of general ecological interest, but is, in its entirety, including the areas the applicant itself characterises as already degraded by historic drainage and forestry, a Priority habitat type under the EU Habitats Directive. A development proposing the permanent excavation and removal of this habitat at 13 turbine foundations, a substation, a BESS compound, and an extensive network of access tracks and cabling corridors is proposing the permanent loss of a Priority Annex I habitat, not merely a degraded or low-value landscape as RWE's own public communications have sought to characterise the site (see Section 4.2 below).

Rural West Environmentalists further notes that the applicant's own Technical Habitat Report confirms at least two additional, separate EU Habitats Directive Annex I habitat types are present and confirmed on site, beyond the Priority active blanket bog addressed above. The report confirms that wet heath areas on site have been classified as Annex I habitat [4010] Northern Atlantic wet heaths with *Erica tetralix*, with the applicant's own surveyors recording the condition of this habitat on site as 'good', and that areas of transition mire on site have been classified as Annex I habitat [7140] Transition mire and quaking bogs, confirmed by the presence of indicator species including *Carex rostrata*, *Menyanthes trifoliata*, and other sedge species. Rural West Environmentalists submits that the presence of at least three separate, confirmed Annex I habitat types across the development site — one of them a Priority habitat type present even in the site's degraded central area — demonstrates a level of habitat sensitivity and legal protection considerably beyond what a general characterisation of the site as low-grade or degraded peatland would suggest. Rural West Environmentalists has now also verified the applicant's own EIA Scoping Report (Technical Appendix 3-3, 18 April 2024), which confirms a fourth separate Annex I habitat type present on site: 'European dry heaths (4030)', recorded 'widely across the main wind farm site in areas of partially drained bog that previously was forested', with the same report confirming that the wet heath (4010) habitat was recorded specifically 'near the active lowland blanket bog (7130*) area, near the Doolough stream' — confirming that these multiple Annex I-protected habitats are geographically concentrated in the same area of the site that drains into the Doolough Stream, the

watercourse independently confirmed elsewhere in this submission as being of Poor WFD status and at risk. Rural West Environmentalists notes that the same Scoping Report identifies an operational EPA water quality monitoring station (reference RS33D020100) on the Doolough Stream, and requests that An Coimisiún Pleanála require the applicant to provide the most recent monitoring data from this station as part of any updated water quality assessment.

4.1B Formal Request

Rural West Environmentalists formally requests that An Coimisiún Pleanála require the applicant to:

- Confirm the precise area, in hectares, of Priority *7130 active blanket bog habitat that would be permanently lost as a direct result of this development, broken down by individual element of infrastructure (turbine foundations, hardstands, access tracks, cabling corridors, substation, BESS compound);
- Explain how the permanent loss of a Priority Annex I habitat type, confirmed present across the entire site including its degraded areas, has been weighed in the Appropriate Assessment and Natura Impact Statement, given the heightened legal protection afforded to Priority habitats under the EU Habitats Directive;
- Reconcile the applicant's own confirmation that the site is Priority active blanket bog habitat with RWE's public characterisation of the site, addressed at Section 4.2 below, as comprising 'cutaway bog, agricultural land and forestry.'

4.2 RWE Mischaracterises the Site in Public Communications

RWE Renewables' October 2025 residents' letter and public website describe the study area as comprising 'cutaway bog, agricultural land and forestry.' Cutaway bog is fundamentally different from active blanket bog: it has been commercially harvested of its surface peat and has significantly different physical and hydrological properties. The Muingmore site includes areas of active, deep, waterlogged Atlantic blanket bog that are categorically not cutaway. This mischaracterisation in public communications is inconsistent with the bog hazard assessment in the applicant's own Technical Appendix 6-2 (Peat Landslide and Hazard Risk Assessment), which acknowledges the presence of peat with significant instability risk. An Coimisiún Pleanála

is requested to note this discrepancy between the applicant's public representations and its own technical assessment.

4.3 Peat Instability: A Catastrophic Reality in Ireland

The risk of peat instability during wind farm construction is not a theoretical concern. It is a demonstrated catastrophic reality with multiple precedents:

Cashelnavean, County Donegal (2020)

A bog slide released approximately 86,240 cubic metres of peat, of which approximately 65,740 cubic metres entered the Shruangarve and Mourne Beg rivers and caused severe damage to European-protected sites. The developers — Planree Limited and Mid-Cork Electrical — pleaded guilty to polluting protected watercourses. The High Court granted an injunction prohibiting further development in April 2024 (Donegal County Council v. Planree Limited and Mid-Cork Electrical). The Court of Appeal found the wind farm unauthorised in December 2024.

Derrybrien, County Galway (2003)

Over 400,000 cubic metres of peat were released during wind farm construction, killing an estimated 50,000 fish. The Irish Peatland Conservation Council has documented multiple subsequent bog slide events during wind farm construction across Ireland.

4.4 No Independent Verification of Peat Stability Assessment

The applicant's Peat Landslide and Hazard Risk Assessment (Technical Appendix 6-2, Volume 3 EIAR) is self-commissioned by the applicant's own environmental consultants. No independent verification of the peat stability modelling has been provided. Given the track record at Cashelnavean — where developer-commissioned stability assessments proved catastrophically wrong — An Coimisiún Pleanála should require an independently commissioned and verified peat stability assessment before any determination is made.

4.5 Scottish Government Good Practice Guidance

The Scottish Government's Good Practice during Wind Farm Construction (4th Edition, 2019) — the internationally recognised leading guidance on this subject — identifies peat instability and pollution of watercourses with suspended solids as the primary and most serious risks of wind farm construction on blanket bog. It states that even with the most rigorous mitigation measures, the risk of pollution events cannot be entirely eliminated on deep, waterlogged peat. This directly supports the conclusion that the Muingmore site is fundamentally unsuitable for a construction project of this scale.

4.6 Mayo County Council's Own Policy: Peatland Excluded

Mayo County Council's adopted Renewable Energy Strategy (Variation No. 2, 13 July 2026) (April 2026) states explicitly: 'Peatlands are vital carbon sinks, storing much of Ireland's carbon in their soils. Activities like wind turbine construction can dry out peat soils, disrupting carbon storage and increasing carbon dioxide emissions... Given the heightened risk of peat desiccation and the associated loss of carbon storage capacity, such soils are considered unsuitable for wind energy development in Mayo. It is therefore appropriate to exclude these areas at the planning policy stage.' The Muingmore site is located on peatland. The planning authority's own emerging strategy says this land should be excluded from wind energy development.

4A.1 Article 17 Conservation Status: The Qualifying Habitats and Species Are Already in Unfavourable Condition

Ireland's most recent Article 17 Habitats Directive reporting — submitted to the European Commission as required under Article 17 of the Habitats Directive — classifies the qualifying habitats and species at issue in this application as follows. Rural West Environmentalists submits that this conservation status context materially raises the legal threshold that the applicant must clear before An Coimisiún Pleanála can lawfully grant permission under Article 6(3).

Active Blanket Bog (*7130) — Unfavourable-Bad (U2), Declining

Ireland's Article 17 report classifies Active Blanket Bog (*7130) as Unfavourable-Bad (U2) with a declining trend. The major recognised pressures include drainage, infrastructure development, forestry, and peat extraction. Those are precisely the pressures associated with this development. The proposed development would permanently remove and fragment areas of Annex I blanket bog habitat and introduce additional hydrological alteration within a habitat type already recognised by the State as being in poor conservation condition. Rural West Environmentalists submits that this conservation status should weigh heavily against any conclusion that additional disturbance can occur without adverse effects on the integrity of connected European sites. Where a qualifying habitat is already in Unfavourable-Bad status, the precautionary principle requires a particularly high evidential threshold before additional impacts can be authorised.

Transition Mire and Quaking Bogs (7140) — Unfavourable-Inadequate (U1)

Transition Mire and Quaking Bogs (Habitat 7140), also confirmed present on site by the applicant's own Technical Appendix 5-1, is classified as Unfavourable-Inadequate (U1) in Ireland's Article 17 reporting. This habitat is particularly sensitive to hydrological alteration and drainage. The development proposes access roads and drainage works in areas containing this habitat. The applicant has not demonstrated beyond reasonable scientific doubt that these works will not cause further deterioration of a habitat already in unfavourable conservation status.

Northern Atlantic Wet Heaths (4010) — Unfavourable-Inadequate (U1)

Northern Atlantic Wet Heaths with *Erica tetralix* (Habitat 4010), confirmed present on site, is classified as Unfavourable-Inadequate (U1) nationally. The combination of existing unfavourable status and the proposed disturbance at this site means the applicant must demonstrate, with complete, precise and definitive findings, that conservation objectives for this habitat will not be adversely affected. The applicant's NIS does not provide this level of certainty.

European Eel (*Anguilla anguilla*) — IUCN Critically Endangered, EU Eel Regulation

While European Eel is not a Natura 2000 qualifying interest, its confirmed presence in site-connected watercourses, combined with its Critically Endangered IUCN status and the obligations imposed by EU Eel Regulation 1100/2007, means that additional sedimentation and hydrological alteration cannot simply be dismissed as insignificant. The species is undergoing one of Europe's most severe population collapses, and the State has specific regulatory obligations to restore eel populations to sustainable levels. Construction-phase impacts on the freshwater systems confirmed to support European Eel must be assessed against that obligation.

Maerl (*Lithothamnion corallioides* and *Phymatolithon calcareum*) — Annex V, Sediment-Sensitive

Both maerl-forming species confirmed in Blacksod Bay are listed under Annex V of the EU Habitats Directive. The MERC (2008) survey constituted a new scientific record of maerl in this bay. Maerl grows at 1 to 3mm per year, making any loss effectively permanent on any planning timescale. The applicant has not demonstrated beyond reasonable scientific doubt that fine sediment mobilisation from 455 hectares of peat disturbance would not adversely affect the maerl-dominated communities that form part of the conservation objectives of the Mullet/Blacksod Bay Complex SAC.

Section 5: The Pathway — Hydrological Connectivity Confirmed by the Applicant

5.1 RWE’s Own Pre-Application Record: The Catchment Admission

All surface water and near-surface groundwater from the Muingmore development site flows into the Blacksod–Broadhaven water catchment. This is not a matter of inference or scientific extrapolation. It was confirmed by RWE Renewables itself, in its own pre-application consultation record (ABP-318372-23), at the meeting with An Coimisiún Pleanála’s representatives in January 2024. The pre-application record states in terms that the development site lies within the Blacksod–Broadhaven water catchment.

At that same January 2024 meeting, An Coimisiún Pleanála’s own Board representatives raised formal water quality concerns. They specifically noted that the Doolough Stream is classified as ‘at risk’ under the Water Framework Directive (WFD), and that Tullaghan Bay, connected via the Trista watercourse, is ‘under review’ under the WFD.

⚠ RWE Was Formally Warned in January 2024 and Proceeded Regardless

An Coimisiún Pleanála’s own representatives raised water quality concerns and flagged the at-risk status of the Doolough Stream at the January 2024 pre-application meeting. RWE Renewables was formally put on notice of these risks two years before lodging this application. It chose to proceed. The applicant cannot claim ignorance.

5.2 The Doolough Stream: At-Risk Under the WFD

The Doolough Stream's classification as 'at risk' under the Water Framework Directive is not a background environmental condition, and it is not merely an officer's comment made at a single pre-application meeting. Rural West Environmentalists has now independently verified that the applicant's own Water Framework Directive technical appendix (Technical Appendix 7-4) repeatedly and consistently confirms this finding in its own formal technical assessment: Doolough Stream (DOOLOUGH_STREAM_010) is recorded as being of 'Poor' WFD status and 'At risk' due to 'sediment and nutrient pollution as a result of agriculture and peat

extraction/drainage pressures' — language repeated near-identically across at least four separate tables and sections of the applicant's own report. This stands in direct contrast to the two other local surface watercourses on site, AN_RÁITH_010 and TRISTIA_010, which the applicant's own report confirms are of 'Good' WFD status. Doolough Stream is therefore not merely 'at risk' in the abstract; it is the applicant's own confirmed weakest-status watercourse on the entire site, already failing to achieve Good status, and already subject to exactly the kind of agricultural and peat-related sediment and nutrient pressures that this 455-hectare construction project would add to directly and substantially.

This is an active legal designation meaning that this watercourse is under pressure and may fail to achieve Good Ecological Status by 2027. A major construction project involving thousands of cubic metres of peat excavation in this watercourse's catchment would represent a direct additional pressure on a watercourse already confirmed, by the applicant's own technical assessment, to be failing WFD standards for precisely the same reasons (sediment and nutrients from peat extraction and drainage) that this development would introduce at far greater scale — a presumptive breach of the non-deterioration obligation under Article 4(1) of the Water Framework Directive.

Rural West Environmentalists has directly reviewed the applicant's own Surface Water Laboratory Results (Technical Appendix 7-5), comprising accredited (ISO/IEC 17025) laboratory analyses of 15 surface water sampling points across the site, conducted by ALS Life Sciences. Across this dataset, Chemical Oxygen Demand (COD) — a standard indicator of organic loading in water — ranges from 35 to 118 mg/l O₂ at fourteen of the fifteen sampling points. At one sampling point, identified as SW-7 (ALS sample reference 5777991, sampled 28 September 2023), the recorded COD is 1,190 mg/l O₂ — more than ten times higher than any other sample taken across the site. For context, untreated domestic sewage typically has a COD in the range of 600 to 900 mg/l; the SW-7 result exceeds even this range. Rural West Environmentalists notes, in fairness, that naturally peat-draining streams can independently produce elevated COD readings due to high concentrations of dissolved humic substances and organic carbon characteristic of blanket bog catchments, and does not assert that this single result is necessarily indicative of contamination. However, given that this result is a clear and substantial outlier within the applicant's own dataset, and given that it appears without further

comment, explanation, or follow-up resampling anywhere in the application documentation reviewed by Rural West Environmentalists, it requires explanation before this submission's water quality baseline can be relied upon. Rural West Environmentalists requests that An Coimisiún Pleanála require the applicant to identify the precise location of sampling point SW-7, to confirm whether this result has been independently verified by resampling, and to explain whether this anomalous reading reflects a genuine, naturally elevated baseline condition specific to that watercourse, or a sampling, laboratory, or transcription error, before this dataset is relied upon as an accurate baseline against which any future construction-phase monitoring would be compared.

Rural West Environmentalists has now directly verified the applicant's own Chapter 7 (Water: Hydrology and Hydrogeology), which confirms a second and materially stronger legal obligation beyond non-deterioration. The applicant's own chapter states the governing legal test in its own words: 'In accordance with the Surface Water Regulations, water classified as 'High' or 'Good' must not be allowed to deteriorate. Water classified as less than good must be restored.' The same chapter confirms, consistent with the findings addressed above, that 'watercourses in the northern area of the Main Wind Farm Development Site are classified as 'At Risk' with a water quality status of 'Poor' — this is the Doolough Stream, which forms the northern boundary of the site — 'while those in the southern area are 'Under Review' with a 'Good' status.'

Rural West Environmentalists submits that this changes the relevant legal question. The applicant's own chapter concludes, at its summary, that 'the Proposed Project, with the mitigation measures in place, will not result in a deterioration of the existing status of the identified WFD receptors.' Even if this conclusion were accepted at face value, Rural West Environmentalists submits that it answers only the non-deterioration limb of the applicant's own stated legal test, and does not engage at all with the second, separate, and more demanding obligation the applicant's own chapter identifies: that a watercourse already classified as less than Good status — as the Doolough Stream is, on the applicant's own evidence — 'must be restored.' A development which introduces 13 turbine foundations, an access track network, drainage alteration, and forestry felling directly into the catchment of an already-Poor-status watercourse, without addressing how that watercourse will be restored to

Good status as the applicant's own cited regulations require, has not engaged with the full legal obligation it has itself identified as applicable.

Rural West Environmentalists draws An Coimisiún Pleanála's attention to CJEU Case C-461/13 (Weser, 2015), which directly strengthens this ground. In Weser the Court of Justice established that any deterioration of the status of a body of water — even where it does not prevent achievement of good status — is unlawful under the Water Framework Directive unless specific exceptions under Article 4(7) are satisfied. The Doolough Stream is already classified as Poor status, the lowest category before Fail. Under Weser, any further deterioration of any quality element of that watercourse — including biological, physicochemical, or hydromorphological elements — is independently unlawful. The applicant has not invoked or satisfied any Article 4(7) exception. The construction-phase impacts of 455 hectares of peat disturbance draining into a Poor-status watercourse cannot be authorised without satisfying Weser, and the applicant's own Water Framework Directive assessment does not address this requirement.

The Doolough Stream drainage pathway is illustrated in the applicant's own Drainage Layout drawings D12-1 to D12-5, available on the public case file at pleanala.ie/en-ie/case/324387, Volume 4.

5.3 The Complete Hydrological Pathway to All Five Protected Sites

The complete source-pathway-receptor chain is established, confirmed, and uninterrupted:

- Rainfall on the construction site carries suspended peat particles, dissolved organic carbon, nutrients, concrete leachate, and hydrocarbon residues from construction machinery into the drainage network.
- Contaminants flow via the Doolough Stream (at-risk, WFD) and connected watercourses into Blacksod Bay, reaching the Mullet/Blacksod Bay Complex SAC (000470) and the Blacksod Bay/Broad Haven SPA (004037).
- Via the 300-metre Belmullet tidal canal, contaminants are transported from Blacksod Bay into Broadhaven Bay on every flood tide, reaching the Broadhaven Bay SAC (000472).
- The combined bay system and its connected freshwater tributaries are the habitat for European Eel, the foraging ground for 14 SPA qualifying bird species, and the location of internationally rare maerl beds, biogenic reefs, and seagrass communities.

— Drainage works on the development site alter the water table of Trista Bog NHA immediately adjacent to the site.

Once this chain is established — as it is here, confirmed by the applicant’s own pre-application record — the competent authority cannot authorise the project unless it can ascertain with certainty beyond reasonable scientific doubt that no adverse effect on the integrity of any of the connected protected sites will result. That certainty cannot be established from the application documents submitted.

5.4 Crayfish Plague: A Confirmed Invasive Pathogen Along the Same Hydrological Pathway

The source-pathway-receptor chain established above is not a purely hypothetical or sediment-and-nutrient pathway. The applicant’s own aquatic ecology surveys confirmed that the invasive aquatic pathogen crayfish plague (*Aphanomyces astaci*) was detected via eDNA sampling at all three riverine sampling locations in the vicinity of the proposed wind farm site boundary, despite no crayfish being recorded during the surveys. The applicant’s report further notes that crayfish plague had previously been detected within Hydrometric Area 33, including the Owenmore River catchment near Bellacorick and the Ballinglen River catchment, and describes the pathogen as one of the world’s 100 worst invasive species.

The presence of this invasive pathogen raises important questions regarding biosecurity during construction. The proposed development involves extensive excavation, drainage works, road construction, movement of machinery, construction traffic and works in proximity to watercourses. These activities have the potential to transfer contaminated water, sediment, soil or equipment between catchments and watercourses if strict controls are not implemented and monitored — moving the pathogen along precisely the same source-pathway-receptor chain already established in Section 5.3 as connecting this site to all five European protected sites.

⚠ The Applicant's Own Survey Team Treated This Risk as Serious — Construction Plans Do Not

The applicant's own survey team considered the risk of crayfish plague transfer sufficiently serious to implement strict biosecurity procedures during surveys, including disinfection of equipment, downstream survey sequencing, and drying procedures to avoid pathogen transfer between watercourses. No equivalent biosecurity protocol of comparable rigour has been demonstrated for the ten-year construction phase, despite that phase involving vastly greater disturbance of, and traffic between, the same watercourses.

Clarification should therefore be provided regarding:

1. Construction-phase biosecurity protocols for plant, equipment and machinery moving between catchments.
2. Measures to prevent transfer of aquatic pathogens between watercourses during construction.
3. Monitoring and enforcement arrangements for any biosecurity protocol adopted.
4. Contingency measures in the event that pathogen spread is detected during construction or operation.
5. Protection of connected aquatic habitats and downstream receiving environments, including the European protected sites identified in Section 3.

This point should be considered alongside the wider concerns regarding peatland disturbance, drainage alterations, sediment movement and protection of aquatic ecosystems set out elsewhere in this submission. The applicant's own survey-stage caution stands in stark contrast to the absence of comparable construction-stage commitment, and the competent authority cannot be satisfied that no adverse effect on the connected European sites will result without this gap being addressed.

Section 6: The Receptors — Destruction of Protected Marine Habitats

6.1 The NPWS/MERC Surveys: Primary Scientific Evidence

The National Parks and Wildlife Service commissioned definitive scientific surveys of the protected benthic communities in both bays:

- MERC Consultants (2008): Surveys of sensitive sublittoral benthic communities in Mullet/Blacksod Bay Complex SAC. The definitive scientific record of the qualifying habitats in Blacksod Bay.
- MERC Consultants (2007): Surveys including Broadhaven Bay SAC and other northwest coast sites.

These government-commissioned surveys constitute the scientific baseline against which the proposed development's impact must be assessed.

6.2 Maerl Beds: A New Scientific Record and Irreversible Loss

The MERC (2008) survey made a discovery of profound scientific significance: the recording of maerl in Blacksod Bay constitutes a new scientific record for this community in the bay. The two maerl-forming species present — *Lithothamnion corallioides* and *Phymatolithon calcareum* — are listed under Annex V of the EU Habitats Directive. Member States are legally obliged to ensure any disturbance is compatible with maintaining these species at favourable conservation status. Rural West Environmentalists has independently verified NPWS's own published Conservation Objectives for Mullet/Blacksod Bay Complex SAC (Site Code 000470, Version 1, 17 December 2014), which formalises this finding as a binding site-specific target. The conservation objective for the qualifying habitat 1160 (Large shallow inlets and bays), with a mapped extent of 11,169 hectares, expressly requires NPWS and the State to 'maintain the extent of the *Zostera*- and maerl-dominated communities and *Serpula vermicularis*-dominated community complex, subject to natural processes', and specifically to 'conserve the high quality of the Maerl dominated community, subject to natural processes', a target based directly on the same 2008 MERC dive survey relied upon throughout this submission. Rural West

Environmentalists submits that this is not a general aspiration but a precise, numbered, legally binding conservation target against which any sediment or turbidity impact from this development must be assessed.

Maerl is among the most ecologically important and sensitive marine communities in European waters. It is biogenic, created by living organisms over centuries to millennia, growing at approximately 1 to 3 millimetres per year. A maerl bed destroyed by sedimentation cannot recover within any planning timeframe. Its loss is, in practice, permanent. The international scientific literature is unambiguous: maerl beds are among the most sensitive marine habitats to fine sediment deposition. Even a thin layer of fine peat particles settling on maerl is sufficient to cause smothering and death.

The proposed development would release, during the construction phase alone, vast quantities of fine peat particles into the drainage catchment of Blacksod Bay. The result would be the smothering and irreversible destruction of a maerl community that has taken centuries to develop, that constitutes a new scientific record, and that is doubly protected under both Annex I and Annex V of the EU Habitats Directive.

6.3 *Serpula vermicularis* Biogenic Reefs and *Lanice conchilega* Communities

The MERC (2008) survey documented extensive *Serpula vermicularis* (tube worm) biogenic reefs and *Lanice conchilega* (Sand Mason worm) communities. The report notes that even after the 2008 survey, these communities had not been fully described and a return visit was planned for 2009, indicating they are more extensive and complex than the 2008 data alone captures. Serpulid reefs are qualifying interests under Annex I Habitat 1170. They are three-dimensional living structures built by filter-feeding organisms that are the first to be killed by high suspended sediment loads: sediment particles clog and abrade their feeding apparatus.

6.4 Seagrass (*Zostera marina*) Beds: Critical for Light-Bellied Brent Goose

The MERC (2008) survey confirmed extensive seagrass beds in excellent condition. The report specifically identifies the generally clear waters of Blacksod Bay as the key physical condition supporting these communities. Seagrass is photosynthetic: it requires sufficient light to reach the seabed. Construction on peat will release suspended particles that cloud the water and reduce light penetration. Even modest reductions in water transparency are sufficient to cause

large-scale seagrass mortality. Seagrass beds, once lost, recover on timescales of decades to centuries. The Conservation Objectives for the SAC specifically require the maintenance of water transparency at a level that supports the maerl and seagrass communities. The applicant has not demonstrated, beyond reasonable scientific doubt, that this requirement will be maintained during a multi-year construction programme on peat above the bay.

Of additional significance: the Light-bellied Brent Goose, a qualifying interest of the SPA (004037), is almost entirely dependent on *Zostera marina* seagrass as its primary winter food source in Blacksod Bay. The destruction of seagrass by turbidity will directly reduce available foraging habitat for this small-population subspecies during its critical winter stay.

6.5 Annex II Species: European Otter and Harbour Seal

Both the European Otter (*Lutra lutra*) and Harbour Seal (*Phoca vitulina*) are Annex II species present in the Mullet/Blacksod Bay Complex SAC, dependent on the bay's benthic communities as foraging habitat. Otters are also resident along the river and drainage channels within the development site footprint itself (see Section 12 for the European Eel finding, which confirms active and productive freshwater ecosystems within the site). Destruction of foraging habitat through sedimentation and eutrophication will deplete the invertebrate and fish communities on which both species depend. The Habitats Directive AA obligation is triggered wherever an Annex II species occurs — not only within SAC boundaries. Rural West Environmentalists has directly verified the applicant's own Chapter 5 (Biodiversity), which confirms that otter signs were specifically recorded on the Doolough Stream and the Mhoing Mhór River, both of which flow along the northern boundary of the development site, with spraint sites and latrines accounting for 87% of all signs recorded. Rural West Environmentalists notes that the Doolough Stream is the same watercourse independently confirmed elsewhere in this submission (Section 5.2) as being of 'Poor' status and 'at risk' under the Water Framework Directive due to existing sediment and nutrient pressures from agriculture and peat extraction. The confirmed presence of resident, actively foraging and marking Otter populations on a watercourse already classified as Poor and at risk, immediately bordering a site involving extensive peat excavation, drainage alteration, and construction runoff risk, represents a direct and compounding threat to an Annex II species' foraging habitat on a receiving watercourse with no resilience to spare.

Section 7: Direct Conflict with Legally Binding

Conservation Objectives

The Conservation Objectives for all five European protected sites are legally binding targets. Each is examined in the context of this development.

7.1 Mullet/Blacksod Bay Complex SAC (000470): Applicant Has Not Demonstrated Conservation Objectives Will Be Maintained

Maintain maerl bed area, distribution, and species richness

The applicant has not demonstrated, beyond reasonable scientific doubt, that fine sediment mobilisation from the construction site would not smother the maerl beds. Maerl grows at 1 to 3mm per year. Loss is permanent on any planning timescale. The applicant has not demonstrated beyond reasonable scientific doubt that this target will be maintained.

Maintain water transparency to support maerl and seagrass communities

Construction on peat will release sustained suspended solids into the bay over a multi-year period. The MERC survey identified clear water as the essential physical condition. The applicant has not demonstrated beyond reasonable scientific doubt that this target will be maintained.

Maintain reef habitat area, quality, physical structure, and species richness

Sediment will bury and collapse Serpula and Lanice reef structures. Chemical pollutants will kill filter-feeding organisms. The applicant has not demonstrated beyond reasonable scientific doubt that this target will be maintained.

Maintain favourable conservation status of European Otter and Harbour Seal

Destruction of foraging habitat and disturbance of commuting routes cannot be shown, beyond reasonable scientific doubt, not to adversely affect both Annex II species. The applicant has not demonstrated beyond reasonable scientific doubt that this target will be maintained.

7.2 Broadhaven Bay SAC (000472): Applicant Has Not Demonstrated Conservation Objectives Will Be Maintained

Rural West Environmentalists has independently verified NPWS's own published Conservation Objectives for Broadhaven Bay SAC (Site Code 000472, Version 1, 11 February 2014). The qualifying habitat 1160 (Large shallow inlets and bays) at this site, mapped at 8,674 hectares, carries a binding objective to 'maintain the extent of the Zostera-dominated community' and to 'conserve the high quality of the Zostera-dominated community', based on a 2007 MERC dive survey. The site also carries a qualifying interest in Habitat 8330 (Submerged or partially submerged sea caves), with an objective requiring that 'human activities should occur at levels that do not adversely affect the ecology of sea caves in this SAC' — a qualifying interest entirely absent from the applicant's own NIS treatment of this site. Given tidal connectivity through the Belmullet canal, all construction-phase sediment, nutrient, and contaminant impacts at Muingmore propagate directly from Blacksod Bay into Broadhaven Bay, placing both of these precise, numbered, legally binding conservation targets at direct risk. The applicant has not demonstrated, beyond reasonable scientific doubt, that these Conservation Objectives will not be adversely affected.

7.3 Blacksod Bay/Broad Haven SPA (004037): Applicant Has Not Demonstrated Conservation Objectives Will Be Maintained

The SPA's Conservation Objectives require maintenance at favourable conservation status of all 14 qualifying bird species. Red-throated and Great Northern Divers are visual pursuit predators dependent on clear productive waters — turbidity will directly reduce their foraging success. Light-bellied Brent Geese are dependent on seagrass as their primary food source — seagrass destruction will reduce their foraging habitat. The Curlew (Red-listed) cannot sustain additional collision mortality. These Conservation Objectives cannot be met.

7.4 Ramsar Convention Obligations

Ireland's Ramsar obligations require the maintenance of the ecological character of Blacksod Bay and Broadhaven Bay (Ramsar Site No. 844). Construction runoff from the Muingmore site will degrade the ecological character of both bays. These international obligations cannot be met if this development proceeds.

Section 8: The Blacksod Bay/Broad Haven SPA (004037): A Missing European Site

8.1 The SPA Is Governed by Statutory Regulations

The Blacksod Bay/Broad Haven SPA (Site Code 004037) is designated under the EU Birds Directive as transposed by S.I. No. 388/2021 (European Union Conservation of Wild Birds (Blacksod Bay/Broad Haven Special Protection Area 004037) Regulations 2021). Under Article 7 of the EU Habitats Directive, the same mandatory Appropriate Assessment obligations that apply to SACs also apply to this SPA. Every comparable wind farm application in the Erris area has been required to carry out full AA of this SPA. Inspector Reports ABP-312573-22 and ABP-313833-22 both confirm that this SPA cannot be screened out from the zone of influence and requires full AA. The inadequate treatment of this SPA in the Muingmore NIS is a potentially fatal legal deficiency.

8.2 Degradation of Bay Water Quality and Food Resources

Red-throated and Great Northern Divers are visual pursuit predators that dive to catch small fish in clear, productive coastal waters. Turbidity reduces their ability to hunt. Eutrophication and dead zones reduce the prey base. Sedimentation destroys the benthic communities that underpin the food web. All of these impacts will follow from construction runoff. Curlew foraging on intertidal mudflats within the SPA will lose invertebrate food resources through sedimentation and pollution of intertidal habitats.

8.3 Direct Avian Collision Risk: Inadequate ACRM

The application includes an Avian Collision Risk Model (ACRM) report (Technical Appendix 5-8, Volume 3 EIAR). Rural West Environmentalists raises the following specific concerns about its adequacy:

- Red-throated and Great Northern Divers are among the most collision-vulnerable bird species in European wind farm assessments, due to their habit of low-level coastal flight, their relatively poor manoeuvrability, and their tendency to fly in low-light conditions at dawn and

dusk. The ACRM must demonstrate collision mortality is below population-level significance thresholds for both species.

— The ACRM must address cumulative collision mortality in combination with all other consented or proposed wind farms within the flight range of the SPA qualifying species. The Oweninny Wind Farm (Phases 1, 2, and the newly granted Phase 3 in the SAME TOWNLANDS as Muingmore) is the most critical in-combination project. An in-combination assessment is mandatory under Article 6(3) and CJEU Waddenzee (Case C-127/02).

— The Curlew (*Numenius arquata*) is Red-listed in Ireland with a documented severe population collapse. Any additional collision mortality from this project could be of population-level significance. The ACRM must demonstrate, with population viability modelling, that even marginal additional Curlew mortality does not contribute to population decline.

— The assessment period for the ACRM must cover all seasons including winter, when the bay's qualifying waterbird species are present in greatest numbers.

8.4 Formal Request

Rural West Environmentalists formally requests that An Coimisiún Pleanála invite NPWS to make a formal submission specifically addressing the adequacy of the Avian Collision Risk assessment for SPA qualifying species, and the adequacy of the NIS's treatment of the Blacksod Bay/Broad Haven SPA (004037) overall.

8A The Combined WFD and Natura 2000 Failure: One Impact Pathway, Two Legal Obligations

Rural West Environmentalists submits that the greatest legal exposure in this application arises not from any single ground of objection but from the fact that the same impact pathway simultaneously breaches two independent bodies of EU law: the Water Framework Directive and the EU Habitats Directive. Peat disturbance, sediment release, and nutrient mobilisation from the 455-hectare development site affect the Doolough Stream (a WFD receptor already at Poor status) and flow directly into the Mullet/Blacksod Bay Complex SAC and Blacksod Bay/Broad Haven SPA (Natura 2000 receptors). These are not two separate arguments — they are one physical pathway breaching two legal obligations simultaneously.

Under the Water Framework Directive and the Weser judgment (C-461/13), any further deterioration of the Doolough Stream is independently unlawful. Under Article 6(3) of the Habitats Directive and the Waddenzee, Sweetman and People Over Wind judgments,

permission cannot be granted where reasonable scientific doubt exists that the connected European sites will not be adversely affected. The applicant has satisfied neither obligation. An Coimisiún Pleanála would need to be satisfied on both independently before permission could lawfully be granted. The applicant's own documents confirm the hydrological pathway exists. The applicant has not provided complete, precise and definitive findings capable of removing all reasonable scientific doubt under either legal regime.

Rural West Environmentalists submits that this cumulative legal exposure — the same physical impact breaching both WFD and Habitats Directive obligations — is the single strongest ground for refusal in this application, and that An Coimisiún Pleanála cannot lawfully grant permission without being satisfied on both independently.

Rural West Environmentalists further submits that the relevant question is not merely whether the applicant can demonstrate compliance with the WFD or compliance with Article 6(3) individually. The relevant question is whether the applicant can demonstrate that the same peatland disturbance pathway simultaneously:

- avoids deterioration of an already Poor-status WFD waterbody;
- does not compromise achievement of Good Status restoration objectives;
- does not adversely affect SAC conservation objectives for the Mullet/Blacksod Bay Complex SAC (000470);
- does not adversely affect SPA conservation objectives for the Blacksod Bay/Broad Haven SPA (004037); and
- does not create uncertainty regarding downstream protected marine habitats and species.

Failure to satisfy any one of these tests is sufficient to prevent consent. Where a project relies on a single hydrological pathway that engages all of them simultaneously, the burden of proof is substantially elevated. The applicant has not discharged that burden on any of the five counts.

The Doolough Stream is not merely a receiving watercourse. It is the critical legal link between the development site and the European sites downstream. The same pathway of peat disturbance, sediment release, and nutrient mobilisation underpins both the Water Framework Directive assessment and the Appropriate Assessment process. An Coimisiún Pleanála cannot lawfully assess WFD compliance and Natura protection in isolation. The combined effect of an

already Poor-status, At-Risk waterbody directly connected to Natura 2000 sites creates a strong independent ground for refusal.

Section 9: Failure of the Natura Impact Statement: Point-by-Point

The NIS (Application Document: Muingmore WF AA Screening and Natura Impact Statement) is the central legal document through which the applicant must satisfy An Coimisiún Pleanála that the development will not adversely affect the integrity of any European site. The following deficiencies are identified.

9.1 SPA 004037: Absent or Inadequate AA

The NIS must carry out a full, reasoned, evidence-based AA of all 14 qualifying species of the Blacksod Bay/Broad Haven SPA (004037), in combination with other plans and projects. Any NIS that screens out this SPA without a fully reasoned analysis, supported by quantitative data, fails the legal test in CJEU Sweetman (Case C-258/11): certainty beyond reasonable scientific doubt. The screening conclusion must be supported, not merely asserted.

9.2 Broadhaven Bay SAC (000472): Tidal Connectivity Not Adequately Modelled

Any NIS that seeks to screen out Broadhaven Bay SAC on the basis that it lies in a different sub-catchment fundamentally misunderstands the hydrological system. The 300-metre Belmullet tidal canal creates direct connectivity between the bays. The screening conclusion must be supported by current hydrological and tidal modelling demonstrating actual contaminant transport times, concentrations, and dilution factors reaching Broadhaven Bay under realistic storm scenarios. No such modelling appears in the application.

9.3 Ramsar Convention Obligations Not Addressed

The NIS contains no assessment of Ireland's obligations under the Ramsar Convention in respect of Ramsar Site No. 844. This is a standalone material omission.

9.4 Maerl Assessment Inadequate

The NIS must engage directly with the MERC (2008) finding that maerl in Blacksod Bay is a new scientific record. It must demonstrate, with sediment transport modelling under realistic worst-case construction storm scenarios, that fine sediment from the construction site cannot reach

the maerl beds in concentrations sufficient to cause smothering. A bare assertion that mitigation measures will prevent sediment reaching the bay is not, in law, adequate (CJEU Waddenzee). The demonstrated failure of such mitigation at Cashelnavean makes this especially important.

9.5 European Otter: Inadequate Survey of Site Footprint and Commuting Routes

Otters are known to be resident in the drainage channel and river network within the development site. The survey must document otter presence and activity across all watercourses within the construction footprint, assess the impact of drainage works on otter commuting routes between the upland bog and the marine SAC, and assess cumulative impacts on the Blacksod Bay otter population. The Habitats Directive obligation applies wherever Annex II species occur.

9.6 Light-Bellied Brent Goose: No Seagrass Food Resource Quantification

The NIS must quantify the *Zostera marina* resource in Blacksod Bay available to the Brent Goose population and assess whether the reduction in seagrass extent resulting from increased turbidity during construction would reduce food availability below the threshold required to maintain the population at favourable conservation status. No such quantification appears in the application.

9.7 European Eel: Not Addressed in NIS Despite Being Found on Site

The applicant's own Aquatic Baseline and Fisheries Assessment (Technical Appendix 5-4) found the European Eel in site watercourses. As a Critically Endangered species subject to EU Eel Regulation 1100/2007 and protected under Annex V of the EU Habitats Directive, its presence in watercourses draining to Blacksod Bay triggers assessment obligations that the NIS does not appear to address. See Section 12 for a full treatment of this critical finding.

9.8 In-Combination Assessment: Oweninny Phase 3 Not Adequately Addressed

Oweninny Wind Farm Phase 3 (18 turbines, up to 200m tip height, located in the townland of Moneynierin — one of the five townlands of the Muingmore application site) was granted permission by An Bord Pleanála on 26 May 2026, two days before Muingmore site notices were erected. The NIS must assess the cumulative impact of Muingmore in combination with

Oweninny Phases 1, 2, and 3 on all qualifying interests of all three European sites. Given that Oweninny Phase 3 is in the same townlands, the cumulative peat disturbance, water quality, and ornithological impacts are of the highest relevance. See Section 15 for full treatment.

Section 10: Failure of the EIAR: Chapter-by-Chapter Analysis

The following deficiencies are identified in the EIAR volumes submitted with the application (PAX16.324387, Volumes 1–3).

10.1 Chapter 2: Description of the Proposed Development

- The description of the site as including ‘cutaway bog’ in public communications overstates the proportion of degraded peat and understates the extent of active blanket bog posing the greatest instability risk.
- The EIAR must present the total volume of peat to be excavated across the entire development footprint — turbine foundations, access roads, cabling corridors, substation, BESS, and construction compounds — as a single aggregated figure. This has not been clearly presented.
- The Grid Connection Route (approximately 25.5km to Bellacorick substation) is described as a separate future application. This is a material deficiency: the GCR is an inseparable part of the development (see Section 14).

10.2 Chapter 5: Biodiversity

Bird Survey (Technical Appendix 5-2)

The bird survey must demonstrate adequate survey coverage during all relevant seasons (breeding, passage, and winter) for all SPA qualifying species. The survey periods and methodologies must be stated and must be adequate to detect the full range of species and flight activities relevant to the ACRM. Given that the SPA qualifying species include winter visitors (divers, geese, waders), winter season survey effort must be equivalent to or greater than breeding season effort.

Avian Collision Risk Model (Technical Appendix 5-8)

The ACRM must address: (a) cumulative in-combination collision risk with Oweninny Phases 1, 2, and 3 and all other consented or proposed wind farms within the flight range of the SPA qualifying species; (b) population-level significance thresholds for all Red List and SPA qualifying species; (c) collision vulnerability of divers during low-level coastal flight including at dawn and dusk; (d) the impact of 180-metre tip height turbines (significantly taller than those modelled in most standard ACRM studies) on collision probability.

Bat Survey (Technical Appendix 5-3)

The bat survey must demonstrate adequate coverage of all habitats within and adjacent to the development footprint, including drainage channels and stream margins used by bats as commuting routes. The impact on bats of a 100m meteorological mast during the pre-construction survey phase must be assessed.

Aquatic Baseline and Fisheries Assessment (Technical Appendix 5-4)

The European Eel finding in this assessment (see Section 12) has not been adequately addressed in the wider EIAR or NIS. The impact on all life stages of the European Eel must be fully assessed.

Marsh Fritillary (Technical Appendix 5-7)

The Marsh Fritillary (*Euphydryas aurinia*) is the only insect species in Ireland protected under Annex II of the EU Habitats Directive (92/43/EEC). It is listed on Ireland's Red List of Butterflies as Vulnerable, with an Overall Status assessed by NPWS (2019) as 'Inadequate but improving' — meaning the species remains under active threat of further decline and extinction nationally. The applicant's own Marsh Fritillary Survey Report (Technical Appendix 5-7, FitzGerald Ecology, September 2023) confirms that the species' foodplant, Devil's-bit Scabious (*Succisa pratensis*), was recorded within multiple areas of the development site, with the report identifying two subsites — Subsites 3 and 4 — as 'Suitable (undergrazed)' habitat containing 'the most suitable habitat for Marsh Fritillary within the site', and further noteworthy patches of the foodplant mapped at Subsites 7 and 9. While no Marsh Fritillary larvae were found during the September 2023 survey, the applicant's own report explicitly recommends that 'additional surveys are carried out prior to construction, with a focus on the subsites mentioned above' — a recommendation Rural West Environmentalists is not aware

has been acted upon, and which does not appear to have been repeated or reported anywhere else in the application documentation.

Rural West Environmentalists raises a further and more serious concern regarding the adequacy of this survey. The applicant's own report confirms that the survey was designed around, and confined to, '11 proposed turbine locations' and their associated 50-metre buffers, with the site divided into 'Subsites 1 to 11' for that purpose. The development now before An Coimisiún Pleanála proposes 13 turbines. Rural West Environmentalists submits that a protected Annex II species survey conducted around only 11 of the 13 currently proposed turbine locations cannot constitute a complete assessment of the development actually applied for. No equivalent Marsh Fritillary habitat assessment appears to have been carried out for the 50-metre buffer zones around the two additional turbines now included in the application.

Rural West Environmentalists formally requests that An Coimisiún Pleanála require the applicant to: (a) confirm which two of the 13 currently proposed turbine locations were not covered by the September 2023 Marsh Fritillary survey; (b) carry out and submit a Marsh Fritillary habitat assessment and larval survey for the 50-metre buffer zones around those two turbines, to the same NBDC-compliant methodology used in 2023; (c) confirm whether the pre-construction follow-up surveys explicitly recommended by the applicant's own ecologists at Subsites 3, 4, 7 and 9 have been carried out, and if not, why not; and (d) provide an Appropriate Assessment of the impact of construction activity, including felling, drainage, and habitat disturbance, on the confirmed Marsh Fritillary foodplant patches identified in the applicant's own survey. Given that the Marsh Fritillary is the sole insect species afforded Annex II protection in Ireland, and that suitable habitat and foodplant patches are confirmed present within the development footprint by the applicant's own survey, Rural West Environmentalists submits that this represents an independent and standalone ground requiring further information before any determination can lawfully be made. Rural West Environmentalists has now directly verified the applicant's own Chapter 5 (Biodiversity), which confirms that a 'May 2025 data-validity review' was subsequently undertaken in respect of the Marsh Fritillary survey. This review confirmed only that 'baseline ecological conditions had not materially changed' and that 'habitat quality and structure were unchanged from earlier assessments',

concluding on that basis that 'the original survey results remain valid.' Rural West Environmentalists submits that this review does not, and on its own terms cannot, cure the turbine-count deficiency identified above: a review confirming that habitat conditions at the original 11 surveyed locations remain unchanged says nothing about whether the two additional turbine locations added to the application after September 2023 have ever been surveyed for Marsh Fritillary at all. The May 2025 review does not mention, address, or purport to resolve the turbine count discrepancy, and Rural West Environmentalists submits that the applicant cannot rely upon it to suggest that the survey gap identified above has been addressed.

Peatland Restoration Plan (Technical Appendix 5-5) and Habitat Condition Assessment (Technical Appendix 5-6)

The Peatland Restoration Plan must demonstrate that the proposed restoration measures will achieve measurable and verifiable improvements to peat hydrology and carbon storage after construction. Restoration commitments without independent monitoring and enforcement conditions, with binding post-construction surveys to demonstrate success, are legally insufficient.

10.3 Chapter 6: Land, Soils and Geology

- Peat Landslide and Hazard Risk Assessment (Technical Appendix 6-2): must be independently verified. Must include worst-case peat slide modelling for each turbine location and access road segment, with quantification of the volume of peat that could be mobilised and the time to reach SAC waters.
- Peat Management Plan (Technical Appendix 6-3): must specify destinations and handling procedures for all excavated peat. No peat may be stockpiled at locations from which it could enter the drainage network.
- GI Factual Report (Technical Appendix 6-1): the geotechnical investigation must demonstrate adequate borehole depth and spacing to characterise peat depth and shear strength across the entire construction footprint, not merely at proposed turbine base locations.

10.4 Chapter 7: Hydrology and Water

— Quantitative sediment transport modelling demonstrating, under realistic worst-case storm event scenarios, the concentration and particle size distribution of suspended sediment reaching the bay. An assertion that mitigation will be effective is not a substitute for quantitative modelling.

— The WFD compliance assessment must address the non-deterioration obligation under Article 4(1) WFD in respect of the Doolough Stream (classified at-risk). Any project creating additional pressure on an at-risk watercourse presumptively breaches this obligation and must demonstrate specific mitigation.

— The impact of drainage works on the water table of Trista Bog NHA, immediately adjacent to the development site, must be specifically modelled.

— The CEMP (Technical Appendix 2-1) must specify independent real-time water quality monitoring at all drainage outlets throughout the construction period, with trigger levels for suspension of work and binding reporting requirements.

Note on the 2006 Guidelines: The Wind Energy Development Guidelines (2006) remain in force as at the date of this submission, confirmed by the Department of Housing, Local Government and Heritage in Dáil responses in May, June, and July 2025. However, they are under active Government review. The Programme for Government 2025 specifically commits to prioritising their replacement. They were written for turbines of approximately 75–100 metres and are acknowledged by the Department itself to require fundamental revision for modern turbines of the scale proposed here — 180 metres tip height. Rural West Environmentalists submits that compliance with a guideline standard written for turbines half the size of those proposed cannot be treated as demonstrating adequacy for the actual proposal.

10.5 Chapter 9: Noise and Vibration

— Amplitude modulation (AM) — the characteristic repetitive swooshing of wind turbines — must be specifically addressed. AM is known to cause sleep disturbance at distances beyond those predicted by standard noise models. The 2025 Wind Energy Ireland Position Paper on AM Conditions (Technical Appendix 9-2) should not be treated as a definitive endorsement of the proposed noise conditions — it is an industry document and its conclusions are disputed.

- The noise assessment must demonstrate that noise levels at all identified receptors comply with the Wind Energy Development Guidelines (2006) limits under all operational wind speed and direction conditions, not only under average or median conditions.
- Low-frequency noise and infrasound components of the turbine noise signature must be assessed. These components are not captured by standard A-weighted measurements.
- The nearest dwelling is 740 metres from the nearest turbine. The cumulative noise impact at this and other near receptors from the five closest turbines (1, 8, 9, 10, 11) simultaneously must be assessed.

16.6 Materially Incorrect Distances to Community Facilities

Rural West Environmentalists draws particular attention to a series of material inaccuracies in the applicant's own Chapter 4 (Population and Human Health) regarding distances from the proposed development to established community facilities. The applicant's own Table 4-9 records the Geesala Community Centre at 4.5km from the nearest turbine. Rural West Environmentalists submits, based on direct local knowledge, that the correct distance is 1,696.23 metres (independently measured, bearing 8.65° from Gweesalia Community Centre to Turbine 10) — less than one-third of the stated figure. These are not minor rounding differences. They are figures used to justify the applicant's assessment of impact on community amenity and quality of life.

Rural West Environmentalists further notes that Chapter 4 fails entirely to identify Geesala National School and Shraigh National School as sensitive receptors in the study area, despite both being established educational facilities serving the local community. Based on direct local knowledge, Geesala National School is 1,650 metres (independently measured) from the nearest turbine and Shraigh National School 2,903.59 metres (independently measured) from the nearest turbine. Schools are among the most sensitive receptors in any planning assessment — their omission from Chapter 4 is a material gap.

Rural West Environmentalists formally requests that An Coimisiún Pleanála require the applicant to provide a corrected receptor table with independently verified distances to all community facilities including schools, the community centre, local businesses, and all recreational amenities identified in this submission.

16.7 Residential Property Within 800 Metres Excluded from Assessment Maps

Rural West Environmentalists has independently measured the distance from Turbine 12 to the nearest residential property and confirms a distance of 719.24 metres — placing this dwelling within the 800-metre radius that is the standard threshold for detailed receptor assessment in shadow flicker, noise, and visual amenity analysis. Rural West Environmentalists has reason to believe this property may be that of the Coyle, Gaughan, or Lindsay family, but requires confirmation of the exact address to name it specifically. What is not in doubt is that a residential property at 719.24 metres from Turbine 12 exists and has not been clearly identified or individually assessed on the applicant's submitted maps. Rural West Environmentalists formally requests that An Coimisiún Pleanála require the applicant to identify every residential property within 800 metres of any proposed turbine by name and address, confirm their individual presence on all receptor maps, and provide individual noise, shadow flicker, and visual amenity assessments for each.

10.6 Chapter 10: Landscape and Visual

— The photomontages (Volume 4) must include viewpoints from Blacksod Point, Elly Bay beach, the Belmullet ferry crossing, and from on the water in Blacksod Bay itself — all key Wild Atlantic Way and tourism viewpoints identified in the Wild Mayo DEDP (2026–2031).

24.3 Omitted Amenity Sites: Beaches, Sporting Clubs, and Recreational Facilities

Chapter 4 (Population and Human Health) contains a further material omission in its assessment of recreational amenity and tourism impacts. The following amenity sites are entirely absent from the applicant's assessment, despite being directly affected by the proposed development:

Doolough Beach, located 2,423.36 metres (independently measured to Turbine 10) from the nearest proposed turbine, is a coastal amenity and recreational beach serving the local community and attracting visitors to the area. Dooyork Beach, located 2,384.28 metres (independently measured to Turbine 10) from the nearest proposed turbine, is similarly omitted. Shraigh Beach is not assessed. The annual horse and dog racing on Doolough Beach — a significant cultural and tourism event drawing large numbers to the area — is not referenced anywhere in the environmental assessment.

The following community facilities and recreational organisations are also entirely absent from Chapter 4's assessment of human health and amenity impacts: the Geesala Rowing Club, Geesala Boxing Club, Doohoma Golf Club, Geesala Playground, and Geesala/Shraigh Hurling Club. Mount Jubilee's old church, a cultural heritage asset referenced in the Playboy of the Western World, is absent from the cultural heritage assessment. Elly Bay Blue Flag Beach, Ballycroy National Park, and the Dark Sky Ireland designation are omitted from the visual and tourism impact sections despite being directly affected receptors within the study area.

Rural West Environmentalists notes that Erris was voted 'Best Place to Go Wild' nationally in 2014, reflecting the area's recognised status as a landscape of exceptional quality. The applicant's assessment of tourism and amenity impacts cannot be regarded as complete when the majority of the area's recognised tourism and recreational assets have not been assessed.

- The assessment must address the cumulative visual impact with Oweninny Phases 1, 2, and 3 and all other existing or consented wind farms visible from the same viewpoints.
- The assessment makes no reference to the Wild Mayo Destination and Experience Development Plan (2026–2031), launched 1 May 2026. The visual impact on DEDP-designated WAW viewpoints must be specifically assessed.

10.7 Chapter 11: Shadow Flicker

This chapter contains the most significant admission in the entire application. The applicant acknowledges that without the automatic shutdown system, the 30-hour per year threshold would be exceeded at one or more residential properties. See Section 11 for a full analysis of the weaknesses in the proposed mitigation.

- All receptor properties within 1,630 metres (ten rotor diameters at the maximum 163m rotor diameter) of any turbine must be identified by name and address and given modelled shadow flicker hours in both unmitigated and mitigated scenarios.
- The automatic shutdown system must be specified as a mandatory planning condition with binding independent performance auditing throughout the 35-year operational life.

10.8 Chapter 12: Cultural Heritage

- The pre-application record confirms two crannogs in the study area, a third in the boundary area, seven recorded monuments in surrounding areas, and one monument within the proposed development site. The impact of drainage works and peat excavation on the hydrological conditions that preserve these crannogs must be specifically assessed. See Section 26 for a full treatment.
- Pre-construction archaeological survey and ongoing watching brief are mandatory for any earthworks within the zone of archaeological potential of a recorded monument.

10.9 Chapter 13: Material Assets, Telecommunications and Aviation

- The IAA should be formally consulted on the aviation lighting requirements for 13 turbines at 180 metres within the Mayo Dark Sky Park area. Aviation warning lighting will introduce significant artificial light into a landscape designated for its darkness. See Section 24.
- The Telecommunications Impact Study (Technical Appendix 13-3) must specifically address the impact on telecommunications infrastructure used by the fishing and marine industries in Blacksod Bay.

10.10 Chapter 14: Traffic and Transportation

- The abnormal load haulage route from Killybegs Port involves roads not designed or maintained for this purpose. The CTMP must include binding commitments on hours of operation, route restrictions, and road damage remediation with financial bond.
- The GCR installation works (25.5km in public roads to Bellacorick) will generate further major traffic impacts that have not been assessed in this application.

Section 11: Shadow Flicker — The Applicant

Admits Exceedance of the 30-Hour Threshold

11.1 The Admission

Chapter 11 of the applicant's EIAR and Technical Appendices 11-1 to 11-4 contain the shadow flicker assessment. The assessment acknowledges that without mitigation, shadow flicker at one or more receptor dwellings will exceed the threshold of 30 hours per year — the de facto standard under the Wind Energy Development Guidelines (2006) and the threshold consistently applied by An Bord Pleanála and An Coimisiún Pleanála in wind farm planning conditions. The proposed solution is an automatic shutdown system that would curtail turbine operation once any receptor has accumulated 30 hours of shadow flicker in any calendar year.

Critical Admission from the Applicant's Own Documents

The applicant has confirmed in its own Chapter 11 that without the automatic shutdown system, the 30-hour threshold is exceeded at residential properties. This is an admission that the development as physically designed causes an unacceptable impact on residential amenity. The automatic shutdown system is not a design solution — it is a mitigation measure concealing an inherent design defect.

11.1.1 Scale of Non-Compliance Before Mitigation

Rural West Environmentalists draws An Coimisiún Pleanála's attention to figures buried within the applicant's own Chapter 11 which demonstrate the true scale of shadow flicker impact before any mitigation is applied. The applicant's own assessment confirms:

- **Annual threshold exceedance:** Under the largest turbine scenario (Scenario 3), 38 properties exceed the 30-hour annual guidance threshold before any mitigation is applied.
- **Daily threshold exceedance:** 49 properties exceed the 30-minute daily threshold before mitigation under the same scenario.
- **Residual exceedance after mitigation:** Even after the applicant applies average sunshine assumptions and automated shutdown mitigation, 8 properties still exceed the annual 30-hour threshold.

Rural West Environmentalists submits that these figures are definitive proof that this development is not inherently compliant with shadow flicker guidance. Its claimed acceptability depends entirely on permanent operational intervention through automated shutdown software — a system that must function correctly, without failure, every day for the full 35-year operational life of the development. The applicant's own assessment concedes that even with this intervention, 8 properties remain in exceedance. An Coimisiún Pleanála cannot be satisfied that shadow flicker impacts have been reduced to an acceptable level when the applicant's own figures show residual non-compliance after mitigation.

11.2 Weaknesses in the Proposed Shutdown Solution

— RELIABILITY: Automatic shutdown systems depend on sensor hardware, software, and communications links that can and do fail. If the shutdown system malfunctions for even a single period of bright sunshine, a receptor could receive its entire 30-hour annual allocation in a matter of days or weeks. There is no backup protection for residents if the system fails.

— THE 'NEAR ZERO' COMMITMENT IS BUILT ON AN UNRELIABLE INPUT DATASET: Rural West Environmentalists has directly verified the applicant's own Chapter 4 (Population and Human Health), which states that 'mitigation measures via shadow flicker detection systems will be installed on all turbines in order to achieve near zero shadow flicker on nearby receptors.' This commitment is only as reliable as the underlying modelling data that determines when each detection system triggers a shutdown. As set out in Section 33.1 of this submission, the applicant's own Shadow Flicker Modelling Input Data (Technical Appendix 11-1) assigns an identical, templated window width, depth, and height to all 368 modelled windows across 92 separate properties, with no variation whatsoever. A shutdown system calibrated against templated and unsurveyed, non-property-specific window data cannot reliably deliver a 'near zero' outcome at the real, physically distinct windows of real properties that the modelling does not actually represent.

The visual impact of the proposed turbines is documented in the applicant's own photomontages, available on the public case file at pleanala.ie/en-ie/case/324387, Volume 4, file: 20260313_Muingmore_WF_Formatted_Book1_Low_Res.pdf.

- **MONITORING AND ENFORCEMENT:** The application does not specify a binding, independent monitoring regime to verify that the shutdown system is functioning correctly throughout the 35-year operational life. Planning conditions requiring self-reporting by the operator are not adequate protection. An independent third-party performance audit, with public reporting, must be a condition of any permission granted.
- **NO COMPENSATION FOR FAILURE:** If the shutdown system fails and a receptor exceeds 30 hours in a year, there is no mechanism to compensate residents or remedy the breach. Enforcement by Mayo County Council of complex technical conditions at a remote wind farm site has historically been limited.
- **CUMULATIVE PSYCHOLOGICAL IMPACT:** The 30-hour threshold applies per year. Over the 35-year operational life, residents will experience shadow flicker in every year of operation. The cumulative psychological and well-being impact of this sustained annual intrusion has not been assessed.
- **IMPACT ON GENERATION CLAIMS:** The shutdown system will reduce energy output. The number of curtailment hours per turbine per year has not been disclosed. Given that the climate justification for the project depends on its generation capacity, a material reduction from shadow flicker curtailment directly undermines the applicant's own case. The applicant cannot simultaneously claim climate benefit and withhold the generation loss from mitigation.

11.2.1 Fundamental Contradiction: Automated Shutdown versus Complaint-Led Process

The applicant's proposed mitigation strategy contains a fundamental internal contradiction which Rural West Environmentalists submits has not been adequately explained. The EIAR describes, in different sections, two incompatible mitigation approaches:

- **Automated shutdown system:** The EIAR states that turbine shutdown software will automatically curtail turbine operation when shadow flicker is predicted at a receptor location, preventing exceedance of the guidance thresholds.
 - **Complaint-led investigation process:** The EIAR separately states that complaints of shadow flicker will be investigated and, if confirmed, mitigation measures will be activated.
- Rural West Environmentalists submits that these two descriptions are irreconcilable. If the automated shutdown system is fully operational from day one and prevents exceedance, there is no circumstance in which a resident could experience shadow flicker nuisance requiring

complaint. The existence of a complaint-led process implies the automated system will not always prevent exceedance — either because it is not activated immediately, because it fails, or because the modelled predictions do not accurately reflect actual experience at individual properties. Rural West Environmentalists formally requests that An Coimisiún Pleanála seek clarification on the following before determining the application:

- **Activation date:** Will the automated shadow flicker shutdown system be fully operational from the first day of turbine operation, with no lag period?
- **Complaint process purpose:** If the automated system prevents all exceedance, what purpose does the complaint-led investigation process serve, and under what circumstances would it be triggered?
- **Continued operation during investigation:** Will turbines continue operating while a shadow flicker complaint is being investigated, and if so, is the affected receptor continuing to experience exceedance during this period?
- **Independent verification:** Who independently verifies that the automated shutdown system has operated correctly, and what reporting obligations apply to the developer?

11.3 The Five Nearest Turbines and the 740-Metre Nearest Dwelling

The nearest dwelling is 740 metres from the nearest turbine. Turbines 1, 8, 9, 10, and 11 are the closest turbines to residential receptors. At hub heights of 98.5 to 105 metres and rotor diameters of between 149 and 163 metres, the shadow flicker assessment zone extends to 1,630 metres (ten rotor diameters at the maximum 163-metre rotor diameter confirmed in EIAR Chapter 2) from each turbine. All dwellings within 1,630 metres of the nearest turbine are in the assessment zone. The shadow flicker assessment must identify every such property by name and address, not merely by grid reference.

Rural West Environmentalists notes that because the applicant has not confirmed the final turbine model, the rotor diameter — and therefore the shadow flicker assessment zone — cannot be fixed. The EIAR confirms a rotor diameter range of 149 to 163 metres (Chapter 2, paragraph 107). At the minimum rotor diameter of 149 metres, ten rotor diameters equals 1,490 metres. At the maximum of 163 metres, ten rotor diameters equals 1,630 metres. The shadow flicker assessment was conducted using a 165-metre rotor diameter — a figure outside

the range stated in the applicant's own EIAR. Any dwellings falling between 1,630 metres and 1,650 metres from the nearest turbine may have been incorrectly included in the assessment zone, while any dwellings between 1,490 metres and 1,630 metres may be affected differently depending on which turbine model is ultimately installed. This is a further consequence of the applicant seeking permission without confirming the turbine model — the shadow flicker receptor assessment cannot be finalised until the rotor diameter is known.

Rural West Environmentalists further notes that the shadow flicker assessment in Technical Appendix 11-1 uses the ITM tower-base coordinates for all turbines as the source point for shadow flicker modelling. The rotating blade tip — which is the physical element that generates shadow flicker — extends 74.5 to 81.5 metres beyond the tower base toward the receptor when the turbine yaws downwind. Every receptor distance in the shadow flicker assessment is therefore a tower-base distance that understates the actual closest shadow source by 74.5 to 81.5 metres. This is addressed in full at Section 21.0.5A of this submission.

11.4 Cumulative Shadow Flicker from Multiple Turbines

Residents near the cluster of Turbines 1, 8, 9, 10, and 11 may be within the shadow flicker zones of more than one turbine simultaneously. The cumulative shadow flicker from multiple turbines affecting the same receptor must be assessed and mitigated to within the 30-hour annual threshold. The application must demonstrate that the shutdown system addresses cumulative multi-turbine shadow flicker, not merely the contribution from each turbine in isolation.

11.4.1 Formal Request: Clarification on Combined Turbine Modelling

Rural West Environmentalists submits that the shadow flicker assessment methodology requires formal clarification on a point of fundamental importance. The assessment models the proposed turbine layout and presents predicted shadow flicker hours at each receptor location. However the assessment documentation does not make sufficiently clear to a lay reader — or to the competent authority — whether the predicted exposure figures at each property represent:

— **Combined effect:** The cumulative shadow flicker arising from all 13 proposed turbines operating simultaneously, where multiple turbines may cast shadows at the same receptor at overlapping or different times of day throughout the year; or

— **Individual turbine effect:** The shadow flicker effect of individual turbines assessed separately, with the combined exposure being the sum of individual predictions.

This distinction is not academic. For properties situated within the shadow zones of multiple turbines simultaneously — particularly those near the T01, T08, T09, T10, and T11 cluster — the difference between individual and combined modelling could materially affect the predicted annual and daily exceedance figures. Rural West Environmentalists formally requests that An Coimisiún Pleanála require the applicant to confirm, with explicit reference to the modelling software outputs, that all predicted shadow flicker exposure figures represent the combined effect of all proposed turbines operating together, and that no receptor's exposure has been understated by treating turbine effects as independent rather than cumulative.

Section 12: European Eel — A Critically

Endangered Species Found on Site

Rural West Environmentalists notes that European Eel is not a qualifying interest of the relevant SACs or SPAs. However, its confirmed presence in site-connected catchments (Technical Appendix 5-4) demonstrates the ecological value of the freshwater system affected by this development and confirms functional hydrological connectivity between the development site and downstream aquatic ecosystems. The European Eel is listed as Critically Endangered on the IUCN Red List, is subject to EU Eel Regulation 1100/2007 requiring restoration of eel populations to sustainable levels, and is listed under Annex V of the EU Habitats Directive. Its presence is material evidence of the ecological sensitivity of this hydrological system and the inadequacy of treating construction-phase impacts on freshwater habitat as insignificant.

12.1 The Finding

Rural West Environmentalists has independently verified the applicant's own Aquatic Baseline and Fisheries Assessment (Technical Appendix 5-4, Triturus Ltd, Volume 3 EIAR) in full. The report confirms that a catchment-wide electro-fishing survey was undertaken across 50 riverine sites plus 4 small pond sites — 54 sites in total — specifically 'to identify the importance of the watercourses as nurseries and habitats for fish of high conservation value that included salmonids, European eel (*Anguilla anguilla*) and lamprey.' European Eel was directly recorded by electro-fishing at multiple named sites within the development's drainage network, including 8 individuals at site A2 on the lower tidal reaches of an unnamed river, and a further 3 individuals at site B6 on a tributary of Tullaghan Bay. The applicant's own report explicitly characterises the tidal channel at site A2 as 'a good nursery for European eel.' This finding has not been adequately treated in the wider EIAR or NIS.

Rural West Environmentalists further notes that the applicant's own fisheries habitat appraisal repeatedly identifies siltation as an existing pressure already compromising salmonid nursery and spawning habitat quality at multiple surveyed sites across the catchment — for example, one site is described as having spawning habitat 'reduced because of siltation pressures' and

another as having refugia 'compromised by siltation and eutrophication pressures.' This applicant-confirmed existing vulnerability to siltation directly corroborates the concerns raised elsewhere in this submission regarding peat excavation runoff, drainage ditch sediment release, and chemical runoff from forestry felling operations (see Sections 19.5 and 33.6 above): the receiving watercourses are not a resilient baseline capable of absorbing additional sediment and nutrient loading, but are already, on the applicant's own evidence, under siltation pressure sufficient to compromise fish nursery and spawning habitat quality.

12.2 The Legal and Conservation Status of the European Eel

The European Eel is one of the world's most threatened fish species:

- Critically Endangered on the IUCN Global Red List — the highest threat category before Extinct in the Wild.
- Critically Endangered on the All-Ireland IUCN Red Data List for Freshwater Fish, Amphibians and Reptiles — Ireland's most threatened native fish species.
- Listed under Annex V of the EU Habitats Directive (*Anguilla anguilla*) — Member States must ensure any disturbance is compatible with maintaining the species at favourable conservation status.
- Subject to EU Eel Regulation (EC) No. 1100/2007 — all Member States are required to implement Eel Management Plans to restore the stock. In Ireland, commercial fishing and recreational angling for eels are now prohibited to protect the remaining population.
- Listed on Appendix II of CITES (2007) and Appendix II of the Convention on Migratory Species (2014) — reflecting international recognition of the species' precarious global status.

The European Eel has suffered a 95% decline in recruitment across Europe since the 1980s. Preliminary 2026 data from ICES indicates glass eel recruitment at approximately 0.7% of the historic baseline in the North Sea area. This is a species on the verge of extinction across its range. The finding of European Eel in the watercourses draining the Muingmore development site is not a routine biodiversity note. It is the discovery of one of the world's most endangered fish species in a freshwater system that this project will fundamentally and irreversibly alter.

12.3 The Threat to European Eel from This Development

Elvers migrating upstream from Blacksod Bay

Adult eels breed in the Sargasso Sea. The larvae drift across the Atlantic and arrive at the west coast of Ireland as transparent ‘glass eels’, entering Blacksod Bay before migrating upstream into freshwater systems. The drainage of peat and release of fine sediment from the construction site will increase turbidity and sedimentation in the bay and in the watercourses the elvers use to migrate upstream. Suspended fine peat particles clog the gills of juvenile fish. Sedimentation buries the gravel and cobble substrate that provides the elvers’ first freshwater habitat.

Adult eels resident in the drainage network

Adult eels are demersal, nocturnal animals living in soft-bottomed watercourses and drainage channels — precisely the habitat types most disturbed by drainage works, peat excavation, and road construction. Direct physical disturbance of their habitat during construction will kill resident adults.

Silver eels migrating downstream to spawn

Adult eels undertake a once-in-a-lifetime migration downstream to the sea as ‘silver eels’, travelling up to 6,000 kilometres across the Atlantic to spawn in the Sargasso Sea, after which they die. Any obstruction, increased sedimentation, or flow reduction in their downstream migration routes will prevent them from completing this migration. Silver eels that fail to reach the sea do not breed and do not contribute to the next generation. Given that the European Eel population is already at less than 5% of historic recruitment levels, any additional mortality at any life stage is potentially of population-level significance.

12.4 Inland Fisheries Ireland Must Be Formally Consulted

Inland Fisheries Ireland (IFI) has statutory responsibility for the protection, management, and conservation of freshwater fish species in Ireland. As a prescribed body, IFI should be formally invited by An Coimisiún Pleanála to make a submission on the adequacy of the Aquatic Baseline and Fisheries Assessment (Technical Appendix 5-4) and on the impacts of the proposed development on the European Eel population in the site watercourses. Rural West Environmentalists formally requests this notification.

12.5 Important Bird Species Also Found

The applicant's biodiversity surveys (EIAR Chapter 5) record a number of bird species categorised as important in the survey area. While the full survey data is not publicly available in searchable form, the following is formally requested:

- A full disclosure of all bird species recorded in the surveys, specifically identifying any Red-listed, Amber-listed, or Annex I species under the EU Birds Directive.
- Rural West Environmentalists has directly verified the applicant's own Minutes of Meeting with NPWS (Technical Appendix 3-6, 13 March 2025), which record NPWS's own Divisional Ecologist (Eoin Connolly) stating directly that 'the main issue for wind farms in this region is collision risk with SPA bird species and assessment [is] often done incorrectly in EIAs', and that 'robust NPWS guidance is lacking and needs to be developed.' The same minutes record NPWS specifically highlighting potential impacts on Merlin (*Falco columbarius*), and stating that 'cumulative effects on Golden Plover will be a key issue', given what NPWS describes as 'a very small breeding [Golden Plover] population, vulnerable to cumulative impacts.' NPWS further advised that cumulative assessment 'shouldn't reiterate conclusions of other assessments but focus on mortality effects', and that the geographical scope of assessment should extend 'beyond county level with reasonable estimates of bird populations.' Rural West Environmentalists submits that this is a direct warning, from the State's own statutory nature conservation body, that collision risk assessments of precisely this kind are frequently performed incorrectly, made specifically in relation to this application, eighteen months before it was lodged. If Curlew (*Numenius arquata*), Golden Plover (*Pluvialis apricaria*), or Merlin (*Falco columbarius*) are confirmed in the survey data, these are priority upland breeding species requiring population-level impact assessment, and Rural West Environmentalists

requests that An Coimisiún Pleanála require the applicant to confirm that the specific methodological concerns raised by NPWS have been fully addressed, including the cumulative mortality-focused assessment and the extended geographical scope NPWS specifically requested.

— The Breeding Bird Atlas data for this area of North Mayo must be specifically consulted to determine the full suite of breeding species present and potentially affected.

Section 13: Comprehensive Avian Collision Risk Analysis — Eleven Species, Over 36,000 Seconds of Confirmed Flight Time Within the Blade Strike Zone

This section sets out, in full and on a species-by-species basis, the avian collision risk evidence contained within the applicant's own Ornithological Results Report (EIAR Technical Appendix 5-2). Rural West Environmentalists submits that this evidence, drawn entirely from the applicant's own Vantage Point survey data, demonstrates a collision risk profile of such scale and severity that it independently warrants refusal of this application, irrespective of any other ground raised elsewhere in this submission.

13.1 Material Deficiencies in the Survey Methodology Itself

Before turning to the collision risk findings, Rural West Environmentalists must first draw attention to the fact that the applicant's own ornithological survey programme did not comply with the industry-standard Scottish Natural Heritage (SNH/NatureScot) guidance that governs avian survey methodology for wind energy developments in Ireland and the United Kingdom. Under Section 37E of the Planning and Development Act 2000 and the EU Birds Directive (2009/147/EC), an applicant is required to provide robust, scientifically sound baseline data sufficient to allow the competent authority to rule out significant impacts on protected bird species with complete certainty. The applicant's own report admits to multiple specific and serious departures from this standard.

13.1.1 Express Admission of Failed Breeding Raptor Surveys

Section 3.8 of the Ornithological Results Report, under the heading 'Survey Limitations', explicitly admits that the number of breeding raptor surveys recommended by SNH/NatureScot guidance was not achieved during either the 2021 or 2022 breeding seasons. SNH guidance mandates a minimum of four separate seasonal visits per breeding season in order to accurately establish home-range occupancy and breeding success for raptor species. By failing to complete the required survey effort across two consecutive breeding seasons, the applicant lacks the data continuity that is necessary to assess long-term, cumulative impacts on the target raptor species confirmed present at the site.

13.1.2 Incomplete Breeding Walkover Coverage and Missing Dusk Surveys

The same Section 3.8 confirms that the recommended breeding walkover surveys and dusk surveys were not completed during either the 2021 or 2022 breeding seasons. Compounding this deficiency, the report confirms that walkover survey coverage was restricted entirely to those areas where the applicant had secured active land-access permission from landowners. This means that substantial areas of land falling within the 500-metre turbine buffer zone — the zone most directly relevant to assessing collision and disturbance risk — were never physically surveyed at all. The true abundance and distribution of nesting bird species across significant portions of the development footprint therefore remains entirely unrecorded on the public planning file.

13.1.3 Fatal Gaps in Autumn Migration Survey Coverage

Section 3.8 further confirms that during the critical Year 1 autumn passage migration season, only 4.5 hours of Vantage Point observation were conducted in total. This extraordinarily limited survey window is dismissed in the report itself as merely 'investigative'. Given the development site's direct proximity to the Blacksod Bay/Broad Haven Special Protection Area — an internationally important wintering and passage corridor for highly vulnerable migratory waterfowl — a 4.5-hour observation window across an entire autumn migration season is scientifically inadequate to characterise peak migratory flight-line activity through the proposed turbine zones. Rural West Environmentalists submits that this single admission alone is sufficient to invalidate any conclusion the applicant draws regarding migratory bird collision risk.

13.1.4 Methodological Irregularities Invalidating Territory Mapping

SNH guidance requires that breeding walkover surveys be conducted as single-day, synchronised counts, specifically in order to avoid duplicate counting of mobile bird populations moving across the survey area. However, Section 5.84 of the EIAR reveals a fractured and non-compliant field methodology: a 2022 survey visit was split across two consecutive days; two separate 2023 visits were extended across three consecutive days each; and a further 2023 breeding visit was fractured across three non-consecutive days. Rural West Environmentalists submits that this methodology invalidates the scientific integrity of the resulting territory mapping, since mobile individuals may have been recorded multiple times as if they were separate breeding pairs, or conversely, mobile individuals may have been missed entirely between non-consecutive survey days.

Taken together, these four admitted methodological failures mean that An Coimisiún Pleanála cannot lawfully carry out a valid Appropriate Assessment or Environmental Impact Assessment on the basis of an ornithological report that openly concedes it skipped mandatory baseline survey effort for highly protected, Red-listed bird species across two consecutive breeding seasons.

Rural West Environmentalists notes that the applicant's own Bird Survey Report attempts to qualify these admissions by stating that, despite the limitations identified, 'it is considered that the surveys carried out in Year 1, Year 2 and Year 3 provide sufficient data to identify any ornithological constraints and provide a robust data set for the purposes of an ornithological impact assessment', and that 'a greater survey effort will be undertaken in following passage seasons to gather more information.' Rural West Environmentalists submits that this self-assessment by the applicant's own consultants does not cure the deficiency. An applicant's own assurance that its admittedly incomplete survey effort was nonetheless 'sufficient' is not independent verification, and a promise of improved survey effort in future passage seasons is not a substitute for the breeding raptor and autumn passage data that should have been, but was not, collected in Year 1 and Year 2. The admissions at Section 3.8 of the Bird Survey Report remain admissions of non-compliance with SNH (2017) guidance regardless of the applicant's own subsequent assurance as to their sufficiency.

13.2 The Kestrel: A Confirmed, Multi-Year Breeding Pair Logging 83.6% of Its Flight Time Inside the Blade Strike Zone

Section 4.2 and Tables 21, 22 and 23 of the Ornithological Results Report confirm that a breeding pair of Kestrel (*Falco tinnunculus*) successfully nested within existing buildings in the central area of the development site across three consecutive breeding seasons: 2021, 2022 and 2023. The Kestrel is currently Red-listed under the Birds of Conservation Concern in Ireland (BoCCI) 2020–2026 scheme, reflecting severe and ongoing national population decline. The siting of industrial turbine infrastructure directly over an active, proven, multi-year raptor nesting site represents, in the submission of Rural West Environmentalists, a clear violation of the proper planning and sustainable development of the area and a breach of the protections afforded under the Wildlife Act 1976, as amended. Rural West Environmentalists has independently verified the applicant's own Chapter 5 (Biodiversity) Collision Risk Model results (Table 5-43/5-85), which confirm that the Proposed Project's own standalone modelled Kestrel

collision risk is 1.05 to 1.19 collisions per year — substantially higher than the modelled collision risk attributed to either of the two other wind farms considered in the applicant's own cumulative assessment (Oweninny Phase 3 at 0.09 collisions/year and Sheskin South Wind Farm at 0.037 collisions/year). The applicant's own cumulative table records a combined total of 1.18 to 2.127 Kestrel collisions per year across all three developments, which the applicant's own table summarily characterises as 'Not significant at any scale' without further reasoning shown. Rural West Environmentalists submits that a modelled collision rate in excess of one Kestrel per year, for a single confirmed breeding pair nesting within the development site across three consecutive seasons, over a 35-year operational life, represents a modelled cumulative loss of more than 35 individual Kestrels from this single site alone — a finding that warrants substantive reasoning as to why it is not significant, rather than the bare assertion provided. Rural West Environmentalists notes that the applicant's own Chapter 17 (Schedule of Mitigation Measures) confirms a specific mitigation measure (MM20) intended to actively deter the Kestrel from foraging near the turbines, including 'creation of uniformly short vegetation heights', 'removal of timber/brush from felling and chipping of tree stumps to ground level', and 'piping/filling over of open field/forestry drains', explicitly 'to ensure no significant effects from collision on this species.' Rural West Environmentalists submits that the existence of a dedicated, active habitat deterrence measure aimed specifically at preventing this confirmed breeding pair from foraging near the turbines is itself an acknowledgement, by the applicant's own ecologists, that the standalone modelled collision risk of 1.05 to 1.19 Kestrel collisions per year is a real and material risk requiring active intervention, not the negligible or theoretical risk the applicant's headline conclusions elsewhere suggest. Rural West Environmentalists further notes that the efficacy of this deterrence measure, particularly over a 35-year operational life and in the context of permanent habitat modification around an active multi-year breeding site, has not been independently verified or subject to any monitoring commitment capable of confirming its success.

13.2.1 An Unprecedented and Quantified Collision Risk Profile

The applicant's own multi-year Vantage Point watch data, set out in Table 9, exposes what Rural West Environmentalists submits is a catastrophic threat profile for this resident breeding pair. Over the survey period, the Kestrel pair logged 192 separate flight observations within the 500-metre turbine zone, accumulating 17,901 total seconds of recorded flight time. Of that total, 14,977 seconds — 83.6% of all recorded flight time — occurred specifically within Height

Band B, defined in the report as 10 metres to 150 metres above ground level. This height band is the precise Collision Risk Zone swept by the rotating blades of the proposed 180-metre turbines.

13.2.1A The 83.6% Figure Understates the True Collision Risk — The Blade Strike Zone Extends Beyond Height Band B

Rural West Environmentalists draws An Coimisiún Pleanála's attention to a fundamental methodological limitation in the applicant's own collision risk assessment that materially affects the significance of the 83.6% figure cited in Section 13.2.1. The survey height bands used in Technical Appendix 5-2 were established before the final turbine model was known. Now that the EIAR has confirmed the turbine specification range — hub heights of 98.5 to 105 metres and rotor diameters of 149 to 163 metres — it is possible to calculate precisely where the actual blade strike zone falls relative to the survey bands. The results demonstrate that the 83.6% figure significantly understates the proportion of Kestrel flight time occurring within the true collision risk zone.

The Blade Sweep Zone Across the Full Turbine Range

Using the applicant's own confirmed specification ranges from EIAR Chapter 2 (paragraphs 106 and 107), the actual blade strike zone can be calculated for both ends of the turbine range:

- **Minimum turbine configuration (5.7MW, 98.5m hub, 149m rotor):** Blade radius: 74.5 metres. Lowest blade point: 98.5 minus 74.5 = 24.0 metres above ground. Highest blade point: 98.5 plus 74.5 = 173.0 metres above ground. Blade strike zone: 24.0 metres to 173.0 metres.
- **Maximum turbine configuration (7MW, 105m hub, 163m rotor):** Blade radius: 81.5 metres. Lowest blade point: 105 minus 81.5 = 23.5 metres above ground. Highest blade point: 105 plus 81.5 = 186.5 metres above ground. Blade strike zone: 23.5 metres to 186.5 metres.

What This Means for Height Band B and the 83.6% Statistic

The survey's Height Band B is defined as 10 metres to 150 metres above ground level. This band does not correspond to the actual blade strike zone for any turbine configuration within the applicant's own stated range. There are two critical divergences:

Divergence 1 — The Bottom of Band B Is Below the Lowest Blade Point

Height Band B begins at 10 metres above ground. The lowest blade point for any turbine in the applicant's range is 23.5 metres (maximum turbine) to 24.0 metres (minimum turbine). This

means the bottom 13.5 to 14.0 metres of Height Band B — from 10 metres to approximately 24 metres above ground — is never swept by the rotating blades under any turbine configuration. Kestrel flights recorded in this sub-zone of Band B are counted toward the 83.6% figure but are not actually within the blade strike zone. To this extent, the 83.6% figure marginally overstates the collision risk in the lower portion of Band B.

Divergence 2 — The Top of Band B Is Well Below the Highest Blade Point

This is the more significant and more serious divergence. Height Band B ends at 150 metres above ground. The highest blade point for any turbine in the applicant's range is 173.0 metres (minimum turbine) to 186.5 metres (maximum turbine). This means:

- **Minimum turbine:** The blade strike zone extends 23.0 metres above the top of Height Band B — from 150 metres to 173 metres above ground. Any Kestrel flight recorded in this zone during the survey was recorded in Height Band C (above 150 metres) and is therefore excluded from the 83.6% figure, despite falling entirely within the rotating blade path.
- **Maximum turbine:** The blade strike zone extends 36.5 metres above the top of Height Band B — from 150 metres to 186.5 metres above ground. The larger the turbine installed, the greater the portion of the blade strike zone that falls above Band B and is therefore excluded from the collision risk percentage.

The True Collision Risk Zone Is Larger Than the Survey Band

The applicant's ornithological survey recorded Kestrel flight observations across three height bands. Height Band B (10–150m) captured 83.6% of all recorded Kestrel flight time. Height Band C (above 150m) captured additional flight time that was classified as above the collision risk zone for the purposes of the assessment. However, as the calculations above demonstrate, Band C flights between 150 metres and 173 to 186.5 metres above ground — depending on turbine model — are not above the collision risk zone at all. They are within the upper portion of the rotating blade path. They were simply not counted because the survey band boundary of 150 metres was set before the turbine specification was known, and does not correspond to the actual blade tip height of any turbine in the confirmed range.

Rural West Environmentalists submits that the 83.6% figure must therefore be understood as a conservative lower bound on the proportion of Kestrel flight time within the true blade strike zone, not as a ceiling. The actual proportion of Kestrel flight time within the collision risk zone is higher than 83.6% — by an amount that cannot be determined without knowing which

turbine model will be installed, because the extent of the blade strike zone above 150 metres varies between 23 metres and 36.5 metres depending on the final turbine specification. This is a further, independent consequence of the applicant seeking permission without confirming the turbine model. The collision risk assessment was conducted against survey bands that do not match the actual blade sweep zone of any turbine in the confirmed range. The applicant's own Table 9 flight data cannot be correctly interpreted without knowing the final hub height and rotor diameter. An Coimisiún Pleanála is being asked to assess Kestrel collision risk on the basis of an assessment that used the wrong upper boundary for the blade strike zone. The 83.6% figure is not wrong — it is incomplete. The true figure is higher, and by an amount that cannot currently be determined.

Rural West Environmentalists formally requests that An Coimisiún Pleanála require the applicant to provide a revised collision risk assessment that recalculates the blade strike zone boundary for each end of the confirmed turbine specification range, reassigns Kestrel height band flight observations accordingly, and recalculates the collision risk percentage using a blade strike zone boundary that corresponds to the actual highest blade point for each turbine configuration assessed — not a fixed 150-metre survey boundary that predates and does not match the confirmed turbine range.

13.2.2 Inherent Behavioural Vulnerability to Blade Strike

Kestrels are a hovering raptor species, hunting by remaining stationary in flight while scanning the ground below for terrestrial prey such as small mammals and invertebrates. This hunting strategy means the bird's attention and visual focus is directed downward, toward the ground, rather than outward or upward toward an approaching turbine blade. Kestrels are consequently physically and behaviourally ill-equipped to detect and avoid fast-moving, multi-megawatt turbine blade tips travelling through the airspace they occupy while hunting. A confirmed breeding pair logging nearly 15,000 seconds of active hunting time within the rotor-swept zone, repeated across three consecutive breeding seasons, represents a sustained and entirely foreseeable mortality risk that cannot be dismissed as incidental or unlikely.

13.2.3 Direct and Unlawful Threat to an Active Nesting Site

The proposed central temporary construction compound (TCC1), the internal site access track network, and several of the largest turbine foundations are sited directly adjacent to the existing buildings within which this Red-listed breeding pair is anchored. The cumulative effect of heavy construction machinery noise, ground vibration, and permanent structural and landscape change in immediate proximity to an active nest site will, Rural West Environmentalists submits, inevitably cause reproductive displacement, nest desertion, and the effective localised extinction of this specific, confirmed territorial breeding pair.

The combination of a confirmed, active, multi-year nesting site for a Red-listed raptor species, together with empirical applicant-generated data showing that this same breeding pair spends nearly 250 minutes of cumulative active flight time directly inside the turbine blade strike zone, is submitted as standing on its own as a ground requiring refusal of planning permission in the interests of proper planning and sustainable development of the area.

13.3 Ten Further Species Exceeding Statutory Collision Risk Thresholds

Beyond the Kestrel, the empirical flight-line data compiled in Technical Appendix 5-2, Section 4.1, Table 9, identifies ten further bird species actively using the 10-metre to 150-metre rotor-swept zone, each logging flight time substantially in excess of the threshold at which industry guidance requires a comprehensive Collision Risk Model to be carried out. General industry consensus, reflected in the applicant's own methodology, treats any species accumulating more than 1,000 seconds of aggregate flight time within the Collision Risk Zone over a three-year baseline period as requiring full quantitative collision risk modelling, layout modification consideration, and species-specific avoidance or mitigation measures. Rural West Environmentalists submits that the applicant has failed to demonstrate adequate layout modification, avoidance setbacks, or species-specific protection mechanisms for any of the ten species identified below.

13.3.1 Red-Listed and Amber-Listed Peatland Breeding Birds

Snipe (*Gallinago gallinago*) — Red-Listed under BoCCI. Section 4.2.1 of the report confirms Snipe are actively breeding, chipping, and engaging in display drumming flights across the site terrain. Table 9 records 2,153 seconds of flight time within the Collision Risk Zone. Snipe display flights are characteristically fast, low, and erratic, typically performed at dawn and dusk over open breeding ground. Introducing thirteen multi-megawatt rotating turbine blade

profiles directly into an active breeding and display ground of this kind will, Rural West Environmentalists submits, result in substantial localised mortality and a clear breach of the protections afforded under the Wildlife Act 1976.

Meadow Pipit (*Anthus pratensis*) — Red-Listed under BoCCI. The Meadow Pipit is a flagship Red-listed species undergoing severe and well-documented national population decline. Table 23 of the report documents an exceptionally high concentration of breeding individuals at the Muingmore site, with up to 56 individuals recorded on a single walkover visit. The species' high-frequency, low-altitude song-flight displays — central to its breeding behaviour — will be severely disrupted by turbine noise and physical presence, resulting in immediate spatial displacement from breeding territory and a long-term net population loss of a species already in critical decline nationally.

13.3.2 Strictly Protected Waterbirds and Foraging Wildfowl

Whooper Swan (*Cygnus cygnus*) — listed under Annex I of the EU Birds Directive and a key Qualifying Interest species for the Termoncarragh Lake and Annagh Machair Special Protection Area. Table 9 records 1,125 seconds of flight time entirely within the Collision Risk Zone.

Whooper Swans are heavy-bodied birds with limited in-flight manoeuvrability, and characteristically migrate during low-light conditions and at night, factors which substantially increase their vulnerability to fatal turbine blade strike.

Greylag Goose (*Anser anser*) — Amber-Listed under BoCCI. This highly sensitive migratory species logged a single mass observation totalling 4,335 seconds within the Collision Risk Zone. This finding confirms that the development site functions as an active overland flight corridor connecting Carrowmore Lake Special Protection Area with the marine complex of Blacksod Bay — precisely the kind of confirmed flight-line connectivity between European sites that the applicant's Natura Impact Statement is required to, but does not, adequately assess.

Grey Heron (*Ardea cinerea*) — logged 1,105 seconds of flight time within the lethal Collision Risk height band, demonstrating an established and persistent foraging flight pathway across the cutover peatland drainage network on site.

13.3.3 High-Risk Protected Raptors

Sparrowhawk (*Accipiter nisus*) — registered an extraordinary 5,588 seconds of hunting flight time within the Collision Risk Zone, recorded across 80 discrete observations. Sparrowhawks hunt at high speed in pursuit of fast-moving avian prey, a hunting strategy that leaves the species largely unable to detect and avoid rotating turbine blade tips while in active pursuit. Buzzard (*Buteo buteo*) — recorded 741 seconds of flight time within the Collision Risk Zone, with a further 310 seconds recorded directly above the zone, establishing a pattern of sustained territorial utilisation of the airspace at and around rotor-swept height.

13.3.4 Coastal and Marine Gull Species — A Combined Collision Risk of Over 21,000 Seconds

The applicant's own data identifies four gull species making substantial and repeated use of the low-lying coastal terrain — ranging in elevation from approximately 3 metres to 33 metres above Ordnance Datum — as an overland passage corridor directly through the proposed development site.

Lesser Black-Backed Gull (*Larus fuscus*) — Amber-Listed under BoCCI. Logged 8,452 seconds of flight time within the Collision Risk Zone across 91 separate observations — the single highest recorded total of any gull species at the site.

Great Black-Backed Gull (*Larus marinus*) — registered 6,654 seconds of flight time within the Collision Risk Zone across 65 separate observations.

Black-Headed Gull (*Larus ridibundus*) — Amber-Listed under BoCCI. Logged 3,537 seconds of flight time within the Collision Risk Zone across 71 separate observations.

Herring Gull (*Larus argentatus*) — Amber-Listed under BoCCI. Logged 2,650 seconds of flight time within the Collision Risk Zone across 64 separate observations.

13.4 Cumulative Conclusion: Over 36,000 Seconds of Confirmed Flight Time Within the Blade Strike Zone

Cumulatively, the eleven species identified in this section — the Kestrel together with the ten further species set out above — have logged, on the applicant's own data, over 36,000 seconds of active flight time directly within the physical blade strike zone of the proposed turbines. Rural West Environmentalists submits that the applicant's reliance on generalised, deferred mitigation measures — such as post-construction monitoring or conditional turbine feathering applied only after mortality has already been detected — does not meet the legal standard

required under the precautionary principle embedded in the EU Birds Directive and the EU Habitats Directive.

The applicant's own Avian Collision Risk Model Report (Technical Appendix 5-8) states, in its Executive Summary, that 'while the model outputs provide a theoretical estimate of collision risk, they do not directly reflect whether collision is likely to have significant effects on avian populations.' The same Executive Summary independently confirms, in the applicant's own words, that 'Common kestrel had the highest level of collision risk, followed by greylag goose and lesser black-backed gull' — directly corroborating, from the applicant's own modelling report, the species ranking set out in this section. Rural West Environmentalists submits that the applicant's own acknowledgement that its model outputs are a 'theoretical estimate' which does not 'directly reflect' actual population-level significance is itself an admission that the collision risk modelling, standing alone, cannot discharge the burden of demonstrating no significant effect. This is reinforced by the underlying flight-time data in the applicant's own Bird Survey Report (Technical Appendix 5-2, Table 9), which demonstrates that the resident Red-listed Kestrel breeding pair alone spends 83.6% of its total recorded active flight time flying directly through the path of the proposed turbine blades — 14,977 seconds within the Collision Risk Zone (Height Band B, 10-150m) out of 17,901 total seconds recorded.

Rural West Environmentalists further submits that this inconsistency between the applicant's headline conclusion and its own underlying survey data is compounded by the applicant's express admission, in its own survey limitations clause, that it did not fulfil the basic SNH/NatureScot survey guidelines for raptors and passage waterbirds during the first two years of survey effort. A development that introduces a data-proven, quantified mortality threat to a Kestrel breeding pair, to Annex I species including Whooper Swan, to multiple Red-listed and Amber-listed species, and to four distinct gull species using the site as a confirmed flight corridor, cannot be reconciled with the proper planning and sustainable development of the area, and must, in the submission of Rural West Environmentalists, be refused.

13.5 Formal Request

Rural West Environmentalists formally requests that An Coimisiún Pleanála:

- Require the applicant to repeat breeding raptor and passage waterbird surveys in full compliance with SNH/NatureScot guidance, across a minimum of two full breeding seasons, before any determination is made;
- Require a comprehensive, quantitative Collision Risk Model to be prepared for each of the eleven species identified in this section, individually and cumulatively, incorporating the applicant's own Vantage Point flight-time data set out above;
- Require the applicant to demonstrate specific layout modifications, turbine micro-siting changes, or avoidance setbacks capable of materially reducing the quantified collision risk to the confirmed breeding Kestrel pair and to the ten further species identified;
- Refuse to accept post-construction monitoring or conditional curtailment as an adequate substitute for a complete and certain pre-permission baseline assessment, consistent with the precautionary principle under the EU Birds Directive and the Waddenzee standard of complete scientific certainty;
- In light of the scale and severity of the collision risk evidence identified in this section — drawn entirely from the applicant's own survey data — refuse permission for the proposed development.

Source relied upon throughout this section: EIAR Technical Appendix 5-2, Ornithological Results Report, Muingmore Wind Farm, RWE Renewables Ireland Limited. All figures, table references and section references are drawn exclusively from the applicant's own submitted report.

Section 14: The Grid Connection Route — Incomplete Application and Artificial Fragmentation of the Development

14.1 The GCR Is an Integral Part of This Development

The applicant's own Planning Statement acknowledges that the proposed Muingmore Wind Farm requires a grid connection to the national electricity transmission network to function. The proposed Grid Connection Route (GCR) involves approximately 25.5 kilometres of 110kV underground cable running from the Muingmore substation through public roads in County Mayo to the Bellacorick 110kV substation. The application states that planning permission for the GCR will be submitted 'at a later date' as a separate application.

Project -Slicing: A Prohibited Fragmentation of an Integral Development

Splitting an integral development into separate applications is a form of Project -slicing prohibited under the EIA Directive (2011/92/EU) and the Planning and Development Act 2000 (as amended). A wind farm that cannot export electricity to the grid is not a functioning development. The GCR is inseparable from the wind farm. The environmental impacts of the two must be assessed together.

14.2 The Legal Basis

The EIA Directive (2011/92/EU) requires that the environmental impact of a project be assessed as a whole, including all components functionally necessary for the project to operate. The CJEU has repeatedly held that competent authorities must guard against the artificial splitting of projects to avoid full EIA. The prohibition on artificial fragmentation of the development has been affirmed in Irish planning law.

The in-combination and cumulative assessment required under Article 6(3) of the EU Habitats Directive cannot be complete without the GCR being assessed as part of this application. The GCR will involve:

- Approximately 25.5 kilometres of underground cable installation in public roads through County Mayo.
- Road opening works at numerous locations, each creating a potential source of construction runoff entering the Blacksod–Broadhaven catchment.
- Multiple watercourse crossings, each requiring independent assessment for their impact on fish passage and water quality.

Rural West Environmentalists has independently verified that the Grid Connection Route crosses tributaries of the Owenmore River, which the applicant's own Aquatic Baseline and Fisheries Assessment (Technical Appendix 5-4) describes as 'a regionally important salmonid river' that is 'ranked 16th nationally in terms of the accessible fluvial habitat to Atlantic salmon' (citing McGinnity et al., 2003), and which the same report confirms is 'a noted recreational salmon and sea trout fishery' that has only met its conservation limit for Atlantic salmon since 2021, following 'several years of failure.' The applicant's own report further confirms the Owenmore supports European Eel, lamprey, and other protected species in addition to salmonids. Rural West Environmentalists submits that construction works affecting tributaries of a nationally significant salmonid river that has only recently and recently recovered its conservation limit warrant particular caution, and that the GCR's crossings of these tributaries cannot lawfully be assessed separately from, or deferred beyond, the present application.

- Extended traffic management and road closures affecting local communities for an estimated multi-year construction period.
- Permanent alteration of road drainage profiles at road opening locations.

None of these impacts has been assessed in this application. The EIAR is therefore incomplete by the standards required under the EIA Directive.

14.3 The Bellacorick Precedent

An Bord Pleanála Case 311157 concerns a planning application for approximately 10.4 kilometres of underground cable from the Sheskin Wind Farm to connect to the national grid at the existing Bellacorick 110kV station in County Mayo. That case required a full Natura Impact Statement for the grid connection, confirming that grid connections in this specific area have been required to carry out independent environmental assessment including AA of European

sites. The same requirement applies to the Muingmore GCR. The applicant has decided to defer this entirely, leaving An Coimisiún Pleanála to assess an incomplete development.

14.4 Request

Rural West Environmentalists formally requests that An Coimisiún Pleanála: (a) require the applicant to clarify the status and timeline for the GCR planning application; (b) decline to determine the wind farm application until the GCR has been submitted and its environmental impacts, including a full NIS for all European sites within the zone of influence of the GCR, have been assessed; (c) treat the omission of the GCR as a material deficiency in the EIAR requiring either supplementary information or a separate parallel application before determination.

Section 15: Cumulative Impact — Oweninny Phase

3 Granted Two Days Before Site Notices

15.1 The Timing

Oweninny Wind Farm Phase 3 — an application by Bord na Móna Powergen Limited for 18 wind turbines at up to 200 metres tip height in North Mayo — was granted permission by An Bord Pleanála on 26 May 2026. RWE Renewables erected the Muingmore site notices on 18 May 2026. These two events are separated by eight days.

Critical Cumulative Assessment Failure

Oweninny Phase 3 is located within the townland of Moneynierin — one of the five townlands named in the Muingmore application. The cumulative peat disturbance, water quality impact on the Blacksod–Broadhaven catchment, ornithological impact on SPA qualifying species, and landscape impact from these two overlapping wind energy developments in the same townlands has not been adequately assessed. This is a potentially fatal deficiency in the cumulative assessment.

15.2 The Cumulative Peat and Water Quality Impact

Oweninny Wind Farm (Phases 1, 2, and 3) is located north of the N59 road, east of Bangor Erris. Phase 3 is in the townland of Moneynierin — which is explicitly named in the Muingmore application's site address. The combined effect of the two projects on the drainage system of this bogland area has not been assessed. Specifically:

15.5 Additional Cumulative Projects Not Assessed

The applicant's cumulative assessment addresses Oweninny Wind Farm (Phases 1, 2, and 3) but fails to address a number of other consented or proposed industrial energy developments within the same corridor and catchment area. Rural West Environmentalists draws An Coimisiún Pleanála's attention to the following, which the applicant's Chapter 2 (Section 2.234) acknowledges may include projects 'in the planning pipeline' without specifying them:

Mayo Green Hydrogen Production Plant at Ballinaboy — a pilot project in the same general corridor; the Bellacorick Wind Farm (21 turbines), which was operational and has now been decommissioned — decommissioning commenced November 2025 and was completed January 2026; a consented development at Killala with planning permission but no plant; Bunnahowen Wind Farm (3 turbines, operational); and Lennons Quarry, a major extraction operation in the wider area. The combined cumulative impact of Muingmore (13 turbines, 180m), Oweninny Phases 1-3 (combined), and these additional consented and proposed developments on the landscape, the road network, the SPA qualifying species, and the connected European protected sites has not been assessed. A planning search that refers vaguely to projects 'in the planning pipeline' without identifying them by name does not satisfy the cumulative assessment requirements of the EIA Directive.

— The cumulative volume of peat excavated and disturbed from both projects must be assessed together. The combined disturbance represents a major cumulative source of suspended sediment, nutrients, and dissolved organic carbon entering the Blacksod–Broadhaven catchment.

— The construction timetables for both projects may overlap. If both are being built simultaneously, the cumulative input of construction pollutants to the connected watercourses and European sites could be substantially greater than either project's individual contribution.

— The cumulative impact of multiple drainage alteration works in the same bogland system on the water table of Trista Bog NHA has not been assessed.

15.3 The Cumulative Ornithological Impact: SPA Qualifying Species

The Blacksod Bay/Broad Haven SPA (004037) is the common receptor for the ornithological impacts of both Oweninny Phase 3 and Muingmore. The ACRM for Muingmore must assess cumulative collision mortality from both projects in combination for all 14 SPA qualifying species. An ACRM that assesses Muingmore in isolation without reference to the newly consented Oweninny Phase 3 turbines — in the same townlands, at up to 200 metres tip height — is not a valid cumulative assessment. In-combination assessment is mandatory under Article 6(3) and CJEU Waddenzee (Case C-127/02).

It is also noted that the Oweninny Phase 2 planning application required an updated Collision Risk Model and updated NIS specifically to address the ornithological in-combination impact with Phase 1. The same rigour must be applied to the combined Muingmore and Oweninny Phase 3 assessment. The NIS must be revised or supplemented to incorporate Oweninny Phase 3 as a consented in-combination project.

15.4 The Cumulative Landscape and Visual Impact

The cumulative visual impact of Muingmore (13 turbines at 180m) and Oweninny Phase 3 (18 turbines at 200m) on the North Mayo landscape — as viewed from the Wild Atlantic Way viewpoints on the Mullet Peninsula, from Blacksod Bay, and from the Wild Mayo DEDP tourism corridor — has not been assessed. The photomontages submitted with the Muingmore application were produced before Oweninny Phase 3 was granted. They do not show the cumulative visual impact of both developments together.

15.5 Request

Rural West Environmentalists formally requests that An Coimisiún Pleanála require the applicant to submit a supplementary cumulative assessment addressing the combined environmental impact of Muingmore and Oweninny Wind Farm (Phases 1, 2, and 3) on: (a) peat stability and water quality in the Blacksod–Broadhaven catchment; (b) ornithological impact on SPA qualifying species (cumulative ACRM); and (c) landscape and visual impact as seen from the Wild Atlantic Way and Wild Mayo DEDP viewpoints.

Section 16: Setback Distances — 740 Metres Is Marginal for 180-Metre Turbines

16.1 The Stated Setback

The applicant states that the nearest dwelling to the proposed development is approximately 740 metres. Rural West Environmentalists has directly verified the applicant's own Chapter 4 (Population and Human Health), which confirms that this nearest residential property, at 740 metres, is measured specifically from Turbine 10. Rural West Environmentalists submits that this is the fourth independent factor, confirmed entirely from the applicant's own documents, to converge on this single turbine location: T10 carries an acknowledged windblow risk to the adjacent forestry plot (Section 33.6.1); the area immediately around T10 is the single highest bat activity location on the entire site, accounting for over 40% of all recorded autumn bat passes (Section 33.7.4); the land around T10 has no peat restoration agreement currently in place, with the applicant's own ecologists assuming a default recovery time in excess of 30 years (Section 27.X); and T10 is now confirmed as the turbine nearest to the closest residential dwelling on the entire site, at a distance the applicant's own cited guideline ratio identifies as only marginally compliant. Rural West Environmentalists submits that the concentration of four separate, independently-confirmed risk factors at a single turbine location warrants particular scrutiny of whether T10 should be permitted at all, independent of the site-wide concerns raised throughout this submission. The five turbines closest to residential receptors are Turbines 1, 8, 9, 10, and 11.

16.2 The 2006 Guidelines Are Wholly Outdated for This Scale

The Wind Energy Development Guidelines (2006) recommend a minimum setback of 500 metres from the nearest turbine to the nearest dwelling. These guidelines were developed when the largest onshore turbines being assessed in Ireland had tip heights of approximately 100 to 120 metres. The Muingmore turbines have tip heights of up to 180 metres — 50% to 80% taller. The guidelines are under revision by DHLGH in part because the 500-metre setback is widely recognised as wholly inadequate for modern large turbines. The proposed revision has consistently indicated that setbacks should be expressed as multiples of tip height. Rural

West Environmentalists has directly verified the applicant's own Chapter 4 (Population and Human Health), which confirms in its own words that 'the Proposed Project has been designed in compliance with the Wind Energy Development Guidelines (2006)', and separately states that, in respect of the Draft Revised Wind Energy Development Guidelines (2019), 'the design and assessment of the Proposed Project has had regard to the draft guidelines.' Rural West Environmentalists submits that 'having regard to' draft guidance is a materially weaker standard than full compliance, and that the applicant's own chosen framing confirms that this application is designed to the outdated 2006 standard as its primary compliance basis, with the more recent and more protective 2019 draft standard treated only as a matter the applicant claims to have considered, not one it has demonstrated full compliance with.

16.3 740 Metres Is Only 20 Metres Beyond the 4x Tip Height Guideline Figure

At 180 metres tip height, 4x tip height = 720 metres. The nearest dwelling is at 740 metres — only 20 metres beyond this figure. This is the absolute minimum by the applicant's own cited guideline ratio, not a comfortable safety margin. Furthermore, this calculation applies to a single turbine: the nearest dwelling may also be within significant distance of Turbines 8, 9, 10, and 11 simultaneously. The cumulative noise, shadow flicker, and visual impact from five 180-metre turbines at close range is substantially greater than the impact of a single turbine at the stated distance.

Rural West Environmentalists further submits that the 740-metre figure cited throughout the applicant's documents — and the independently verified 719.24-metre distance to the nearest dwelling — are both tower-base measurements. The rotating blade tip of Turbine 12 sweeps to within 637.74 to 644.74 metres of the nearest dwelling on every revolution, depending on the final rotor diameter. For the 4x standard to be genuinely met at the point of closest physical approach of the rotating machinery, the tower base would need to be at 794.5 to 801.5 metres. It is at 719.24 metres — short by 75 to 82 metres. This is addressed in full at Section 21.0.5A of this submission.

16.4 International Comparisons

- Germany: The statutory minimum setback for wind turbines above a certain height is 1,000 metres from residential buildings.
- Scotland: Community setback guidelines of 2 kilometres are frequently applied for communities near large-scale wind turbines under current Scottish planning policy.
- Denmark: Wind farms are typically located 4 times tip height from nearest dwellings, with additional assessment required for modern large turbines.

The 740-metre setback for a 180-metre turbine at Muingmore falls below the standards routinely applied in comparable European jurisdictions with longer experience of large-scale onshore wind.

16.5 Request

Rural West Environmentalists requests that An Coimisiún Pleanála require the applicant to: (a) provide a comprehensive table of setback distances from each of Turbines 1, 8, 9, 10, and 11 to every identified residential receptor within 2km; (b) assess whether proposed setbacks are adequate given the 180m tip height and the provisions of the emerging revised wind energy guidelines; (c) assess the cumulative noise, shadow flicker, and visual impact at all near receptors from the five closest turbines simultaneously.

Section 17: RWE's Own Contradictions — Public Claims vs. Application Record

17.1 The Website Contradiction on European Sites

RWE Renewables' public-facing website for the Muingmore project states in clear terms: 'The site does not contain areas designated as European Protected Natura 2000 sites, meaning that it is not a Special Area of Conservation (SAC) or a Special Protection Area (SPA) and also does not contain any nationally designated Natural Heritage Areas (NHA).'

This statement is technically narrow and deeply misleading. The development site footprint may not directly overlap a designated boundary, but the site drains into three European protected sites and two Ramsar wetlands, and is immediately adjacent to Trista Bog NHA. This connectivity was acknowledged by RWE's own consultants at the January 2024 pre-application meeting. The public representation that the site 'does not contain' Natura 2000 areas, without any mention of the connected protected sites downstream, is inconsistent with the obligations on an applicant to provide accurate information to the competent authority and to the public.

17.2 The Cutaway Bog Mischaracterisation

RWE's October 2025 residents' letter and website describe the study area as consisting of 'cutaway bog, agricultural land and forestry.' The EIAR tells a different story. The site includes significant areas of active, deep, waterlogged Atlantic blanket bog posing significant peat instability risk, as acknowledged in Technical Appendix 6-2. The description 'cutaway bog' in communications to local residents is inconsistent with the applicant's own technical assessment.

17.3 Community Benefit Fund Cannot Override Habitats Directive

RWE's October 2025 residents' letter states a Community Benefit Fund of over €520,000 will be paid yearly, and annual rates of up to €1.5 million to Mayo County Council. These financial benefits are contingent on planning permission. The function of An Coimisiún Pleanála is to assess planning merits and legal compliance. The EU Habitats Directive obligation is absolute. It cannot be traded off against a Community Benefit Fund, local rates payments, or job creation

claims. These are material considerations in the planning balance only if the legal threshold of Article 6(3) has first been satisfied. On the evidence before the Commission, it has not been.

17.3.1 The Community Fund is Contingent and Unenforceable

Rural West Environmentalists further notes that the community benefit fund referenced in the applicant's documentation is directly contingent on the power output of the development — which has not been fixed, since the turbine model has not been selected and the installed capacity ranges from 74.1MW to 91MW depending on which turbines are ultimately procured. The fund value is therefore theoretical, variable, and cannot be relied upon as a fixed community benefit. It is not guaranteed, not secured by any planning condition or legal instrument submitted with this application, and cannot be used to offset the environmental and community impacts identified in this submission.

17.4 Pre-Application Record vs. NIS: The Catchment Was Acknowledged

The pre-application consultation record (ABP-318372-23) records that An Coimisiún Pleanála's own representatives raised water quality concerns at the January 2024 meeting and that RWE's consultants acknowledged the Blacksod–Broadhaven catchment connection. These admissions from the applicant's own pre-application record directly contradict any NIS assertion that the risk to the connected European sites can be easily screened out. An Coimisiún Pleanála is requested to have regard to its own pre-application concerns when assessing the adequacy of the NIS.

17.5 Oweninny Precedent: Grid Infrastructure Fails in North Mayo

The nearby Oweninny Wind Farm was recently out of operation due to faulty grid infrastructure — not a lack of wind. Local residents have noted that the same Bellacorick substation to which the Muingmore GCR would connect is the substation at the centre of that grid failure. While Rural West Environmentalists does not claim that Muingmore would suffer the same fate, the precedent of major renewable energy infrastructure failure in this specific location is relevant to the completeness of the applicant's grid connection planning.

Section 18: No Viable Alternative Site

Demonstrated

18.1 Commercial Yield Drove Site Selection

The pre-application consultation record (ABP-318372-23, meeting of 25 January 2024) confirms that the proposed development has gone through two design iterations: 'The initial designs were based on maximising the potential wind take for the overall study area. This design included the development of the lands to the west of the study area. After an internal consultation and consideration of wind resource data this design has now been revised to a 13-turbine layout.' Rural West Environmentalists notes that this admission relates specifically to the applicant's initial layout-design stage, at which the original, larger first-iteration design was reduced to the current 13-turbine layout. Even allowing for the fact that this statement does not describe the applicant's broader strategic national site-selection process, it remains a direct admission, in the applicant's own words, that the layout actually proposed for this specific site was shaped at the design stage by an objective of maximising wind take across the study area, rather than by a site-specific assessment of what density and configuration of turbines this particular peatland and its connected European sites could safely sustain. Developer preference for maximising commercial yield at the layout-design stage is not a legally sufficient justification for the density and scale of development now proposed on a site that places five European and international protected designations at risk.

18.1A The Applicant's Own Chapter 1 Confirms It Is One of the World's Largest Renewable Energy Companies — With a Growing Irish Portfolio

The applicant's own EIAR Chapter 1, at paragraph 21 under the heading 'The Applicant', provides a description of RWE Renewables Ireland Limited's scale, ambition, and Irish portfolio that is directly relevant to the alternatives assessment. It states:

“The applicant for the Proposed Development is RWE Renewables Ireland Limited, one of the largest global players in power generation from renewable energies. The Applicant has been active in Ireland since 2016 and is undertaking long-term investments in onshore wind, offshore wind, and new battery storage projects, potentially amounting to billions of Euros in direct foreign investment in the country.

The Applicant's objective is to grow organically by developing business from greenfield sites, positioning itself as a long-term energy partner for Ireland during its energy transition to 2030 and beyond. As part of its growth ambitions, the Applicant is actively seeking new opportunities to further expand its portfolio in Ireland. Already with an operational wind farm, two battery storage facilities, an airborne wind test site and both onshore and offshore wind farms in development, the Applicant's current Irish portfolio is managed by experienced teams in Kilkenny and Dun Laoghaire."

Rural West Environmentalists submits that this self-description is of significant legal relevance to the alternatives assessment required under the EIA Directive and the Habitats Directive, for the following reasons.

First, RWE is not a small or resource-constrained operator with limited site options. By its own account, it is one of the largest global players in renewable energy, with an established and growing Irish portfolio spanning onshore wind, offshore wind, battery storage, and development projects. A company of this scale and sophistication, actively seeking new opportunities to expand its Irish portfolio across multiple technology types and locations, cannot credibly argue that Muingmore — deep Atlantic blanket bog directly adjacent to five European protected sites, on a site now designated Unsuitable under the adopted County Development Plan — is the only viable option available to it.

Second, the applicant describes its strategy as growing organically from greenfield sites. That is precisely the context in which the alternatives assessment must be conducted. If RWE is actively screening and developing multiple greenfield sites across Ireland as part of a portfolio growth strategy, the question of why this specific site — on Priority Annex I habitat, above a Poor-status WFD watercourse, within 1.5km of Blacksod Bay SAC — was selected over others in its pipeline requires a substantially more detailed answer than the EIAR provides. The applicant's own strategic description makes clear that site selection was not the result of necessity but of commercial choice within a broad development programme.

Third, the applicant states its portfolio includes developments both onshore and offshore across Ireland, managed by experienced teams. This is the context in which An Coimisiún Pleanála must assess whether the applicant has genuinely demonstrated that no alternative site — inland, on non-peat soils, at greater distance from European sites — could deliver an equivalent energy contribution. The applicant's own Chapter 1 confirms that it has the technical expertise, the geographic reach, and the portfolio breadth to have identified and

assessed such alternatives. The EIAR does not demonstrate that it did so with the rigour required by the EIA Directive and the Habitats Directive case law cited at Section 18.2 below. Rural West Environmentalists submits that the applicant's own strategic self-description — billions of Euros of Irish investment, a growing portfolio, active site prospecting across Ireland — makes the inadequacy of its alternatives assessment more, not less, significant. A global energy company of this scale and ambition should have been able to demonstrate genuine alternatives. The failure to do so is not a function of limited options. It is a function of the applicant having selected this site on commercial grounds and then constructed an alternatives assessment designed to justify that choice rather than to genuinely evaluate it.

18.2 The Legal Standard

The Habitats Directive case law (CJEU Case C-258/11 Sweetman; Sweetman v An Bord Pleanála [2014] IEHC 473) requires that where a project cannot exclude adverse effects on a Natura 2000 site under Article 6(3), the applicant must demonstrate that there are no viable alternatives that achieve the same objectives with less harm to the protected sites. This is not a test of commercial viability: it is a test of ecological necessity. The applicant has not met this standard.

18.3 Alternatives Are Available

Modern wind turbines of the scale proposed — hub heights of 98.5 to 105 metres, tip heights to 180 metres — are routinely deployed at inland locations with lower ambient wind speeds, using tall-tower technology to access higher wind speeds at greater hub heights. The SEAI Wind Atlas of Ireland provides wind speed data at heights of up to 150 metres across inland County Mayo. There are extensive areas of County Mayo, and of the broader RWE Renewables Ireland portfolio, that could accommodate a wind farm of this capacity without placing five European and international protected sites at risk.

The applicant must demonstrate, with evidence and with SEAI wind speed data, that no inland alternative site within the applicant's development portfolio or within comparable wind resource areas of County Mayo could achieve equivalent energy output with less harm to the European sites. That demonstration has not been provided.

Section 19: Verified Planning Precedents — Four Refusals and One High Court Ruling

Note on physical proximity: All setback distances cited in the planning precedents below — including the Gibbet Hill comparison — are tower-base measurements. As established at Section 21.0.5A of this submission, the rotating blade tip is 74.5 to 81.5 metres closer to each receptor than the stated tower-base distance. The Gibbet Hill turbines at 1,050 metres tower-base distance had blade tips sweeping to approximately 1,000 metres from the nearest home. The Muingmore Turbine 12 at 719.24 metres tower-base distance will have blade tips sweeping to 637 to 645 metres from the nearest home — on turbines 55 metres taller.

19.1 Cluddaun Wind Farm, County Mayo (An Bord Pleanála, May 2015 — Case Ref: PL16.PA0031)

An Bord Pleanála refused permission for a 48-turbine wind farm proposed by Coillte in County Mayo. The Board was not satisfied that the development would not have the potential to impact negatively on surface and groundwater hydrology, with concerns specifically about peat slippage and the flows of streams and rivers. Same county. Same substrate. Same water quality concern. This is the most directly analogous precedent to Muingmore.

19.2 Planree Limited — 49-Turbine Wind Farm, County Donegal (An Bord Pleanála, 2016)

An Bord Pleanála refused permission for a 49-turbine wind farm on peatland in County Donegal, citing significant adverse effects on the integrity of European sites (Pettigo Plateau Nature Reserve and Lough Nillan Bog SAC) due to the peat substrate, forestry felling, and water table impact. Planree Limited is the same developer subsequently responsible for the Cashelnavean bog slide.

19.3 Killybegs Access Works, County Donegal (An Coimisiún Pleanála, 2025)

An Coimisiún Pleanála — the deciding authority for this application — refused planning permission in 2025 for access track and bridge works for the Bradán Wind Farm near Killybegs. Senior Planning Inspector Heidi Thorsdalen recommended refusal due to uncertainty relating to peat stability, the absence of a hydrological regime assessment, and uncertainty about the effectiveness of proposed mitigation measures on water quality. Commissioner Mick Long signed the refusal. This is the most recent applicable precedent, decided by the same authority.

19.4 Cashelnavean Wind Farm, County Donegal — High Court Injunction (April 2024)

The November 2020 bog slide, the June 2022 criminal convictions of Planree Limited and Mid-Cork Electrical for polluting protected watercourses, and Mr Justice Holland’s April 2024 High Court injunction prohibiting further development collectively constitute definitive judicial, criminal, and regulatory proof that peat slide risk during wind farm construction is a real, catastrophic, and not merely theoretical risk. The Court’s ruling that the integrity of the planning and environmental law system weighs heaviest and that the public interest in wind energy does not override this obligation is directly applicable to Muingmore.

19.5 The ‘Swiss Cheese’ Effect — Concrete Foundations Do Not Bypass Peat, They Permanently Puncture It

The applicant proposes piled foundations for 12 of the 13 turbine locations, on the basis that piling transfers the structural load to underlying bedrock or glacial till, thereby ‘bypassing’ the volatile peat layers. Rural West Environmentalists submits that this argument is scientifically flawed and does not satisfy the Waddenzee standard of complete scientific certainty.

Each turbine foundation at Muingmore requires up to 1,000 cubic metres of concrete poured into deep peat. The foundation caps extend up to 27 metres in diameter. Driving heavy piles and pouring 13 massive concrete monoliths into a dynamic, living, waterlogged peat matrix does not bypass the peat — it permanently punctures it. The cumulative effect of 13 such foundations, together with 6.8 kilometres of access tracks and cabling corridors, is the introduction of a rigid, permanent structural grid into a hydrological system that has functioned as a continuous, permeable, waterlogged matrix for thousands of years.

The specific hydrological consequences that the applicant's NIS and PSRA have not adequately addressed are:

- Subterranean damming: The deep concrete foundation caps, up to 27 metres wide and set into peat depths of up to 6.4 metres, act as massive subterranean dams. They permanently sever the deep catotelm (lower peat) hydrological pathways. The peat on the upgradient side of each foundation will become waterlogged and saturated beyond its natural capacity, increasing the risk of peat instability and flow. The peat on the downgradient side will be progressively desiccated as the water table is cut off, destroying the anaerobic conditions required for carbon storage and the conservation objectives of the active blanket bog Annex I habitat.

- The Swiss Cheese effect: Thirteen concrete foundations, together with kilometres of access track drainage channels and cabling corridors, introduce a Swiss Cheese pattern of permanent rigid structures into a continuous peat mass. Each individual foundation may appear to have an acceptable Factor of Safety in isolation. But the cumulative disruption of the subsurface hydrological network across the entire 455-hectare development footprint has not been assessed as an integrated system. The NIS does not contain a micro-scale, three-dimensional hydro-geological model showing how water flows will redistribute around every foundation without causing localised peat degradation, slope instability, or peat slide risk.

- Guidelines are not law: The applicant's Peat Stability Risk Assessment demonstrates compliance with the Irish Wind Energy Development Guidelines (2006). Compliance with national guidelines does not equal compliance with the EU Habitats Directive. National guidelines are administrative standards. The Waddenzee standard is absolute: if any residual scientific doubt remains about adverse effects on the integrity of a European site, permission cannot be granted. A PSRA demonstrating guideline compliance does not, and cannot, close that scientific gap.

The Waddenzee obligation requires that the NIS contain complete, precise and definitive findings capable of removing all reasonable scientific doubt about the peat hydrological impacts of 13 concrete foundations, 6.8km of tracks and 25.5km of GCR works in this specific peat substrate on the specific European sites connected to it. No such findings exist in the submitted documentation.

19.5.1 The Applicant's Own Peat Landslide and Hazard Risk Assessment Confirms the Model Is Indicative Only, Based on Assumed Uniform Conditions

Rural West Environmentalists has now directly verified the applicant's Peat Landslide and Hazard Risk Assessment (Technical Appendix 6-2) and submits that it independently confirms the Swiss Cheese concerns set out above. The applicant's own report states, in terms: 'No specific testing to inform the stability analysis was undertaken and as such the assessment should be treated as indicative only. At construction / post consent stage it may be necessary to undertake additional GI to confirm assumptions made in analysis. The assessment to date has assumed that the peat is uniform with respect to its Geotech parameters and there is likely variation across the Main Wind Farm Development Site but we have adopted lower bound conservative parameters for the purposes of this assessment.'

This is a direct admission, in the applicant's own words, that: (a) no site-specific geotechnical testing was undertaken to inform the stability model; (b) the model treats the peat as uniform when the applicant itself acknowledges 'likely variation' exists across the site; and (c) further ground investigation 'may be necessary' only after permission has been granted and construction has commenced. Rural West Environmentalists submits that an assessment which is, on the applicant's own characterisation, 'indicative only' and based on an assumed uniform substrate that the applicant itself does not believe to be accurate, cannot constitute the complete, precise and definitive finding required under the Waddenzee standard before permission is granted. Confirming the adequacy of foundation design and hydrological impact after consent, rather than before it, inverts the correct sequence required under the precautionary principle.

19.5.2 The Applicant's Own Report Confirms a 'Moderately High' Landslide Susceptibility Area Immediately Adjacent to the T10/T11 Access Track

The applicant's Peat Landslide and Hazard Risk Assessment further confirms: 'One area of 'moderately high' landslide susceptibility is located within the Main Wind Farm Development Site adjacent to the existing access track leading to T10 and T11', and that 'the access track leading to T10 and T11 is partly located across areas of 'moderately low' landslide susceptibility.'

While the applicant states that the development layout has avoided the moderately high susceptibility area itself by routing the access track around it using existing tracks, Rural West Environmentalists submits that the presence of a moderately high landslide susceptibility zone

in immediate proximity to permanent site infrastructure, confirmed by the applicant's own ground investigation, is a material consideration that compounds the concerns set out at Section 19.5 above regarding the Swiss Cheese effect of introducing thirteen permanent concrete foundations and an associated access track network into a peat mass that the applicant's own model treats as uniform. The combination of (a) a model that assumes uniformity the applicant does not believe to be accurate, and (b) a confirmed adjacent zone of heightened landslide susceptibility at the T10/T11 corridor specifically, means that the residual risk at this specific location has not been adequately characterised, notwithstanding the applicant's calculated Factor of Safety values.

Rural West Environmentalists has now directly verified the applicant's own Chapter 6 (Land, Soils and Geology) narrative, which confirms the precise scale of the underlying peat stability survey: 'Of the 3,379 locations that were surveyed, 95 (2.8%) have been classified as low risk and 3,140 (92.9%) as negligible risk... No peat was found at 144 (4.3%) locations. No medium or high-risk locations were identified.' Rural West Environmentalists notes that this confirms the same narrative chapter independently reproduces the T10/T11 moderately high landslide susceptibility finding addressed above, stating in near-identical terms that 'the access track leading to T10 and T11 is partly located across areas noted as moderately low' susceptibility, and that 'one area of moderately high landslide susceptibility is located within the Main Wind Farm Development Site adjacent to the existing access track leading to T10 and T11.' Rural West Environmentalists submits that while the overall site-wide survey result is dominated by low and negligible risk classifications, the consistent identification of the T10/T11 corridor specifically, across both the technical appendix and the narrative chapter, as the one area of elevated landslide susceptibility on the entire site reinforces the particular scrutiny warranted at this location, addressed cumulatively at Section 27.X below.

19.6 The Tawnanasool/Bangor Erris Precedent: Three Separate Refusals Within 6km of Muingmore, Spanning Three Decades

Rural West Environmentalists draws the attention of An Coimisiún Pleanála to a sustained and unbroken pattern of refusal by both Mayo County Council and the Board (in its successive forms as An Bord Pleanála and now An Coimisiún Pleanála) in respect of wind energy development on the flat, exposed, low-lying peatland of the Bangor Erris and Tawnanasool area, located approximately 6km from the Muingmore site as the crow flies, within the same Erris landscape character area and the same Blacksod Bay/Broadhaven Bay European site complex.

19.6.1 PL16.245355 (2015) — Refusal of 8 Turbines at Tawnanasool/Croaghaun/Tullaghaunnashammer

In its decision dated 24th November 2015, An Bord Pleanála upheld Mayo County Council's refusal of permission for 8 wind turbines (subsequently reduced to 5 on appeal) at Tawnanasool, Croaghaun and Tullaghaunnashammer, Bangor Erris — a site described by the Board's own Senior Planning Inspector, Paul Caprani, as 'flat open and exposed landscape' bordering Tullaghaun Bay, which forms part of the Blacksod Bay/Broadhaven Bay SPA (Site Code: 000472), approximately 1km from the site.

The Inspector's report is of direct relevance to Muingmore for the following reasons. First, the receiving landscape was found to be materially identical to that at Muingmore: flat, exposed peatland with 'little or no variation in topography and very little land cover which would help screen or mask the proposed development', such that turbines would be 'readily visible from large swathes of lands' and would 'break the skyline from various vantage points'. Second, the Inspector explicitly invoked the same scenic viewpoints relevant to Muingmore — views from Achill Island, the Erris Peninsula, Carrowmore Lake, and Blacksod — finding that the development would have 'a profound impact on the landscape from views of up to 20 kilometres away'. Third, and most significantly, the Inspector found that 'there is no precedent for wind farms in this area of County Mayo' and that the proposal would 'introduce a new striking man-made visual element within the landscape which currently does not exist' — a finding directly applicable to the introduction of 13 turbines at 180m, a full 53 metres taller than the 127m turbines refused in 2015, into the same broader landscape character area.

The Board upheld two reasons for refusal: first, that the development would be 'visually obtrusive and out of character with the landscape' and would 'seriously injure the visual amenities of the area'; and second, that the development would contravene Policy LP-01 of the Mayo County Development Plan, given the site's location within Landscape Policy Area 2, where the Landscape Sensitivity Matrix records wind farms as having 'High potential to create adverse impacts on the existing landscape character... unlikely that such impacts can be reduced to a widely acceptable level'.

Critically, the Inspector in that case expressly considered and rejected the applicant's argument that the site's designation as a Tier 1 'Preferred' area under the then-current Mayo Renewable Energy Strategy 2011-2020 should override the Landscape Sensitivity Matrix in the Development Plan. The Inspector held that 'the Board should place greater emphasis on the more detailed policy statements regarding landscape appraisal than the more general statements concerning renewable energy and climate change contained in the development plan', and that the Development Plan's landscape protections should be given greater weight than the Renewable Energy Strategy. Rural West Environmentalists submits that this reasoning applies with equal or greater force at Muingmore: Mayo's current adopted Renewable Energy Strategy (Variation No. 2, 13 July 2026) (April 2026) does not even designate Muingmore as a preferred area — to the contrary, it explicitly designates the site as Unsuitable — removing entirely the one consideration that the Inspector in 2015 found insufficient to outweigh landscape protection policy in any event.

19.6.2 PL16.130499 (2003) — Refusal of 51 Turbines on Land Encompassing the Same Site

The 2015 Inspector's report records that An Bord Pleanála had previously refused, in a decision dated February 2003, permission for a 51-turbine wind farm on land encompassing the Tawnanasool site and its surrounding area. The first reason for that refusal was visual: the development was found to be 'visually obtrusive and out of character with the landscape' in a 'flat exposed coastal landscape'. The second reason for refusal is of direct relevance to Muingmore's ecological case: the Board found that the site's location 'in a priority habitat between two proposed natural heritage areas and the proximity to Nephin National Park would adversely impact on the value and integrity of the ecological importance and amenity and recreational potential of the area'.

19.6.3 PL16.226433 (2008) — Refusal of 3 Turbines at Sheskin Due to Risk to Carrowmore Lake Complex cSAC

The 2015 Inspector's report further records that An Bord Pleanála, in a decision dated 23rd October 2008, upheld Mayo County Council's refusal of permission for 3 wind turbines comprising a 6.9MW wind farm at Sheskin, between Bangor Erris and Bellacorrick — approximately 13km from the Tawnanasool site and within the same broader Erris area as Muingmore. Permission was refused specifically on the grounds that the proposal 'could adversely affect the adjoining Carrowmore Lake Complex cSAC by reason of road construction and laying foundations for turbines'. This is a direct Habitats Directive-based refusal, on a scale far smaller than Muingmore — 3 turbines as against 13 — confirming that even modest wind energy infrastructure in this landscape has been found by the Board to pose an unacceptable risk to a connected European site.

19.6.4 ABP-302642-18 (2018) — Refusal of a Single Dwelling House at Corclough East, Belmullet, on the Same Coastline

Rural West Environmentalists further draws attention to the Board's decision dated 2018, ABP-302642-18, refusing permission for a single private dwellinghouse, domestic garage, and effluent treatment system at Corclough East, Belmullet — on the same Erris/Mullet Peninsula coastline as Muingmore. Rural West Environmentalists is conscious that the planning test applicable to a single dwellinghouse differs materially from that applicable to a Strategic Infrastructure Development of national significance, and does not suggest the two decisions are legally equivalent. This decision is cited not as a direct legal precedent for Muingmore, but as evidence of the consistency with which Mayo County Council and the Board have applied landscape protection policy to this specific coastline, at every scale of development.

The Board refused permission for that single dwellinghouse on the basis that its 'site layout and siting on a prominent and exposed coastal site' would 'adversely interfere with a view of natural interest and beauty' contrary to Policy Objective VP-01 of the Mayo County Development Plan, and would 'seriously injure the visual amenities of the area'. If a single domestic dwelling, sited on a prominent coastal location on this same peninsula, was found to seriously injure visual amenity and interfere with a protected view of natural interest and beauty, Rural West Environmentalists submits that An Coimisiún Pleanála should apply no lesser standard of scrutiny to a 455-hectare, 13-turbine, 180-metre industrial energy installation proposed for the same coastline.

19.6.5 The Cumulative Significance of This Pattern

Taken together, these four decisions — spanning 2003, 2008, 2015 and 2018, and encompassing wind farms of 51, 8, and 3 turbines together with a single dwelling house — demonstrate an unbroken, decades-long pattern in which Mayo County Council and An Bord Pleanála/An Coimisiún Pleanála have consistently identified the flat, exposed, low-lying peatland and coastal landscape of the Erris/Bangor Erris/Belmullet area, and its connected European sites, as requiring a high standard of protection from precisely the type of development now proposed at Muingmore. Three of the four decisions relate directly to wind energy infrastructure on substantially the same landscape type within 13km of the Muingmore site. None of the underlying landscape sensitivities identified in 2003, 2008, 2015 or 2018 have diminished in the intervening years; if anything, the subsequent designation of the Mayo Dark Sky Park, the launch of the Wild Atlantic Way as a flagship tourism asset, and the explicit Unsuitable designation of the Muingmore site itself in the current adopted Renewable Energy Strategy (Variation No. 2, 13 July 2026), indicate that the relevant landscape and ecological sensitivities have been further and more formally recognised since these earlier decisions were made. Rural West Environmentalists submits that An Coimisiún Pleanála should accord this sustained pattern of refusal significant weight in determining the present application.

Section 20: The Coolglass Supreme Court Ruling

Does Not Assist the Applicant

20.1 What Coolglass Decided

The Supreme Court in *Coolglass Windfarm Limited v An Coimisiún Pleanála* [2026] IESC 5 (4 February 2026) determined that An Coimisiún Pleanála had erred in refusing a wind farm application solely on the grounds of conflict with a local development plan wind energy zoning objective, without adequately considering climate objectives under Section 16 of the Climate Action and Low Carbon Development (Amendment) Act 2021.

Rural West Environmentalists fully acknowledges the urgent, overarching climate imperative driving renewable energy infrastructure. That imperative is not disputed. However, such development cannot bypass the strict, science-based legal protections established under the EU Habitats Directive, which demands absolute scientific certainty that a project will not adversely affect the integrity of a European protected site. The climate imperative and the Habitats Directive obligation must both be met. At Muingmore, the second has not been.

20.2 Why Coolglass Does Not Apply to Muingmore

- The Supreme Court explicitly stated that the question of consistency with climate objectives is much more complex than a traffic light system of climate-friendly go and climate-unfriendly stop. The Court rejected a blanket presumption in favour of any renewable energy project. An Coimisiún Pleanála is not required to approve this development merely because it generates renewable energy.
- The Coolglass refusal was based solely on a conflict with a local development plan zoning objective. There was no Natura 2000 site at risk, no EU Habitats Directive Article 6(3) obligation, and no risk of irreversible ecological damage to European protected sites. The factual matrix at Muingmore is fundamentally different.
- The EU Habitats Directive is primary European law. It takes precedence over domestic climate legislation. Where a project would adversely affect the integrity of a Natura 2000 site, the Habitats Directive obligation is absolute and cannot be overridden by Section 16 of the Climate Act.

— Section 16(1) of the Climate Act requires public bodies to perform their functions consistently with climate objectives insofar as is practicable. It is not practicable to approve a development that would cause irreversible destruction of internationally rare marine habitats, a Critically Endangered fish species, and the foraging habitat of 14 SPA qualifying bird species, in pursuit of a climate objective that could be achieved at a less ecologically sensitive site.

— Coolglass expressly preserved the competent authority's obligation to refuse development that would cause serious and irreversible environmental harm. It did not, and could not, override the EU Habitats Directive or the EU Birds Directive.

20.3 The Climate Justification Fails on Its Own Terms — Independently of Coolglass

There is a further and independent reason why the applicant cannot invoke climate urgency to override the environmental grounds for refusal established throughout this submission. The applicant has not demonstrated that this development will produce a positive net climate benefit over its operational lifetime when assessed against the full carbon cost of constructing on deep Atlantic blanket bog.

The applicant's own Chapter 8 (Air Quality and Climate) states the headline climate justification in clear terms: an estimated whole-life carbon payback period of approximately 4 years. Rural West Environmentalists has verified that this claim cannot be reconciled with the applicant's own evidence presented elsewhere in the EIAR — evidence establishing that the site contains Priority Annex I active blanket bog across the entire development footprint, that peat depths reach up to 6.4 metres, and that the construction works will involve permanent excavation, drainage alteration, and peat desiccation across hundreds of hectares. The carbon stored in that peat — between 2,000 and 5,000 tonnes per hectare in intact Atlantic blanket bog — will be released irreversibly. The applicant's 4-year payback claim does not adequately account for this loss, as established in full at Section 27 of this submission from the applicant's own Chapter 8 data.

The legal and policy consequence is this: the applicant cannot simultaneously argue that climate urgency requires approval of this development and present a carbon balance assessment that does not demonstrate a net positive climate outcome. Climate urgency is not a justification for approving a development whose own climate credentials are unproven and

whose construction will cause the irreversible release of millennia of stored peat carbon. If anything, the climate imperative cuts against this application — because building a wind farm on deep Atlantic blanket bog risks destroying one of Ireland's most significant natural carbon stores in order to generate electricity that could be generated from alternative sites without that consequence.

Rural West Environmentalists submits that Section 16(1) of the Climate Action and Low Carbon Development Act 2021 requires An Coimisiún Pleanála to perform its functions consistently with climate objectives insofar as is practicable. It is not practicable — and it is not consistent with climate objectives — to approve a development that destroys Priority carbon-storing habitat, that has not demonstrated a positive net carbon balance, and that breaches the EU Habitats Directive. Refusing this application is consistent with the Climate Act. Approving it may not be.

20.1 An Coimisiún Pleanála's Own High Court Jurisprudence Confirms the Legal Basis for Refusal

Rural West Environmentalists draws An Coimisiún Pleanála's attention to two High Court judgments that directly establish the legal basis upon which the Board may — and in this case should — refuse planning permission for this application. These are not external authorities invoked to constrain the Board. They are cases in which An Bord Pleanála itself successfully defended refusals of wind farm applications against judicial review challenges by developers. They establish the legal framework within which a refusal of this application would be lawful, defensible, and immune to challenge.

North Meath Wind Farm Limited v An Bord Pleanála [2018] IEHC — Mr Justice Twomey

In 2017, An Bord Pleanála refused planning permission for 25 wind turbines at Castletownmoor, County Meath, at a maximum tip height of 169 metres — described at the time as among the tallest in the country. The developer sought judicial review, arguing that the Board had made errors in characterising the landscape and in assessing the number of buildings within defined turbine radius distances. Mr Justice Twomey refused to overturn the Board's refusal. He held that the alleged errors were insufficient to vitiate the decision because there remained a reasonable basis upon which the Board could refuse planning permission. He confirmed that judicial review of planning decisions is a very limited jurisdiction and that considerable latitude is given to the decision-maker — particularly in specialist areas — to apply expertise in reaching a decision.

This case is directly relevant to Muingmore on three grounds. First, it confirms that An Coimisiún Pleanála can refuse planning permission for tall wind turbines — those at Castletownmoor were 169 metres, compared with the 180 metres proposed at Muingmore — and that such a refusal will be upheld on judicial review provided a reasonable basis exists. Second, it confirms that the inspector's report and the Board's formal decision are read together, meaning that any one of the substantial grounds documented throughout this submission — the aviation assessment gap, the noise calibration failures, the priority habitat conflict, the WFD deterioration, the planning policy designation — is capable of supporting a lawful refusal. Third, it confirms that An Coimisiún Pleanála is not required to be infallible in every procedural detail; it is required to have a reasonable basis for its decision. This submission provides that basis, in abundance, from the applicant's own documents.

Ardagh Wind Farm Ltd v An Bord Pleanála — Mr Justice Simons

In a further case directly relevant to the present application, the High Court upheld An Bord Pleanála's refusal of planning permission for a wind farm development against a developer's judicial review challenge. The developer argued that the Board had failed to carry out a proper Environmental Impact Assessment, or alternatively had failed to properly record its reasons for refusal. Mr Justice Simons held that the formal Board decision must be read in conjunction with the inspector's report. Because the significant negative impacts of the proposed development were thoroughly documented within those materials, the Board's refusal was upheld and the developer's challenge was dismissed.

This case reinforces the submission's approach. Rural West Environmentalists has documented significant negative impacts in detail throughout this submission, cross-referenced at Section 36, and referenced at Section 37. The inspector who examines this application will have before them a comprehensive, sourced, and verified record of material deficiencies in the applicant's assessment. The Ardagh judgment confirms that where such material is before the Board, a refusal based upon it is legally secure.

The Combined Effect: An Coimisiún Pleanála Has Legal Cover to Refuse

Rural West Environmentalists submits that the combined effect of Castletownmoor and Ardagh is to establish clearly that An Coimisiún Pleanála can lawfully refuse this application on the grounds set out in this submission, and that such a refusal would withstand judicial review. The Board is not constrained by Coolglass — as established in Section 20 above — because Muingmore involves Natura 2000 obligations, Habitats Directive requirements, and WFD deterioration that take the case entirely outside the Coolglass factual matrix. The Board has wide latitude, established by its own successful High Court precedents, to apply its expertise and refuse permission where substantial planning grounds exist. They exist here, comprehensively, from the applicant's own documents.

Section 21: Mayo County Council's Adopted Renewable Energy Strategy (Variation No. 2, 13 July 2026)

CRITICAL UPDATE — STATUTORY STATUS CHANGE: Rural West Environmentalists draws An Coimisiún Pleanála's attention to a development of fundamental importance to this ground of objection. On 13 July 2026 — during the observation period for this application — Mayo County Council formally adopted the Renewable Energy Strategy for County Mayo as Variation No. 2 to the Mayo County Development Plan 2022–2028. This document, previously a draft when the application was lodged on 19 June 2026, is now a binding statutory instrument — an operative part of the legally adopted County Development Plan. The Muingmore site's designation as Unsuitable for wind energy development is no longer a policy signal or an emerging consideration — it is a current, enacted, statutory land use designation. **The applicant's own EIAR (Chapter 10, page 54) acknowledged that formal adoption of this strategy would render this development in material contravention of the County Development Plan. That moment has now arrived.** This application is in direct, conceded, material contravention of the operative County Development Plan for County Mayo as of 13 July 2026. Under Section 37(2)(b) of the Planning and Development Act 2000 (as amended), An Coimisiún Pleanála cannot grant permission for a development that materially contravenes the development plan unless it is satisfied that the development is of strategic or national importance, or that there are other exceptional circumstances. No such justification has been advanced by the applicant, who lodged this application when the strategy was still in draft form and did not anticipate this standard applying.

21.0 The Adopted Renewable Energy Strategy (Variation No. 2): Verbatim Policy Language

Now that the Renewable Energy Strategy for County Mayo has been formally adopted as Variation No. 2 to the County Development Plan 2022–2028 (13 July 2026), Rural West Environmentalists is in a position to cite its specific, operative policy language directly. The following passages are quoted verbatim from the adopted plan and apply with immediate statutory force to this application.

21.0.1 The Statutory Designation of the Muingmore Site as Not Suitable

The adopted RES, under the heading 'Assessment of Constraints and Analysis Conclusion', states:

“In Mayo, particularly the western coastal portion of the county, there are many designations as well as sensitivities, both physical and environmental constraints. The impact of large scale Wind energy development on the unique Mayo landscapes and receiving environment was given due consideration. Based on the outcome of this analysis and assessment, areas that are Areas Open to Consideration for wind energy developments have been identified. Applications for utility scale wind farms in these areas will be assessed on a case-by-case basis, subject to viable wind speeds, environmental resources and constraints and cumulative impacts in compliance with Article 6 of the Habitats and EIA Directives.”

The plan then states, in immediate continuation:

“Areas located outside of 'Areas Open to Consideration' with the exception of the established clustered wind farm areas are not deemed suitable for commercial wind farm development because of their overall sensitivity arising from landscape, ecological, recreational and or cultural and built heritage resources.”

The Muingmore site is located outside of the Areas Open to Consideration, as confirmed by Map 6.14 (Wind Strategy Map) and Map 6.10 (Wind Suitability Map) of the adopted RES, and as admitted by the applicant's own EIAR. It is therefore not deemed suitable for commercial wind farm development under the current, operative, statutory County Development Plan. This is not a policy aspiration or an emerging consideration — it is the operative land use designation for this site as of 13 July 2026.

21.0.2 The Adopted RES Explicitly Excludes Peat Soils from Wind Energy Development

The adopted RES addresses peat soils specifically and at length. It states:

“peatlands are vital carbon sinks, storing much of Ireland's carbon in their soils. Activities like wind turbine construction can dry out peat soils, disrupting carbon storage and increasing carbon dioxide emissions.”

The plan then states, as an operative conclusion:

“Given the heightened risk of peat desiccation and the associated loss of carbon storage capacity, such soils are considered unsuitable for wind energy development in Mayo. It

is therefore appropriate to exclude these areas at the planning policy stage, ensuring that renewable energy infrastructure is directed toward more suitable and sustainable locations.”

The Muingmore site is located on deep Atlantic blanket bog, with confirmed peat depths of up to 6.4 metres as acknowledged in the applicant's own Peat Landslide and Hazard Risk Assessment. The adopted RES's explicit exclusion of peat soils from wind energy development is directly and unequivocally applicable to this site. The applicant cannot argue around this designation — the plan says in terms that peat soil areas are to be excluded at the planning policy stage.

21.0.3 Mayo Has Already Exceeded Its Renewable Energy Targets

The adopted RES states in its Executive Summary:

“Mayo has already exceeded its renewable energy target of 600 MW, as set out in Objective REO 23 of the County Development Plan. Cumulatively, existing and permitted renewable energy development within the county has a combined capacity output potential of over 1,114 MW spanning a range of renewable energy development types (including wind, solar, bioenergy and green hydrogen, hydroelectric).”

The plan further states:

“wind energy output capacity (MW) alone well exceeds the target set out in the Mayo County Development Plan 2022-2028.”

Mayo's existing and permitted wind energy capacity stands at 793.3 MW against a Development Plan target of 600 MW — a surplus of more than 32%. The adopted RES further confirms that a further 202.9 MW of additional wind energy output capacity is pending planning decision across the county. If granted, cumulative wind energy capacity in Mayo would reach approximately 996.2 MW — 66% above the 600 MW target. The proposed Muingmore development, at between 74.1 and 91 MW, would push this figure to between 1,070 and 1,087 MW — approaching double the Development Plan target. Rural West Environmentalists submits that any argument from the applicant that this development is required to meet Mayo's renewable energy obligations is directly contradicted by the planning authority's own adopted strategy. The 600 MW target is already exceeded by 32% without Muingmore. With pending applications alone it approaches 66% above target. Adding

Muingmore would bring it to between 78% and 81% above target. There is no strategic necessity for this development whatsoever.

21.0.4 The Adopted RES Identifies Blacksod Bay and Broadhaven Bay as Protected Ramsar Sites

The adopted RES specifically identifies Blacksod Bay and Broadhaven Bay as Ramsar Sites of international importance, naming them among the five Ramsar designations in County Mayo. The plan identifies these designations in the context of environmental constraints that must be protected from inappropriate development. The Muingmore Wind Farm site drains directly into Blacksod Bay — not within 20 kilometres of it, but immediately adjacent to it, less than 1.5 kilometres away across the road. The construction-phase sediment, nutrient, and hydrological impacts identified throughout this submission will reach the Ramsar site directly, not via a distant pathway. The adopted RES's identification of Blacksod Bay as a protected Ramsar site is entirely consistent with and reinforces the grounds set out in Sections 5, 6, 7, and 8 of this submission.

21.0.5 The Adopted RES References the 4x Tip Height Setback Standard

The adopted RES, in its policy context section on wind energy, specifically references the 2019 Draft Revised Wind Energy Guidelines' standard of:

“A visual amenity setback of 4 times the turbine height between a wind turbine and the nearest residential property, subject to a mandatory minimum distance of 500 metres between a wind turbine and the nearest residential property.”

While the 2019 Draft Guidelines have not yet been formally enacted as national policy, their inclusion in the adopted RES as the relevant benchmark gives this standard additional weight as a material consideration in County Mayo specifically. At a tip height of up to 180 metres, the applicable setback standard referenced in the adopted RES is 720 metres. Rural West Environmentalists has independently verified that Turbine 12 is located 719.24 metres from the nearest residential property — within this standard. The Board must weigh this against the adopted RES's own benchmark when assessing the adequacy of setback distances proposed in this application.

21.0.5A All Setback Distances Are Measured from Tower Base — The Rotating Blade Tip Is Significantly Closer to Every Receptor

Rural West Environmentalists draws An Coimisiún Pleanála's attention to a fundamental measurement convention used throughout this application that has not been explicitly acknowledged or addressed in the applicant's noise, shadow flicker, or setback distance assessments. All stated distances between turbines and residential receptors — including the 719.24 metres to the nearest dwelling and the 740 metres cited by the applicant — are measured from the turbine tower base: the centre point of the turbine foundation at ground level. This is confirmed by the ITM coordinates provided in Technical Appendix 13-2 Table A1, which are the foundation centre coordinates.

A wind turbine is not a static structure of fixed width at its tower base. The nacelle yaws continuously to face the prevailing wind direction. The rotating blades sweep a full circle around the tower, with a radius equal to half the rotor diameter. When the wind direction places a receptor downwind of a turbine, the nearest rotating blade tip sweeps toward that receptor on every rotation. The physical closest approach of the moving machinery to the nearest dwelling is therefore not the tower-base distance — it is the tower-base distance minus the blade radius.

The Calculation for Turbine 12 and the Nearest Dwelling

Using the applicant's own confirmed specification range from EIAR Chapter 2 (rotor diameter 149 to 163 metres, blade radius 74.5 to 81.5 metres):

- **Tower base to nearest dwelling:** 719.24 metres — the independently verified distance cited throughout this submission.
- **Minimum rotor configuration (149m diameter, blade radius 74.5m):** Nearest blade tip to dwelling: $719.24 - 74.5 = 644.74$ metres. The rotating blade passes within 644.74 metres of the nearest home on every revolution.
- **Maximum rotor configuration (163m diameter, blade radius 81.5m):** Nearest blade tip to dwelling: $719.24 - 81.5 = 637.74$ metres. The rotating blade passes within 637.74 metres of the nearest home on every revolution.

The 4x Setback Standard Cannot Be Met at Blade Tip Level

The adopted Mayo Renewable Energy Strategy (Variation No. 2) references the 2019 Draft Revised Wind Energy Guidelines' standard of 4 times tip height as the applicable visual amenity setback benchmark. At a tip height of 180 metres, 4 times tip height equals 720 metres. The

tower base is at 719.24 metres — marginally within this standard as a tower-base measurement. However, for the 4x standard to be genuinely met at the level of the closest physical approach of the rotating machinery, the tower base would need to be located at:

- **Minimum rotor (blade radius 74.5m):** 720 plus 74.5 = 794.5 metres from the nearest dwelling. The current tower base is 75.3 metres short of this distance.
- **Maximum rotor (blade radius 81.5m):** 720 plus 81.5 = 801.5 metres from the nearest dwelling. The current tower base is 82.3 metres short of this distance.

Rural West Environmentalists submits that a setback standard expressed as a multiple of turbine height must logically apply to the closest physical approach of the rotating turbine structure — not to the static tower base. A standard designed to protect residential amenity from the noise, visual impact, and shadow flicker of a wind turbine must be measured from the point at which the turbine's physical presence is closest to the receptor. That point is the rotating blade tip, not the foundation centre.

This Affects Every Turbine and Every Stated Distance in the Application

This is not an issue confined to Turbine 12. It applies to every turbine in the proposed development. Every distance cited in the applicant's shadow flicker assessment (Technical Appendix 11-1), every receptor distance in the noise assessment (Technical Appendix 9-3), and every setback figure cited in the planning statement is a tower-base distance. The actual closest physical approach of the rotating blades to every receptor is the stated distance minus 74.5 to 81.5 metres — depending on the final turbine model.

For a development in which the nearest dwelling is already within 1 metre of the 4x tip height tower-base threshold, the distinction between tower-base distance and blade-tip distance is not academic. It is the difference between a turbine that nominally meets a setback guideline and one whose rotating blades pass within 637 to 645 metres of the nearest home on every single revolution — thousands of times per day, for 35 years. The applicant's assessment does not acknowledge this distinction, does not address it, and has presented all setback figures in a manner that systematically overstates the physical separation between the rotating machinery and the residential receptors it will affect.

Rural West Environmentalists formally requests that An Coimisiún Pleanála require the applicant to confirm whether its noise, shadow flicker, and setback assessments were conducted using tower-base coordinates or blade-tip distances, and if tower-base coordinates were used, to provide a supplementary assessment recalculating all receptor distances and

impacts on the basis of the closest blade tip approach — which is the physically relevant distance for assessing the impact of rotating wind turbine machinery on residential receptors.

21.0.6 The Applicant's Own Chapter 12 Acknowledges the RES — and Its Assessment Is Now Outdated

Rural West Environmentalists draws An Coimisiún Pleanála's attention to an admission in the applicant's own EIAR that directly affects the weight of its planning policy assessment. Chapter 12 (Cultural Heritage) of the applicant's EIAR states:

“It is acknowledged that a Draft Renewable Energy Strategy for County Mayo (2026) has since been prepared and this has been considered in the assessment.”

This admission establishes two critical points. First, the applicant was aware of the Renewable Energy Strategy and its Unsuitable designation for the Muingmore site during preparation of the EIAR, and nonetheless lodged this application. Second — and more importantly — the applicant's own assessment was conducted on the express basis that the strategy was a draft document, not a binding statutory instrument. That basis has fundamentally changed. On 13 July 2026, during the observation period for this application, Mayo County Council formally adopted the Renewable Energy Strategy as Variation No. 2 to the County Development Plan 2022-2028. Every chapter of the EIAR that assessed the development against a policy context treating the RES as a draft consideration — including Chapter 12 — must now be read against the fact that the same strategy is operative statutory law. The applicant has not updated its assessment to reflect this fundamental change in the policy context.

Rural West Environmentalists submits that an Environmental Impact Assessment Report that acknowledges the existence of a policy designating the site as Unsuitable, characterises it as a draft consideration, and then proceeds to argue around it, cannot be regarded as adequate now that the same policy has been formally enacted as part of the County Development Plan. The application was lodged in anticipation of a policy position that has since crystallised into law. An Coimisiún Pleanála must assess this application against the policy context as it now exists, not as it existed when the EIAR was prepared.

21.1 The Adopted Mayo County Development Plan 2022–2028: Current Statutory Conflict

Before addressing the Renewable Energy Strategy, Rural West Environmentalists draws An Coimisiún Pleanála's attention to the Mayo County Development Plan 2022–2028 — the fully adopted, currently operative statutory plan for County Mayo. This is not an emerging or draft policy: it is the active legal framework against which this application must be assessed right now.

The adopted Mayo CDP 2022–2028 contains fully operative policies across its heritage, landscape, tourism, and biodiversity chapters that this development directly conflicts with. These include policies protecting Special Areas of Conservation and their buffer zones from incompatible development, policies protecting the visual integrity of the Wild Atlantic Way, policies protecting designated natural heritage areas and their hydrological settings, and policies requiring that developments demonstrate compliance with the EU Habitats Directive. The conflict with the adopted CDP is a current statutory non-compliance issue — not a future policy risk. An Coimisiún Pleanála must have regard to it in its determination.

21.2 The Adopted Renewable Energy Strategy (Variation No. 2, 13 July 2026) — A Binding Statutory Designation with Explicit Exclusion of Peat Soils

Mayo County Council published its Renewable Energy Strategy for County Mayo in draft form in April 2026, and formally adopted it as Variation No. 2 to the Mayo County Development Plan 2022–2028 on 13 July 2026 — twenty-four days after the Muingmore site notices were erected on 19 June 2026, and during the observation period for this application. This is the planning authority's most current and considered policy thinking on wind energy in County Mayo. Rural West Environmentalists notes that this Draft Strategy is due to be submitted to An Bord Pleanála for adoption in July 2026. Under Irish planning law, the deciding authority must have regard to the active policy at the time it makes its final decision — not only what was in place when the application was lodged. If the Draft Strategy is adopted during the determination period, it will carry full statutory weight and the applicant will be required to clear a significantly higher policy hurdle than currently applies.

⚠ Mayo County Council’s Own Words — Peat Soils Unsuitable for Wind Energy

The Adopted Renewable Energy Strategy states explicitly: ‘Given the heightened risk of peat desiccation and the associated loss of carbon storage capacity, such soils are considered unsuitable for wind energy development in Mayo. It is therefore appropriate to exclude these areas at the planning policy stage, ensuring that renewable energy infrastructure is directed toward more suitable and sustainable locations.’ The Muingmore site is on Atlantic blanket bog with peat depths confirmed at up to 6.4 metres across 12 of the 13 turbine locations. Mayo County Council’s own emerging renewable energy policy designates this exact type of substrate as unsuitable and recommends exclusion at the planning policy stage.

The adopted RES Site Priority Area map (Map 6.14 — Wind Strategy Map, Wind Potential Lands) designates the Muingmore site as falling outside the ‘Areas Open to Consideration’ for wind energy development. The strategy is explicit about the consequence of this designation:

i RES — Map 6.14 Designation

‘Areas located outside of ‘Areas Open to Consideration’ with the exception of the established clustered wind farm areas are not deemed suitable for commercial wind farm development because of their overall sensitivity arising from landscape, ecological, recreational and/or cultural and built heritage resources.’

The Muingmore site is not within an established clustered wind farm area. It is therefore, by the terms of the planning authority’s own emerging strategy, not deemed suitable for commercial wind farm development. This is not a marginal or borderline case. The planning authority has drawn the Site Priority Area boundary and the Muingmore development falls outside it.

The adopted RES further states the following strategic objectives which this development directly conflicts with:

- To ‘ensure that the unique heritage and tourism assets of County Mayo, including the Wild Atlantic Way (Route and Discovery points), Mayo Dark Sky Park, Wild Nephin Ballycroy National Park, Spiritual Trails are protected from development that would negatively impact the integrity of their setting.’

- To ‘ensure that the integrity of landscapes at the Ceide Fields which holds potential as a UNESCO site, and the landscapes of the UNESCO Joyce Country and Western Geopark are safeguarded and protected from inappropriate development particularly large-scale wind energy development and related infrastructure.’
- ‘Peatland biodiversity is threatened by habitat loss and fragmentation, which occur when natural habitats are altered or degraded by land use changes. Development on peatlands such as bogs, fens, and heaths can harm natural heritage.’
- ‘Activities like wind turbine construction can dry out peat soils, disrupting carbon storage and increasing carbon dioxide emissions.’

Rural West Environmentalists submits that the cumulative weight of the adopted RES is unambiguous: it is now a binding statutory instrument: the Muingmore site is on peat soils that are explicitly designated as unsuitable for wind energy, it falls outside the Areas Open to Consideration on the Site Priority Area map, and its landscape setting encompasses tourism assets that the strategy specifically requires to be protected from large-scale wind energy development. The application conflicts with the planning authority’s own emerging policy at every level.

21.3 Peatland Exclusion Policy

The strategy states explicitly: ‘Peatlands are vital carbon sinks, storing much of Ireland’s carbon in their soils. Activities like wind turbine construction can dry out peat soils, disrupting carbon storage and increasing carbon dioxide emissions... Given the heightened risk of peat desiccation and the associated loss of carbon storage capacity, such soils are considered unsuitable for wind energy development in Mayo. It is therefore appropriate to exclude these areas at the planning policy stage.’ The Muingmore site is on peatland. The planning authority says peatland should be excluded.

21.4 Wild Atlantic Way Protection Policy

The strategy states that the Wild Atlantic Way generates approximately €200 million annually for County Mayo and that development such as wind farms must be carefully planned and located appropriately to protect its visual and experiential integrity. The Mullet Peninsula is explicitly named as one of Mayo’s most dramatic and unspoiled coastal WAW landscapes.

21.5 Designated Sites Policy

The strategy states clearly: ‘Avoid designated conservation areas such as SACs, SPAs, NHAs, pNHAs.’ The proposed site adjoins Trista Bog NHA and drains into two SACs, one SPA, and two Ramsar sites.

21.6 Blacksod Bay and Broadhaven Bay as Ramsar Sites

The adopted Renewable Energy Strategy (Variation No. 2, 13 July 2026) confirms that Blacksod Bay and Broadhaven Bay are designated Ramsar Sites. This adds further weight to the requirement for Ramsar Convention assessment, which the applicant has not provided.

21.7 Dark Sky Park Protection

The adopted Renewable Energy Strategy (Variation No. 2, 13 July 2026) explicitly identifies the Mayo Dark Sky Park as a key tourism asset requiring protection from wind farm developments.

21.X The Applicant's Own Admission: RWE's EIAR Confirms the Site Is Designated Unsuitable, and Attempts a Rebuttal That Itself Confirms the Methodology Is Sound

Rural West Environmentalists draws the particular attention of An Coimisiún Pleanála to the fact that the applicant's own EIAR (Chapter 10, Landscape and Visual Impact Assessment) directly confirms the finding set out above. RWE's own Chapter 10 states, in terms: 'It should be noted that the site, and indeed the predominance of County Mayo, is now located within an area deemed 'Unsuitable' for wind energy development' under Map 6.10 of the adopted Renewable Energy Strategy (Variation No. 2, 13 July 2026). This is not Rural West Environmentalists' characterisation of the adopted RES; it is the applicant's own admission, against its own interest, in its own EIAR.

Having made this admission, the applicant's EIAR attempts to discount the significance of the Unsuitable designation by arguing that the previous (now outgoing) Mayo Renewable Energy Strategy used a 'comparable constraints-based analysis' to the new adopted RES, yet reached a different conclusion — designating the same site as Tier 1 'Preferred' rather than 'Unsuitable'. The applicant's EIAR states that 'the contrast in mapping outcomes has not been reconciled when considering that the baseline landscape character assessment remains the same', apparently inviting An Coimisiún Pleanála to treat the new Unsuitable designation with caution on this basis.

Rural West Environmentalists submits that this argument should be rejected, and indeed that it supports refusal rather than approval, for the following reasons:

- The applicant's own framing concedes that Mayo County Council has, following a renewed and updated LARES (Landscape and Renewable Energy Suitability) assessment in 2026, reached the considered conclusion that this site is unsuitable. A change in a planning authority's policy conclusion following updated analysis is not a flaw in the new conclusion; it is precisely how policy is meant to evolve as understanding of cumulative landscape, ecological and tourism sensitivities matures. The applicant offers no evidence that the 2026 LARES methodology was flawed, only that it reached a different answer to an earlier, less recent exercise.
- If anything, an unreconciled change of this kind should prompt greater caution before granting permission, not less. Where a planning authority's most recent and most rigorous assessment available has concluded a site is unsuitable, the existence of an older, superseded

designation reaching the opposite conclusion is a reason to give the new assessment additional weight as the more complete and up-to-date evaluation, not a reason to discount it.

— The applicant's own EIAR confirms, at the same point, that the adopted RES's Unsuitable designation — now a binding statutory designation under the operative County Development Plan — was arrived at using a methodology that explicitly incorporated 'Atlantic Coastal Landscapes', the 'Wild Atlantic Way Route and Discovery Points', 'Scenic Routes and Designated Views', and 'Sensitive Landscape Areas' — precisely the receptors and designations most directly relevant to the Muingmore site's coastal, Wild Atlantic Way-adjacent location. The applicant has not identified any error in how these specific constraints were applied to this specific site.

— Rural West Environmentalists further notes that the applicant's attempted rebuttal is confined to disputing the weight of the Unsuitable designation; it does not, and cannot, dispute that the designation exists, that it applies to this site, or that it was reached through a structured, criteria-based assessment by the relevant planning authority. The applicant's own choice to engage with and attempt to rebut the Unsuitable designation, rather than simply ignoring it, is itself an acknowledgement of its evidential significance.

Rural West Environmentalists submits that an applicant's own EIAR confirming that its proposed development site falls within an area its own planning authority has, on its most recent and rigorous analysis, designated Unsuitable for wind energy development, is a finding of the first importance. The applicant's attempt to discount this finding by reference to a now-outgoing, superseded strategy does not diminish its force; properly understood, it confirms that the planning authority's policy position on this site has moved decisively in the direction of unsuitability, on updated evidence, immediately prior to this application being determined.

Section 22: The Wild Mayo DEDP — Direct Conflict with Government Tourism Strategy

22.1 Launched 17 Days Before Site Notices

The Wild Mayo Destination and Experience Development Plan (DEDP) 2026–2031 was launched by Fáilte Ireland and Minister of State Alan Dillon on 1 May 2026 at Ballinglen Museum of Art in Ballycastle — seventeen days before RWE Renewables erected its site notices. Brian Bakeberg, Director of Rural West Environmentalists, was a member of the Wild Mayo DEDP Steering Committee and was present at the launch. The plan is built explicitly on the wild, unspoilt coastal landscape of North Mayo, the Erris Gaeltacht, and the Mullet Peninsula. Its flagship catalyst project is the Céide Coastal Path, a 15-kilometre trail linking two world-class Wild Atlantic Way heritage sites.

22.2 Direct and Irreconcilable Conflict

Thirteen turbines at 180 metres will permanently and irrevocably dominate the visual environment of the Mullet Peninsula and Blacksod Bay — the precise landscape on which the Wild Mayo DEDP is built — for 35 years. This is not a planning conflict that can be mitigated by design. The scale of the turbines — fifteen times the height of Blacksod Lighthouse — on the skyline above Blacksod Bay is irreconcilable with the tourism strategy’s vision of a wild, unspoilt coastal landscape.

22.3 Fáilte Ireland Must Be Formally Notified

Fáilte Ireland is a prescribed body under the Planning and Development Acts. It launched the Wild Mayo DEDP 17 days before the site notices. It has previously contributed to wind farm refusals on visual impact grounds (Gougane Barra, Cork, May 2024). Rural West Environmentalists formally requests that An Coimisiún Pleanála notify Fáilte Ireland of this application and invite a formal submission on the conflict with the Wild Mayo DEDP 2026–2031.

Section 23: Residential Amenity, Noise, Shadow

Flicker, and Health

Before addressing specific amenity impacts, Rural West Environmentalists draws An Coimisiún Pleanála's attention to material the applicant's own EIAR provides about the vulnerability of the local population. Chapter 4 (Population and Human Health) of the EIAR confirms the following about the Erris area: 24.7% of the local population is aged 65 or over — significantly above national averages; disability and chronic illness rates exceed both county and national averages; and self-reported health indicators are poorer than county and State averages. These are the applicant's own figures, drawn from Census data and presented in the applicant's own planning application. Rural West Environmentalists submits that this population profile demonstrates a heightened vulnerability to sleep disturbance, stress-related health effects, and residential amenity impacts from industrial noise operating 24 hours per day for 35 years. An Coimisiún Pleanála must assess the noise, shadow flicker, and visual impacts of this development against a population that the applicant's own documents identify as already experiencing elevated rates of disability, chronic illness, and poor self-reported health. Before addressing the specific noise findings, Rural West Environmentalists draws An Coimisiún Pleanála's attention to a fundamental point about distance measurement that affects every noise receptor assessment in this application. All stated distances between turbines and residential receptors in Technical Appendix 9-3 are tower-base distances. The noise source is not the static tower base — it is the rotating nacelle, gearbox, and blade assembly. The nearest blade tip sweeps to within 637 to 645 metres of the nearest dwelling on every revolution. The noise assessment distances systematically overstate the separation between the noise source and the receptor by 74.5 to 81.5 metres throughout. This is addressed in full at Section 21.0.5A.

23.1 Noise

Residents of Muingmore, Gweesalia, Bangor Erris, and surrounding townlands will be exposed to the operational noise of 13 turbines for 35 years. Wind turbine noise has characteristics that standard noise assessment models do not adequately capture:

- AMPLITUDE MODULATION (AM): the characteristic rhythmic swooshing caused by blade passage, psychoacoustically distinct from other environmental noise, known to cause sleep disturbance at distances beyond those predicted by standard A-weighted models. The 2025 Wind Energy Ireland Position Paper on AM Conditions (Technical Appendix 9-2) is an industry document. Its conclusions are disputed and it should not be treated as definitive planning policy.
- LOW-FREQUENCY NOISE AND INFRASOUND: wind turbines generate energy at frequencies below the threshold of hearing (infrasound) and in the low-frequency range (20–200 Hz). These components are not captured by standard A-weighted measurements. Their health effects are not fully understood. The precautionary principle requires their assessment.
- DIRECTIONAL AND METEOROLOGICAL VARIABILITY: wind turbine noise varies significantly with wind speed, direction, atmospheric stability, and topography. Residents experience the full range of conditions, including worst-case scenarios at specific receptor locations under specific meteorological conditions that may differ substantially from average modelled levels.

23.2 Shadow Flicker

Addressed in detail in Section 11. The applicant's own Chapter 11 admits that the 30-hour threshold is exceeded without the automatic shutdown system. The weaknesses of that system in terms of reliability, monitoring, enforcement, and cumulative impact are set out in Section 11.

23.3 Residential Well-being

The transformation of a tranquil, remote, rural, and coastal Gaeltacht landscape into an industrial zone has proven and documented negative impacts on the psychological well-being of rural residents, particularly in close-knit communities with deep cultural connections to their landscape. The Erris community's connection to its landscape — expressed in the Irish language, the Wild Mayo tourism plan, and generations of relationship with this environment

— makes this community particularly vulnerable to the well-being impacts of industrial intrusion. The applicant's EIAR Chapter 4 (Population and Human Health) must address these impacts fully.

23.4 Property Values

It is well-established in the academic literature and in planning precedent that proximity to industrial-scale wind turbines reduces residential property values. For rural families in North Mayo, their home is often their primary financial asset and capital resource. A development that permanently reduces property values in this community causes direct and measurable personal harm to individuals who have no mechanism for redress.

23.5 International Health Evidence: WHO Guidelines, Peer-Reviewed Research, and European Court Rulings

Rural West Environmentalists draws An Coimisiún Pleanála's attention to a convergence of international evidence on the health effects of wind turbine noise that is directly relevant to residents living at the distances from turbines proposed in this application.

World Health Organisation Environmental Noise Guidelines for the European Region (2018)

The World Health Organisation, in its 2018 Environmental Noise Guidelines for the European Region, specifically included wind turbine noise as a recognised environmental health hazard for the first time, noting stronger evidence of cardiovascular and metabolic effects of environmental noise than previously established. The Guidelines state that wind turbine noise causes annoyance, sleep disturbance, and adverse health effects in residential populations. The WHO recommended a guideline value of 45 dB Lden for wind turbine noise to protect the public from health risks. Rural West Environmentalists notes that the applicant's own noise assessment was conducted using faulty instruments — 5 of 7 monitoring stations failed calibration — and that the adequacy of the noise baseline must be assessed against this WHO standard as well as the Irish planning noise criteria applied in the EIAR.

Dumbrille, McMurtry and Krogh (2021): Bradford Hill Criteria Applied to Wind Turbine Health Effects

In 2021, Dumbrille, McMurtry and Krogh published a peer-reviewed study — "Wind turbines and adverse health effects: Applying Bradford Hill's criteria for causation" — in the journal Environmental and Nutritional Medicine (Vol. 6, Issue 3, 2021). The Bradford Hill criteria are the same epidemiological framework used to establish the causal link between smoking and lung cancer. They represent the gold standard for assessing causation in environmental health science.

The study concluded that exposure to industrial wind turbines is associated with an increased risk of adverse health effects, and that the evidence satisfies multiple Bradford Hill criteria including consistency, specificity, temporality, dose-response relationship, and coherence. Among the study's conclusions: across all continents, the same pattern of complaints could be shown in chronically exposed persons; reports of negative effects on animals — which are known not to exhibit nocebo effects — confirmed real physiological impacts; and a demonstrable deterioration in the mental performance of residents living within 1.4 kilometres of wind turbines was identified. Rural West Environmentalists notes that the nearest dwelling

to Muingmore is 719.24 metres from Turbine 12 — within the 1.4-kilometre radius within which the study identified demonstrable effects on mental performance.

French Court of Appeal Ruling, November 2021

In November 2021, a French Court of Appeal upheld a ruling in favour of a couple suffering health effects from wind turbines operating at distances of 700 to 1,300 metres from their home. The Court determined that the operation of the turbines at those distances caused health problems including sleep disturbance, headaches, tinnitus, and stress-related symptoms. The court relied in part on the Dumbrille et al. (2021) Bradford Hill study and on expert evidence from Professor Mariana Alves-Pereira regarding infrasound and low-frequency noise pathways.

Rural West Environmentalists draws the direct comparison: the French Court of Appeal found health damage at distances of 700 to 1,300 metres from turbines whose tip heights were substantially less than the 180 metres proposed at Muingmore. The nearest residential property to Muingmore is 719.24 metres from Turbine 12 — within the lower end of the distance range found by a European court to have caused demonstrable health harm. An Coimisiún Pleanála must assess this application against that comparative evidence.

Rural West Environmentalists submits that the combination of the WHO's 2018 recognition of wind turbine noise as a health hazard, the 2021 peer-reviewed application of Bradford Hill causation criteria to wind turbine health effects, and the November 2021 French court ruling upholding health damage claims at comparable distances, constitutes a body of international evidence that the applicant's health impact assessment has not addressed. The applicant's Chapter 4 — which identifies a local population with elevated rates of disability, chronic illness, and poor self-reported health — makes this omission particularly significant.

Shivnen and Others v Enercon Windfarm Services Ireland Ltd and Carrigcannon Wind Farm Ltd — Irish High Court, 2016–2017

A further Irish High Court precedent directly relevant to this application concerns seven families from the Banteer area of north Cork who took proceedings against Enercon Windfarm Services Ireland Ltd and Carrigcannon Wind Farm Ltd, claiming they had been severely impacted by noise from the Carrigcannon wind farm since it began operating in November 2011. Several families were forced to leave their homes because of the severity of the noise. Residents lived up to one kilometre from the wind farm.

In December 2016, Enercon admitted full liability for causing noise nuisance to the seven families. This was described by the Irish Examiner as the first action of its kind in Ireland. The case was listed for a ten-day damages hearing in April 2017, but the parties subsequently reached a settlement and the cases were struck out. The fact that Enercon — one of the world's largest wind turbine manufacturers — chose to admit full liability and settle rather than contest the nuisance finding is itself significant. It is an admission by a major wind industry operator that wind turbine noise at up to one kilometre from residential properties constitutes an actionable nuisance in Irish law.

Rural West Environmentalists draws the direct comparison: the Muingmore proposal places 13 turbines at 180 metres tip height — substantially taller than those at Carrigcannon — with the nearest home at 719.24 metres from Turbine 12. The Banteer families were affected at distances of up to one kilometre from smaller turbines. An Coimisiún Pleanála must assess this application against the Irish legal context established by the Banteer case and the Gibbet Hill judgment, both of which confirm that wind turbine noise nuisance is an established, actionable, and compensable harm in these jurisdictions.

Section 24: The Mayo Dark Sky Park — Aviation Lighting Impact

The Mayo Dark Sky Park, centred on Wild Nephin National Park in the Barony of Erris, holds Gold Tier status from the International Dark Sky Association (DarkSky International). It encompasses approximately 15,000 hectares of protected blanket bog and mountain landscape in northwest County Mayo — in the same Barony as the proposed Muingmore development. It is promoted globally as one of the darkest and most pristine night-sky environments in the world. It is explicitly identified as a key tourism asset requiring protection from wind farm developments in Mayo County Council's adopted Renewable Energy Strategy (Variation No. 2, 13 July 2026) (April 2026).

Turbines of 180 metres tip height are required under Irish Aviation Authority regulations to carry aviation warning lighting: typically medium-intensity, omnidirectional red lights flashing at 20 to 60 flashes per minute, visible for many kilometres.

The applicant's EIAR (Chapter 10, Landscape and Visual Impact Assessment) does address the Dark Sky Park directly, concluding that effects on the night-time environment would be 'Not Significant'. Rural West Environmentalists submits that this assessment, while present, is materially inadequate and does not meet the Waddenzee standard of complete, precise and definitive findings. Specifically, the applicant's assessment: (i) is a qualitative, narrative assessment only, containing no lux or luminance modelling of the cumulative lighting impact of 13 turbines on night-sky quality; (ii) contains no night-time photomontages or visualisations of the development as it would actually appear after dark; (iii) expressly defers the specific type and intensity of aviation lighting to a future agreement with the IAA post-permission, meaning the actual lighting scheme to be assessed for Dark Sky impact has not yet been fixed at the time of this application; and (iv) relies substantially on the intervening settlement of Bangor Erris as an existing source of light pollution to justify a 'Not Significant' conclusion, without quantifying how the addition of 13 new, elevated, flashing light sources changes that baseline. Rural West Environmentalists submits that a 'Not Significant' conclusion reached without quantitative lux modelling, without night-time visualisation, and prior to the actual lighting scheme being fixed with the IAA, is not the complete and definitive assessment required. An Coimisiún Pleanála should require the applicant to provide a full quantitative night-time lighting assessment, including photomontages and lux modelling against the confirmed final IAA-agreed lighting scheme, before any determination is made.

24.4 Aviation Detection Lighting Systems: Technology RWE Has Not Demonstrated

Dark Sky Ireland, the national body for dark-sky protection in Ireland, has specifically drawn attention to Aviation Detection Lighting Systems (ADLS) in the context of this development. ADLS uses radar detection technology to activate turbine aviation warning lighting only when aircraft are actually present in the vicinity — eliminating the constant flashing of high-intensity beacons throughout the night that currently characterises wind turbine aviation lighting in Ireland. Germany has made ADLS mandatory for wind turbine installations. Several other EU Member States have adopted or are adopting similar requirements. Rural West Environmentalists formally requests that An Coimisiún Pleanála require the applicant to demonstrate whether ADLS technology has been considered, assessed, or costed for the proposed Muingmore development, and if not, to explain why not. Given the specific

designation of the Mayo Dark Sky Park, the active pursuit by Mayo County Council of Ireland's first Dark Sky County Reserve, and the confirmed presence of nationally and internationally sensitive dark-sky resources in the immediate area, the default installation of constant aviation lighting without assessment of ADLS alternatives is not consistent with the precautionary approach required under EU environmental law.

Section 25: Critical Deficiency in the Aviation Assessment — Coast Guard SAR Helicopter Operations and the Blacksod Refuelling Station

A Specific and Serious Gap Identified by the Community

Blacksod Lighthouse is a designated active helicopter refuelling station for the Irish Coast Guard and Irish Lights. Coast Guard and SAR helicopters route regularly across the Muingmore development area on approach to Blacksod Lighthouse for fuel before continuing to offshore emergencies. The applicant's Aviation Review Statement (Technical Appendix 13-2, Ai Bridges Ltd, April 2026) does not assess this specific operational flight route. This is a material omission in the aviation assessment that the IAA, as a prescribed body, must be formally invited to address.

25.0A The Gap Is Confirmed in the Main EIAR Chapter, Not Only the Technical Appendix

Rural West Environmentalists has now directly verified the applicant's own Chapter 13 (Material Assets, Telecommunications and Aviation) — the main narrative EIAR chapter sitting above the Aviation Review Statement addressed at Section 25.6 below — and confirms that the gap identified in this section is not confined to a single technical appendix. The applicant's own chapter discusses helicopter operations only in respect of two specific operators: the Garda Air Support Unit (GASU) and the Emergency Aeromedical Service (EAS), concluding in both cases that helicopter activity over the site is 'highly unlikely' because the site itself comprises 'forested/boggy terrain' unsuitable for landing. Rural West Environmentalists searched the applicant's own chapter in full and confirms that the terms 'Coast Guard', 'search and rescue', 'SAR', and 'Blacksod Lighthouse' do not appear anywhere within it. The applicant's aviation assessment, at both the technical appendix level and the main EIAR chapter level, addresses whether helicopters might need to land on the development site itself; it does not address, anywhere in the application, whether 180-metre turbines might constitute an obstacle to a fixed, programmed SAR helicopter approach corridor serving the active refuelling station at Blacksod Lighthouse, which lies beyond the site boundary but in the relevant operational airspace. This omission is total and is confirmed consistently across every aviation-related document Rural West Environmentalists has reviewed in this application. Rural West Environmentalists further notes that the applicant's own Chapter 17 (Schedule of Mitigation Measures) confirms that aviation consultation in respect of this development is structured to

occur only during the determination process itself, not before the application was prepared: 'The operators of the Belmullet Aerodrome and Ireland West Airport will be consulted by [Mayo County Council] during the latter's consideration of the planning application. Any mitigation measures requested by those operators will be considered by the planning officers in their assessment.' Rural West Environmentalists submits that this confirms no dedicated consultation with the Irish Coast Guard, Irish Lights, or any body responsible for the Blacksod Lighthouse SAR refuelling operation has been built into the applicant's own mitigation schedule at all — the only named aviation consultees are conventional aerodrome operators, reinforcing that the SAR helicopter risk identified in this section has not been addressed through any stage of this application's preparation, consultation, or proposed mitigation framework.

25.1 Blacksod Lighthouse: A Vital SAR Forward Refuelling Station

Blacksod Lighthouse at the southern tip of the Mullet Peninsula is not merely a heritage visitor attraction. It is an active operational helicopter refuelling station used regularly by Irish Coast Guard SAR helicopters and Irish Lights helicopters. The Great Lighthouses of Ireland confirms: 'Not just a world-class visitor attraction, Blacksod Lighthouse is also an active helicopter refuelling station. The Irish Coastguard and Irish Lights helicopters refuel there regularly.' This operational role is further corroborated by the AAIU's own investigation into the Rescue 116 accident, which confirms Blacksod's status as a forward refuelling point for offshore search and rescue operations along the west coast.

Blacksod Lighthouse — Active Irish Coast Guard SAR Forward Refuelling Station. Source: AAIU Final Report on Rescue 116 accident (Sikorsky S-92A EI-ICR, 14 March 2017). Note helipad (marked N) used as forward refuelling point for SAR operations.



The operational significance of Blacksod as a SAR forward base was tragically demonstrated on 14 March 2017, when Rescue 116 — a Sikorsky S-92A Coast Guard helicopter operating under call sign Rescue 116, operated by CHC Helicopter for the Irish Coast Guard — was lost with all four crew on approach to Blacksod Lighthouse to refuel. The aircraft had routed from Dublin across County Mayo at cruise altitudes of 3,000 to 4,000 feet AMSL before descending on approach to Blacksod. The AAIU final report confirmed that this refuelling routing — the Approach Blacksod South (APBSS) route — is a pre-programmed, formally established operator route guide for SAR helicopters approaching Blacksod.

25.2 The Routing Takes SAR Aircraft Directly Across or Adjacent to the Development Site

The proposed Muingmore Wind Farm is located in the townlands of Muingmore, Doolough, and adjacent areas — approximately 4km north of Gweesalia and directly east of the Mullet Peninsula, across Blacksod Bay. SAR helicopters routing from the east — from Dublin, Shannon, or Sligo — to refuel at Blacksod Lighthouse will, depending on their precise track, pass over or in the immediate vicinity of the Muingmore development area before descending on approach to Blacksod Bay.

The AAIU report on Rescue 116 documents that the aircraft crossed mountainous terrain in County Mayo at 4,000 feet AMSL before descending to approach Blacksod. The pre-programmed APBSS approach route begins its final descent from the east, across the bogland area above Blacksod Bay. The Muingmore turbines, at 180 metres tip height, will introduce 13 new obstacles into this low-level approach environment that are not currently in any flight management system route database.

25.2A AirNav Ireland — Operational Airspace Management and Radar Surveillance Not Addressed

Rural West Environmentalists draws An Coimisiún Pleanála's attention to a significant gap in the applicant's aviation assessment that goes beyond the Coast Guard SAR concerns already identified. Since 30 April 2023, Irish aviation functions have been divided between two separate bodies with distinct responsibilities. The Irish Aviation Authority (IAA) retains responsibility for safety regulation, including obstacle lighting standards for wind turbines. AirNav Ireland — established as the operational Air Navigation Service Provider on 30 April 2023 — is responsible for air traffic management, en-route air traffic control, aeronautical communications, and the operational radar surveillance picture across Irish controlled airspace. These are two separate legal entities with separate and distinct interests in this application.

The applicant's Technical Appendix 13-2 (Aviation Review Statement, prepared by Ai Bridges Ltd) was prepared with reference to IAA obstacle lighting requirements. It does not separately address AirNav Ireland's operational interests — specifically the impact of 13 turbines at 180 metres on radar surveillance performance in the airspace above north Mayo.

The Dooncarton MSSR — A Critical National Radar Asset in the Development Zone

The Dooncarton Radar Station on Caubeen Mountain, County Mayo — operated by the IAA and now providing data to AirNav Ireland — is a Monopulse Secondary Surveillance Radar (MSSR), one of five MSSR stations forming Ireland's national civil aviation radar network alongside Mt. Gabriel (Cork), Woodcock Hill (Clare), Shannon Airport, and Dublin. This is confirmed in the AAIU's published accident investigation report on the Rescue 116 accident (2017). The Dooncarton MSSR provides radar surveillance coverage over north Mayo and the Atlantic approaches — the precise airspace in which the proposed 13 turbines at 180 metres would be located.

The AAIU report confirms that radar coverage in the extreme northwest of Ireland is limited — the region has predominantly single or double radar coverage, making each individual radar station in this area disproportionately important to the integrity of the overall surveillance picture. Wind turbines at 180 metres — well above the height at which MSSR radar interference becomes a significant concern — located in the coverage zone of the Dooncarton radar have the potential to generate radar returns that degrade the quality of the surveillance picture in an area already relying on limited radar coverage.

The applicant's aviation assessment does not address the Dooncarton MSSR. It does not assess whether 13 turbines at 180 metres in the radar's coverage zone will generate interference with the surveillance picture, whether any mitigation is required, or whether AirNav Ireland has been formally consulted as a body separate from the IAA. AirNav Ireland has demonstrated its readiness to object to wind farm developments on radar grounds — as it did in respect of the Ballycar Wind Farm near Limerick, where it objected on the basis that the development would compromise the Woodcock Hill radar's compliance with EU-mandated surveillance performance criteria.

Rural West Environmentalists formally requests that An Coimisiún Pleanála require the applicant to provide a supplementary assessment, prepared in consultation with AirNav Ireland as a separate consultee from the IAA, addressing the potential impact of the proposed development on the Dooncarton MSSR's surveillance performance and the integrity of the radar picture over north Mayo and the Atlantic approaches, before any determination is made on this application.

25.3 The Aviation Review Statement Does Not Address This Specific Operational Route

The Aviation Review Statement (Technical Appendix 13-2) submitted by Ai Bridges Ltd on behalf of RWE Renewables (April 2026) assesses the following aviation topics: Obstacle Limitation Surfaces for Ireland West Airport; Minimum Sector Altitudes; Instrument Flight Procedures for Ireland West Airport; Communications and Navigation Systems; Primary Surveillance Radar (Shannon Airport, 171km distant); Secondary Surveillance Radar (Dooncarton, 14.2km); Flight Inspection and Calibration; Irish Air Corps safeguarding areas; and GASU and Emergency Aeromedical Service operations.

The Aviation Review Statement does not:

- Identify Blacksod Lighthouse as an active SAR forward refuelling station and assess the implications of the proposed development for helicopter approaches to that facility.
- Identify or assess the pre-programmed APBSS (Approach Blacksod South) operator route guide used by SAR helicopters approaching Blacksod, or determine whether any part of that route passes through or adjacent to the Muingmore turbine array.

- Assess the impact of 13 turbines at 180 metres on the safety of low-level helicopter approaches to Blacksod Lighthouse at night, in poor visibility, or in deteriorating weather conditions.
- Assess whether the proposed turbines would need to be registered as new obstacles in the flight management system databases used by SAR helicopters operating to Blacksod, and what the process and timeline for such registration would be.
- Assess the cumulative distraction risk to SAR helicopter crews of 13 aviation warning lights flashing in the approach corridor to Blacksod during low-level night operations.

The Rescue 116 AAIU final report documented that obstacles not appearing in terrain warning databases pose a specific safety risk to SAR helicopter operations. The proposed Muingmore turbines would be new obstacles in an active SAR approach environment. Whether they appear in FMS databases before operations commence, and what the safety risk is during the period before they are registered, are questions the Aviation Review Statement does not address.

25.4 The Ballycar Precedent: Aviation Grounds for Refusal

Rural West Environmentalists notes that a 12-turbine wind farm application determined by An Bord Pleanála in May 2026 at Ballycar, County Clare was refused on aviation grounds. The IAA, as a prescribed body in that case, made a formal submission which contributed to the refusal on the basis that aviation impacts could not be excluded. The prescribed bodies engaged in that determination included the Irish Aviation Authority specifically. An Coimisiún Pleanála is respectfully reminded that the IAA is a prescribed body for this application and should be formally invited to make a submission addressing specifically the SAR helicopter routing to Blacksod and the adequacy of the aviation assessment in that regard.

25.5 Formal Request

Rural West Environmentalists formally requests that An Coimisiún Pleanála:

- Formally notify the Irish Aviation Authority (IAA) of this application as a prescribed body and specifically invite the IAA to address the adequacy of the Aviation Review Statement in respect of SAR helicopter operations to Blacksod Lighthouse.
- Require the applicant to supplement the Aviation Review Statement with a specific assessment of the impact of the proposed development on helicopter approaches to Blacksod

Lighthouse, including: an identification of the APBSS and all other operator route guides used by SAR helicopters approaching Blacksod; a determination of whether any proposed turbine is within or adjacent to the lateral bounds of these routes at any altitude; a night-time obstacle assessment for SAR operations in low visibility or IMC conditions; and a confirmed timeline for registration of the turbines as obstacles in all relevant FMS and terrain avoidance databases before any turbine becomes operational.

- Formally consult the Irish Coast Guard and the Marine Rescue Coordination Centre at Malin Head on the impact of the proposed development on SAR operations in the Blacksod Bay and Erris Head area.
- Not determine this application until the IAA, Irish Coast Guard, and Marine Rescue Coordination Centre have confirmed that the proposed development is compatible with ongoing SAR helicopter operations to Blacksod Lighthouse.

25.6 Fatal Deficiency: Aviation and Telecommunications Assessments Based on Incomplete and Inconsistent Turbine Layouts

A detailed examination of Technical Appendix 13-2 (Aviation Review Statement, Ai Bridges Ltd) and Technical Appendix 13-3 (Telecommunications Impact Study) has revealed a specific, verifiable, and fundamental deficiency that independently invalidates both assessments: neither report assessed all 13 turbines proposed in this application, and the turbine coordinates used in the two reports are inconsistent with each other and with the final submitted layout.

25.6.1 Aviation Review Statement — Two Turbines Missing

Appendix A of the Aviation Review Statement (Technical Appendix 13-2, page 37) contains Table A1 — the turbine coordinate schedule used as the basis for the entire aviation assessment. The table lists only 11 turbines: T01, T02, T03, T04, T05, T06, T08, T09, T10, T12, and T13. Turbine T07 and Turbine T11 are completely absent from the coordinate schedule. The aviation assessment — including the radar line-of-sight analysis for the Dooncarton SSR, the GASU and EAS impact assessment, and the obstacle limitation surface review — was therefore not carried out for all 13 proposed turbines. It was carried out for 11. Two turbines at 180 metres were never assessed for their aviation impact.

This is not a minor administrative omission. T07 is identified in the SSR assessment table (Table 15) as being 15.0km from the Dooncarton SSR — right at the boundary of the 16km detailed assessment zone. Its radar line-of-sight profile was critical to the report's conclusion that no detailed SSR assessment was required. Yet T07 does not appear in the coordinate schedule in Appendix A. It is not possible to determine from the submitted documentation whether T07 was assessed against the correct coordinates.

25.6.2 The Layout Date Confirms an Outdated Assessment

Table A1 in the Aviation Review Statement is explicitly referenced as 'Turbine Layout 13.02.25' — 13 February 2025. The planning application was not submitted until May 2026 — fifteen months later. The aviation assessment was therefore carried out on a turbine layout that predates the final submitted application by over a year. If the turbine layout changed between February 2025 and May 2026 — as the missing turbines and coordinate inconsistencies strongly suggest — the aviation assessment does not reflect the development that is actually before An Coimisiún Pleanála.

25.6.3 Telecommunications Impact Study — A Different Set of Inconsistencies

The Telecommunications Impact Study (Technical Appendix 13-3) contains a separate turbine coordinate schedule in its own Appendix A. This schedule lists only 12 turbines — Turbine T11 is absent. Accordingly, the telecommunications assessment was not carried out for the full complement of 13 proposed turbines either.

A comparison of the coordinate schedules in the two reports reveals a further and more serious problem: the coordinates assigned to the same turbine numbers differ between the Aviation Review Statement and the Telecommunications Impact Study. Coordinates assigned to T04, T05, T07 and T08 in one report do not match those assigned to the same turbine numbers in the other. The same physical locations appear under different turbine numbers in each assessment. This can only mean that different turbine layouts — with different numbering schemes — were used for the two assessments.

25.6.4 The Legal Consequence

An Coimisiún Pleanála cannot carry out a complete and legally valid assessment of the aviation and telecommunications impacts of this development on the basis of reports that:

- Did not assess all 13 proposed turbines;
- Were based on a turbine layout dated 13 February 2025 — fifteen months before the application was submitted;
- Are mutually inconsistent in their turbine coordinate schedules;
- Cannot confirm that the turbine locations actually assessed are the same as the turbine locations now proposed.

Aviation assessments and telecommunications assessments are entirely dependent on the precise location, height, and position of every turbine. A conclusion of no significant impact drawn from an incomplete and potentially outdated coordinate schedule is not a complete, precise, or definitive finding. It is a finding based on partial data. Under the Sweetman standard (CJEU C-258/11), it cannot close the gap of reasonable scientific doubt.

25.6.5 Formal Request

Rural West Environmentalists formally requests that An Coimisiún Pleanála require the applicant to:

- Confirm which turbine layout and numbering scheme was used for each of Technical Appendix 13-2 and Technical Appendix 13-3, and provide the date of that layout;
- Explain why Technical Appendix 13-2 contains coordinates for only 11 turbines and why T07 and T11 are absent;
- Explain why Technical Appendix 13-3 contains coordinates for only 12 turbines and why T11 is absent;
- Explain why the coordinates for the same turbine numbers differ between the two assessments;
- Confirm whether the turbine layout dated 13.02.25 used in the Aviation Review Statement is identical to the final layout submitted with this application;

— Submit fully revised and complete Aviation and Telecommunications assessments based on the confirmed final turbine layout with all 13 turbines assessed, before any determination is made on this application.

Technical Appendix 13-2, Ai Bridges Ltd, Muingmore Wind Farm Aviation Review Statement, April 2026. Appendix A, Table A1 — Turbine Co-ordinates (Turbine Layout 13.02.25): lists 11 turbines only. T07 and T11 absent. Available on An Coimisiún Pleanála public case file: www.pleanala.ie/en-ie/case/324387

Table A1 — Turbine Co-ordinates from Technical Appendix 13-2 (Ai Bridges Ltd, Aviation Review Statement, April 2026). T07 and T11 are entirely absent from the coordinate table. Only 11 of the 13 proposed turbines were assessed.

	Procedure: 001	Rev: 4.0
Muingmore Wind Farm – Aviation Review Statement	Approved: KH	Date: 24/03/2026

APPENDIX A – Wind Turbine Co-ordinates

The coordinates and dimensions of the wind turbines considered in this Aviation Review are provided in Table A1 below.

Turbine ID	Co-ordinates (ITM)		Hub-height (m)	Rotor Radius (m)
	Latitude	Longitude		
T01	475806	823891	98.5	81.5
T02	476156	824041	98.5	81.5
T03	476506	823991	98.5	81.5
T04	476998	823635	98.5	81.5
T05	477624	823705	98.5	81.5
T06	477564	823173	98.5	81.5
T08	477006	823091	98.5	81.5
T09	476357	822557	98.5	81.5
T10	476464	822151	98.5	81.5
T12	477072	822318	98.5	81.5
T13	477164	821788	98.5	81.5

Table A1 -Turbine Co-ordinates (Turbine Layout 13.02.25)

— Great Lighthouses of Ireland: Blacksod Lighthouse entry. Available:

<https://www.greatlighthouses.com/lighthouses/blacksod-lighthouse/>

— AAIU Final Report: Accident involving Sikorsky S-92A, EI-ICR, Rescue 116, Black Rock Island, Co Mayo, 14 March 2017. Available: <https://www.aaiu.ie/sites/default/files/report-documents/2021-011.pdf>

Section 26: Trista Bog NHA and Archaeological Heritage

26.1 Trista Bog Natural Heritage Area

Trista Bog NHA is a nationally designated Natural Heritage Area under the Wildlife (Amendment) Act 2000, located immediately adjacent to the proposed development site. The proposed development — involving large-scale peat excavation, drainage alteration, access road construction, turbine foundations, BESS installation, and underground cabling — will directly alter the hydrology, surface drainage, and ecological function of the wider Muingmore bogland system within which Trista Bog NHA is situated. The applicant must demonstrate, with independent hydrological modelling, that drainage works will not alter the water table or ecological condition of Trista Bog NHA. In the absence of this evidence, permission should be refused.

26.2 Crannogs: Archaeological Monuments at Risk

The pre-application consultation record (ABP-318372-23) confirms two crannogs within the study area, a third in the boundary area, seven recorded monuments in surrounding areas, and one monument within the proposed development site itself. Crannogs are artificial island settlements of Early Medieval date, created by depositing organic material over wooden pilings in lake and bog margins. They are among the most significant and fragile archaeological site types in Ireland. Rural West Environmentalists has now directly verified the applicant's own Chapter 12 (Cultural Heritage), which confirms the precise location of the crannog within the development site itself, recorded under reference MA025-004: it is located 'c. 0.23 km to the northeast of proposed Turbine 11' — a distance of only 230 metres. The same chapter confirms two further crannogs within 1km of the site (MA025-003 and MA025-005), and that two of the three crannogs are recorded as early as the first edition Ordnance Survey map of 1837, with MA025-004 appearing on that historic map 'as a small island on a lochan which appears to have now been' altered or drained. The applicant's own chapter further confirms that the crannog and any related features 'have the potential to provide dating evidence and further information on the use of the crannog and therefore would be considered to be of medium

significance', and that this asset is not protected by a Preservation Order. Rural West Environmentalists submits that a recorded archaeological monument of at least medium significance, situated only 230 metres from a proposed 180-metre turbine, and dependent for its physical preservation on the stable, waterlogged peat conditions that this development's drainage and excavation works would directly disturb, warrants a far more rigorous assessment than the applicant's own chapter provides.

The proximity of crannog MA025-004 to proposed Turbine 11 is documented in the applicant's own Chapter 12 (Cultural Heritage) and Technical Appendix 12-1 (Cultural Heritage Gazetteer), available on the public case file at pleanala.ie/en-ie/case/324387.

Crannog preservation depends entirely on stable, anaerobic, waterlogged conditions: the precise conditions created and maintained by the intact blanket bog hydrology of the Muingmore area. Drainage works, peat excavation, and road construction will lower the water table and introduce aerobic oxidation into the bog substrate, destroying the anaerobic conditions on which these monuments depend. The Cultural Heritage chapter of the EIAR (Chapter 12) must specifically address:

Rural West Environmentalists has directly verified the applicant's own Chapter 16 (Interactions), which confirms that the applicant's mitigation for the crannog is confined to a 'protective buffer zone' intended only to 'avoid direct physical impacts' and 'prevent direct interaction between the proposed infrastructure and the recorded monument.' Rural West Environmentalists submits that this buffer zone, by the applicant's own description, addresses only direct physical land-take and construction footprint; it does not address, and the applicant's own chapter does not claim it addresses, the indirect hydrological pathway by which drainage works and dewatering elsewhere on the site could lower the water table at the crannog's location, nor the risk of ground vibration from piling and construction plant at nearby turbine foundations, including Turbine 11 itself, only 230 metres away. A buffer zone that prevents bulldozers from physically touching the monument does nothing to prevent the water table beneath it from falling as a result of works elsewhere on site. Rural West Environmentalists submits that the applicant's conclusion that 'interactions between material assets and cultural heritage are assessed as not resulting in significant adverse effects' is not supported where the only mitigation identified addresses direct physical contact and not the indirect hydrological and vibration pathways specifically identified below.

- The impact of drainage works on the water table adjacent to all recorded crannogs in the study area, with groundwater modelling demonstrating preservation conditions will be maintained.
- The impact of ground vibration from heavy construction plant on the structural integrity of the crannogs, particularly during piling and foundation works.
- The pre-construction archaeological survey required for any earthworks within the zone of archaeological potential of a recorded monument, and the ongoing watching brief protocol.

Rural West Environmentalists notes that the applicant's own Chapter 12 (Cultural Heritage) concludes, in summary, that 'the assessment has found that the Proposed Project would cause no significant direct or indirect effects to heritage assets within or outside the Main Wind Farm Site', and that 'no significant residual direct or indirect adverse effects would occur as a result of the Proposed Project.' Rural West Environmentalists submits that this headline conclusion is difficult to reconcile with the applicant's own finding, in the same chapter, that a recorded archaeological monument of at least medium significance lies only 230 metres from a proposed 180-metre turbine, in peat-bog ground conditions upon which its physical survival depends, and where the applicant's own water table and hydrological disturbance is acknowledged elsewhere in this application to extend across the wider site. A 'no significant effect' conclusion reached without site-specific groundwater modelling demonstrating that preservation conditions at this specific monument will be maintained throughout and after construction is not, in Rural West Environmentalists' submission, adequately supported.

Rural West Environmentalists draws An Coimisiún Pleanála's attention to a compounding deficiency that connects Section 26.2 directly to the aviation and telecommunications assessment failures identified at Section 25 of this submission. Turbine 11 — the turbine located only 230 metres from the recorded crannog MA025-004 — is absent from both the Aviation Review Statement (Technical Appendix 13-2) and the Telecommunications Impact Study (Technical Appendix 13-3). As established at Section 25.6.3 of this submission, TA 13-2 assessed only 11 of 13 turbines and omitted T07 and T11; TA 13-3 assessed only 12 turbines and omitted T11.

The consequence is significant: the turbine in closest proximity to the most sensitive archaeological monument in the development footprint has not been assessed for aviation or

telecommunications impacts. This is not a coincidence of omission. It means that the full impact profile of Turbine 11 — the turbine that poses the greatest risk to the structural integrity of crannog MA025-004 through ground vibration, drainage alteration, and construction disturbance — has been partially assessed for cultural heritage purposes while being entirely absent from the aviation and telecommunications assessment record.

Rural West Environmentalists submits that the absence of Turbine 11 from Technical Appendices 13-2 and 13-3, combined with its 230-metre proximity to a recorded Annex II monument, is a further independent ground requiring a complete revised assessment of all 13 turbines across aviation, telecommunications, and archaeological impact before any determination is made on this application.

Section 27: Carbon Balance — The Climate

Justification Fails on Its Own Terms

RWE Renewables argues that this wind farm will displace thousands of tonnes of carbon dioxide over its lifetime and contribute to Ireland's climate targets. This claim must be tested against the full carbon balance of the development. The applicant has not provided a full, independently verified carbon balance assessment.

Atlantic blanket bog is among the most carbon-dense ecosystems on Earth. A single hectare of intact Atlantic blanket bog stores between 2,000 and 5,000 tonnes of carbon in its peat profile. The carbon costs of this specific project include:

- Direct peat excavation for turbine foundations: thousands of cubic metres removed to mineral substrate, releasing all contained carbon immediately.
- Access road construction: peat stripping and drainage over many kilometres, with drainage ditches lowering the water table and causing aerobic oxidation of the surrounding peat for the entire 35-year operational life.
- Underground cabling corridors: peat stripping across the cabling routes.
- Drainage works: alteration of the bog drainage regime causing widespread peat desiccation and carbon release beyond the immediate construction footprint.
- Concrete production: each turbine foundation requires hundreds of tonnes of reinforced concrete — one of the most carbon-intensive construction materials.
- Forestry felling on peat soils: ancillary felling within the site will expose the underlying peat to desiccation.

Mayo County Council's own adopted Renewable Energy Strategy (Variation No. 2, 13 July 2026) (April 2026) acknowledges this risk explicitly, noting that wind turbine construction on peat soils disrupts carbon storage and increases carbon dioxide emissions, which is precisely why it recommends excluding peat soils from wind energy development.

Without a full, independently verified carbon balance assessment demonstrating that the net climate benefit of this project over its 35-year operational lifetime is positive after accounting for peat disturbance, the climate justification cannot be accepted on its own terms. An

Coimisiún Pleanála should require the submission of such an assessment before any determination.

27.W The Applicant's Own '4-Year Carbon Payback' Claim Does Not Account for the Irreversible Loss Confirmed Elsewhere in Its Own Application

Rural West Environmentalists has directly verified the applicant's own Chapter 8 (Air Quality and Climate), which states the development's headline climate justification in clear terms: 'Estimated whole life emissions (manufacturing, construction, decommissioning) are approx. 160,277 tCO₂e, plus emissions from peat disturbance and backup energy. The expected annual avoided emissions are between 57,888-71,091 tCO₂e, leading to a payback period of ~4 years.' The applicant characterises the development's overall effect over its 35-year operational life as 'Significantly Beneficial' on this basis.

Rural West Environmentalists submits that this 4-year payback claim cannot be reconciled with the applicant's own evidence, addressed elsewhere in this submission, regarding the permanence of peat and carbon loss at this site. The applicant's own Peatland Restoration Plan (Technical Appendix 5-5) confirms that the statutory biodiversity metric assumes approximately two-thirds of bog restoration effort will fail, that successful restoration to merely 'good' condition takes a minimum of 5 to 15 years even under the most favourable cited evidence, and that the area around Turbine 10 specifically has no restoration agreement in place at all, with an assumed recovery time in excess of 30 years (see Section 27.X below). A genuine carbon payback calculation that properly accounted for this acknowledged restoration failure rate, the decades-long recovery timescale for successful restoration, and the area with no restoration agreement at all, would be materially longer than the 4 years claimed, and the claimed carbon stock recovery from 'peat disturbance' cannot be assumed to occur on the timescale the headline figure implies.

Rural West Environmentalists further notes that the applicant's own figure for 'emissions from peat disturbance' is presented only as a single line item within the 160,277 tCO₂e whole-life emissions estimate, without the underlying calculation being made available for independent scrutiny within the chapter narrative itself. Given the peat depths confirmed elsewhere in this application of up to 6.4 metres, and the total excavation volume of approximately 107,080 m³ confirmed in the applicant's own Peat Management Plan, Rural West Environmentalists requests that An Coimisiún Pleanála require the applicant to provide the full, transparent

calculation underlying the peat disturbance emissions figure, including the assumed rate and timescale of any peat carbon stock recovery through restoration, before the 4-year payback period claim can be relied upon as a basis for permission.

Rural West Environmentalists has now directly verified the applicant's Chapter 8 narrative in full and confirms that this transparency gap is real: the chapter describes only the general methodology used to calculate peat disturbance emissions (IPCC default emission factors applied to 'removed peat' and 'drained peat' separately, plus dissolved and particulate organic carbon leaching), without disclosing the underlying figures, which the chapter confirms were calculated separately in spreadsheet form and not reproduced in the narrative chapter itself. Critically, Rural West Environmentalists finds no indication anywhere in this chapter that the calculation incorporates the restoration failure rate, recovery timescale, or site-specific restoration uncertainty confirmed in the applicant's own Peatland Restoration Plan (addressed at Section 27.X below) — specifically, the statutory metric's own assumption that approximately two-thirds of bog restoration effort will fail, the 5-to-30+ year recovery timescales involved, or the confirmed absence of any restoration agreement for the area around Turbine 10. Rural West Environmentalists submits that a carbon balance which appears to assume restoration occurs promptly, completely, and successfully — rather than incorporating the failure rate and timescale uncertainty the applicant's own restoration ecologists describe elsewhere in the same application — cannot support the confident '4-year payback' and 'Significantly Beneficial' characterisation the applicant seeks to rely upon. Rural West Environmentalists notes that this uncertainty is not novel or unique to this application. The joint UK industry and regulatory guidance 'Good Practice during Wind Farm Construction' (Scottish Natural Heritage, Scottish Environment Protection Agency, Scottish Renewables, Forestry Commission Scotland and Historic Environment Scotland, Version 3, September 2015) — a document jointly produced by the wind energy industry's own representative body and the relevant statutory environmental regulators — states plainly that 'the payback of wind farm development could be significantly affected by the construction methods used and the degree of restoration of the site.' Rural West Environmentalists submits that this is a direct acknowledgement, by the wind energy industry's own joint guidance, that carbon payback calculations of the kind relied upon by the applicant in this application are inherently sensitive to exactly the restoration uncertainty addressed in this submission, and

cannot be treated as a fixed, reliable figure independent of whether restoration in fact succeeds.

27.X Peat 'Restoration' Cannot Recreate Lost Peat or Carbon Stock Within Any Relevant Timeframe

Rural West Environmentalists has directly verified the applicant's own Peat Management Plan (Technical Appendix 6-3) and submits that the restoration methodology it describes, while presented as mitigation, is incapable of reversing the loss of peat and carbon stock that this development would cause within any timeframe relevant to this application or its 35-year operational life.

The applicant's own document confirms that the proposed restoration mechanism is ditch blocking using excavated peat material: 'up to 101,301 m³ of excavated peat from construction may be utilised within peatland restoration via ditch blocking.' The applicant's own total excavation estimate is approximately 107,080 m³ of peat removed from the development footprint. Rural West Environmentalists submits that ditch blocking is not equivalent to restoring lost peat depth or recreating the active blanket bog habitat that has taken thousands of years to form. Ditch blocking re-wets degraded ground to halt further oxidation and encourage future vegetation recolonisation; it does not, and cannot, restore the carbon already lost, nor recreate the specific depth, structure, and ecological function of the peat removed during construction.

This distinction is confirmed by the published peer-reviewed peatland restoration science. A peer-reviewed ecohydrological modelling study of blanket bog drainage and restoration (using the DigiBog model, applied to blanket peatlands) found that the peat lost during 100 years of drainage had still not been replaced 200 years after restoration began, and that water table dynamics remained altered even centuries after the original drainage. Field studies of ditch-blocking restoration on formerly afforested blanket bog have found that water table levels remained measurably lower than undisturbed bog even ten years after restoration work was carried out, and that recovery of pore-water and surface-water chemistry to undisturbed conditions can require timescales in excess of ten years, with the recovery time for the most heavily degraded and afforested peatlands described in the literature as 'unknown.' A separate field study found that water table recovery following ditch blocking in blanket bog is 'usually

small in magnitude' — in the range of 2 to 9 centimetres — and that water tables had not recovered to background levels even six years after blocking.

Rural West Environmentalists submits that this body of published science confirms that the restoration methodology proposed by the applicant operates on a timescale of decades to centuries, not the 35-year operational life sought for this development, and that ditch blocking using excavated peat is, at best, capable of halting further degradation in already-drained areas elsewhere on site — it cannot offset, reverse, or compensate for the complete and permanent loss of peat and its associated carbon stock at the 107,080 m³ of locations where it is permanently excavated for turbine foundations, the substation, the BESS compound, and the access track and cabling network. Any carbon balance assessment, climate justification, or peatland restoration claim relied upon by the applicant that treats this restoration methodology as equivalent to, or compensatory for, the carbon and habitat permanently lost through excavation is not supported by the published science and should not be accepted by An Coimisiún Pleanála as demonstrating no significant adverse effect.

Rural West Environmentalists has now also directly verified the applicant's own Peatland Restoration Plan and Habitat Management Plan (Technical Appendix 5-5), and submits that the applicant's own restoration ecologists independently confirm the science set out above, in their own words and using their own assessment methodology. The applicant's own document states that the statutory Biodiversity Net Gain metric used to assess this restoration 'assumes that c. 2/3rds of the bog restoration effort will fail', and that 'the time to target condition is in excess of 30 years for enhancement from poor or moderate to good condition... or 20 years for enhancement from poor to good condition.' Even using the most favourable evidence the applicant's own ecologists could find — citing Scottish restoration sites where 'the transition from moderate to good condition blanket bog via drain blocking is likely to be in the region of 5 to 15 years' — the applicant's own cited example at Forsinard Flows Reserve took 14 years for Sphagnum cover to increase from approximately 5% to only approximately 20%, a habitat still far short of undisturbed blanket bog condition.

Most significantly, the applicant's own Restoration Plan confirms that the area around proposed Turbine 10 specifically — the same location independently identified elsewhere in this submission as carrying an acknowledged windblow risk (Section 33.6.1) and as recording the highest level of bat activity of any location on the entire site, accounting for over 40% of all autumn bat passes recorded (Section 33.7.4) — is the one area of the site where 'there is no

agreement for bog restoration', where 'drained, drier conditions are likely to persist', and where the applicant's own ecologists have assumed a recovery timescale of '30+ years' using the default, most pessimistic multiplier in the statutory metric. Rural West Environmentalists submits that the convergence of three independent, applicant-confirmed risk factors at this single turbine location — acknowledged windblow risk, dominant bat activity, and the longest and most uncertain peat restoration timescale on the entire site, with no restoration agreement currently in place at all — warrants particular scrutiny of the Turbine 10 location specifically, independent of the site-wide concerns raised throughout this submission.

Rural West Environmentalists submits that an applicant's own restoration ecologists confirming, in their own assessment, that two-thirds of bog restoration effort is expected to fail under the statutory metric, that successful restoration elsewhere on site will take a minimum of 5 to 15 years to reach merely 'good' condition (itself a categorisation below undisturbed bog), and that one specific turbine location has no restoration agreement in place and a default assumed recovery time in excess of 30 years, is compelling, self-sourced confirmation that the restoration measures relied upon in this application cannot offset the permanent loss of peat and carbon stock within the 35-year operational life sought for this development.

Rural West Environmentalists draws An Coimisiún Pleanála's attention to a further, fundamental legal deficiency in the applicant's biodiversity framework. The Court of Justice of the EU in Case C-521/12 (T.C. Briels and Others v Minister van Infrastructuur en Milieu, 2014) established that compensatory habitat creation or enhancement measures — even where they produce a genuine net biodiversity gain — cannot be used at the Article 6(3) Appropriate Assessment stage to offset the adverse effects of a project on existing protected habitats. The Briels principle is directly applicable here: the applicant's claim of a '32% Biodiversity Net Gain' through restoration of cutover bog elsewhere on the site does not and cannot remove the adverse effect of permanently destroying and piling through existing Annex I blanket bog habitat. The BNG calculation is a mitigation measure; under Briels, mitigation cannot be used to conclude that an adverse effect on site integrity does not exist. The competent authority must assess the adverse effect first, then determine whether it has been eliminated to a standard of scientific certainty — and a 32% net gain on paper, built on unenforceable restoration commitments using inapplicable foreign metrics, does not eliminate it.

27.Y.1 The Briels Principle: Biodiversity Net Gain Cannot Legally Offset Loss of Annex I

Habitat

Rural West Environmentalists further notes an internal inconsistency in the applicant's own Peat Management Plan regarding the scale of this issue: the report states at one point that 'no surplus peat is expected to be generated by the Proposed Project', while stating elsewhere that 'surplus peat is expected to be generated by the Proposed Project.' Rural West Environmentalists requests that An Coimisiún Pleanála require the applicant to clarify which of these two contradictory statements is correct, and to confirm the final, reconciled volume of peat that will require restoration, storage, or off-site disposal.

27.Y Formal Request

Rural West Environmentalists formally requests that An Coimisiún Pleanála require the applicant to:

- Provide independent, peer-reviewed evidence supporting any claim that the proposed ditch-blocking restoration methodology can recover lost peat depth and carbon stock within the 35-year operational life of this development, given that the published literature indicates recovery timescales of decades to centuries;
- Reconcile the internal inconsistency between the Peat Management Plan's statements that 'no surplus peat is expected' and that 'surplus peat is expected to be generated', and confirm the final reconciled peat volume requiring restoration or disposal;
- Confirm whether the carbon balance assessment relied upon in this application treats ditch-blocking restoration as equivalent to, or compensatory for, the carbon permanently lost through peat excavation, and if so, to justify that treatment against the published science.
- Confirm whether a binding restoration agreement is now in place for the area around Turbine 10, given the applicant's own Restoration Plan confirms none was in place at the time of writing, and if not, to explain how an Appropriate Assessment of carbon and habitat impacts can be regarded as complete while this location's restoration outcome remains unresolved.

27.Z Restoration Uncertainty Cannot Remove Article 6(3) Concerns

The applicant proposes approximately 200 hectares of peatland restoration to address losses affecting approximately 30 hectares of blanket bog habitat. Rural West Environmentalists submits that this restoration programme, whatever its merits as a land management commitment, cannot resolve the Article 6(3) Appropriate Assessment requirement for the following reasons.

First, under the Briels principle (CJEU C-521/12), compensatory habitat creation or enhancement cannot be used at the Article 6(3) stage to conclude that no adverse effect exists on existing protected habitats. The restoration programme is precisely the kind of compensatory measure that Briels excludes from the Article 6(3) assessment.

Second, the applicant's own Peatland Restoration Plan and Habitat Management Plan (Technical Appendix 5-5) acknowledges that restoration outcomes are inherently uncertain, that the statutory biodiversity metric assumes approximately two-thirds of restoration effort will fail, and that some areas may require over 30 years to show any meaningful recovery. Under the Waddenzee standard, uncertain future ecological improvements cannot remove present scientific uncertainty regarding adverse effects on site integrity. The Court of Justice requires complete, precise and definitive findings. A restoration plan that the applicant's own consultants predict will fail in two-thirds of cases cannot provide those findings.

Third, no restoration agreement currently exists for the area surrounding Turbine 10. The restoration commitment is therefore not legally binding, not site-specific, and not capable of being enforced as a condition of permission in any meaningful way. An Coimisiún Pleanála cannot rely on an unenforceable, uncertain restoration programme to satisfy itself that the Article 6(3) test has been met.

Section 28: Community Impact, Property Values, and Economic Harm

Rural West Environmentalists represents a community that has invested decades in building a sustainable tourism economy based on the wild, unspoilt character of the Erris landscape. The Wild Mayo DEDP, launched on 1 May 2026, is the culmination of that investment. The Wild Atlantic Way, the Erris Gaeltacht, and the Mayo Dark Sky Park are internationally recognised tourism assets generating millions of euros annually for local businesses. This development threatens all of them.

— TOURISM ECONOMY: The visual intrusion of 13 turbines at 180 metres on the Wild Atlantic Way viewpoints and Blacksod Bay seascape will reduce the quality of the visitor experience that drives tourism expenditure. Even a conservative 10% reduction in visitor numbers across the affected tourism zone would represent millions of euros of annual economic loss to local guesthouses, restaurants, pubs, activity providers, and heritage sites.

— PROPERTY DEVALUATION: The academic literature on wind farm proximity consistently finds reductions in residential property values in the range of 10–20% within 2km of turbines. For many rural families in North Mayo, their home is their primary financial asset and only capital resource. This development will impose a permanent reduction in personal wealth on the community it claims to benefit.

— MARINE FISHERIES: The destruction of the marine ecology of Blacksod Bay — maerl beds, seagrass meadows, and reef communities that support juvenile fish and invertebrates — will reduce the productivity of commercial and recreational fisheries in the bay and in the surrounding waters for decades or permanently.

— GAELTACHT IDENTITY: The Erris Gaeltacht is among the most significant and vulnerable Irish-speaking communities in Ireland. The community's cultural identity is inseparable from its landscape. The industrial transformation of the skyline above Blacksod Bay will cause cultural and social harm to this community that cannot be quantified in planning terms but is real, serious, and irreversible.

— BRAND DAMAGE: The Erris Gaeltacht, Wild Atlantic Way, and Mayo Dark Sky Park are internationally recognised brands. Association with industrial wind development will damage these brands in the perception of potential visitors, particularly in the high-value walking, cycling, birdwatching, and stargazing tourism markets.

Section 29: Prescribed Bodies — Formal Requests for Submissions

Rural West Environmentalists formally requests that An Coimisiún Pleanála notify and invite formal submissions from the following prescribed and relevant bodies before determining this application:

29.1 National Parks and Wildlife Service (NPWS)

NPWS has statutory responsibility for European site protection in Ireland. It commissioned the MERC surveys that discovered the internationally rare maerl beds in Blacksod Bay. NPWS has direct scientific and institutional authority to assess the adequacy of the NIS for this application — specifically the NIS’s treatment of the Mullet/Blacksod Bay Complex SAC (000470), Broadhaven Bay SAC (000472), and Blacksod Bay/Broad Haven SPA (004037). Its involvement is essential, not merely appropriate.

29.2 Fáilte Ireland

Fáilte Ireland is a prescribed body. It launched the Wild Mayo DEDP 17 days before the site notices. It has previously contributed to wind farm refusals on visual impact grounds (Gougane Barra, May 2024). Given the direct conflict between this application and a live, government-adopted tourism strategy for the same landscape, its formal submission is critical.

29.3 Environmental Protection Agency (EPA)

The EPA has responsibility for the Water Framework Directive and for monitoring at-risk watercourses. The Doolough Stream’s at-risk WFD classification — raised by An Coimisiún Pleanála’s own representatives in January 2024 — is directly relevant to this application. The EPA should be formally notified and invited to submit on the WFD implications of this development.

29.4 Inland Fisheries Ireland (IFI)

IFI has statutory responsibility for the protection, management, and conservation of freshwater fish species in Ireland, including the Critically Endangered European Eel. Given that the applicant's own surveys found European Eel in site watercourses, IFI's assessment of the impact on the eel population is essential.

29.5 Irish Aviation Authority (IAA)

The IAA is a prescribed body in respect of tall structures. Its assessment of the aviation lighting requirements for 13 turbines at 180 metres within the Mayo Dark Sky Park Barony of Erris is essential. The IAA should be invited to address the compatibility of mandatory aviation warning lighting with the Gold Tier Dark Sky Park designation.

29.6 Mayo County Council

Mayo County Council's adopted Renewable Energy Strategy (Variation No. 2, 13 July 2026) (April 2026) explicitly identifies peatland as unsuitable for wind energy development, identifies the WAW and Dark Sky Park as requiring protection, and confirms both bays as Ramsar Sites. The Council, as the relevant planning authority for the area, should be invited to make a formal submission addressing the application's compliance with its emerging renewable energy policy.

29.7 An Taisce

An Taisce, as the national trust for Ireland and a prescribed body, has expertise in heritage, landscape, and environmental law matters directly relevant to this application.

Section 30: Mayo County Council's Own Recorded Opposition — 'Not Happy' and 'Not in Favour' Fourteen Months Before Lodgement

Rural West Environmentalists has obtained and directly verified the applicant's own Minutes of Meeting with Mayo County Council (Technical Appendix 3-4), recording a pre-application meeting held on 16 January 2025 — over fourteen months before this application was lodged. The minutes, prepared by the applicant's own consultants and agreed by both parties, record Mayo County Council's response to the proposed development in unambiguous terms: 'Mayo Co. Co. not happy with the application and not comfortable to give green light at this stage. Not in favour from a visual point of view.'

Rural West Environmentalists submits that this is a direct, contemporaneous, written record of the relevant planning authority telling the applicant, well in advance of lodgement, that it did not support the development on visual amenity grounds. The same minutes record Mayo County Council's Senior Planner (JMC) raising a series of further serious concerns, all directly relevant to this submission:

- That the current Mayo Renewable Energy Strategy — the strategy under which the applicant claims the site sits within a Tier 1 'Preferred' area — is 'out of date and not fit for purpose', and that the Council is 'well underway in compiling an updated version', a process which has since resulted in the adopted Renewable Energy Strategy (Variation No. 2, 13 July 2026) (April 2026) addressed at Section 21 above, which designates the site as Unsuitable;
- That 'appreciation of landscape has changed within Mayo Co. Co. since the existing RES was adopted' and that 'there is a more conservative view now' on landscape sensitivity;
- That 'some preferred areas were politically motivated in the existing RES and will likely be amended in the new RES' — a direct admission from the planning authority itself that the very 'Preferred' designation the applicant relies upon for this site may not have been arrived at on purely planning grounds;
- That 'protection of more recent designations such as Dark Skies, National Park and Wild Atlantic Way need to be balanced with permitted wind farms and proposed' development, directly engaging the Mayo Dark Sky Park and Wild Atlantic Way concerns addressed at Sections 21 and 23 of this submission;
- That a previous wind farm application was refused approximately eight years earlier specifically due to visual impact 'from north Achill', with Mayo's own representative noting this

refused scheme and the applicant's own landscape consultant confirming awareness of that decision while seeking to distinguish the present site as less prominent.

Rural West Environmentalists further notes that the same minutes confirm the applicant reduced the proposed development from 14 turbines at 200 metres to 13 turbines at 180 metres specifically in response to Mayo County Council's prior comments — confirming that even after this reduction, the Council's position recorded at this meeting remained that it was 'not happy' and 'not in favour' of the application on visual grounds.

Rural West Environmentalists submits that this contemporaneous record, agreed and signed by both the applicant's own consultants and confirmed as accurate, is direct evidence that the relevant local planning authority communicated clear opposition to this development on visual amenity grounds well before the application was lodged, and that the strategic policy document the applicant relies upon to support the application's compatibility with county planning policy was, by the Council's own admission at this meeting, already known by both parties to be out of date, under active revision, and potentially compromised by undisclosed political considerations in its existing designations. An Coimisiún Pleanála should treat this record as significant, direct evidence of the local planning authority's settled view on this development.

Section 31: The NIS Mitigation Measures Fail the Legal Standard — A Point-by-Point Analysis

This section applies the legal methodology established by Peter Sweetman & Associates in their observation to the Oweninny Wind Farm Phase 3 application (ABP-316178-23) — the development in the same townlands as Muingmore, granted two days before these site notices were erected. That submission demonstrated, by quoting the applicant’s own NIS mitigation measures and applying the legal standard from CJEU Case C-258/11 (Sweetman), that the measures were not mitigation at all.

The legal standard is fixed. The CJEU in Case C-258/11 (Sweetman v An Bord Pleanála, para 44) held that the Appropriate Assessment cannot have lacunae and must contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the works proposed on the protected site concerned. This is not a standard of probability or best efforts. It is a standard of certainty.

The same standard applies identically to the Muingmore NIS (PAX16.324387). The mitigation measures relied upon in the Muingmore NIS to screen out or reduce impacts on the connected European sites are examined below. In each case, the measure as stated in the NIS is quoted or paraphrased, and assessed against the Sweetman 258/11 standard.

⚠ The Sweetman Standard Is Absolute

CJEU Case C-258/11 para 44: the assessment cannot have lacunae and must contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt. A vague commitment, a best-practice aspiration, or a reference to a future plan to be prepared does not remove reasonable scientific doubt. It creates it.

31.1 The CEMP as Mitigation: Not Mitigation

The Muingmore NIS and EIAR rely extensively on the Construction Environmental Management Plan (CEMP) (Technical Appendix 2-1, Volume 3 EIAR) as the primary vehicle for delivering mitigation of construction-phase water quality impacts. The NIS states in terms that mitigation measures for the protection of watercourses during construction are contained within and secured by the CEMP.

i The Oweninny Precedent

Peter Sweetman & Associates made exactly this argument in relation to the Oweninny Phase 3 NIS (ABP-316178-23). Their submission states: 'The Construction Environmental Management Plan in appendix 3 could not assist the board in carrying out an Appropriate Assessment. So far as concerns the assessment carried out under Article 6(3) of the Habitats Directive, it should be pointed out that it cannot have lacunae and must contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the works proposed on the protected site concerned.' That submission was made in respect of the Oweninny NIS prepared by the same consultants (SLR Environmental Consulting) who prepared the Muingmore NIS. The same deficiency applies.

A CEMP is a construction management document prepared in general terms before a contractor is appointed. By its own nature, it cannot contain the complete, precise and definitive findings required under Sweetman 258/11 because:

- It is not site-specific at the level of individual turbine foundations, drainage channels, or stream crossings. It describes general procedures, not precise findings.
- It will be updated by the appointed contractor. **The NIS itself acknowledges this. A document that will be revised in the future is, by definition, not a definitive finding at the time of the Appropriate Assessment.**
- It contains general commitments to best practice and compliance with guidance documents. Reliance on generic commitments to comply with IFI, EPA or other guidance documents does not, of itself, satisfy the requirements of Article 6(3). The Appropriate Assessment must contain complete, precise and definitive findings demonstrating that project-specific mitigation measures are capable of avoiding adverse effects on European sites. General commitments to

follow guidance cannot substitute for site-specific evidence demonstrating that those measures will be effective at the Muingmore site. It does not remove scientific doubt about adverse effects on specific qualifying interests of specific European sites.

— It does not quantify the sediment load that will reach Blacksod Bay under construction storm scenarios. It does not model the pathway from source to receptor. It does not demonstrate with quantitative evidence that the Annex I habitats in the bay will not be adversely affected. Without this quantification, no reasonable scientific doubt is removed.

31.2 Ecological Clerk of Works: Not Mitigation

The NIS and CEMP propose the appointment of a suitably qualified Ecological Clerk of Works (ECoW) who will be required full time on site during construction works. The ECoW will ensure that all mitigation measures outlined within the NIS are implemented correctly during the construction works.

This is not mitigation. This is a monitoring and compliance role. The presence of an ECoW on site does not prevent sediment from entering the drainage network if a peat slide occurs, if a culvert fails, if a storm event exceeds the design parameters of the silt traps, or if a fuel spill reaches a watercourse. An ECoW can observe, report, and stop works — but cannot prevent the harm that has already occurred.

Furthermore, the role of the ECoW — ensuring that mitigation measures are implemented correctly — presupposes that the mitigation measures themselves are adequate. If the measures are not adequate to prevent adverse effects on the connected European sites, an ECoW implementing them correctly still produces an adverse effect. The presence of an ECoW does not close the scientific gap.

This is precisely the point made by Peter Sweetman & Associates in relation to the Oweninny Phase 3 NIS: an ECoW appointment is not mitigation; it is administration of whatever mitigation has been designed, and if that mitigation is insufficient, the ECoW cannot compensate for it.

31.3 Silt Fencing and Silt Traps: Not Adequate Mitigation for Peat Construction

The NIS and CEMP propose the use of silt fencing and silt traps at drainage outlets during construction to intercept suspended solids before they enter the watercourse network. Drawings D15 (Typical Drainage Details — Silt Fence) and D16 (Typical Drainage Details — Silt Trap) show the proposed designs.

These measures are wholly inadequate as mitigation for the specific type of construction disturbance at Muingmore, for the following reasons:

- Silt fences and silt traps are designed for mineral soil construction sites with predictable storm water runoff. They are not designed for the mobilisation of deep, waterlogged peat in extreme rainfall events on Atlantic blanket bog. The Cashelnavean bog slide (86,240 cubic metres of peat entering river systems) could not have been contained by silt fencing. Scale and physical forces matter.
- The NIS does not specify: the number of silt traps to be installed; their locations by reference to specific drainage channels; their designed capacity in litres per second; the storm return period they are designed to manage; or the suspended solids removal efficiency under worst-case conditions. These are the precise and definitive findings that the Sweetman standard requires. None are present.
- Silt traps require regular emptying to remain effective. The CEMP proposes that sediment retained in silt traps will be removed on a regular basis. What is a 'regular basis'? Once a week? Once a month? After every storm event? As Peter Sweetman & Associates noted in relation to the identical formulation in the Oweninny NIS: 'What is a regular basis? It is not definite.'
- Atlantic blanket bog receives an average of 1,200 to 2,000mm of rainfall per year, predominantly as high-intensity events. The construction drainage system must be designed to manage these events without allowing suspended peat particles to enter the watercourse network. No storm frequency analysis or hydraulic capacity calculation for the proposed silt trap system is provided. This is a fundamental lacuna.

31.4 Pollution Control Measures: Vague Commitments, Not Definitive Findings

The NIS and CEMP contain a series of pollution control commitments for the construction phase. Each is assessed below against the Sweetman standard of complete, precise and definitive findings.

Commitment: All construction works will be undertaken with due regard to IFI guidance on the Protection of Fisheries During Construction Works in and Adjacent to Waters (2016)

Assessment: This is not mitigation. This is compliance with existing legal guidance, which is already legally required. A statement that works will comply with applicable guidance does not remove scientific doubt about the specific impacts of this specific project on these specific European protected sites. As Peter Sweetman & Associates noted in identical circumstances at Oweninny: 'That is not a mitigation measure.'

Commitment: No instream works will be permitted during construction works. Where stream crossing occurs on site, a clear-span design bridge will be used

Assessment: The NIS and CEMP do not specify where stream crossings occur on site. Drawing D17 (Typical Drainage Details — Culvert) exists in the application, suggesting culverts are proposed at some crossings. The commitment that no instream works will be permitted is contradicted by the existence of culvert design drawings. Which crossings will use clear-span bridges and which will use culverts? This is not defined. Not definitive.

Commitment: No refuelling will take place within 50 metres of any watercourse

Assessment: Where will refuelling take place? The refuelling areas are not identified on any drawing in the application. The commitment does not define the locations and therefore cannot be verified or enforced. Not precise. Not definitive.

Commitment: Fuels and chemicals will be stored within bunded areas as appropriate to guard against potential accidental spills or leakages. The bund area will have a volume of at least 110% of the volume of such materials stored

Assessment: Where are the bunded storage areas? They are not identified on Drawing D10 (Temporary Construction Compound) or any other application drawing. A commitment to use bunded storage in unspecified locations is not a precise or definitive finding. Furthermore, a bund is passive containment — it does not remove the fuel from proximity to the drainage network. If a bund overflows in a heavy rainfall event, its contents enter the drainage system. The risk of overflow in an Atlantic rainfall environment has not been assessed.

Commitment: Soil/peat exposure will be minimised by controlling, insofar as is practical, where and when peat is stripped

Assessment: The phrase ‘insofar as is practical’ is the antithesis of a precise and definitive finding. It is an aspiration conditional on practicality as assessed by the contractor at the time. It does not remove scientific doubt. As Peter Sweetman & Associates noted at Oweninny in relation to the identical formulation: ‘This is not mitigation, but it does prove that mitigation measures have not been formed, and therefore do not exist.’

Commitment: Concrete is required for the construction of the turbine bases and foundations. No batching of wet-cement products will occur on site. Ready-mixed supply of small amounts of wet concrete products and emplacement of pre-cast elements will take place

Assessment: The applicant's own EIAR Chapter 2, paragraph 166 states that "a typical gravity foundation design will require 1,000m³ of concrete in the turbine foundation." At the standard density of reinforced concrete of approximately 2.4 tonnes per cubic metre, 1,000 cubic metres equates to approximately 2,400 tonnes of concrete per foundation — and that is for gravity foundations only. Where piled foundations are required, additional concrete will be needed for the piles themselves. Supplying this in ‘small amounts’ of ready-mixed concrete means hundreds of concrete truck movements across the peatland site. After concrete is poured, the chutes of ready-mixed concrete trucks must be washed out to remove the remaining concrete before it hardens. The NIS states this wash-out will take place at an appropriate facility offsite.

Where is this facility? It is not identified in the drawings. No wash-out facility design is included in the application. The alkaline concrete wash-water, if it reaches any watercourse, will directly alter the pH chemistry of that watercourse and threaten freshwater invertebrates and fish, including the Critically Endangered European Eel. Not precise. Not definitive.

Commitment: Traffic on site will be kept to a minimum. Only the proposed onsite access track will be used for project-related traffic. Where onsite access tracks pass close to watercourses, silt fencing will be used to protect the streams

Assessment: 'Close to watercourses' is not defined. What distance constitutes close? 5 metres? 50 metres? The drainage layout drawings (D12-1 to D12-5) show access tracks crossing and running parallel to drainage channels across the site. The commitment to use silt fencing at unspecified locations close to unspecified watercourses is not a precise or definitive finding.

31.5 Surface Water Management Plan: Future Document, Not Current Mitigation

The NIS and EIAR (Chapter 7) refer to a Surface Water Management Plan (SWMP) (Technical Appendix 11.3 of the EIAR). The SWMP is described as incorporating specific objectives for the management of surface water runoff during construction. However, the NIS states that this drainage design will be reviewed by the appointed Contractor as part of the review of the Construction Environmental Management Plan (CEMP).

A plan that will be reviewed and potentially revised by an as-yet-unidentified contractor, after planning permission is granted, is not a current definitive finding. It is a promise to produce a definitive finding in the future. Under the Sweetman standard, the complete, precise and definitive findings must exist at the time the Appropriate Assessment is carried out — not after permission is granted. A planning condition requiring the submission of a SWMP after permission is granted does not satisfy the Article 6(3) obligation; it defers it.

31.6 The Peat Management Plan: Not Adequate for the Scale of Disturbance

The Peat Management Plan (PMP) (Technical Appendix 6-3, Volume 3 EIAR) is relied upon in the NIS as the primary mechanism for managing the excavation and storage of peat during construction. The NIS asserts that peat will be managed in accordance with the PMP to minimise the risk of peat entering the drainage network.

The PMP does not:

- Specify the total volume of peat to be excavated across the entire development footprint as a single aggregated figure. Without this figure, it is impossible to assess whether the proposed peat management measures are proportionate to the scale of disturbance.
- Identify specific peat storage locations on the site drawings with their precise capacities, drainage management arrangements, and leachate control systems.
- Demonstrate with hydrological modelling that peat stockpiles in the proposed locations cannot contribute suspended solids to the drainage network during storm events.
- Specify the monitoring regime for peat stockpile stability and the trigger conditions that would require suspension of peat excavation works.

The absence of these specific and quantified details means the PMP does not provide the complete, precise and definitive findings required under the Sweetman standard. It is a framework document, not a definitive impact assessment.

31.7 The Parallel with Oweninny Phase 3: Same Consultants, Same Deficiencies

The Muingmore NIS and CEMP were prepared by SLR Environmental Consulting (Ireland) Limited. The Oweninny Phase 3 NIS and CEMP were also prepared by SLR Environmental Consulting (Ireland) Limited. Both developments are on Atlantic blanket bog in the Barony of Erris, County Mayo. Both drain into the Blacksod–Broadhaven catchment. Both require construction on deep, waterlogged peat.

Peter Sweetman & Associates, in their observation on the Oweninny Phase 3 application (ABP-316178-23, 24 May 2023), concluded:

i Peter Sweetman & Associates — Oweninny Phase 3 Observation (ABP-316178-23)

IT IS OUR SUBMISSION THAT AS THE SCREENING CARRIED OUT BY THE DEVELOPER IS SO FUNDAMENTALLY FLAWED IN LAW, THAT IT IS NOT POSSIBLE TO MAKE A FULLY INFORMED SUBMISSION ON THE SUBMITTED NATURA IMPACT STATEMENT. The same consultants have prepared the Muingmore NIS using the same general approach. The same structural deficiencies that Peter Sweetman identified in the Oweninny NIS — vague mitigation, unspecified locations, future plans to be revised by unnamed contractors, aspirational language replacing definitive findings — are present in the Muingmore NIS. The deficiency is not accidental. It is systemic. It is the standard approach used by this consultancy firm for wind farm NIS documents in this region, and it consistently fails to meet the Sweetman 258/11 standard.

An Coimisiún Pleanála is the competent authority for both the Muingmore application and the Oweninny Phase 3 application. It is therefore aware of both the NIS submitted for Oweninny Phase 3 and the criticism of that NIS by Peter Sweetman & Associates. It would be inconsistent for An Coimisiún Pleanála to apply the legal standard rigorously to Oweninny Phase 3 while accepting an NIS prepared by the same consultants, using the same methodology, on the same type of bog, draining to the same European sites, in the same Barony, for the Muingmore application.

31.8 Conclusion on Mitigation Adequacy

The mitigation measures in the Muingmore NIS, examined against the legal standard established in CJEU Case C-258/11 (Sweetman), fail on every count:

— The CEMP is not a definitive finding — it is a framework to be updated by an unnamed contractor after permission is granted.

31.8.1 The CEMP Relied Upon by the NIS Is Itself a Draft Document

The inadequacy of the CEMP as a basis for the NIS's mitigation case is compounded by a further deficiency that Rural West Environmentalists submits requires specific attention. The applicant's own legal and technical documentation acknowledges that the Construction Environmental Management Plan relied upon throughout the NIS as the primary vehicle for

environmental protection during construction is itself described as a draft document, containing 'standard, generalized mitigation measures' rather than site-specific, quantified, legally binding commitments.

Under the legal standard established in Waddenzee (C-127/02) and applied in People Over Wind (C-323/17), mitigation measures relied upon at the Article 6(3) Appropriate Assessment stage must be capable of being assessed with the rigour required to exclude reasonable scientific doubt that the project will not adversely affect the integrity of the European sites. A draft document containing generalised standard measures does not meet this standard. It cannot do so by definition — a draft is subject to revision, has not been agreed with the relevant authorities, and does not carry the legal force of a condition or a binding commitment. Rural West Environmentalists submits that the NIS's reliance on a draft CEMP as its primary construction-phase mitigation instrument is a further, independent reason why the Article 6(3) test cannot be satisfied on the basis of the documents as submitted.

- The ECoW appointment is not mitigation — it is administration of whatever mitigation exists.
- The silt fencing and silt trap commitments lack quantification, lack specified locations, lack capacity analysis, and lack storm frequency design parameters.
- The pollution control commitments use aspirational language ('as appropriate,' 'insofar as is practical,' 'on a regular basis') that is the direct opposite of complete, precise and definitive.
- The SWMP is a future document that will be revised by the appointed contractor after permission is granted. It does not exist as a definitive finding at the time of the Appropriate Assessment.
- The PMP does not quantify total peat disturbance volumes, specify storage locations with precise drainage arrangements, or demonstrate with modelling that peat stockpiles cannot enter the drainage network.

The NIS, as submitted, cannot provide the complete, precise and definitive findings required by Article 6(3) of the EU Habitats Directive as interpreted by the CJEU in Sweetman. An Coimisiún Pleanála does not have legal jurisdiction to grant permission on the basis of an NIS that fails this standard.

- Peter Sweetman & Associates. Observation on Oweninny Wind Farm Phase 3 (ABP-316178-23), 24 May 2023. Available on the An Bord Pleanála public case file.
- CJEU Case C-258/11, Sweetman v An Bord Pleanála [2013], para 44: complete, precise and definitive findings standard.
- CJEU Case C-323/17, People Over Wind and Peter Sweetman v Coillte Teoranta [2018]: mitigation measures cannot be taken into account at the screening stage.

Section 32: The Application Form's Own Disclosure Answer Appears Inconsistent with the Applicant's Own Withdrawal of the Prior Application

Rural West Environmentalists has directly verified the applicant's SID Application Form (and Addenda 1-12) submitted with this application, dated 19 June 2026. The form itself confirms, in its own covering text, that 'this application is a resubmission of a previously submitted SID application (submitted on 22 May 2026), which was subsequently withdrawn due to a minor clerical error in the site notice.' Rural West Environmentalists notes that the application withdrawn was Case Reference PAX16.324308, and that the 'clerical error' in question was the defective bilingual site notices identified by Rural West Environmentalists and subsequently confirmed by An Coimisiún Pleanála and An Coimisinéir Teanga.

Rural West Environmentalists draws particular attention to Question 10 of the same Application Form, which asks: 'Are you aware of any valid planning applications previously made in respect of this land / structure?' The applicant has answered this question 'No.' Rural West Environmentalists submits that this answer cannot be correct: the applicant was itself the party to the withdrawn application, PAX16.324308, made on this exact land less than one month before this form was completed, and the same form's own covering letter expressly acknowledges that withdrawal in the same document.

Rural West Environmentalists notes that the Application Form itself contains an explanatory note immediately beneath this question, stating: 'If a valid planning application has been made in respect of this land or structure in the 6 months prior to the submission of this application, then any required site notice must be on a yellow background in accordance with Article 19(4) of the Planning and Development Regulations 2001 as amended.' Rural West Environmentalists submits that answering 'No' to this question, when a valid prior application plainly existed on this land within the preceding six months, appears to have removed the trigger for the Article 19(4) yellow notice requirement that the applicant's own form identifies as applicable in these circumstances. Rural West Environmentalists has independently confirmed that the site notices actually erected for this resubmitted application were printed on a white background, not yellow.

32.1 Formal Request

Rural West Environmentalists formally requests that An Coimisiún Pleanála:

- Confirm whether the applicant's 'No' answer to Question 10 of the Application Form, in light of the withdrawn application PAX16.324308 on the same land within the preceding month, was accurate and properly completed;
- Confirm whether Article 19(4) of the Planning and Development Regulations 2001, as amended, applied to this resubmission, and if so, whether the white-background site notices actually erected comply with that requirement;
- Treat this submission as a formal objection to the validity of the public notification process for this application, pending clarification of the above, without prejudice to Rural West Environmentalists' other grounds of objection set out in this submission.

Section 33: Technical Deficiencies — Specific

Findings from the Application's Own Documents

This section sets out specific technical deficiencies identified by a detailed examination of the applicant's own submitted documents. Each finding is referenced to the specific technical appendix, chapter, table, or section from which it is drawn. These are not general objections — they are direct admissions from the application itself that individually and cumulatively demonstrate that the EIAR and NIS do not meet the legal standard required under the EIA Directive (2011/92/EU) and the EU Habitats Directive.

33.1 Shadow Flicker: Templated Receptor Baseline Data: Identical Window Dimensions Across All 92 Properties Invalidates the Entire Assessment

Technical Appendix 11-1 (Table 11-1-1) contains the Shadow Flicker Receptor Data for all 92+ local residential properties within the assessment zone. A rigorous audit of this table reveals that the applicant has input identical, carbon-copied structural variables for every single receptor, producing a standardised modelling output that bears no relationship to the actual physical characteristics of the local housing stock.

Rural West Environmentalists has independently verified Technical Appendix 11-1 (Shadow Flicker Modelling Input Data) in full, row by row. The dataset contains 368 separate window entries across 92 distinct residential properties (numbered 1 to 100, with some numbers unused), each modelled with up to four windows facing the four cardinal points (0°, 90°, 180° and 270° — North, East, South and West). Without a single exception across all 368 entries, every window at every one of the 92 properties is logged with an identical width of exactly 10.0 metres, an identical depth of exactly 5.0 metres, and an identical height of exactly 3.0 metres. There is no variation anywhere in the dataset. Rural West Environmentalists submits that it is not scientifically or statistically plausible for 92 separate rural dwellings — bungalows, two-storey farmhouses, and cottages of varying age and construction across a 3km development corridor (the applicant's own EIAR Chapter 2 describes the site as occupying "around 3km in a north-east to south-west orientation") — to possess windows of identical width, depth and

height on all four elevations. This is not a survey of real properties; it is a single generic template value copied 368 times.

Technical Appendix 11-1 — Shadow Flicker Modelling Input Data. Every window entry across all 92 properties carries identical dimensions: Width 10m, Depth 5m, Height 3m. Not one property was individually surveyed.

Table 11-1-1: Shadow Flicker Receptor Data (first 20 of 368 entries)
EVERY window entry across ALL 92 properties has identical dimensions: Width 10m, Depth 5m, Height 3m

House Number	Window Number	Easting	Northing	Width (m)	Depth (m)	Height (m)
1	1	474732	824808	10	5	3
1	2	474737	824803	10	5	3
1	3	474732	824798	10	5	3
1	4	474727	824803	10	5	3
2	1	474693	824802	10	5	3
2	2	474698	824797	10	5	3
2	3	474693	824792	10	5	3
2	4	474688	824797	10	5	3
3	1	474626	824790	10	5	3
3	2	474631	824785	10	5	3
3	3	474626	824780	10	5	3
3	4	474621	824785	10	5	3
4	1	474904	824648	10	5	3
4	2	474909	824643	10	5	3
4	3	474904	824638	10	5	3
4	4	474899	824643	10	5	3
5	1	474393	824635	10	5	3
5	2	474398	824630	10	5	3
5	3	474393	824625	10	5	3
5	4	474388	824630	10	5	3

Source: Technical Appendix 11-1 (Shadow Flicker Modelling Input Data) — available on public case file at pleanala.ie/en-ie/case/324387
Rural West Environmentalists verified all 368 window entries across 92 properties — not one entry varies from W:10m D:5m H:3m

— For every audited house — including Houses 1 through 25, 33 to 44, and 56 to 90 — the modelling software has assigned exactly four windows per dwelling pre-programmed at precisely 0 degrees (North), 90 degrees (East), 180 degrees (South), and 270 degrees (West). This proves the applicant did not survey real properties — it used an automated blanket data template.

— In reality, the rural landscape near Gweesalia consists of diverse one-off residential bungalows, two-storey farmhouses, and vernacular cottages. It is architecturally impossible for dozens of independent homes to possess identical 10-metre-wide apertures facing uniform cardinal directions.

The consequence is direct and legally fatal: because the software inputs for window areas, structural depths, and building orientations are entirely detached from real-world geography, the resulting calculations for Maximum Theoretical Minutes Per Day and Total Theoretical Hours Per Year are scientifically invalid. The EPA Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (2022) require that predictive modelling inputs accurately reflect the real-world baseline environment. They do not. An Coimisiún Pleanála

cannot legally enforce a Shutdown Protocol based on predictive modelling where the foundational baseline data is demonstrably templated and unsurveyed.

⚠ Key Finding from Applicant's Own Table 11-1-1

The applicant's own shadow flicker receptor data (Technical Appendix 11-1) assigns identical 10.0m x 5.0m x 3.0m window dimensions and identical N/E/S/W orientations to every single one of 92+ properties in the impact zone. This is not simplification — it is the replacement of real-world data with a uniform mathematical construct that renders all modelling outputs scientifically meaningless.

33.2 Shadow Flicker: The Applicant's Own Modelling Confirms Exceedances at a Greatly Larger Number of Properties Than Previously Acknowledged

The applicant's shadow flicker computer modelling (Chapter 11, p. 31) explicitly confirms the following unmitigated baseline exceedances, which are significantly more extensive than Rural West Environmentalists' earlier submission acknowledged:

- Under Scenario 1: shadow flicker exceeds 30 minutes per day at 37 residential receptors.
- Under Scenario 2: shadow flicker exceeds 30 minutes per day at 41 residential receptors.
- Under Scenario 3: shadow flicker exceeds 30 minutes per day at 49 residential receptors.
- Up to 38 residential homes will exceed the 30 hours per year threshold before the automatic shutdown system is applied.

These figures are drawn directly from the applicant's own assessment. The numbers demonstrate that the 13-turbine layout is fundamentally and inherently incompatible with the residential amenity of the surrounding community without the complete reliance on an automated shutdown system. The applicant is not mitigating a marginal exceedance — it is seeking planning permission for a layout that breaches public health thresholds at up to 49 properties, and then proposing to fix this with a technical system that, as demonstrated in Section 11 of this submission, has no binding independent monitoring, no compensation mechanism if it fails, and no enforcement history at comparable sites in this region.

33.3 Ornithology: Survey Standards Not Met and Breeding Kestrel Pair

Confirmed on Site

33.3.1 Mandatory SNH/NatureScot Survey Standards Explicitly Not Achieved

The Ornithological Results Report (Technical Appendix 5-2, Section 3.8, 'Survey Limitations') contains explicit admissions that mandatory survey standards were not met:

- Section 3.8 explicitly admits that the required number of breeding raptor surveys recommended by SNH/NatureScot guidelines was NOT accomplished during the 2021 and 2022 breeding seasons. SNH guidance mandates a minimum of four separate seasonal visits to establish home-range occupancy and breeding success. Missing these surveys across consecutive years means the applicant lacks the data continuity required to assess long-term cumulative impacts on target raptors.
- Section 3.8 explicitly confirms that the recommended breeding walkover and dusk surveys were NOT accomplished during either the 2021 or 2022 breeding seasons. Walkover tracking was restricted to areas where active land-access permission was granted, meaning substantial territories within the 500-metre turbine buffer zone were never physically surveyed.
- During the critical Year 1 autumn passage season, only 4.5 hours of observation per Vantage Point (VP) location was conducted, dismissed as 'investigative.' Given the site's immediate proximity to the Blacksod Bay/Broad Haven SPA — an internationally important passage corridor for migratory waterfowl — a 4.5-hour snapshot is scientifically inadequate to quantify peak migratory flight line activity through the turbine zones.
- Methodological irregularities in breeding walkovers: a 2022 survey visit was split over two consecutive days; two 2023 visits were spread over three consecutive days; a further 2023 breeding visit was fractured across three non-consecutive days. SNH guidance requires single-day synchronised counts to avoid duplicate tallies of mobile populations. These fractured surveys invalidate the territory mapping.

33.3.2 Red-Listed Kestrel Breeding Pair Confirmed on Site for Three Consecutive Years

Section 4.2 and Tables 21, 22, and 23 of Technical Appendix 5-2 explicitly confirm that a breeding pair of Kestrel (*Falco tinnunculus*) successfully nested within the existing buildings in the central area of the development site across three consecutive years: 2021, 2022, and 2023. The Kestrel is currently Red-listed under the Birds of Conservation Concern in Ireland (BoCCI) 2020–2026 scheme due to rapid and severe national population declines. It is also protected under Article 1 of the EU Birds Directive (2009/147/EC). The positioning of industrial infrastructure — turbine foundations, access roads, cabling corridors, and construction compounds — directly over an active, proven multi-year raptor nesting site is a standalone and serious ground for refusal or at minimum a requirement for a full cumulative impact assessment on this breeding population. The applicant’s Avian Collision Risk Model (Technical Appendix 5-8) explicitly confirms that the Common Kestrel logged the single highest level of collision risk of all species assessed on site. The combination of confirmed breeding presence and highest modelled collision risk for a Red-listed species has not been adequately addressed.

33.4 Habitat Assessment: UK Metrics Used Instead of Irish Standards

The Peatland Restoration Plan (Technical Appendix 5-5, Section 2.1) confirms that the applicant has used the Scottish and Southern Energy (SSE) Biodiversity Toolkit and the UK Government’s statutory DEFRA Biodiversity Metric to calculate habitat loss and recovery on an Irish site.

— Section 2.1 explicitly acknowledges that the TII Biodiversity Metric — an official, country-specific, and geographically appropriate habitat metric developed specifically for the Irish environment — was released in December 2025. The applicant explicitly states they chose NOT to use this metric simply because their calculations were ‘largely complete.’

— Administrative convenience is not a legally sufficient justification for bypassing Irish statutory environmental standards. The use of UK-derived metrics calibrated for British upland habitats to assess an Irish Atlantic blanket bog system introduces a systematic bias that cannot be assumed to produce accurate results for the specific habitats, species assemblages, and ecological dynamics of the Muingmore site.

— Under Section 34 of the Planning and Development Act 2000 (as amended), environmental assessment frameworks must accord with Irish statutory instruments and local development

plans. The deliberate substitution of a UK metric for the Irish equivalent, on grounds of administrative convenience, invalidates the objective credibility of the habitat assessment.

33.5 Habitat Condition Assessment: Water Table Criterion Failed at 100% of Sampled Sites

Technical Appendix 5-6 (Section 3.0) further admits that due to accessibility constraints, some areas of the site were assessed from a distance, which precluded complete condition assessment. To compensate, the applicant applied a 'worst-case scenario' assumption, assigning un-surveyed parcels the condition rating of the highest-rated lands on site. Rural West Environmentalists submits that assigning a best-available condition rating to areas that could not be physically reached is the opposite of a precautionary worst-case approach — it systematically overstates baseline habitat quality and understates the development's actual impact on degraded habitats.

Rural West Environmentalists further notes that Technical Appendix 5-6 (Section 2.4) confirms that the primary quadrat fieldwork was conducted entirely during the sub-optimal winter period — 4th to 14th November 2024 and January 2026. The report itself acknowledges that cryptic botanical species, including protected wild orchids, are entirely subterranean during winter and were impossible to identify during this survey period. Conducting baseline vegetation mapping when critical floral indicators are dormant renders the dataset incomplete and scientifically unreliable for the purposes of an EIA. Rural West Environmentalists submits that a habitat condition baseline conducted predominantly in November and January cannot satisfy the Waddenzee standard of scientific certainty required before an adverse effect on site integrity can be excluded.

The Habitat Condition Assessment Report (Technical Appendix 5-6) contains a finding of profound significance that the applicant has not adequately addressed in the NIS or EIAR:

Rural West Environmentalists has independently verified the applicant's Habitat Condition Assessment Report (Technical Appendix 5-6) condition sheets in full. The report confirms that Criterion A — described in the applicant's own report as 'essential for achieving Good condition' — requires that 'the water table is at, or near the surface throughout the year... There is no artificial drainage.' Across the 8 numbered Wetland Habitat Type assessment

locations (Locations 1 through 8), Criterion A failed at every single one — 8 out of 8, a 100% failure rate — with the applicant's own surveyors recording at each location that 'there are regular drains cut every 5m which run the full length of the habitat' and that 'the area is intensively drained.' Rural West Environmentalists notes, for completeness and to ensure this submission is itself fully accurate, that the applicant separately assessed two further 'Overrun Area' sites outside the 8 main Locations: Overrun Area 3 also failed Criterion A ('completely cutover and rotovated'), while Overrun Area 1 passed, the applicant recording 'no drains on site... good water retention.' Even including these two additional sites, Criterion A failed at 9 of the 10 total locations assessed across the development site — a 90% failure rate overall, and a 100% failure rate across every one of the 8 principal Wetland Habitat Type locations specifically.

- Locations 1, 2, 3, and 4 are intensely drained by artificial deep-cut channels every 5 metres, with water systems remaining completely stagnant or dry.

- Because Criterion A is a mandatory statutory prerequisite for a 'Good Condition' peatland designation, its uniform failure across all sampled parcels demonstrates that the development is situated across a structurally degraded ecosystem that is already losing its ecological function.

This finding has two critical consequences. First, it directly undermines the applicant's carbon balance and peatland restoration claims: if the bog is already degraded, the claimed carbon sequestration benefits of the Peatland Restoration Plan are materially overstated. Second, a degraded, heavily drained peat substrate presents even greater peat instability risk than intact bog — because the drainage channels already established across the site create direct preferential pathways for mobilised peat to enter the watercourse network.

33.6 Forestry: Acknowledged Windblow Risk, Chemical Runoff, and Variable Footprint

33.6.1 Acknowledged Windblow Risk at Turbine 10 / Plot C1

The Forestry Report (Technical Appendix 2-2, Section 2.2.1) explicitly concedes: 'considering the proximity to the western coast, the underlying peat soil, and the current height of the trees, infrastructure felling at the proposed location for turbine T10 may result in future windblow in the remaining trees of plot C1.' Plot C1 is a mature, Coillte-owned forest block standing on deep peat.

The T10/T11 corridor is visible on aerial imagery at Muingmore townland, County Mayo, available via Ordnance Survey Ireland or Google Maps satellite view, and on the applicant's site layout drawings on the public case file at pleanala.ie/en-ie/case/324387.

Uprooting and overturning of trees due to windblow causes extensive tearing of the peat substrate, exposing massive areas of raw carbon soil to atmospheric oxidation and torrential rain erosion. Section 2.2.2 confirms that felling and windblow directly threaten surface water quality via major sediment mobilisation and nutrient loading into the Doolough and Tristia watercourses — which drain directly into the SAC waters of Blacksod Bay. The applicant has acknowledged this risk in its own forestry report and has not demonstrated that it can be adequately mitigated.

33.6.2 Urea Chemical Application Across Peat Draining to European Sites

The Forestry Report confirms that as the harvester cuts down conifer stands, 'a urea solution is applied to the surface of the remaining tree stumps' to prevent colonisation by *Heterobasidion annosum*, a serious fungal disease. The applicant's own report states that 'the application of Urea is generally a condition of a felling licence where the soil type is mineral soil or where a peat soil is less than 25cm (excluding the litter layer)', and that 'the application of urea is not permitted within 10 metres of any aquatic zone or relevant watercourse.' Rural West Environmentalists submits that this creates a direct and unresolved internal inconsistency in the application. The applicant's own Peat Landslide and Hazard Risk Assessment confirms peat depths across the Main Wind Farm Development Site of up to 6.4 metres, with an average depth across the site materially in excess of 25cm. The standard regulatory basis described by

the applicant's own Forestry Report for routinely applying urea — a peat depth of less than 25cm, or mineral soil — does not appear to reflect the actual ground conditions confirmed elsewhere in the application. Rural West Environmentalists requests that An Coimisiún Pleanála require the applicant to confirm, for every felling location across the site, the actual peat depth recorded, whether urea application is in fact proposed at each such location notwithstanding the deep peat conditions described elsewhere in the application, and the distance from every proposed urea-treated stump to the nearest aquatic zone or watercourse, given the applicant's own 10-metre exclusion standard. In the absence of this location-by-location confirmation, it is not possible for An Coimisiún Pleanála to be satisfied that the applicant's own stated 10-metre watercourse buffer for urea application will be respected across a site containing an intensive 5-metre drainage ditch network draining toward regional salmonid nurseries and the connected European conservation zones of Blacksod Bay. This constitutes a direct and unassessed risk to Water Framework Directive compliance and to the conservation objectives of the SAC and SPA. No assessment of this specific chemical pathway to the European sites appears in the NIS.

33.6.3 Variable Footprint Makes All Dependent Environmental Models

Speculative

The Forestry Report (Section 4.3, Tables 4.2, 4.3, and 4.4) establishes that the total area of permanent forest removal fluctuates between 27.17 hectares, 27.25 hectares, and up to 31.37 hectares depending on which turbine model is selected. The choice of Nordex N163 over Nordex N149 expands the clearfelling footprint at individual turbine sites by significant margins (e.g. felling at Turbine 2 expands from 2.58 ha to 3.44 ha).

Because the exact turbine model has not been selected, a difference of 4.20 hectares of mature forestry felling (27.17ha for Nordex N149 vs 31.37ha for Nordex N163) remains completely open in the planning file. This means that all dependent environmental calculations — bat buffer protection zones, nesting bird habitat loss, wind turbulence modelling, and the net carbon emissions balance — are speculative. An assessment based on a range of possible outcomes rather than definitive findings does not meet the legal standard for a valid EIA.

33.7 Bat Surveys: Equipment Failure, Missing Spring Data, and Draft Documents Submitted

33.7.0 Bat Conservation Ireland Had No Capacity to Engage with the Scoping Process

Before addressing the specific deficiencies in the bat survey as executed, Rural West Environmentalists draws An Coimisiún Pleanála's attention to a procedural failure at the scoping stage that compounds every subsequent technical deficiency identified below. The pre-application scoping record (ABP-318372-23, Scoping Report Technical Appendix 3-3) confirms that Bat Conservation Ireland — the national expert organisation for bat species in Ireland — notified the applicant during the scoping consultation process that it did not have the capacity to make comment on this application.

The scoping process is not a formality. It is the mechanism through which expert bodies identify what baseline surveys are required, what methodology is appropriate, what survey periods must be covered, and what gaps in knowledge must be addressed before an Environmental Impact Assessment Report can be considered adequate. For a 454-hectare development on Atlantic blanket bog immediately adjacent to five European protected sites — a landscape that supports multiple Annex IV bat species confirmed in the applicant's own survey data — the input of the national bat authority at the scoping stage is not peripheral. It is the primary safeguard against a survey methodology that is inadequate for the site.

Bat Conservation Ireland's stated inability to engage with the scoping process means that the bat survey methodology — the choice of detector locations, the survey seasons, the deployment periods, the transect routes, and the analysis framework — was designed without any input or scrutiny from the one national body best placed to assess whether it was appropriate for a site of this ecological sensitivity. The consequences of that absence are visible throughout the bat survey record: equipment failures at critical detector locations (D.10 and D.12), a missed spring survey window, draft documentation submitted as formal evidence, and a site-level bat activity finding at D.10 of 40.91% that the applicant's own assessment does not adequately address. Each of these deficiencies might have been identified and corrected at the scoping stage had the national expert authority been in a position to engage.

Rural West Environmentalists submits that the absence of Bat Conservation Ireland from the scoping process is a material procedural gap that undermines the reliability of the entire bat survey methodology. An Coimisiún Pleanála cannot satisfy itself that the bat survey design was

adequate for this site when the national authority on bat survey methodology was unable to review it before it was deployed. The deficiencies identified at Sections 33.7.1 to 33.7.4 below are not isolated errors — they are the predictable consequence of a survey methodology that was never subjected to expert national scrutiny.

33.7.1 Equipment Failure at Detector Locations D.10 and D.12 During the 2023 Autumn Survey

Section 2.5.1 ('Survey Coverage') of the Bat Survey Report (Technical Appendix 5-3) explicitly documents that 'Two detector failures occurred during the 2023 autumn survey season, detector locations D.10 and D.12', confirming that 'Equipment failures/technical issues was limited to the following detectors over the course of the 2023 survey: autumn deployments at locations D.10 and D.12 (no data recovered).' The applicant's own report then states: 'Despite the technical issues during the autumn 2023 survey year, due to the volume of data collected over the seasons, it is considered that the data collected during this survey remains robust and compliant with NatureScot et al. (2021).' Rural West Environmentalists submits that this self-assessment does not cure the underlying defect. Two complete detector failures during an entire autumn survey season, at locations the applicant's own data elsewhere identifies as among the highest-activity sites on the site (D.10 in particular is identified at Section 33.7.4 below as registering some of the highest recorded bat activity in other survey periods), represent a genuine and unaddressed gap in the autumn 2023 baseline specifically at two of the locations where bat activity, on the applicant's own evidence, is most concentrated. An applicant's own assurance that the remaining data is 'robust' does not supply the missing autumn data from precisely the two locations where it matters most.

The legal consequence is direct: all bat species in Ireland are Annex IV strictly protected species under the EU Habitats Directive (Article 12). The complete absence of real survey data at detector locations D.10 and D.12 throughout the entire autumn 2023 survey season means the competent authority does not have a complete data set covering that critical autumn period at two of the site's monitored locations. Rural West Environmentalists submits that an applicant's own assurance that the remaining data is sufficiently robust does not substitute for the missing autumn 2023 data itself, and that An Coimisiún Pleanála cannot make a definitive finding of no

adverse effect on bat species while a confirmed gap in the survey record remains unaddressed at two monitored locations.

33.7.2 Spring Survey Window Missed

Section 2.5.1 confirms that the 'Spring' static detector deployment did not physically commence until 28 May 2024. Standard bat survey guidelines require spring baseline monitoring to cover the April-to-May seasonal emergence window. By delaying deployment until the end of May, the applicant completely missed the early-season emergence and dispersal patterns of local bat populations, leaving the planning file without a valid spring baseline.

Rural West Environmentalists notes that the applicant's own report attempts to address this admission directly, stating: 'The spring static surveys did not start till 28 May, therefore the 10 compliant days are within the summer season survey window, however, as the survey data is time stamped, the spring survey analysis is as stated in Table 4. This does not impact the analysis of the data.' Rural West Environmentalists submits that this assurance does not cure the underlying defect. Labelling late-May and early-June data as a 'spring' baseline, while simultaneously acknowledging that the same data falls within the summer survey window, does not transform incomplete spring coverage into complete spring coverage. An applicant's own assertion that a missed seasonal window 'does not impact the analysis' is not independent scientific verification, and the underlying gap in genuine April-to-May spring monitoring remains unaddressed regardless of how the resulting data is subsequently labelled or time-stamped.

33.7.3 Draft Documentation Submitted as Formal Evidence

The title blocks and metadata on Page 3 and Page 7 of Technical Appendix 5-3 explicitly state: 'This is a draft document and should not be cited.' The applicant has submitted unvouched, unapproved, and legally non-binding draft ecological statements as part of a formal Strategic Infrastructure Development application. An Coimisiún Pleanála cannot execute a definitive statutory EIA based on placeholder draft text that has not been professionally signed off, peer reviewed, or verified. This is a standalone procedural deficiency.

33.7.4 Highest Bat Activity Recorded Adjacent to Turbine Locations

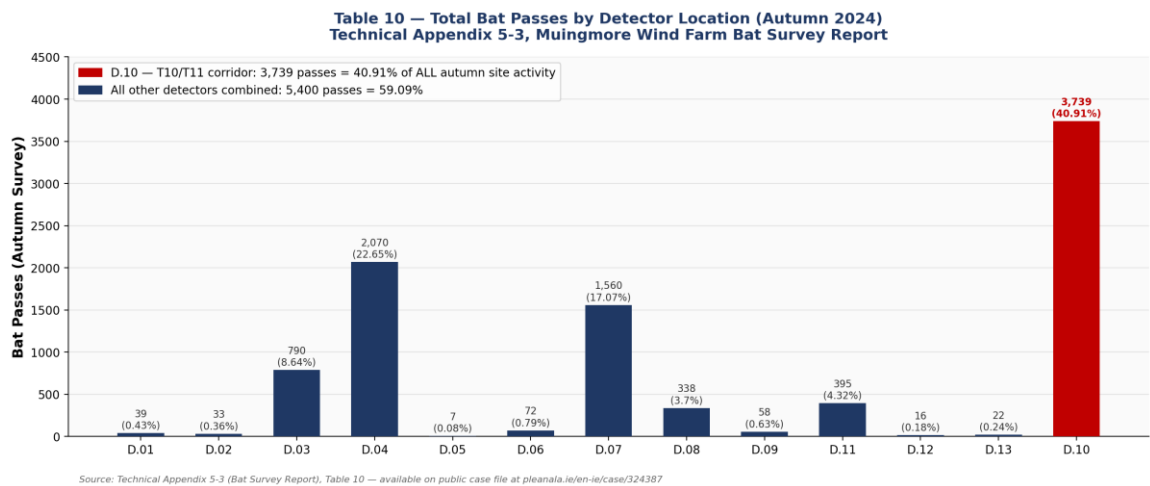
The applicant's own survey data confirms that detector D.10, located 'on semi-mature larch disjointed young forestry edge' with a watercourse to the north and 'moderate foraging and commuting potential', recorded measurable bat activity across Spring 2022, Summer 2022, Autumn 2022 and Summer 2023. This is consistent with the well-established ecological principle that forestry edges, particularly adjacent to watercourses, function as preferred bat foraging and commuting corridors.

The applicant's own Table 10 (Total number of passes recorded per species per detector for autumn) confirms that D.10 recorded 3,739 bat passes during the autumn 2024 survey period alone — 40.91% of all autumn bat activity recorded across every detector on the entire site, and more than double the activity recorded at the next-highest location, D.07 (1,560 passes, 17.07%). The applicant's own 2024 summary independently corroborates this, stating that 'spatial distribution was uneven with detectors near plantation edges and linear habitats recording the higher activity, particularly D.10, D.07, and D.04 in autumn, and D.10 and D.11 in spring' — directly naming D.10 as one of the highest-activity detectors on the entire site in two of the three 2024 survey seasons. The applicant's own EcoBat statistical analysis further confirms that, with the exception of D.07 and D.10, activity at every other detector on the site was determined to be no higher than 'low/moderate' in autumn, and that D.10 specifically sustained 'moderate/high or moderate' activity over five separate nights — confirming D.10 as the single most active bat location on the entire proposed development site during the autumn survey period.

Rural West Environmentalists notes that the applicant's own reported seasonal totals for 2024 (autumn 9,139 passes, spring 2,832 passes, summer 2,058 passes) sum to 14,029 passes, which does not match the applicant's own stated overall total of 13,423 passes for that year — a discrepancy of 606 passes that the applicant's report does not explain. Rural West Environmentalists requests that An Coimisiún Pleanála require the applicant to reconcile this discrepancy, and to confirm the correct and final per-detector, per-season pass totals, before any determination is made.

Rural West Environmentalists requests that the Habitat Management Plan and Forestry Report be required to confirm whether any of the 13 proposed turbines are sited within or immediately adjacent to the forestry edge habitat at D.10 specifically, given that this single location accounts for over 40% of all recorded autumn bat activity on the entire site, and if so, what rotor-tip clearance from this specific high-activity edge has been applied. The combination of confirmed, dominant bat activity at this single location, the unexplained arithmetic discrepancy in the applicant's own seasonal totals, and the equipment failure at two monitoring locations during the autumn 2023 survey identified at Section 33.7.1 above, means the applicant has not demonstrated that turbine-specific collision risk at this critical forestry-edge location has been completely and adequately assessed.

Table 10 from Technical Appendix 5-3 (Bat Survey Report) — Autumn 2024 bat passes by detector. D.10 recorded 3,739 passes — 40.91% of all autumn bat activity on the entire site.



The adequacy of the roost assessment is further undermined by the woodland edge bat activity concentrations identified at Detector D.10, addressed at Section 33.7.4 above. The applicant's own NatureScot-compliant guidance (the standard applied throughout the Bat Survey Report) requires a minimum 50-metre rotor-tip clearance buffer from woodland edges at turbines with demonstrated high bat activity. Rural West Environmentalists has verified that no such buffer has been applied or justified for Turbines T01, T02, T03, T10, T12, or T13, which Technical Appendix 5-3 Section 3.9 confirms directly correspond to the high-activity woodland edge zones. The applicant's failure to apply this buffer at the locations of highest recorded activity, without any site-specific justification, is a material omission from the Bat Survey Report.

Rural West Environmentalists has independently verified Section 2.2.1 of the Bat Survey Report (Technical Appendix 5-3), which confirms that all tree roost assessments across the entire 454-hectare site were conducted exclusively from ground level using non-invasive external techniques. Ground-level visual surveys are structurally incapable of identifying deep tree hollows, crevices, or internal cavities used by hibernating or breeding bats. All bat species in Ireland are Annex IV strictly protected species under the EU Habitats Directive, for which An Coimisiún Pleanála cannot grant permission without establishing, to the standard of scientific certainty required by Waddenzee, that no roosts will be disturbed or destroyed. Rural West Environmentalists submits that a ground-level survey cannot satisfy that standard on a 454-hectare forested and semi-forested site, and formally requests that the inspector require the applicant to demonstrate that the roost assessment methodology employed was sufficient to detect all bat roosts potentially affected by tree felling.

33.7.5 Bat Roost Assessment: Ground-Level Only Surveys Insufficient for 454-Hectare Site

33.7.5 Leisler's Bat — High-Flying Collision-Risk Species Confirmed Present, No Demonstrated At-Height Monitoring

Beyond the equipment failures, missed spring window, and draft documentation already identified above, the Bat Survey Report (Technical Appendix 5-3) contains a further and distinct deficiency specific to Leisler's bat (*Nyctalus leisleri*) that independently undermines the adequacy of the collision risk assessment for this development.

Leisler's bat is confirmed present at Muingmore across all three 2024 survey seasons, with the applicant's own data recording 34 passes in spring, 36 in summer, and 31 in autumn — a total of 101 passes across the full 2024 monitoring season, independently confirmed by the applicant's own summary table recording exactly 101 Leisler's bat passes (0.7% of the 14,031 total bat passes recorded across all species that year). The applicant's own Bat Conservation Ireland data, reproduced in Appendix C of the report, records a Leisler's bat observation approximately 0.13km from the centre of the buildable turbine envelope — an exceptionally close record in the context of a 13-turbine, 180-metre development.

Leisler's bat is a high, fast-flying species and is recognised internationally as one of the bat species most vulnerable to wind turbine collision, precisely because it forages and commutes at rotor-swept height rather than within tree cover or close to ground level. This is the critical

distinction the Bat Survey Report fails to address: confirming bat presence through ground-level or habitat-proxy detectors does not answer the question that actually determines collision risk for turbines of this scale — whether bats are active within the rotor-swept zone itself.

Rural West Environmentalists has found no evidence within Technical Appendix 5-3 of dedicated at-height acoustic monitoring — that is, microphones deployed at or near the height of the rotor-swept zone (broadly 20 to 180 metres above ground level for the turbines proposed) rather than at standard ground-level static detector height. Without at-height data, a ground-based survey showing 'low' or 'moderate' activity cannot logically support a conclusion of low collision risk for a high-flying species, because the entire risk pathway for Leisler's bat operates in the airspace the ground-based survey does not measure.

This deficiency compounds, rather than stands apart from, the equipment failures already identified in Section 33.7.1 above. Where ground-level detectors failed at locations D.10 and D.12 during the autumn 2023 survey season, and where some detectors were positioned to represent general habitat types rather than at the specific locations of every proposed turbine, the absence of any at-height monitoring removes the one data source that could have independently corroborated or contradicted the ground-level findings for this specific high-risk species.

33.7.6 Survey Timing Fails to Capture Peak Leisler's Bat Activity

The survey timing deficiencies identified in Section 33.7.2 in respect of the missed spring window apply with particular force to Leisler's bat. The report confirms the 2024 static deployments ran: spring from 28 May to 11 June, summer from 16 July to 31 July, and autumn from 24 September to 7 October. The report itself acknowledges that the spring deployment did not begin until 28 May, meaning the ten compliant survey days fell within what is meteorologically and biologically the early summer period, yet this data was analysed and reported as the spring baseline.

The autumn deployment is independently deficient for Leisler's bat specifically. Late summer and early autumn — broadly August into early September — is recognised as a period of heightened Leisler's bat activity associated with mating behaviour and pre-hibernation foraging. The applicant's autumn 2024 deployment did not commence until 24 September, missing the preceding weeks entirely. A survey window that begins after this peak period has

already passed cannot be relied upon to characterise the true extent of Leisler's bat activity at the site during the period when collision risk for this species is plausibly at its highest.

33.7.7 Lighting and Cumulative Impact on Bat Connectivity Not Properly Assessed

The Bat Survey Report itself states that maintaining connected edge habitats and avoiding new lighting of bat commuting corridors would safeguard bat connectivity and prey availability.

Rural West Environmentalists submits that this standard, set by the applicant's own ecologists, has not been applied across the development as a whole.

The development is not limited to 13 turbines. It includes permanent access tracks, hardstands, a 110kV substation, a BESS compound, security lighting, mandatory aviation obstacle lighting on every turbine, and a construction phase of significant duration. Each of these elements introduces lighting into a landscape the applicant's own report identifies as functioning primarily as a bat foraging and commuting corridor. The EIAR and NIS do not contain a single, integrated cumulative lighting assessment combining turbine aviation lighting, BESS and substation security lighting, and construction lighting, and analysing the combined effect on bat connectivity across the site as a whole. Each lighting source has, at most, been considered in isolation, if at all.

33.7.8 Requests for Further Information

In addition to the matters raised at Section 33.7.1 to 33.7.4 above, Rural West

Environmentalists requests that An Coimisiún Pleanála require the applicant to provide:

- Confirmation of whether at-height bat monitoring was undertaken within the projected rotor-swept zone, including microphone height, deployment dates, and weather conditions for each night of deployment;
- A turbine-by-turbine bat risk assessment, rather than reliance on representative or proxy detector data, for every one of the 13 proposed turbine locations;
- A full scientific justification for analysing the 28 May to 11 June deployment as spring data;
- A full explanation of how the 2024 autumn survey, beginning 24 September, adequately captured the peak Leisler's bat activity period in the preceding weeks;
- Complete weather-compliance records for every survey night, including temperature, wind speed, and rainfall, cross-referenced against standard bat survey guidelines;
- A specific, named assessment of collision risk and barotrauma risk for Leisler's bat at each turbine location, given its status as a high-flying species;

- A single, integrated cumulative lighting assessment covering turbine aviation lighting, BESS and substation security lighting, and construction lighting, and its combined effect on bat connectivity across the site;
- Binding and enforceable mitigation commitments, including blade feathering and operational curtailment during identified high-risk bat activity periods, together with a post-construction acoustic monitoring and carcass search programme.

Rural West Environmentalists submits that monitoring carried out after construction cannot substitute for a robust pre-permission baseline. Post-construction monitoring identifies harm that has already occurred; it does not discharge the obligation to demonstrate, in advance and with complete scientific certainty, that no significant effect will arise. For a strictly protected Annex IV species confirmed present at a site identified by the applicant's own ecologists as a foraging and commuting landscape, the correct sequence is avoidance first, with mitigation reserved for residual risk that cannot otherwise be avoided — not the reverse.

33.8 Background Noise: Systemic Calibration Failures Invalidate the Entire Noise Baseline

The Baseline Noise Survey Details (Technical Appendix 9-3) compiled by Bow Acoustics contains severe instrumentation errors that violate the Wind Energy Development Guidelines (2006) and the Institute of Acoustics (IOA) Good Practice Guide to the Application of ETSU-R-97.

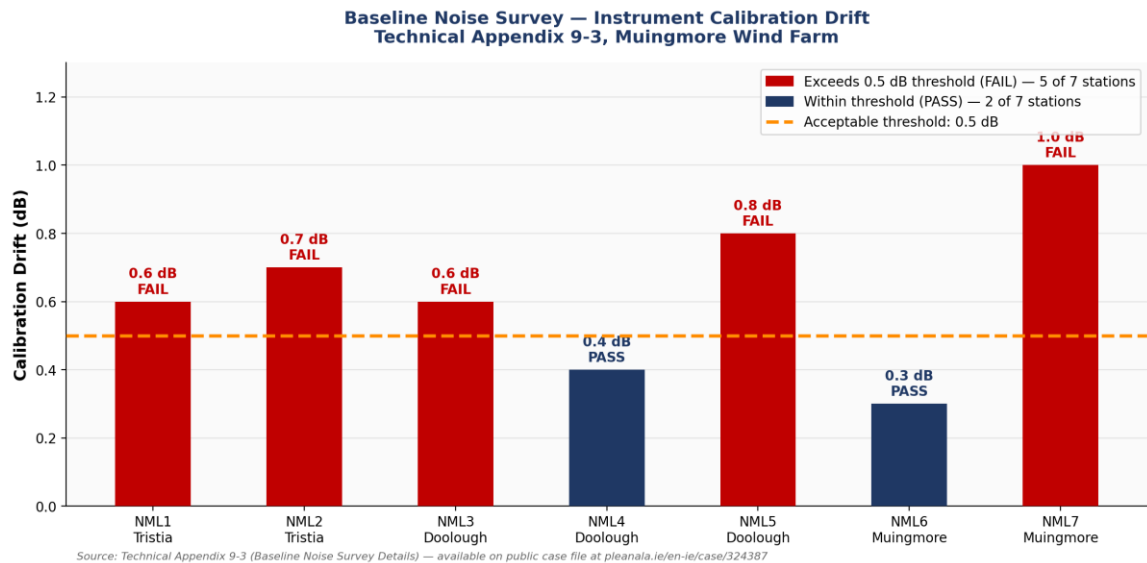
Rural West Environmentalists notes that this directly contradicts the applicant's own Chapter 9 (Noise and Vibration) narrative, which asserts in its 'Assumptions, Limitations and Confidence' section that 'no significant information gaps were identified, and the assessment was undertaken in line with relevant standards and policy documents.' Rural West Environmentalists submits that an applicant cannot properly claim no significant information gaps exist in a noise assessment while, on the applicant's own underlying instrument records addressed below, five of the seven sound level meters used to establish that assessment's baseline failed to meet basic field calibration stability criteria.

33.8.1 Calibration Drift Exceeds the 0.5 dB Threshold at 5 of 7 Monitoring Stations

The IOA Good Practice Guide specifies a strict quality control threshold: if the acoustic drift between the initial pre-deployment field calibration and the post-collection verification exceeds 0.5 dB, the equipment has suffered structural instability and the data must be rejected. The applicant’s own telemetry records confirm systemic calibration failure across five of seven monitoring stations:

- NML1 (Tristia): drift of 0.6 dB — EXCEEDS THRESHOLD
- NML2 (Tristia): drift of 0.7 dB — EXCEEDS THRESHOLD
- NML3 (Doolough): drift of 0.6 dB — EXCEEDS THRESHOLD
- NML5 (Doolough): drift of 0.8 dB — EXCEEDS THRESHOLD
- NML7 (Muingmore): drift of 1.0 dB — EXCEEDS THRESHOLD BY A FACTOR OF TWO

Noise instrument calibration drift from Technical Appendix 9-3. 5 of 7 stations exceed the 0.5dB threshold: NML1 (0.6dB), NML2 (0.7dB), NML3 (0.6dB), NML5 (0.8dB), NML7 (1.0dB). NML7 fails by a factor of two.



Five out of seven Sound Level Meters failed basic stability criteria. Systemic drifts of this magnitude prove instrument instability, microphone moisture saturation, or environmental interference. This mathematically skews background levels, inflating the noise limits that will be permitted to the developer at the expense of local residential protection. The 35-year operational noise limits for this wind farm are built on a noise baseline derived from instruments that the IOA’s own guidance requires to be rejected.

33.8.2 Instruments at the Limit of Laboratory Certification

Sound level meters and field calibrators require strict laboratory trace certification every 24 months to remain compliant under IEC 61672. The applicant deployed instruments operating at the absolute limit of their certification windows:

- NML1: laboratory calibration dated 05/07/2021 — nearly 23 months old at time of deployment.
- NML3: laboratory calibration dated 28/09/2021 — approaching 24 months.
- NML7: laboratory calibration dated 23/06/2021 — approaching 24 months.

Relying on instruments approaching expiry of certification, while simultaneously recording extreme field calibration drifts, invalidates the integrity of the predictive noise model.

33.8.3 NML6 Positioned in Breach of Free-Field Requirements

The description for monitoring location NML6 (Muingmore) explicitly states: 'Access to the garden was not provided.' Despite having no legal land-access permission, the consultant positioned a precision meter just 3.5 metres away from a low blockwork wall. Standard free-field requirements specify that microphones must be placed at least 3.5 metres from any reflective vertical structure to avoid acoustic echoing and data amplification. NML6 data is therefore compromised by direct reflective interference and must be excluded from any valid noise baseline.

33.8.4 Amplitude Modulation: The Industry's Own Position Paper Admits the Defect Cannot Be Eliminated, and Proposes Only After-the-Fact Complaint Monitoring

Rural West Environmentalists has now traced this admission back to the very earliest stage of this application. The applicant's own EIA Scoping Report (Technical Appendix 3-3, dated 18 April 2024 — almost two years before this application was lodged) explicitly proposed, at the scoping stage, to exclude Amplitude Modulation from the assessment altogether, stating: 'amplitude modulation, including 'excess amplitude modulation' and 'other amplitude modulation', in line with the Institute of Acoustics Good Practice Guide, is not something that can be adequately assessed at the planning stage.' Rural West Environmentalists submits that this is not a conclusion arrived at after rigorous assessment; it is an admission made before any site-specific assessment of Amplitude Modulation was undertaken at all, proposing to exclude

the issue from scope on the basis that it cannot be assessed — rather than undertaking the best available assessment and disclosing the resulting uncertainty.

Rural West Environmentalists draws particular attention to a document the applicant has itself relied upon and submitted as part of this application: the Wind Energy Ireland (WEI) Position Paper on Amplitude Modulation Planning Conditions (Technical Appendix 9-2, October 2025). Wind Energy Ireland is the trade association of which RWE is a member, and this document is an industry advocacy position paper, not an independent scientific or regulatory assessment. Notwithstanding its advocacy purpose, the document contains a series of admissions against the wind energy industry's own interest that Rural West Environmentalists submits are directly relevant to this application.

Amplitude Modulation (AM) is described in the applicant's own submitted document as 'a naturally occurring feature of wind turbine operation, sometimes experienced as a 'swishing' sound from rotating blades.' Critically, the document states in terms that 'No AM' conditions should not be included in planning permissions, as AM cannot be eliminated.' Rural West Environmentalists submits that this is a direct admission, by the wind energy industry's own representative body, that the swishing noise associated with Amplitude Modulation is an inherent and unavoidable characteristic of operating wind turbines of this kind, including those proposed at Muingmore, and that no mitigation measure exists capable of eliminating it. The same document confirms that 'there is currently no endorsed government guidance on how it should be regulated' in Ireland, and that, 'in the absence of a validated penalty system or approved guidance, standard practice in Ireland has been not to include AM within noise conditions.' Rural West Environmentalists submits that the absence of any binding regulatory standard for an acknowledged, unavoidable, and intrusive noise characteristic is not a reason to disregard it at planning stage; it is a reason for An Coimisiún Pleanála to apply particular caution before granting permission for a development that will, by the industry's own admission, generate this effect throughout its 35-year operational life.

The applicant's own submitted position paper proposes, as its preferred solution, a 'complaints-based monitoring system' operated only after the wind farm has been commissioned and is already operational, under which residents experiencing the admittedly unavoidable swishing noise must themselves identify and report it before any monitoring, investigation, or response is triggered. Rural West Environmentalists submits that this model places the entire burden of detecting and proving harm onto the residents living nearest to the

turbines, after construction and commissioning have already taken place, rather than requiring the applicant to demonstrate, before permission is granted, that no significant Amplitude Modulation effect will arise at the nearest noise-sensitive receptors. This is the same pattern of deferred, post-permission assessment that Rural West Environmentalists has identified elsewhere in this application, including in respect of bat survey methodology, fire authority consultation, and toxic plume dispersion assessment for the BESS.

Rural West Environmentalists has now also directly verified the applicant's own Chapter 9 (Noise and Vibration), which confirms this admission in the applicant's own first-party EIAR narrative, not merely in the third-party industry position paper addressed above. The applicant's own chapter states plainly: 'AM cannot be measured or predicted in advance of the operation of the wind farm. Therefore, developers can't know how much AM may be produced or commit to a condition that requires no AM.' The same chapter concludes: 'There is no available method for predicting the probability of AM occurring, or whether or not it would amount to a likely significant effect on the environment before the wind farm is constructed and operational.'

Rural West Environmentalists submits that this is a direct admission, by the applicant itself, in its own EIAR, that the core requirement of the EIA Directive — to identify and assess the likely significant effects of a project before it is permitted, not after — cannot be met in respect of Amplitude Modulation for this development. An effect that, on the applicant's own admission, cannot be measured, predicted, or assessed for significance before construction and operation have already taken place, cannot properly be screened out or concluded upon at the application stage. Rural West Environmentalists submits that the correct legal consequence of this admitted uncertainty is not to proceed to permission on the basis that significant effects are merely 'unlikely', but to recognise that the applicant has not discharged, and on its own admission cannot discharge, the burden of demonstrating in advance that no significant effect will arise.

Rural West Environmentalists notes that the applicant's own Baseline Noise Survey Details (Technical Appendix 9-3), addressed at Section 33.8.1 to 33.8.3 above, contains no Amplitude Modulation-specific monitoring, assessment, or proposed condition at all. Given that the applicant's own submitted industry position paper confirms AM cannot be eliminated and that no approved Irish methodology exists to measure, rate, or condition against it, Rural West Environmentalists submits that the applicant has not demonstrated, to the standard required,

that residents at the nearest noise-sensitive properties will not experience significant adverse effects from Amplitude Modulation throughout the 35-year operational life of this development.

33.8.5 Formal Request

Rural West Environmentalists formally requests that An Coimisiún Pleanála:

- Require the applicant to submit a specific, quantitative Amplitude Modulation assessment for the nearest noise-sensitive receptors to the Muingmore development, rather than relying on the absence of an approved national methodology as a basis for omitting such an assessment;
- Refuse to accept a post-commissioning, complaints-based monitoring programme as an adequate substitute for a pre-permission assessment of an effect the applicant's own submitted position paper confirms cannot be eliminated;
- Require the applicant to confirm what specific, binding, pre-construction commitments — rather than post-complaint responses — will be put in place to protect residents at the nearest properties from Amplitude Modulation throughout the operational life of the development.

33.9 Avian Collision Risk Model: Temporal Mismatch, Flawed Assumptions, and Acknowledged Irrelevance

33.9.1 ACRM Completed July 2025 — EIAR Updated to April 2026

The Avian Collision Risk Model report (Technical Appendix 5-8) was completed on 9 July 2025. However, the broader EIAR and related Peatland and Habitat updates are dated as late as March and April 2026. This temporal mismatch means that subsequent seasonal flight line adjustments, technology revisions, and field observations from the late 2025 and early 2026 survey cycles were completely omitted from the predictive collision spreadsheets. The ACRM is therefore based on an outdated data window within a live and evolving application file.

33.9.2 Defective Uniform Distribution Flight Height Assumption

Section 2.4.6.1 explicitly admits that to calculate Potential Collision Heights (PCH) for rotor diameters of up to 163 metres, the model assumes that ‘in each of the height ranges within which flight height was classified, flight heights were distributed uniformly.’ This is a severe

ecological fallacy. Vulnerable raptors and waterbirds do not distribute their flight times evenly across wide altitude bands. Their behaviour is dictated by low-altitude foraging pulses, thermal currents, and landscape topography. Assuming flat mathematical uniformity artificially dilutes bird density figures within the blade sweep zone, systematically skewing modelled mortality counts downward.

33.9.3 Applicant Explicitly Admits the ACRM Does Not Reflect Reality

The Executive Summary of Technical Appendix 5-8 explicitly states: ‘while the model outputs provide a theoretical estimate of collision risk, they do not directly reflect whether collision is likely to have significant effects on avian populations.’ The applicant has provided, by its own description, a theoretical exercise that isolates data from regional population dynamics. For the Red-listed Common Kestrel — which logged the single highest level of collision risk on site and which is confirmed as a breeding species within the development footprint for three consecutive years — any additional localized blade-strike mortality could contribute to a collapse of this territorial breeding population. The applicant’s own assessment cannot say whether this will happen. That uncertainty is not a reason to proceed — under the precautionary principle, it is a reason to refuse.

33.10 Project Splitting, O’Grianna Precedent, and Variable Turbine Specifications

33.10.1 O’Grianna v. An Bord Pleanála — A Binding Irish Precedent on Project Splitting

The applicant states in Section 1.3 of the EIAR that the 25.5 km Grid Connection Route (GCR) underground cable to Bellacorick Substation is excluded from this application and will be submitted via a separate planning application at a later date (Volume 1, pp. 9 and 14). Rural West Environmentalists submits that this approach must be assessed against the standard established in O’Grianna v. An Bord Pleanála, which confirmed that a wind farm and its grid connection constitute a single, indivisible project for the purposes of Environmental Impact Assessment under Irish and EU law. Critically, the O’Grianna framework does not simply prohibit separate applications — it requires that the EIAR for the wind farm fully and

adequately assesses the cumulative ecological impacts of the entire project, including the GCR corridor, before the wind farm application can be determined.

The central legal question is therefore not whether a separate GCR application was filed, but whether the Muingmore EIAR meets the O’Grianna standard for cumulative GCR assessment.

Rural West Environmentalists submits that it does not, for the following reasons:

Project Splitting Continued — Stage 2 Does Not Cure a Flawed Stage 1 Screening

The applicant may argue that because it advanced the project to a full Stage 2 Appropriate Assessment backed by a Natura Impact Statement, any argument about inadequate Zone of Influence assessment at Stage 1 becomes legally moot. This argument must be rejected.

Moving to Stage 2 does not automatically cure a flawed Stage 1 Screening. If the developer used the intended presence of drainage mitigation measures — SuDS, rock-lined channels, silt fences, sediment traps — to artificially limit the Zone of Influence (Zoi) at Stage 1, thereby completely excluding other nearby hydrologically linked European sites from Stage 2 review entirely, the entire assessment framework remains legally contaminated. An Coimisiún Pleanála cannot carry out a legally valid Stage 2 Appropriate Assessment if the scope of that assessment was improperly narrowed at Stage 1. A Stage 2 AA that is built on a flawed Zoi determination does not satisfy the Waddenzee standard of complete, precise and definitive findings — it simply conducts a rigorous assessment of an improperly restricted scope.

The Rochdale Envelope Cannot Substitute for Site-Specific Baseline Data at 32 Watercourse Crossings

The GCR crosses 32 watercourses. The applicant has relied on the Rochdale Envelope principle — the assessment of a worst-case scenario where exact engineering details are not yet finalised — to avoid providing site-specific baseline data for each crossing. This is an abuse of the Rochdale Envelope principle that does not satisfy the O’Grianna standard.

The Rochdale Envelope principle permits minor design flexibility within an assessed worst-case scenario. It is not a mechanism for wholesale deferral of site-specific environmental assessment. Each of the 32 watercourse crossings has its own specific geotechnical conditions, ecological sensitivity, hydrological regime, and connection to the Blacksod-Broadhaven European protected sites catchment. The cumulative ecological risk of 32 crossings cannot be

assessed on a generic worst-case basis. The O’Grianna standard requires that the cumulative ecological impacts of the GCR corridor are fully and adequately assessed — not merely assessed at the level of a hypothetical worst-case envelope.

If the NIS defers the exact design details of any of the 32 crossings to post-permission — stating that they will be addressed in a Construction Environmental Management Plan or an updated Environmental Management Plan — that deferral is an unlawful displacement of the Appropriate Assessment obligation. Under People Over Wind C-323/17 and the Sweetman standard, the complete, precise and definitive findings must exist at the time of the AA, not after permission is granted.

Frac-Out Risk at HDD Crossings — A Specific, Documented, Unassessed Hazard

For ecologically sensitive watercourse crossings along the GCR, the applicant proposes Horizontal Directional Drilling (HDD) as the preferred method, on the basis that it drills underneath the riverbed without requiring in-channel works. Rural West Environmentalists submits that HDD is not a risk-free technique and that the applicant’s NIS has not assessed a specific, well-documented hazard associated with its use.

HDD relies on high-pressure drilling fluids — typically a bentonite clay slurry — to cool the drill bit and stabilise the borehole. In certain ground conditions, particularly where the substrate is soft, saturated, or where the depth of cover over the drill path is insufficient, the high pressure of the drilling fluid can rupture the riverbed or the surrounding ground. This is known as a ‘frac-out’ or ‘inadvertent return.’ When a frac-out occurs, large volumes of bentonite slurry are discharged directly into the watercourse, covering the riverbed, smothering benthic invertebrates, and creating immediate acute toxicity for fish, including the Critically Endangered European Eel confirmed in the Muingmore watercourses.

Frac-out events are not theoretical. They are a documented and recognised risk in HDD operations in saturated or soft substrates. The GCR crosses watercourses within the Blacksod-Broadhaven catchment that are directly connected to the SAC and SPA European protected sites. The NIS does not contain a frac-out risk assessment for any of the proposed HDD crossings. It does not identify the specific ground conditions at each crossing that determine frac-out probability. It does not specify the contingency procedures if a frac-out occurs during drilling. The absence of this assessment is a specific, identifiable lacuna in the NIS that prevents

An Coimisiún Pleanála from making a complete and definitive finding of no adverse effect on the connected European sites.

33.10.2 Variable Turbine Specifications — Blanket Consent Sought

Section 1.4 of the EIAR confirms that the applicant has not finalised a turbine technology, instead proposing broad ranges: tip height 179–180m, rotor diameter 149–163m, hub height 98.5–105m. This fluid design baseline means that all predictive empirical modelling within the EIAR concerning aerodynamic noise emission, human shadow flicker intrusion, bat and bird collision probability, and visual impact is fundamentally variable. A 14-metre variance in rotor diameter and a 6.5-metre variance in hub height are not trivial tolerances — they produce materially different environmental outcomes. Seeking a blanket consent with extreme envelope tolerances deprives the public, prescribed bodies, and the competent authority of planning certainty, and fails to meet the strict legal standard of a definitive environmental assessment.

A related and compounding deficiency arises from Chapter 8 (Air Quality and Climate), which states that the carbon assessment was undertaken using turbine ratings of 5.7MW, 6MW and 7MW, and that the 7MW scenario is used to derive the maximum project capacity of 91MW — an average output of 7MW per turbine across the 13-turbine development. This carbon-assessment capacity figure is itself difficult to reconcile with the rotor diameter and hub height ranges given elsewhere in the application: turbine models commonly associated with a 149–163m rotor diameter, 98.5–105m hub height and 179–180m tip height envelope — for example the Nordex N149, Nordex N149/5.X, Nordex N163, Nordex N163/6X and Vestas V150 — are generally associated with rated outputs in the region of approximately 4.5MW to 6MW, not 7MW. The application does not clearly identify the final turbine manufacturer or model capable of delivering the maximum 7MW output within the stated design envelope, nor does it confirm whether the carbon assessment, the noise, shadow flicker and collision-risk modelling addressed elsewhere in this submission, and the headline 91MW capacity figure have all been calculated using the same turbine specification. Clarification should be provided regarding the turbine manufacturer and model assumed in the 7MW scenario, the rated output and physical dimensions of that turbine, and whether every environmental assessment in the application has been undertaken on a consistent basis. Until this is resolved, the 91MW capacity figure —

and by extension the carbon balance case addressed in Section 27 of this submission — cannot be relied upon as a definitive assessment.

33.10.3 45-Year Total Industrial Lockup

The applicant is seeking a 10-year permission period, within which the applicant's own Chapter 2 states construction will take 18 to 24 months, followed by a 35-year operational period. The combined effect is a minimum 37-year industrial presence on the Muingmore bogland. For context, a child born in Gweesalia on the day these site notices were erected would be 45 years old before the decommissioning process begins. A 45-year commitment of this scale, on peatland draining to European protected sites, with no turbine model specified, requires the most exacting level of environmental assessment. The application does not provide it.

33.11 Traffic: Catastrophic Impact on Rural Road Infrastructure

Chapter 14 of the EIAR (Traffic and Transportation) contains the following admissions that go significantly beyond what Rural West Environmentalists described in Section 10.10:

Rural West Environmentalists has independently verified the applicant's own Chapter 14 (Traffic and Transportation) traffic count tables (Table 14-2 and associated impact tables). The local access infrastructure comprises the L1206 — carrying a 2023 baseline of 943 total vehicles per day, of which only 44 are HDVs — and the L5252, a minor rural lane carrying a 2023 baseline of just 61 total vehicles per day, of which only 12 are HDVs.

Peak construction traffic will add up to 311 HDV movements and 51 light vehicle movements per day, a combined 362 daily two-way construction vehicle trips, on top of these existing baseline volumes.

The applicant's own Table 14 confirms the resulting impact in its own words: on the L5252 specifically, total two-way traffic rises from a 2023 baseline of 61 vehicles per day to 423 vehicles per day with construction traffic added — a 593% increase in total traffic — while heavy vehicle (HDV) traffic on this same minor rural lane rises from 12 to 323 movements per day, an increase of 2,592% confirmed by the applicant's own calculation. This is not a marginal or incremental impact: it represents a more than 26-fold increase in heavy vehicle traffic on a sub-standard rural lane that was never designed or maintained for HGV traffic. The applicant's

own Chapter 14 separately confirms that 'the increase in the percentage of HDV trips is greater than 100% which is considered to be a high magnitude of impact' for this link — the applicant's own assessment substantially understates the true scale of the change when measured against the actual verified baseline and post-development figures in its own traffic tables.

— The applicant itself admits in Section 15.3 that the unmitigated impact on the N59, L1206, and L5252 during peak construction is of 'Moderate Significance (Significant)' before applying temporary mitigation (Volume 1, pp. 35–36).

These figures represent a complete transformation of the road environment for the communities of Muingmore, Gweesalia, and surrounding townlands for the construction period — which the applicant's own Chapter 2 confirms will last between 18 and 24 months. The impact on elderly residents, children, cyclists, farm traffic, and local businesses along these routes has not been adequately assessed.

33.11.1 The Turbine Delivery Route: 69 Points of Intervention Across Four Counties (Donegal, Sligo, Leitrim, and Mayo), Including Permanent Removal of Bridge Railings, Walls, and Street Furniture

Rural West Environmentalists has directly verified the applicant's own Abnormal Indivisible Load (AIL) Route Survey (Technical Appendix 14-1), which sets out the detailed engineering assessment of the route by which turbine blades, tower sections, and other oversized components will travel from Killybegs Port, County Donegal, to the Muingmore site. The applicant's own survey identifies 69 separate Points of Intervention along this route where physical alteration of the public road network is required to permit passage of the loads. The cumulative scale of permanent and temporary infrastructure removal documented in the applicant's own survey, extracted directly from its own constraint tables, includes: removal of overhead utility lines at a minimum of 24 separate locations (with the explicit instruction that 'all overhead utilities must be removed to allow safe passage'); removal or relocation of dozens of bollards, road signs, chevron signs, traffic signals, and lighting columns across the route; clearance or trimming of trees and vegetation at multiple locations, including the applicant's own admission that 'at this location and throughout the entire route, the tree canopy needs to be trimmed to provide a clear head height', a measure the applicant's own survey acknowledges 'can be subject to ecological constraints'; and construction of entirely new

bypass tracks at the N59/R312 junction and at two further locations on the L1206, none of which currently exist.

Rural West Environmentalists draws particular attention to the applicant's own findings at the N59/R290 roundabout in Ballina, where the survey states: 'one traffic signal, three road signs, one bollard, the bridge railing, pedestrian guardrail and wall should be removed' to permit the raised blade tip to pass. This is not vegetation trimming or temporary signage removal — it is the permanent or semi-permanent alteration of a road bridge structure, its safety railing, and an adjoining wall, in the centre of a populated town, to accommodate the passage of wind turbine components for this single development.

Rural West Environmentalists further draws attention to the applicant's own findings at Crossmolina, where the survey records clearances as tight as 150mm, 200mm, and 250mm between the load and adjacent buildings, and states that 'due to the constrained nature of this location, minimal clearance is expected between the loads and nearby structures at several locations', requiring confirmation 'during the test run' that the clearances are in fact sufficient. The applicant's own survey similarly flags Tone Street and McDermott Street in Ballina as having a 'constrained nature' requiring a repeated swept path assessment, and notes that a 'full traffic management plan will be required for the movement of loads through Ballina.'

Rural West Environmentalists submits that an applicant's own engineering survey identifying 69 points of intervention, including the removal of bridge railings and a wall in a populated town centre, road clearances as tight as 150mm from occupied buildings, and the construction of three entirely new access tracks, demonstrates that the true scale of off-site infrastructure impact associated with this development extends far beyond the immediate Muingmore site and the L1206/L5252 corridor addressed elsewhere in this submission, and has not been adequately disclosed or assessed for its cumulative impact on the towns and villages of Killybegs, Dunkineely, Donegal, Ballyshannon, Bundoran, Cliffony, Grange, Sligo, Ballina, Crossmolina, and Bangor Erris, through which this route passes.

33.11.2 Formal Request

Rural West Environmentalists formally requests that An Coimisiún Pleanála require the applicant to:

- Provide a full schedule of all permanent structural alterations required along the delivery route, including the bridge railing, pedestrian guardrail, and wall identified for removal at the

N59/R290 roundabout in Ballina, together with confirmation of the consent of the relevant road authority and any necessary separate planning permission for these works;

- Confirm the ecological assessment undertaken, if any, in respect of the tree canopy trimming required 'throughout the entire route', given the applicant's own acknowledgement that this work 'can be subject to ecological constraints', and confirm whether this assessment has had regard to bat and bird species protected under the EU Habitats and Birds Directives along the delivery corridor;
- Confirm the consultation undertaken with residents and business owners at the specific locations identified as having clearances as tight as 150mm from occupied buildings, including Crossmolina, and provide a scheme of compensation or remediation in the event of damage to property during the conduct of these deliveries;
- Provide a consolidated cumulative traffic and disruption assessment for the towns and villages along the full delivery route, rather than treating the route as a series of isolated engineering points of intervention.

33.11.2A The Applicant's Own EIAR Confirms a 17MW Capacity Range — the Turbine Has Not Been Selected

Rural West Environmentalists draws An Coimisiún Pleanála's attention to a fundamental admission in the applicant's own Chapter 2, Section 2.29 (Power Output). The EIAR states: "The Proposed Development will have an estimated installation capacity of between 74.1 MW to 91 MW depending on the final turbine technology installed."

The applicant's own footnote at Chapter 2 paragraph 102 further states: "the MW output is stated here based on turbines of between 5.7 MW and 7 MW output only for the purposes of assessment of benefits towards climate." The turbine specification at Chapter 2 further confirms: "The exact turbine will be subject to a competitive procurement process that will only commence if the Proposed Development receives consent."

This is a 17MW range in declared installed capacity — a difference of 23% between the lower and upper bounds. The environmental impact assessment has been conducted without knowing which turbine will be installed, what its specific acoustic characteristics will be, what its precise rotor diameter will be (stated as a range of 149–163 metres), or what foundation loads will be imposed on the deep peat. The applicant is seeking permission for an infrastructure commitment whose defining technical characteristics are unresolved. An

Coimisiún Pleanála is being asked to assess environmental impacts that cannot be fully assessed because the core technical parameters have not been fixed.

Rural West Environmentalists submits that this is not a minor technical detail. The acoustic profile of a 5.7 MW turbine differs from that of a 7 MW turbine. The rotor swept area of a 149-metre diameter rotor differs meaningfully from one of 163 metres, with direct consequences for shadow flicker, bird and bat collision risk, and visual impact. The foundation load requirements differ. The piling solution may differ. None of these variables has been resolved, and the competitive procurement process that would resolve them has not yet begun and will not begin unless and until permission is granted. An Coimisiún Pleanála is therefore being asked to grant permission for a development whose environmental impacts have been assessed against a range of possible specifications rather than the actual specification that will be built.

33.11.2B The L5252 Baseline Is Already at Capacity — The Applicant's Own Speed Data Confirms It

Rural West Environmentalists draws An Coimisiún Pleanála's attention to a further material finding within the applicant's own Chapter 14 traffic data that compounds the 2,592% HDV increase identified at Section 33.11 of this submission.

The applicant's own Table 14-16 records the baseline traffic on the L5252 west of the L1206 as 61 vehicles per day in total, of which 12 are already Heavy Goods Vehicles. The road therefore already carries HGV traffic at baseline — it is not a purely light-vehicle road. The 12 baseline HDVs rising to 323 during peak construction is the basis for the 2,592% HDV increase cited throughout this submission, and that figure is taken directly from the applicant's own Table 14-31.

Critically, the applicant's own Table 14-17 (Speed Performance, L5252) records that 85% of traffic on the L5252 travels at speeds not exceeding 49.8 kilometres per hour — significantly below the 60 kph national speed limit for rural local roads to which this road is subject. The applicant's own traffic consultant acknowledges this finding in Chapter 14 without drawing the appropriate conclusion from it.

A road on which 85% of traffic already travels at 49.8 kph or below — on a road with a 60 kph limit — is a road that is operating at or near its physical capacity for its current traffic mix. Drivers on a single-lane bog road slow to sub-limit speeds because the road geometry, sight

lines, surface condition, and carriageway width constrain them to do so. This is not driver caution — it is the physical reality of a narrow, unsurfaced, single-lane local road serving a remote rural community.

Rural West Environmentalists submits that introducing 323 HDV movements per day onto a road that is already physically constraining its current 61 vehicles per day to speeds averaging under 50 kph is not a manageable construction impact. It is a wholesale transformation of a road that the applicant's own data shows is already operating at the limit of its geometric and structural capacity. The applicant's traffic assessment classifies this as a Low sensitivity link and assigns a Slight significance to the impact. Rural West Environmentalists submits that a classification of Low sensitivity for a single-lane bog road carrying a remote rural community, on which 85% of existing traffic already travels below 50 kph, is not a defensible conclusion. Further, the applicant's own paragraph 577 states that peak construction months will generate 51 additional light vehicle two-way trips per day — on top of the 323 HDV movements. Total traffic on the L5252 during peak construction would therefore reach approximately 423 vehicles per day, of which 323 would be HDVs. The applicant's own Table 14-31 confirms this figure. On a road currently carrying 61 vehicles per day at average speeds of under 50 kph, this represents a total traffic increase of 593% and an HDV increase of 2,592%. The applicant's own speed data establishes that the road cannot physically absorb this load without fundamental alteration to its character and the safety of every person who lives on or uses it.

33.11.2C The N59 Traffic Survey Does Not Distinguish Between the Delivery Route and the Irrelevant Southern Corridor

Rural West Environmentalists draws An Coimisiún Pleanála's attention to a methodological deficiency in the applicant's traffic assessment of the N59 that has not been identified elsewhere in this submission. The applicant's own Chapter 14 confirms that its Automatic Traffic Count survey on the N59 was conducted at a point approximately 1.6 kilometres east of the R313 junction at Bangor Erris — on the N59 running northeast toward Sligo and Belladrihid, approximately 95 kilometres to the east. This is the direction from which all construction traffic will arrive, as confirmed at Chapter 14, paragraph 575: 'All construction vehicles will enter the Main Wind Farm Development Site from the L5252, with the majority of vehicles originating from the northeast along the N59 east of Bangor Erris.'

However, the N59 also runs south from Bangor Erris through Ballycroy toward Newport and Westport. This southern section is an entirely different road corridor serving entirely different communities in a different direction. It carries different traffic, serves different sensitive receptors, and has no role whatsoever in the construction delivery route for this development. Construction vehicles will not travel south of Bangor Erris on the N59. The communities along that southern corridor are not affected by construction traffic from this project.

The applicant's Chapter 14 refers to 'the N59' throughout as a single undifferentiated study area link, without clearly distinguishing between the northeast section — the actual delivery approach corridor — and the southwest section toward Ballycroy, which is irrelevant to this application. This creates a material risk that the traffic baseline presented — 2,397 vehicles per day including 165 HDVs at the survey point — is being used to characterise the N59 in the vicinity of Bangor Erris as a road carrying a relatively high volume of traffic, when in fact the survey point captures traffic travelling in two different directions: northeast toward the construction route, and southwest toward Ballycroy. The traffic travelling southwest toward Ballycroy is not affected by this development and should not be included in a baseline characterisation of the delivery corridor.

If a proportion of the 2,397 vehicles per day recorded at the survey point are turning south at Bangor Erris and therefore not travelling on the section of N59 immediately adjacent to the R313 junction and L1206 — the section actually used by construction traffic — then the baseline count of 2,397 vehicles per day overstates the traffic on the relevant delivery corridor. The communities along the N59 northeast of Bangor Erris, who will bear the full impact of 323 HDV movements per day during peak construction, are living alongside a road whose actual baseline traffic the applicant has not accurately measured in isolation from the irrelevant southern corridor.

Rural West Environmentalists further notes that the N59 south of Bangor Erris runs through Ballycroy National Park — a wilderness landscape of international significance. The applicant's failure to distinguish the two N59 corridors also means that the sensitive receptors along the southern corridor have been included in a traffic study that does not affect them, while potentially diluting attention from the communities along the northeastern corridor who are genuinely impacted. A traffic assessment that treats a forked national road as a single undifferentiated link has not adequately characterised the impact on the population actually affected.

Rural West Environmentalists formally requests that An Coimisiún Pleanála require the applicant to provide a corrected traffic analysis that clearly distinguishes between the N59 northeast of Bangor Erris — the actual delivery corridor — and the N59 southwest of Bangor Erris, which is irrelevant to this application, and that demonstrates the baseline traffic count accurately reflects the section of road affected by construction traffic movements.

33.11.3 No Pre-Works Road Condition Survey: The Applicant Cannot Prove What Damage It Caused

The applicant's own Construction Traffic Management Plan (Technical Appendix 14-4) states that 'post construction, road condition will be reviewed against pre-works records to identify and rectify any project related damage', and that 'engagement with Mayo County Council and Transport Infrastructure Ireland will be maintained throughout delivery windows to confirm restrictions, notify any short-term traffic management, and agree reinstatement.' Rural West Environmentalists notes that this promise is entirely dependent on the existence of adequate pre-works baseline records of road condition. No such pre-works road condition survey has been submitted with this application, nor does any part of the application confirm that one has been commissioned or agreed with Mayo County Council.

Rural West Environmentalists submits that this is a material gap. Without an independently verified pre-works record of the condition of the L5252, L1206, and all other roads on the delivery route, there will be no evidential baseline against which any post-construction assessment can be made. The applicant will be in a position to dispute that any road damage attributable to construction traffic existed prior to works commencing, leaving affected communities and Mayo County Council with no enforceable record to rely upon. This is particularly acute given that the L5252 and L1206 are rural roads built on bog, not designed or maintained for the volume or weight of HGV traffic this development requires, and that the applicant's own Table 14 confirms a 2,592% increase in heavy vehicle movements on the L5252 alone during the peak construction period.

Rural West Environmentalists formally requests that An Coimisiún Pleanála require the applicant to commission and submit an independently certified pre-works road condition survey for every road on the construction traffic and AIL delivery route prior to any permission being granted, and that any planning permission be conditioned on the applicant providing

that baseline survey to Mayo County Council for agreement before any construction traffic commences.

33.11.4 Continuous Flight Auger Piling: A Deferred Decision with Direct Contamination

Implications

The applicant's own Construction Environmental Management Plan (Technical Appendix 2-1) lists Continuous Flight Auger (CFA) piling as one of the permissible piling methods for turbine foundations. The document states: 'Continuous Flight Auger — Typically used where bore stability can be maintained and groundwater inflow is manageable.' The final choice of piling method is explicitly deferred to the construction stage, to be determined by ground investigation results at that point.

Rural West Environmentalists submits that this deferral is not acceptable given the environmental context of this site. CFA piling works by rotating a continuous helical auger into the ground and simultaneously pumping concrete in as the drill is withdrawn. The process inherently brings spoil, groundwater, and in this context peat arisings and contaminated water to the surface. On a site with confirmed peat depths of up to 6.4 metres, sitting above a drainage network that flows via the Doolough Stream — already classified as Poor status under the Water Framework Directive — into Blacksod Bay and the connected European protected sites, CFA piling represents a direct, foreseeable, and unassessed contamination pathway. The fundamental problem is this: the environmental impact assessment for this application has been conducted without knowing which piling method will actually be used. If CFA is ultimately selected, the impacts on peat, groundwater, and downstream water quality will be materially different from those associated with bored piles with temporary casing. An environmental assessment that cannot specify the construction method whose impacts it is assessing cannot be regarded as complete.

Rural West Environmentalists formally requests that An Coimisiún Pleanála require the applicant to: (a) confirm whether Continuous Flight Auger piling is or is not proposed at any of the 13 turbine foundation locations; (b) if CFA cannot be excluded, provide a specific assessment of the contamination risk to the Doolough Stream and connected European sites from peat arisings and contaminated groundwater brought to the surface by this method; and (c) confirm, with reference to confirmed peat depths and groundwater conditions at each

turbine location, whether 'bore stability can be maintained and groundwater inflow is manageable' as the applicant's own CEMP requires before CFA can be used.

33.11.5 Concrete and Aggregate Quality: No Independent Quality Assurance Plan Submitted

Rural West Environmentalists draws An Coimisiún Pleanála's attention to a documented precedent directly relevant to the structural integrity of wind turbine foundations on the island of Ireland. In July 2017 it was reported that SSE had discovered defects in the concrete foundations of as many as 50 wind turbines across Ireland, with planning documents filed with Fermanagh and Omagh District Council in Northern Ireland confirming that remedial work was required at a County Tyrone wind farm. The council documents stated: "Regular site inspections have identified defects in the concrete that forms the foundations on all turbine bases." Issues were also identified at wind farms in Cork and Cavan. SSE confirmed the defects and stated that repair work was needed to prevent further deterioration, while noting there was no immediate risk of structural failure.

Rural West Environmentalists does not assert that similar defects will occur at Muingmore. It does assert that this precedent demonstrates that wind turbine foundation concrete quality is a real and documented risk on the island of Ireland, and that independent quality assurance — not reliance on the contractor's own certification — is necessary. The Muingmore proposal presents particular challenges in this regard. The site is on deep Atlantic blanket bog with confirmed peat depths of up to 6.4 metres. Peat can compress, move, and change when drained or heavily loaded. Each turbine foundation will be exposed to constant dynamic loading from turbine weight, wind pressure, and blade movement. The final turbine model has not been selected and the piling method has been deferred to construction stage. The applicant is seeking permission for a 35-year structure whose structural design has not been finalised.

No independent Concrete and Aggregate Quality Assurance Plan has been submitted with this application. Rural West Environmentalists formally requests that An Coimisiún Pleanála require the applicant to submit, before any permission is granted, an independent Concrete and Aggregate Quality Assurance Plan covering the following:

— **Aggregate source:** the source of all aggregate, concrete, and imported stone for turbine foundations, crane hardstands, access roads, the substation, and the BESS compound

- **Geological and petrographic testing:** independent geological and petrographic testing of each aggregate source, with specific reference to the risk of problematic minerals given Mayo's documented defective concrete block history
- **Standards compliance:** compliance with relevant Irish Standards and European Standards for structural concrete in wind turbine foundations
- **Independent certification:** independent third-party testing and certification of each concrete batch, separate from the contractor's own quality control
- **Full traceability:** full traceability of aggregate source, concrete mix design, batch records, delivery dockets, and pour records for every foundation
- **Long-term inspection:** a programme of independent long-term structural inspection of every turbine foundation throughout the 35-year operational life, with defined trigger points for remedial action
- **Turbine-specific design:** confirmation that the final structural foundation design will be specific to the confirmed turbine model and independently verified ground conditions at each individual turbine location before construction commences
- **Defect response:** a clear, publicly available process for notifying An Coimisiún Pleanála and Mayo County Council of any identified foundation cracking, movement, or deterioration
- **Foundation design:** approval of the final foundation design by an independent structural engineer before any concrete is poured
- **Mica risk:** a specific assessment of the risk of problematic aggregate sourced from quarries within or adjacent to the affected geological zones given Mayo's experience with the defective concrete block crisis

Rural West Environmentalists submits that seeking permission for 13 turbine foundations of approximately 1,000 cubic metres each — totalling approximately 13,000 cubic metres of structural concrete supporting 180-metre structures on deep peat bog — without an independent quality assurance plan and without a confirmed turbine model or piling method, is not consistent with the precautionary approach required for an application affecting five European protected sites and a community that will live alongside these structures for 35 years.

33.12 Public Consultation: Aarhus Convention Obligations Not Met

The Community Consultation Report (Technical Appendix 3-7) documents a public engagement campaign that fails to meet the core requirements of meaningful public participation under the Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (1998), to which Ireland is a signatory.

Section 2.0 confirms the applicant identified 225 homes within a 2.5km radius of the proposed turbines. During the initial door-to-door phase (June 2023), the project team met with only 67 householders (30%), leaving 70% of households unreached in person. During the follow-up phase (October 2025), they spoke with only 83 householders (37%), still leaving 63% of households without direct personal contact twenty-eight months after the initial door-to-door phase. Rural West Environmentalists acknowledges that the applicant also operated a dedicated phone line and email address, a project website, and engaged with elected representatives including local Councillors and TDs. None of these additional channels substitute for direct personal contact with the residents most directly and personally affected. A phone line and email address are passive channels that depend entirely on the resident already knowing enough about the proposed development, and feeling sufficiently informed and motivated, to initiate contact themselves; they do not reach a resident who has not yet engaged. Engagement with elected representatives, however valuable, is not engagement with the affected residents themselves. The applicant's own figures confirm that even after two separate door-to-door phases spanning more than two years, fewer than four in ten households in the immediate 2.5km radius had been personally contacted. Rural West Environmentalists submits that, for a Strategic Infrastructure Development of this scale and permanence, requiring effective, equitable, and informed public participation under the Aarhus Convention 1998, a sustained two-in-three non-contact rate with the closest-affected residents falls materially short of an adequate public consultation process, regardless of the supplementary channels that were also made available.

Section 2.12 — Absence of Engagement with Rural West Environmentalists

Section 4.12 of the applicant's EIAR states that email engagement was conducted with individuals and community groups during the pre-application consultation process. Rural West Environmentalists Limited and Erris Action Group — the primary community environmental organisations representing local residents in opposition to this development, with a

membership drawn from the immediate area — received no contact, no invitation to engage, and no consultation whatsoever from the applicant or its agents at any stage of the pre-application process. This is not a matter of minor administrative oversight. Rural West Environmentalists and Erris Action Group had been publicly active in this area and was identifiable. The applicant's claim of comprehensive community engagement cannot be sustained.

— The applicant held its main public Drop-In Clinic on 28 January 2026 at the Broadhaven Hotel in Belmullet. The proposed turbine layout is located near Gweesalia and Doolough, approximately 4km north of Gweesalia and 11km west of Bangor Erris. Belmullet is a town situated at the isthmus connecting the Mullet Peninsula to the mainland, approximately 11km from the development site at Muingmore and Doolough. The Broadhaven Hotel, where the clinic was held, is an inland venue within the town. For residents of the directly affected townlands — who are the primary stakeholders in this application — travelling to Belmullet for a consultation clinic requires either private transport or assistance. Holding the primary consultation clinic 11km from the affected community, rather than in the community itself at a facility such as Geesala Community Centre, created a practical and geographic barrier for elderly, less mobile, and non-driving residents. This is reflected in the outcome: only 21 individuals attended over a 12-hour window.

— Section 2.0 acknowledges that shadow flicker, noise levels, visual impact, and public health were the primary concerns raised by residents. The applicant's response was to publish standard regulatory documents on its website. Directing face-to-face concerns to a digital portal is not a proactive or meaningful response under the Aarhus Convention.

The Aarhus Convention requires that public participation be effective, genuine, and timely — not a procedural formality. A consultation process that fails to reach 60% of directly affected households, holds its primary clinic in a location geographically inconvenient for the affected community, and responds to specific concerns with regulatory boilerplate, does not meet this standard.

Section 34: Battery Energy Storage System (BESS) and Substation — Inadequate Risk Assessment

The proposed development includes a Battery Energy Storage System (BESS) and associated 110kV substation. While the main observation in this submission focuses on the environmental and legal deficiencies of the wind turbine component, Rural West Environmentalists raises specific and serious concerns about the risk assessment for the BESS that have not been adequately addressed in the application documents.

Rural West Environmentalists has directly verified the applicant's own Chapter 15 (Major Accidents and Disasters), which concludes, in its overall summary, that 'it is assessed that the Proposed Project carries no significant effects in terms of the EIA regulations with respect to major accidents or disasters, nor is it vulnerable to potential disasters or accidents, including both natural and man-made incidents.' In respect of fire specifically, the same chapter states only that 'in the unlikely event that a fire should occur, the operator's internal health and safety management procedures will be followed, and the local fire station will be contacted' — a single generic sentence containing no BESS-specific quantitative risk assessment, no reference to thermal runaway, no discussion of toxic gas release, and no mention of Mayo Fire Service's capacity or resources to respond to a lithium-ion battery fire at this remote, peat-bog location. Rural West Environmentalists submits that a headline conclusion of 'no significant effects' cannot properly be supported by an assessment that does not engage at the level of detail the underlying hazard requires, and that the specific deficiencies addressed in this section demonstrate that the applicant has not, in fact, demonstrated the absence of significant effects to the standard the EIA Directive requires.

i What Is a BESS?

A Battery Energy Storage System of the scale proposed at Muingmore consists of multiple containerised lithium-ion battery units. Lithium-ion batteries store large quantities of electrical energy in a chemically reactive form. In the event of a thermal runaway event — caused by overcharging, physical damage, manufacturing defect, or external fire — a lithium-ion battery can release intense heat, toxic gases (including hydrogen fluoride, carbon monoxide, and other organic fluorides), and potentially sustain fires that are extremely difficult to extinguish with conventional firefighting methods. BESS fires have occurred at commercial-scale facilities in the UK, USA, Australia, and South Korea, with some burning for days.

34.1 Emergency Response Plan Deferred Until After Permission

The application acknowledges that risks associated with the BESS include thermal runaway, fire, gas release, contamination, and environmental incidents. However, the Emergency Response Plan (ERP) — the critical document that would specify how a major BESS fire would be managed, contained, and extinguished — has not been submitted as part of this application. The application defers preparation of the ERP until after planning permission has been granted and after the final battery technology has been selected.

This deferral is legally and practically unacceptable for the following reasons:

- An Coimisiún Pleanála cannot carry out a complete assessment of public safety risks without knowing how those risks will be managed in an emergency. The absence of the ERP is a material information gap that prevents the competent authority from discharging its statutory obligations.
- The Sweetman standard — complete, precise and definitive findings capable of removing all reasonable scientific doubt — applies to the BESS risk assessment as it does to every other component of the development. A commitment to produce an ERP in the future is not a definitive finding. It is a promise to address a critical risk after permission is granted.
- The deferral of the ERP until after the final battery technology is selected means that the entire risk assessment is based on a technology that has not yet been chosen. Different battery chemistries (NMC, LFP, NCA) have materially different thermal runaway characteristics, gas

release profiles, and firefighting requirements. An assessment that does not specify the technology cannot be complete, precise, or definitive.

34.2 Mayo Fire Service Consultation Not Confirmed

Rural West Environmentalists has now directly verified the applicant's own Battery Safety Management Plan (Technical Appendix 4-1), which confirms that Mayo Fire Service has not yet been consulted at all. The applicant's own document states: 'Discussions with the local Fire Authority will take place prior to progressing the Proposed Project to construction stage, allowing review of the proposed facility layout, emergency access arrangements, confirmation of firefighting water requirements, etc.' This confirms that fire authority consultation is deferred until after planning permission has been granted and the applicant is proceeding to construction — not before. The applicant's own document further confirms, at Section 6.1, that 'prior to commencement of construction of the BESS, an updated BSMP... is required to be prepared and submitted to the relevant local planning authority and approved, in consultation with the Health and Safety Authority (HSA)... and the Local Authority Fire Services.' Rural West Environmentalists submits that this sequence is the wrong way round. An Coimisiún Pleanála is being asked to grant permission for a Battery Energy Storage System before Mayo Fire Service has confirmed it has the resources, water supply, specialist equipment, and operational capacity to respond to a lithium-ion thermal runaway event at this specific, remote, peat-bog location — with that confirmation only being sought once construction is already underway. This is not a hypothetical concern. BESS fires require specialist firefighting approaches that differ fundamentally from conventional structural or vegetation fires. Standard firefighting equipment is not effective against lithium-ion thermal runaway and can, in some circumstances, exacerbate the reaction. Mayo Fire Service would need to have:

- Specialist knowledge of BESS fire behaviour and appropriate suppression techniques for the specific battery technology deployed.
- Adequate water supply capacity, given that BESS fires may require very large volumes of water applied over extended periods.
- A pre-prepared response plan specifying access routes to the BESS compound, evacuation zones, and coordination with the National Ambulance Service in the event of toxic gas release.

— Training for firefighters in the use of specialist personal protective equipment against the specific toxic gases that can be released during a lithium-ion thermal runaway.

A completed consultation with Mayo Fire Service, including written confirmation that the Service is satisfied with the emergency arrangements, should be a condition precedent to any planning permission, not an afterthought.

34.3 Contaminated Firewater Runoff: A Direct Threat to the European Sites

This concern is of particular severity in the context of the Muingmore site. The BESS compound is located on blanket peatland with an extensive drainage network connected to local watercourses and ultimately to Blacksod Bay. In the event of a major BESS fire:

— Firefighting water applied to a lithium-ion BESS fire becomes heavily contaminated with battery electrolyte (typically lithium hexafluorophosphate in organic solvent), heavy metals (cobalt, nickel, manganese), thermal decomposition products, and combustion byproducts. This contaminated firewater must be contained and cannot be allowed to enter any watercourse.

— The Muingmore site is on peat, which is highly permeable and has direct hydrological connections to the Doolough Stream (already classified as at-risk under the WFD), Blacksod Bay (SAC 000470 and SPA 004037), and Broadhaven Bay (SAC 000472).

— The application does not specify a contaminated firewater containment system — a bunded collection area or impermeable drainage diversion capable of capturing the full volume of firefighting water that would be applied during a major event.

The volume of firefighting water required for a large-scale BESS fire can be enormous — potentially hundreds of thousands of litres over hours or days. Without a specified, designed, and independently verified containment system, a major BESS fire at Muingmore would represent a catastrophic pollution event for the connected European protected sites. Given that the Doolough Stream is already at risk under the WFD and the bay waters contain internationally rare maerl beds and 14 qualifying SPA bird species, the consequences of an uncontained firewater discharge into this catchment would be severe and potentially irreversible.

34.4 Toxic Plume Dispersion Assessment Not Provided

A lithium-ion thermal runaway event releases a complex mixture of toxic gases, including hydrogen fluoride (one of the most acutely toxic industrial chemicals), carbon monoxide, and various organic fluorides and phosphorus compounds. The potential impact of a toxic plume on nearby residents, emergency responders, livestock, and the wider environment has not been assessed in the application. Rural West Environmentalists has directly verified this omission against the applicant's own Battery Safety Management Plan (Technical Appendix 4-1), which confirms in terms: 'Any further plume dispersion assessment (if required) will be undertaken in accordance with planning conditions imposed by the Local Authority after consultation with the Local Fire Authority.' This is a direct admission, in the applicant's own words, that no toxic plume dispersion assessment has been carried out at the application stage, and that whether one will ever be carried out at all is expressly conditional ('if required') and deferred to a future planning-condition stage after permission has already been granted. Rural West Environmentalists submits that An Coimisiún Pleanála cannot lawfully grant permission for a development incorporating a Battery Energy Storage System of this scale while the single most safety-critical assessment for nearby residents — what happens to a toxic gas plume in the event of thermal runaway, and whether any home falls within the resulting exclusion zone — remains both unperformed and only conditionally promised for some future date.

Rural West Environmentalists has directly verified the applicant's own Chapter 15 (Major Accidents and Disasters), which states, in respect of major accidents involving dangerous substances: 'The Proposed Project does not involve the use of substances / chemicals that require special control or licensing... the storage of materials of this kind are very limited.' This statement appears in the same chapter that elsewhere acknowledges the BESS facility's fire risk and the presence of 'inbuild fire detection and aerosol/gas suppression systems' specifically because of the hazard posed by the battery chemistry. Rural West Environmentalists submits that this is difficult to reconcile with the applicant's own Battery Safety Management Plan, which confirms the BESS will store substantial quantities of lithium-ion battery material across 120 battery containers, and with the well-documented capacity of lithium-ion thermal runaway to release hydrogen fluoride and other acutely toxic substances. Rural West Environmentalists requests that An Coimisiún Pleanála require the applicant to confirm, by reference to the Control of Major Accident Hazards Involving Dangerous

Substances Regulations and the relevant HSA thresholds, why the lithium-ion battery inventory proposed for this BESS facility is not considered to constitute a substance requiring special control or licensing, given the toxic gas release risk the applicant's own safety documentation elsewhere acknowledges.

Given that residential properties are located as close as 740 metres from the nearest turbine — and the BESS compound is within the development footprint — a toxic gas plume in unfavourable wind conditions could reach residential areas rapidly. The applicant must provide:

- A quantitative toxic plume dispersion assessment based on the worst-case battery chemistry and volume proposed, using site-specific meteorological data from the Muingmore monitoring mast.
- A definition of the toxic exclusion zone that would be established in the event of a thermal runaway, and confirmation that no residential properties fall within this zone.
- A protocol for public notification and evacuation if a thermal runaway event occurs.

Rural West Environmentalists further notes that the applicant's Chapter 15 dismisses Seveso III applicability to this development in a single conclusory statement — that the project does not involve substances within the scope of the Major Accident Hazards Directive. This conclusion has not been adequately reasoned or evidenced. The Seveso III Directive (2012/18/EU) applies to establishments handling dangerous substances above defined threshold quantities, including flammable and toxic substances. A large-scale BESS of the capacity proposed contains battery electrolyte — typically lithium hexafluorophosphate in organic solvent — in quantities that may approach or exceed Seveso III lower-tier thresholds for toxic and flammable substances. The applicant has not provided a quantified screening assessment demonstrating that the total inventory of hazardous substances in the BESS falls below all relevant Seveso III thresholds. A bare assertion that Seveso III does not apply is not a screening assessment. This is particularly relevant given that the European Commission published its second implementation report on the Seveso III Directive in September 2025, confirming it covers over 11,000 EU establishments and remains fully operative, and reaffirmed its commitment to the Directive on 10 July 2026 — the 50th anniversary of the original Seveso disaster. Rural West Environmentalists formally requests that An Coimisiún Pleanála require the applicant to provide a quantified Seveso III screening assessment for the BESS, confirming with evidence

whether the total hazardous substance inventory falls below lower-tier thresholds, before any determination is made.

34.5 The BESS as Part of an Integrated Industrial Complex

The proposed BESS and substation do not exist in isolation. They form part of a wider industrial energy complex including 13 turbines at 180 metres, transformers, switchgear, battery containers, security fencing, permanent lighting, drainage infrastructure, and access roads across 455 hectares of Atlantic blanket bog. The cumulative impact of all these elements on residential amenity, landscape character, public safety, and the environment must be assessed as a single integrated development. The piecemeal treatment of the BESS safety assessment — with critical documents deferred to after permission — is inconsistent with the requirement for a complete environmental impact assessment of the whole project.

34.6 Request

Rural West Environmentalists formally requests that An Coimisiún Pleanála:

- Require the applicant to submit a completed Emergency Response Plan, including a confirmed formal consultation response from Mayo Fire Service, before any determination is made on this application.
- Require the applicant to identify the final battery technology and chemistry, and submit a technology-specific risk assessment addressing thermal runaway characteristics, gas release profiles, and appropriate suppression methods.
- Require the applicant to submit a quantitative contaminated firewater containment assessment, with specific design details for a bunded collection system capable of containing the full volume of firefighting water from a worst-case BESS fire without any discharge to the drainage network.
- Require the applicant to submit a quantitative toxic plume dispersion assessment based on site-specific meteorological data, defining the toxic exclusion zone and confirming no residential properties fall within it.

— Treat the absence of these documents as a material deficiency in the application that prevents the competent authority from carrying out a complete and legally sufficient Environmental Impact Assessment.

Section 35: Conclusion and Formal Request for Refusal

Rural West Environmentalists Limited has demonstrated, across this submission, that the proposed Muingmore Wind Farm (PAX16.324387) fails every significant legal and planning test applicable to it. The grounds for refusal are extensive, independently sufficient, and mutually reinforcing.

Ground for Refusal	Legal Basis	Status
SPA 004037 absent or inadequately assessed in NIS	Art 6(3) Habitats Directive; Art 7 Birds Directive; S.I. 388/2021	POTENTIALLY FATAL
Broadhaven Bay SAC (000472): tidal connectivity not modelled	Art 6(3) Habitats Directive; CJEU Waddenzee C-127/02	POTENTIALLY FATAL
Maerl beds (Annex V species, new record): irreversible loss not excluded	Art 6(3) Habitats Directive; Annex V	POTENTIALLY FATAL
Ramsar Convention obligations not assessed	Ramsar Convention (1971); national policy	MATERIAL OMISSION
European Eel (Critically Endangered, Annex V): found on site, not assessed in NIS	Annex V Habitats Directive; EU Eel Regulation 1100/2007	MATERIAL DEFICIENCY
European Otter (Annex II): inadequate survey of site footprint and commuting routes	Art 6(3) Habitats Directive; Annex II	MATERIAL DEFICIENCY
Marsh Fritillary (Annex II Priority Species): not adequately assessed	Art 6(3) Habitats Directive; Annex II Priority	MATERIAL DEFICIENCY

Ground for Refusal	Legal Basis	Status
Peat stability: self-commissioned, no independent verification	Precautionary principle; Cashelnavean 2024; Killybegs 2025	SERIOUS CONCERN
No viable alternative site demonstrated	Art 6(3) Habitats Directive; Sweetman [2014] IEHC 473	LEGAL STANDARD NOT MET
Doolough Stream: WFD at-risk non-deterioration obligation	Art 4(1) Water Framework Directive	LEGAL BREACH RISK
Shadow flicker: 30-hour threshold exceeded without mitigation — admitted by applicant	Wind Energy Dev. Guidelines 2006; residential amenity	ADMITTED DEFECT
Grid Connection Route (25.5km) deferred — EIAR does not meet O’Grianna standard for cumulative GCR assessment	EIA Directive (2011/92/EU); O’Grianna v. An Bord Pleanála; Planning & Development Acts	POTENTIALLY FATAL
Cumulative assessment: Oweninny Phase 3 (same townlands, granted 26 May 2026) not adequately assessed	Art 6(3) Habitats Directive; CJEU Waddenzee; in-combination obligation	MATERIAL DEFICIENCY
No carbon balance assessment	Mayo Draft RE Strategy 2026; Climate Act 2021; national policy	MATERIAL OMISSION
No night-time visual impact assessment for Dark Sky Park (Gold Tier)	Mayo Draft RE Strategy 2026; material planning consideration	MATERIAL OMISSION
Trista Bog NHA: no hydrological impact assessment	Wildlife (Amendment) Act 2000	MATERIAL OMISSION
Crannogs: preservation condition impact not assessed	National Monuments Acts	MATERIAL OMISSION

Ground for Refusal	Legal Basis	Status
Wild Mayo DEDP: direct conflict with live government tourism strategy, not assessed	Planning & Development Act 2000, s.143	MATERIAL OMISSION
Mayo County Council peatland exclusion policy: direct conflict	Mayo Draft RE Strategy April 2026	MATERIAL POLICY CONFLICT
RWE website contradicts NIS: claims no Natura 2000 sites at risk	Accuracy obligations of applicant	CREDIBILITY ISSUE
In-combination assessment inadequate across all three European sites	Art 6(3) Habitats Directive; CJEU Waddenzee C-127/02	LEGAL REQUIREMENT NOT MET
Setback: 740m nearest dwelling is only 20m beyond 4x tip height guideline figure	Wind Energy Dev. Guidelines 2006 (emerging revision)	CONCERN
Cumulative shadow flicker from five nearby turbines not fully assessed	Wind Energy Dev. Guidelines 2006	CONCERN
Curlew (Red-listed): population-level collision mortality not demonstrated below significance threshold	Art 6(3) Habitats Directive; EU Birds Directive	MATERIAL DEFICIENCY
Light-bellied Brent Goose seagrass food resource not quantified	SPA 004037 Conservation Objectives	HABITATS DIRECTIVE GAP
Fáilte Ireland not notified as prescribed body despite direct DEDP conflict	Planning & Development Acts; prescribed body obligations	PROCEDURAL GAP

Ground for Refusal	Legal Basis	Status
Inland Fisheries Ireland not notified despite European Eel finding on site	IFI statutory remit; prescribed body obligations	PROCEDURAL GAP
No independent otter survey covering full development footprint	Art 6(3) Habitats Directive; Annex II	MATERIAL DEFICIENCY
Amplitude modulation and low-frequency noise not adequately assessed	Precautionary principle; health protection obligations	CONCERN
Photomontages do not include key DEDP Wild Atlantic Way viewpoints	Wild Mayo DEDP 2026; planning assessment completeness	MATERIAL OMISSION
Aviation Review Statement not reviewed by IAA as prescribed body	IAA statutory remit; prescribed body obligations	PROCEDURAL GAP

This is not a case where a single technical concern or a minor procedural gap might be addressed by a further information request. The deficiencies identified in this submission go to the fundamental legality of the project in this location. They include the absence of legally required environmental assessments for multiple European protected sites, the admission of an exceedance of residential amenity thresholds, the deliberate fragmentation of an integral development, and a failure to conduct an adequate cumulative assessment despite the newly consented Oweninny Phase 3 project in the same townlands.

Approving this development would expose the State to infringement proceedings by the European Commission for breach of the EU Habitats Directive and the EU Birds Directive. It would expose An Coimisiún Pleanála to judicial review on multiple grounds. And it would cause irreversible, permanent destruction of internationally rare marine habitats, a Critically Endangered fish species, the foraging habitat of 14 European bird species, and a wild landscape

that a community has spent decades protecting and that the government invested in as a tourism asset just seventeen days before these site notices appeared.

Rural West Environmentalists Limited, on behalf of the community it represents, formally and respectfully requests that An Coimisiún Pleanála fulfil its statutory and legal duty and refuse permission for this project in its entirety.

Brian Bakeberg

Director, Rural West Environmentalists Limited (Company No. 802923)

President, Erris Chamber of Commerce

Member, Wild Mayo DEDP Steering Committee

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List of Referenced Documents

Scientific and Survey Evidence

— NPWS Conservation Objectives for Mullet/Blacksod Bay Complex SAC (000470) — Coastal Habitats. Available:

[https://www.npws.ie/sites/default/files/publications/pdf/Mullet%20Blacksod%20Bay%20Complex%20SAC%20\(000470\)%20Conservation%20objectives%20supporting%20document%20-%20Coastal%20habitats%20%5BVersion%201%5D.pdf](https://www.npws.ie/sites/default/files/publications/pdf/Mullet%20Blacksod%20Bay%20Complex%20SAC%20(000470)%20Conservation%20objectives%20supporting%20document%20-%20Coastal%20habitats%20%5BVersion%201%5D.pdf)

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— MERC Consultants (2007). Surveys including Broadhaven Bay SAC. Available:

https://www.npws.ie/sites/default/files/publications/pdf/MERC_2007_NPWS_Subtidal_Surveys.pdf

— NPWS Site Synopsis and Conservation Objectives, Mullet/Blacksod Bay Complex SAC (000470). Available: <https://www.npws.ie/protected-sites/sac/000470>

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— S.I. No. 388/2021 — European Union Conservation of Wild Birds (Blacksod Bay/Broad Haven SPA 004037) Regulations 2021. Available: <https://www.irishstatutebook.ie/eli/2021/si/388/made/en/print>

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Application Documents

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- Killybegs Access Works (Bradán Wind Limited) — An Coimisiún Pleanála refusal (2025). Reported: <https://www.donegallive.ie/news/home/1880782>
- Cashelnavean Wind Farm — High Court injunction, Mr Justice Holland (April 2024). Reported: <https://www.irishtimes.com/crime-law/courts/2024/04/11/council-secures-court-order-prohibiting-further-development-at-wind-farm-where-bog-slide-occurred/>
- Oweninny Wind Farm Phase 3 (An Bord Pleanála, granted 26 May 2026). Available: <https://www.oweninnywindfarmphasethreeplanning.ie>
- An Bord Pleanála Case 311157: Sheskin Wind Farm grid connection to Bellacorick 110kV. Available: <https://www.pleanala.ie/en-ie/case/311157>

Legal Framework

— Coolglass Windfarm Limited v An Coimisiún Pleanála [2026] IESC 5 (4 February 2026).

Available: <https://www.courts.ie/judgments>

— Council Directive 92/43/EEC on the conservation of natural habitats (EU Habitats Directive), in particular Article 6(3) and Annexes II, IV, V. Available: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:31992L0043>

— Council Directive 2009/147/EC on the conservation of wild birds (EU Birds Directive).

Available: <https://eur-lex.europa.eu>

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— EU Eel Regulation (EC) No. 1100/2007. Available: <https://eur-lex.europa.eu>

— Case C-127/02 — Landelijke Vereniging tot Behoud van de Waddenzee (Waddenzee) [2004]: precautionary principle and in-combination assessment.

— Case C-258/11 — Sweetman v An Bord Pleanála [2013]: certainty beyond reasonable scientific doubt.

— Sweetman v An Bord Pleanála [2014] IEHC 473: alternatives analysis.

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- EPA Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (2022). Available: <https://www.epa.ie/publications/monitoring--assessment/assessment/epa-guidelines-on-the-information-to-be-contained-in-environmental-impact-assessment-reports-2022.php>
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- Peter Sweetman & Associates. Observation on Oweninny Wind Farm Phase 3 application (ABP-316178-23), 24 May 2023. Available on the An Bord Pleanála/An Coimisiún Pleanála public case file at: <https://www.pleanala.ie/en-ie/case/316178>
- CJEU Case C-323/17 — People Over Wind and Peter Sweetman v Coillte Teoranta [2018]: mitigation measures cannot be taken into account at the screening stage of Appropriate Assessment under Article 6(3). Available: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A62017CJ0323>

APPENDIX

Referenced Documents, Key Extracts and Evidence Directory

Contains full text extracts from primary scientific evidence, verified planning precedents,
key legal provisions, and policy documents cited in this submission.

RURAL WEST ENVIRONMENTALISTS LIMITED

Section 36: Cross-Reference Index — Observations Against Every Chapter and Technical Appendix of the Applicant's EIAR

Rural West Environmentalists has structured this submission thematically. This index cross-references each of the applicant's 17 EIAR chapters against the specific sections of this submission in which they are addressed, confirming that every chapter and the great majority of technical appendices have been directly reviewed.

Chapter 1 — Introduction

Section 1. Procedural and structural observations. The independent technical review by Coyle Environmental Ltd (22 July 2026) reviewed the submission as a whole and confirmed it is exceptionally detailed. No chapter-specific technical challenge beyond the framing role of Chapter 1.

Chapter 2 — Description of the Proposed Project

Section 2. Development description, scale, and infrastructure. Turbine specification ambiguity at Section 33.10.2.

Chapter 3 — Site Selection and Alternatives

Section 18. The 'maximising wind take' design-stage admission at Section 17.1.

Chapter 4 — Population and Human Health

Sections 16, 11, 23. Directly verified: 740m nearest dwelling specifically from Turbine 10; 'had regard to' framing of 2019 guidelines; near-zero shadow flicker commitment tested against templated and unsurveyed window dataset.

Chapter 5 — Biodiversity

Sections 3, 6, 7, 8, 12, 13. Directly verified: Kestrel collision risk 1.05–1.19/year; Otter signs on Doolough Stream; Marsh Fritillary 11-vs-13-turbine gap; Annex I priority habitat confirmation. Bat roost assessment conducted at ground level only — insufficient for 454-hectare forested site (Section 33.7.5). 50-metre woodland-edge buffer not applied at six high-activity turbines (Section 33.7.5). Habitat condition surveys conducted November 2024 and January 2026 when indicator species dormant (habitat condition section). Article 17 conservation status added for all qualifying habitats and species (Section 4A.1): Blanket Bog *7130 Unfavourable-Bad (U2) declining; Transition Mire 7140 Unfavourable-Inadequate (U1); Wet Heath 4010 Unfavourable-Inadequate (U1); European Eel Critically Endangered IUCN.

Chapter 6 — Land, Soils and Geology

Sections 19, 27. Directly verified: 3,379-location peat stability survey; T10/T11 moderately-high susceptibility confirmed in both narrative chapter and technical appendix.

Chapter 7 — Water (Hydrology and Hydrogeology)

Section 5. Directly verified: applicant's own statement that Poor-status watercourses 'must be restored'; Doolough Stream confirmed 'At Risk' and 'Poor' status. Weser judgment (CJEU C-461/13) cited: any deterioration of a WFD quality element is unlawful unless Article 4(7) exceptions satisfied. Combined WFD+Natura argument at new Section 8A.

Chapter 8 — Air Quality and Climate

Section 27. Directly verified: 4-year carbon payback claim; absent reconciliation with restoration failure-rate evidence confirmed in Peatland Restoration Plan.

Chapter 9 — Noise and Vibration

Sections 23, 33.8. Directly verified: AM 'cannot be measured or predicted in advance'; 'no significant information gaps' claim directly contradicted by 5-of-7 noise station calibration failures.

Chapter 10 — Landscape and Visual

Sections 21, 24, 30. Directly verified: applicant's own admission site falls in Unsuitable designation; Dark Sky assessment inadequacy; Mayo Council 'not happy' admission. Verbatim policy language from adopted RES (Section 21.0, six sub-sections): Unsuitable designation wording; peat soils explicit exclusion; Mayo target exceeded (1,114 MW vs 600 MW target); Blacksod Ramsar identification; 4x tip height setback benchmark. Chapter 12 admission that EIAR treated RES as draft (Section 21.0.6).

Chapter 11 — Shadow Flicker

Sections 11, 33.1. Directly verified: all 368 window entries across 92 properties confirmed identical templated dimensions — no variation anywhere in dataset.

Chapter 12 — Cultural Heritage

Section 26. Directly verified: crannog MA025-004 at 230 metres from Turbine 11; buffer zone addresses only physical contact, not hydrological or vibration pathways.

Chapter 13 — Material Assets, Telecommunications and Aviation

Section 25. Directly verified: complete absence of any Coast Guard, SAR, or Blacksod Lighthouse reference in the main narrative chapter.

Chapter 14 — Traffic and Transportation

Section 33.11. Directly verified and corrected: 2,592% HDV increase on L5252; 69-point AIL route survey including Ballina bridge railing removal; no pre-works road survey submitted; CFA piling deferral. Pre-works road condition survey gap (Section 33.11.3). Continuous Flight Auger piling deferral and contamination risk (Section 33.11.4). Independent concrete and aggregate quality assurance (Section 33.11.5) — SSE foundation defect precedent, 50 turbines, Ireland 2017.

Chapter 15 — Major Accidents and Disasters

Section 34. Directly verified: 'no significant effects' headline; single-sentence fire treatment; Seveso inconsistency; deferred fire authority consultation and plume assessment.

Chapter 16 — Interactions

Section 26. Directly verified: crannog buffer zone limited to physical contact only; hydrological and vibration pathways not addressed.

Chapter 17 — Schedule of Mitigation Measures

Section 13 (Kestrel — MM20 deterrence confirms real collision risk); Section 25 (MM84 — aviation consultation deferred to during determination; no SAR consultation in schedule).

Technical appendices directly reviewed: TA 2-1 (CEMP), 2-2 (Forestry), 3-3 (Scoping Report), 3-4 (Mayo County Council meeting), 3-5 (ACP meeting records), 3-6 (NPWS meeting), 3-7 (Community Consultation), 4-1 (Battery Safety), 5-1 (Habitat Report), 5-2 (Bird Survey), 5-3 (Bat Survey), 5-4 (Aquatic Baseline), 5-5 (Peatland Restoration/HMP), 5-6 (Habitat Condition), 5-7 (Marsh Fritillary), 5-8 (Avian CRM), 6-2 (Peat Landslide), 6-3 (Peat Management Plan), 7-4 (WFD Assessment), 7-5 (Surface Water Lab Results), 9-2 (AM Position Paper), 9-3 (Baseline Noise Survey), 11-1 (Shadow Flicker Input Data), 13-2 (Aviation Review Statement), 13-3 (Telecoms Impact Study), 14-1 (AIL Route Survey), and the SID Application Form and Addenda 1–12 (addressed at Section 32).

APPENDIX OF REFERENCED DOCUMENTS AND KEY EVIDENCE

Companion to the Formal Observation — PAX16.324387 — Muingmore Wind Farm

Purpose of This Appendix

This appendix reproduces key extracts from the primary referenced documents and provides verified URLs for all sources cited in the main observation. It is intended to assist the inspector in locating and verifying the scientific, legal, and planning evidence on which the observation is based. Full documents are publicly available at the URLs provided.

Part 1: Scientific Evidence — Key Extracts and Sources

Document 1: MERC (2008) — Sublittoral Benthic Survey, Mullet/Blacksod Bay Complex SAC

Surveys of sensitive sublittoral benthic communities in Mullet/Blacksod Bay Complex SAC (NPWS commissioned report)

Source: MERC Consultants Ltd / National Parks and Wildlife Service | Year: October 2008

Key Evidence: *The 2008 MERC survey confirms: (1) The recording of maerl (Lithothamnion corallioides and Phymatolithon calcareum) constitutes a new scientific record for this community in Blacksod Bay. Both species are listed in Annex V of the EU Habitats Directive. (2) Extensive Serpula vermicularis biogenic reef communities were documented. (3) Dense seagrass (Zostera marina) beds confirmed in excellent condition. (4) The survey specifically notes the 'generally clear waters' of Blacksod Bay as the key physical condition supporting these communities. (5) The Serpulid reef and Sand Mason communities had not been fully described after the 2008 survey — a return visit was planned for 2009. (6) The survey specifically confirms the canal at Belmullet as approximately 300 metres long, linking Blacksod Bay with the adjacent Broadhaven Bay (also an SAC). (7) Both maerl species noted as listed in Annex V of the EU Habitats Directive in the survey's own footnote 1.*

Relevance: The MERC (2008) survey is the definitive scientific baseline for SAC 000470. It establishes: (a) maerl as a new scientific record protected under Annex I and Annex V; (b) the clear water condition which would be irreversibly degraded by peat runoff; (c) the 300m tidal canal connection to Broadhaven Bay SAC. The NIS must engage with this survey's specific findings — not merely cite its existence.

Full document:

https://www.npws.ie/sites/default/files/publications/pdf/MERC_2008_NPWS_Subtidal_survey_s.pdf

Document 2: NPWS Site Synopsis — Mullet/Blacksod Bay Complex SAC (000470)

NPWS Official Site Synopsis — Mullet/Blacksod Bay Complex SAC, Site Code 000470 (Version date: 26.08.2013)

Source: National Parks and Wildlife Service (NPWS), Ireland | Year: 2013

Key Evidence: *The Site Synopsis confirms: (1) Annex I habitats: Large Shallow Inlets and Bays [1160], Reefs [1170], Mudflats [1140], three priority habitats (Fixed Dunes, Decalcified Dune Heath, Machairs). (2) Annex II species: European Otter (*Lutra lutra*) — 'well distributed throughout the site'; Petalwort (*Petalophyllum ralfsii*). (3) Internationally important winter populations: Great Northern Diver (64), Barnacle Goose (400-500), Brent Goose (212), Bar-tailed Godwit (552). (4) Seven Annex I EU Birds Directive species occurring regularly in winter. (5) Confirms *Serpula vermicularis* reef communities and extensive *Zostera marina* beds. (6) Benthic communities 'very vulnerable to bottom-fishing gear' — directly applicable to construction disturbance.*

Relevance: This is the official NPWS designation record for SAC 000470. It confirms the presence of Annex II European Otter throughout the site — not only in the bay but throughout the site — meaning the Habitats Directive AA obligation for Otter extends to the entire development footprint, including the drainage channels within the construction area.

Full document: <https://www.npws.ie/sites/default/files/protected-sites/synopsis/SY000470.pdf>

Document 3: NPWS Site Synopsis — Broadhaven Bay SAC (000472)

NPWS Official Site Synopsis — Broadhaven Bay SAC, Site Code 000472

(Version date: 01.04.2014)

Source: National Parks and Wildlife Service (NPWS), Ireland | Year: 2014

Key Evidence: *The Site Synopsis confirms: (1) Qualifying interests: Mudflats [1140], Large Shallow Inlets and Bays [1160], Reefs [1170], Atlantic Salt Meadows [1330], Sea Caves [8330]. (2) Eelgrass (Zostera marina) present in sheltered areas. (3) Nationally important wintering populations: Red-breasted Merganser (38), Ringed Plover (484), Grey Plover (52), Sanderling (74), Dunlin (2,108), Bar-tailed Godwit (484). (4) Brent Goose exceeds national/international importance in some winters. (5) Nationally important breeding Sandwich Tern on Inishderry Island. (6) 'Intertidal mud characterised by polychaete communities or muddy sand which support communities of polychaetes and bivalves.' (7) Saltmarshes fringe parts of the site and provide useful roosts for wintering waterfowl.*

Relevance: Broadhaven Bay SAC is a separate European designation with its own qualifying interests and conservation objectives. The tidal canal connection confirmed in the MERC (2008) survey means pollutants entering Blacksod Bay will reach Broadhaven Bay SAC. The NIS must assess the impact on this site independently and fully. Screening it out without adequate hydrological modelling is legally insufficient.

Full document: <https://www.npws.ie/sites/default/files/protected-sites/synopsis/SY000472.pdf>

Document 4: NPWS Site Synopsis — Blacksod Bay/Broad Haven SPA (004037)

NPWS Official Site Synopsis — Blacksod Bay/Broad Haven SPA, Site Code 004037 (Version date: 14.12.2018)

Source: National Parks and Wildlife Service (NPWS), Ireland | Year: 2018

Key Evidence: *The Site Synopsis confirms: (1) INTERNATIONALLY IMPORTANT: Great Northern Diver (308) and Light-bellied Brent Goose (279). Over 20% of all-Ireland populations of Great Northern Diver and Common Scoter use this site. (2) NATIONALLY IMPORTANT: Red-throated Diver (156), Slavonian Grebe (48), Common Scoter (3,772), Red-breasted Merganser (138), Ringed Plover (590), Sanderling (171), Dunlin (1,255), Bar-tailed Godwit (664), Curlew (567). (3) Eight Annex I EU Birds Directive species occurring regularly. (4) Nationally important breeding Sandwich Tern on Inishderry Island (114 pairs in 1994). (5) Nationally important breeding Dunlin (schinzii) — 24 pairs. (6) Eelgrass (Zostera marina) at several localities — primary food source for Light-bellied Brent Goose. (7) Explicitly states: 'Blacksod Bay and Broad Haven is a Ramsar Convention site.' (8) Confirms the site includes Tullaghan Bay, connected via the Trista watercourse — the same watercourse flagged as 'under review' under the WFD at the January 2024 pre-application meeting.*

Relevance: This document confirms the exceptional conservation value of the SPA as the third European protected site directly threatened by this development. The Great Northern Diver alone — with over 20% of the all-Ireland population present — represents a species of international conservation significance. The development threatens this and 13 other qualifying species through both water quality degradation and direct collision risk.

Full document: <https://www.npws.ie/sites/default/files/protected-sites/synopsis/SY004037.pdf>

Part 2: Planning Precedents — Sources and Key Findings

Case	Decision	Key Grounds	URL
Cluddaun Wind Farm, Mayo An Bord Pleanala, May 2015 Ref: PL16.PA0031	REFUSED	Board not satisfied re: impact on surface and groundwater hydrology. Peat slippage and stream flows specifically cited. Same county, same substrate, same legal test as Muingmore.	pleanala.ie/casenum/PA0031.htm
Planree Ltd 49-turbine wind farm, Donegal An Bord Pleanala, 2016	REFUSED	Adverse effects on integrity of European sites. Peat substrate, water table impact, threat to Pettigo Plateau/Lough Nillan Bog SAC. Same developer later responsible for Cashelnavean bog slide.	archive.pleanala.ie

Case	Decision	Key Grounds	URL
Killybegs Access Works (Bradan Wind) An Coimisiun Pleanala, 2025 Inspector: Thorsdalen; Commissioner: Long	REFUSED	SAME DECIDING AUTHORITY. Refused on: peat stability uncertainty; absent hydrological regime assessment; mitigation effectiveness uncertain for water quality. Most directly applicable precedent.	donegallive.ie/news/home/1880782
Cashelnavean Wind Farm, Donegal High Court, April 2024 (Holland J.)	INJUNCTION GRANTED	86,240m3 peat released in bog slide. 65,740m3 entered European- protected rivers. Criminal convictions June 2022. Holland J.: 'Integrity of environmental law weighs heaviest.' Court of Appeal Dec 2024: wind farm unauthorised.	irishtimes.com — April 2024
Coolglass Windfarm v An Coimisiun Pleanala [2026]	REFUSAL UPHELD	Explicitly rejected blanket presumption for wind farms. Climate	courts.ie/judgments

Case	Decision	Key Grounds	URL
IESC 5 Supreme Court, 4 Feb 2026		Act does NOT override EU Habitats Directive. Coolglass had NO SAC/SPA at risk. Muingmore has THREE European sites. Directly distinguishable.	
ABP Case 311157: Sheskin Wind Farm grid connection to Bellacorick 110kV, Mayo	Full NIS required for GCR	Grid connection to SAME Bellacorick 110kV station required independent NIS. Directly applicable to the deferred Muingmore GCR application.	pleanala.ie/en-ie/case/311157
Oweninny Phase 3, North Mayo An Bord Pleanala, 26 May 2026 (GRANTED 2 DAYS BEFORE SITE NOTICES)	GRANTED — triggers in-combination AA obligation	18 turbines, 200m tip height. Location: MONEYNIERIN TOWNLAND — one of the five Muingmore townlands. Muingmore NIS must be revised to include Oweninny Phase 3 in all cumulative assessments.	oweninnywindfarmphasethreeplanning.ie

Part 3: Legal Framework — Key Provisions

Article 6(3) EU Habitats Directive (Council Directive 92/43/EEC) — The Central Legal Obligation

Source: European Commission — eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:31992L0043 | Year: 1992 (as applied)

Key Evidence: Text: *'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. In the light of the conclusions of the appropriate assessment of the implications for the site... the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned.'*

Relevance: This is the primary legal obligation at the centre of this case. Three European sites are within the zone of influence of the Muingmore development. The competent authority cannot grant permission unless it can ascertain, beyond reasonable scientific doubt (Sweetman [2013]), that no adverse effect on any of these sites will result. On the evidence before the Commission, including the applicant's own pre-application admissions, that cannot be established.

CJEU Case C-127/02 Waddenzee [2004] — Precautionary Principle and In-Combination Assessment

Source: Court of Justice of the European Union | Year: 2004

Key Evidence: *Held: (1) The precautionary principle requires that where doubt exists as to the absence of adverse effects, the competent authority must refuse consent. (2) In-combination assessment with other plans and projects is mandatory. (3) The assessment must be complete, precise and definitive — no lacunae permitted.*

Relevance: In-combination assessment with Oweninny Phase 3 (consented 26 May 2026, same townlands) is now mandatory. The NIS submitted with this application was prepared before Oweninny Phase 3 was consented. It cannot satisfy the in-combination obligation under Waddenzee without being revised to address Oweninny Phase 3 across all three European sites.

CJEU Case C-258/11 Sweetman v An Bord Pleanala [2013] — The Certainty Standard

Source: Court of Justice of the European Union | Year: 2013

Key Evidence: *Held: A competent authority may agree to a plan or project only if it has made certain that the plan or project will not adversely affect the integrity of the site — i.e. only if there is no reasonable scientific doubt as to the absence of such effects.*

Relevance: This is the legal standard the NIS must meet: not probability, not reasonable assumption, not mitigation commitment — certainty beyond reasonable scientific doubt. For each of the three European sites connected to this development, the NIS must demonstrate that standard is met. On the basis of the application documents, it cannot be.

Part 4: Policy Documents — Direct Conflicts

Mayo County Council — Renewable Energy Strategy for County Mayo (July 2026)

Source: Mayo County Council — mayo.ie — Published April 2026 (one month before site notices) | Year: July 2026

Key Evidence: *The Renewable Energy Strategy states explicitly: PEATLAND: 'Peatlands are vital carbon sinks... Activities like wind turbine construction can dry out peat soils, disrupting carbon storage... such soils are considered unsuitable for wind energy development in Mayo. It is therefore appropriate to exclude these areas at the planning policy stage.'* WILD ATLANTIC WAY: *'Any development such as wind farms must be carefully planned and located appropriately to protect the visual and experiential integrity of this iconic route.'* The Mullet Peninsula is explicitly named. DESIGNATED SITES: *'Avoid designated conservation areas such as SACs, SPAs, NHAs, pNHAs.'* RAMSAR: *Confirms Blacksod Bay and Broadhaven Bay are both designated Ramsar Sites.* DARK SKY PARK: *Identifies the Mayo Dark Sky Park as a key tourism asset requiring protection from wind farm developments.*

Relevance: This is the planning authority's own most current and considered policy on wind energy in County Mayo, published one month before the Muingmore site notices were erected. It directly condemns this development on five independent policy grounds. An Coimisiun Pleanala must have regard to this emerging policy position in its determination.

Failte Ireland — Wild Mayo Destination and Experience Development Plan 2026-2031

Source: Failte Ireland / Minister of State Alan Dillon — northmayo.ie — Launched 1 May 2026 | Year: Launched 1 May 2026 — 17 days before site notices

Key Evidence: *A five-year government-backed tourism strategy building on the wild, unspoilt coastal landscape of North Mayo, the Erris Gaeltacht, and the Mullet Peninsula. The plan's flagship catalyst project is the Ceide Coastal Path, a 15km trail linking two world-class Wild Atlantic Way heritage sites. The Mullet Peninsula and Erris Gaeltacht are explicitly identified as cornerstones of regional tourism. The applicant's EIAR and NIS make no reference to this plan, which was adopted and launched 17 days before the site notices appeared.*

Relevance: Direct conflict: 13 turbines at 180 metres will permanently alter the visual environment of the Mullet Peninsula and Blacksod Bay for 35 years. Failte Ireland is a prescribed body. Brian Bakeberg, Director of Rural West Environmentalists, was a member of the Wild Mayo DEDP Steering Committee. Failte Ireland must be formally notified and invited to make a submission.

Part 5: Complete URL Directory — All Referenced Documents

Scientific and Survey Evidence

— NPWS Conservation Objectives for Mullet/Blacksod Bay Complex SAC (000470) — Coastal Habitats [LEGALLY BINDING]

[https://www.npws.ie/sites/default/files/publications/pdf/Mullet%20Blacksod%20Bay%20Complex%20SAC%20\(000470\)%20Conservation%20objectives%20supporting%20document%20-%20Coastal%20habitats%20%5BVersion%201%5D.pdf](https://www.npws.ie/sites/default/files/publications/pdf/Mullet%20Blacksod%20Bay%20Complex%20SAC%20(000470)%20Conservation%20objectives%20supporting%20document%20-%20Coastal%20habitats%20%5BVersion%201%5D.pdf)

Legally binding conservation targets for SAC 000470 coastal habitats. Every single target is incompatible with this development proceeding.

— NPWS Conservation Objectives for Mullet/Blacksod Bay Complex SAC (000470) — Marine Habitats [LEGALLY BINDING]

[https://www.npws.ie/sites/default/files/publications/pdf/Mullet%20Blacksod%20Bay%20Complex%20SAC%20\(000470\)%20Conservation%20objectives%20supporting%20document%20-%20Marine%20habitats%20%5BVersion%201%5D.pdf](https://www.npws.ie/sites/default/files/publications/pdf/Mullet%20Blacksod%20Bay%20Complex%20SAC%20(000470)%20Conservation%20objectives%20supporting%20document%20-%20Marine%20habitats%20%5BVersion%201%5D.pdf)

Legally binding conservation targets for SAC 000470 marine habitats including maerl beds and seagrass communities.

— NPWS Conservation Objectives for Broadhaven Bay SAC (000472) — Coastal Habitats [LEGALLY BINDING]

[https://www.npws.ie/sites/default/files/publications/pdf/Broadhaven%20Bay%20SAC%20\(000472\)%20Conservation%20objectives%20supporting%20document%20-%20coastal%20habitats%20%5BVersion%201%5D.pdf](https://www.npws.ie/sites/default/files/publications/pdf/Broadhaven%20Bay%20SAC%20(000472)%20Conservation%20objectives%20supporting%20document%20-%20coastal%20habitats%20%5BVersion%201%5D.pdf)

Legally binding conservation targets for Broadhaven Bay SAC coastal habitats.

— NPWS Conservation Objectives for Broadhaven Bay SAC (000472) — Marine Habitats [LEGALLY BINDING]

[https://www.npws.ie/sites/default/files/publications/pdf/Broadhaven%20Bay%20SAC%20\(000472\)%20Conservation%20objectives%20supporting%20document%20-%20marine%20habitats%20%5BVersion%201%5D.pdf](https://www.npws.ie/sites/default/files/publications/pdf/Broadhaven%20Bay%20SAC%20(000472)%20Conservation%20objectives%20supporting%20document%20-%20marine%20habitats%20%5BVersion%201%5D.pdf)

Legally binding conservation targets for Broadhaven Bay SAC marine habitats.

— NPWS Conservation Objectives for Blacksod Bay/Broad Haven SPA (004037) [LEGALLY BINDING]

[https://www.npws.ie/sites/default/files/publications/pdf/Blacksod%20Bay%20Broad%20Haven%20SPA%20\(004037\)%20Conservation%20objectives%20supporting%20document%20-%20%5BVersion%201%5D.pdf](https://www.npws.ie/sites/default/files/publications/pdf/Blacksod%20Bay%20Broad%20Haven%20SPA%20(004037)%20Conservation%20objectives%20supporting%20document%20-%20%5BVersion%201%5D.pdf)

Legally binding conservation targets for SPA 004037 under S.I. No. 388/2021. 14 qualifying bird species.

— MERC (2008) — Sublittoral benthic survey, Mullet/Blacksod Bay Complex SAC [PRIMARY EVIDENCE — NEW MAERL RECORD]

https://www.npws.ie/sites/default/files/publications/pdf/MERC_2008_NPWS_Subtidal_surveys.pdf

NPWS-commissioned survey. Confirms maerl new scientific record, Zostera marina, Serpula reefs, clear waters, 300m tidal canal connection.

— MERC (2007) — Sublittoral benthic survey, Broadhaven Bay SAC and NW Ireland sites

https://www.npws.ie/sites/default/files/publications/pdf/MERC_2007_NPWS_Subtidal_Surveys.pdf

Companion NPWS-commissioned survey for Broadhaven Bay SAC (000472) and other northwest coast SACs.

— NPWS Site Synopsis — Mullet/Blacksod Bay Complex SAC (000470)

<https://www.npws.ie/sites/default/files/protected-sites/synopsis/SY000470.pdf>

Confirms qualifying habitats, Otter, internationally important bird populations including GN Diver and Brent Goose.

— NPWS Conservation Objectives summary page — Mullet/Blacksod Bay Complex SAC (000470)

https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000470.pdf

Full 7.6MB Conservation Objectives document for SAC 000470. Contains all legally binding habitat and species targets.

— NPWS Site Synopsis — Broadhaven Bay SAC (000472)

<https://www.npws.ie/sites/default/files/protected-sites/synopsis/SY000472.pdf>

Confirms qualifying habitats, nationally important bird populations, tidal connectivity.

— **NPWS Conservation Objectives — Broadhaven Bay SAC (000472)**

https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000472.pdf

Legally binding conservation targets for second SAC affected by this development.

— **NPWS Site Synopsis — Blacksod Bay/Broad Haven SPA (004037)**

<https://www.npws.ie/sites/default/files/protected-sites/synopsis/SY004037.pdf>

Confirms internationally important GN Diver (308) and Brent Goose (279). Over 20% all-Ireland GN Diver. Confirms Ramsar designation. Confirms Tullaghan Bay connection via Trista watercourse.

— **NPWS Conservation Objectives — Blacksod Bay/Broad Haven SPA (004037)**

[https://www.npws.ie/sites/default/files/publications/pdf/Blacksod Bay Broad Haven SPA \(004037\) Conservation objectives supporting document - \[Version 1\].pdf](https://www.npws.ie/sites/default/files/publications/pdf/Blacksod Bay Broad Haven SPA (004037) Conservation objectives supporting document - [Version 1].pdf)

Legally binding targets for the SPA under S.I. No. 388/2021.

— **S.I. No. 388/2021 — Blacksod Bay/Broad Haven SPA Regulations 2021**

<https://www.irishstatutebook.ie/eli/2021/si/388/made/en/print>

Statutory instrument giving legal force to SPA 004037 under EU Birds Directive. Applies full Habitats Directive AA obligations.

— **Inland Fisheries Ireland — European Eel (*Anguilla anguilla*) species page**

<https://www.fisheriesireland.ie/fish-species/european-eel-anguilla-anguilla>

Confirms Critically Endangered status in Ireland. Commercial fishing and recreational angling now prohibited to protect population.

Application Documents

— An Coimisiún Pleanála — PAX16.324387 — All Application Volumes

<https://www.pleanala.ie/en-ie/case/324387>

Full application including EIA Volumes 1-3, NIS/AA Screening, Planning Statement, SID Application Form, and all technical appendices.

— Pre-Application Consultation Record ABP-318372-23 (25 January 2024)

<https://www.pleanala.ie> (search case reference ABP-318372-23)

Contains RWE's own admission that the site lies within the Blacksod-Broadhaven water catchment, and An Coimisiún Pleanála's own water quality concerns about the Doolough Stream (at risk under WFD).

— RWE Renewables Ireland — Muingmore project website

<https://ie.rwe.com/projects-and-locations/onshore-wind-farm-muingmore/>

Contains contradictory statement: 'The site does not contain areas designated as European Protected Natura 2000 sites.' Inconsistent with the applicant's own pre-application record.

Planning Precedents

— Cluddaun Wind Farm, County Mayo — An Bord Pleanála refusal (May 2015) Ref:

PL16.PA0031

<http://www.pleanala.ie/casenum/PA0031.htm>

Direct Mayo precedent. Refused on peat slippage risk and water quality grounds in the same county.

— Killybegs Access Works (Bradan Wind) — An Coimisiún Pleanála refusal (2025)

<https://www.donegallive.ie/news/home/1880782>

Most recent precedent. Same deciding authority. Refused on peat stability and hydrological assessment grounds. Inspector: Thorsdalen. Commissioner: Long.

— Cashelnavean Wind Farm — High Court injunction (April 2024)

<https://www.irishtimes.com/crime-law/courts/2024/04/11/council-secures-court-order-prohibiting-further-development-at-wind-farm-where-bog-slide-occurred/>

Donegal County Council v Planree Limited and Mid-Cork Electrical. Holland J. April 2024. Definitive judicial proof of bog slide catastrophe.

— Coolglass Windfarm Limited v An Coimisiún Pleanála [2026] IESC 5

<https://www.courts.ie/judgments>

Supreme Court 4 February 2026. Does not create blanket presumption for wind farms. Cannot override EU Habitats Directive. Factually distinguishable from Muingmore.

— ABP Case 311157 — Sheskin Wind Farm grid connection to Bellacorick 110kV, Mayo

<https://www.pleanala.ie/en-ie/case/311157>

Precedent that grid connections to Bellacorick substation require independent NIS. Directly applicable to deferred Muingmore GCR.

— Oweninny Wind Farm Phase 3 planning (An Bord Pleanála, 26 May 2026)

<https://www.oweninnywindfarmphasethreeplanning.ie>

18 turbines, 200m tip height, Moneynierin townland. Granted two days before Muingmore site notices. Critical in-combination project for all cumulative assessments.

Legal Framework

— EU Habitats Directive (92/43/EEC) — Article 6(3) and Annexes II, V

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:31992L0043>

Primary European law. Article 6(3): mandatory AA. Annex V: maerl species (Lithothamnion corallioides and Phymatolithon calcareum) protected.

— EU Birds Directive (2009/147/EC)

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32009L0147>

SPA designation law. Article 7 applies Habitats Directive AA obligations to SPAs including SPA 004037.

— EU Eel Regulation (EC) No. 1100/2007

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32007R1100>

Requires Member States to maintain Eel Management Plans for the Critically Endangered European Eel. In Ireland, commercial and recreational eel fishing are now prohibited.

— Ramsar Convention on Wetlands (1971) — Irish designated sites

<https://www.npws.ie/protected-sites/ramsar-sites>

Blacksod Bay and Broadhaven Bay: Ramsar Site No. 844, designated 7 June 1996. International treaty obligations not assessed in NIS.

— Water Framework Directive (2000/60/EC) — Article 4(1) non-deterioration obligation

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32000L0060>

Doolough Stream classified as 'at risk' under WFD. Article 4(1) prohibits projects that create additional pressure on at-risk watercourses.

Technical and Policy References

— **Scottish Government — Good Practice during Wind Farm Construction, 4th Edition (2019)**

<https://www.nature.scot/sites/default/files/2019-09/Good%20Practice%20during%20Wind%20Farm%20Construction%20-%204th%20Edition%20-%202019.pdf>

Internationally recognised guidance. Identifies peat instability and watercourse pollution as primary risks on blanket bog.

— **SEAI Wind Atlas of Ireland — wind speeds at 100m+ hub heights across inland Mayo**

<https://www.seai.ie/renewable-energy/wind-energy/wind-atlas-map>

Supports alternatives argument. Demonstrates comparable wind resources available at inland sites away from the three connected European protected sites.

— **Failte Ireland — Wild Mayo Destination and Experience Development Plan 2026-2031**

<https://www.northmayo.ie/wild-mayo-destination-and-experience-development-plan/>

Launched 1 May 2026 — 17 days before site notices. Government-backed tourism strategy built on the landscape this development will permanently alter.

— **Mayo County Council — Renewable Energy Strategy for County Mayo — Variation No. 2 to the Mayo County Development Plan 2022–2028, formally adopted 13 July 2026**

<https://www.mayo.ie/planning/development-plans/cdp2022-2028>

Published April 2026. Explicitly excludes peatland from wind energy development. Identifies SACs, Ramsar sites, WAW and Dark Sky Park as requiring protection.

— **Mayo Dark Sky Park — Gold Tier, DarkSky International**

<https://www.darksky.org/our-work/conservation/idsp/parks/mayo/>

Internationally recognised Gold Tier designation in Barony of Erris. Aviation lighting from 13 turbines at 180m would introduce artificial light into this protected dark-sky landscape.

— **BirdLife International Important Bird Area — Broadhaven, Blacksod and Tullaghan Bays**

<https://datazone.birdlife.org/site/factsheet/broadhaven-blacksod-and-tullaghan-bays-and-parts-of-the-mullet-peninsula-iba-ireland/details>

Internationally designated Important Bird Area confirming the global ornithological significance of these bays.

Brian Bakeberg

Director, Rural West Environmentalists Limited (Company No. 802923)

President, Erris Chamber of Commerce

Member, Wild Mayo DEDP Steering Committee

brian@errischamber.ie

28 May 2026

APPENDIX C

Cross-Reference Index: Rural West Environmentalists' Observations Against Every Chapter and Technical Appendix of the Applicant's EIAR

Rural West Environmentalists has structured the main body of this submission thematically — by legal and technical ground — because many of the strongest findings in this submission draw on evidence spanning multiple chapters and technical appendices of the applicant's EIAR simultaneously. To ensure An Coimisiún Pleanála can readily confirm that every chapter of the EIAR, and every technical appendix directly reviewed by Rural West Environmentalists, has been considered and addressed in this submission, the following index cross-references each of the applicant's 17 EIAR chapters, and the technical appendices reviewed in detail, against the specific sections of this submission in which they are addressed. The strength of the grounds raised varies by chapter — some chapters are challenged on multiple, serious, independently-verified grounds; others are addressed by way of more limited observation. Rural West Environmentalists submits that every chapter of the application has been reviewed and is accounted for below.

Chapter 1 — Introduction

Section 1 (Introduction and Statement of Opposition). Procedural and structural observations. The Coyle Environmental Ltd independent technical review (22 July 2026) reviewed the submission as a whole. No chapter-specific technical challenge to Chapter 1 content beyond its framing role.

Chapter 2 — Description of the Proposed Project

Section 2 (The Applicant, the Development, and Its True Scale). Development description, scale, and infrastructure components addressed; turbine specification ambiguity addressed at Section 33.10.2.

Chapter 3 — Site Selection and Alternatives

Section 18 (No Viable Alternative Site Demonstrated). The 'maximising wind take' design-stage admission (pre-application consultation record, ABP-318372-23) is addressed at Section 18.1. No independent verification of this chapter's narrative text beyond the pre-application record was completed; Rural West Environmentalists notes this as an area where further scrutiny of the chapter itself, rather than only the related meeting record, may be of value.

Chapter 4 — Population and Human Health

Section 16 (Setback Distances), Section 11 (Shadow Flicker), Section 23 (Residential Amenity). Directly verified: the 740m nearest-dwelling distance specifically from Turbine 10 (Section 16.1); the 'had regard to' (rather than full compliance) framing of the 2019 Draft Guidelines (Section 16.2); the 'near zero' shadow flicker commitment tested against the templated and unsurveyed window dataset (Section 11).

Chapter 5 — Biodiversity

Sections 3, 6, 7, 8, 12, 13, 33.7, 33.9. Directly verified: Kestrel standalone collision risk of 1.05–1.19 collisions/year (Section 13); Otter signs on the Doolough Stream (Section 6); in-combination displacement claims for SPA species; Annex I priority habitat classification addressed via the Technical Habitat Report at Section 4.1A. This chapter's 127 tables have been sampled and targeted rather than reviewed exhaustively line-by-line; Rural West Environmentalists does not represent that every table has been independently checked.

Chapter 6 — Land, Soils and Geology

Section 19.5 (Swiss Cheese effect), Section 19.5.2 (T10/T11 landslide susceptibility). Directly verified: the 3,379-location peat stability survey (92.9% negligible / 2.8% low / 4.3% no peat / 0% medium-high risk), and crossconfirmation of the T10/T11 moderately-high susceptibility finding in both the narrative chapter and Technical Appendix 6-2.

Chapter 7 — Water (Hydrology and Hydrogeology)

Section 5.2 (The Doolough Stream: At-Risk Under the WFD). Directly verified: the chapter's own statement of the governing legal test (non-deterioration for Good/High status waters; mandatory restoration for less-than-Good status waters), and the chapter's own confirmation that the Doolough Stream is 'At Risk' with 'Poor' status — engaging the restoration obligation the applicant's own summary conclusion does not address.

Chapter 8 — Air Quality and Climate

Section 27.W (The 4-Year Carbon Payback Claim). Directly verified: the headline payback period and lifecycle emissions figures; the absence of any disclosed reconciliation between the carbon balance calculation and the restoration failure-rate and timescale evidence in the applicant's own Peatland Restoration Plan.

Chapter 9 — Noise and Vibration

Section 33.8 (Background Noise), Section 33.8.4–33.8.5 (Amplitude Modulation). Directly verified: the chapter's own first-party admission that AM 'cannot be measured or predicted in advance' of operation; the direct contradiction between the chapter's 'no significant information gaps' assurance and the calibration drift failures at 5 of 7 monitoring stations.

Chapter 10 — Landscape and Visual

Section 21.X (RWE's Own Admission — Unsuitable Designation), Section 24 (Mayo Dark Sky Park), Section 30 (Mayo County Council's Own Recorded Opposition). Directly verified: the chapter's own admission that the site falls within the adopted RES 'Unsuitable' designation and its attempted rebuttal of that designation's significance; correction of an earlier overstatement regarding the absence of any Dark Sky Park assessment, replaced with a more precise critique of the assessment's qualitative and pre-IAA-agreement limitations.

Chapter 11 — Shadow Flicker

Section 11 (Shadow Flicker), Section 33.1 (Templated Receptor Baseline Data: Identical Window Dimensions Across All 92 Properties). Directly verified: all 368 window entries across 92 properties in the underlying input dataset (Technical Appendix 11-1), confirming uniform, templated dimensions throughout with no exceptions.

Chapter 12 — Cultural Heritage

Section 26.2 (Crannogs). Directly verified: the precise 230-metre distance from the recorded crannog (MA025-004) to proposed Turbine 11; the medium-significance classification of the asset; and the challenge to the chapter's 'no significant effect' headline conclusion in light of that proximity.

Chapter 13 — Material Assets, Telecommunications and Aviation

Section 25 (Coast Guard SAR Helicopter Operations), Section 25.6 (Aviation and Telecommunications Coordinate Inconsistencies). Directly verified: the complete absence of any reference to Coast Guard, search and rescue, or Blacksod Lighthouse operations anywhere in this chapter; confirmation that only GASU and EAS helicopter operations are considered.

Chapter 14 — Traffic and Transportation

Section 33.11 (Traffic), Section 33.11.1 (The Turbine Delivery Route). Directly verified and corrected: the L5252 traffic impact figures, upgraded from an original 510% estimate to the applicant's own calculated 2,592% HDV increase; the 69-point Abnormal Indivisible Load route survey, including the Ballina bridge railing and wall removal.

Chapter 15 — Major Accidents and Disasters

Section 34 (Battery Energy Storage System), Section 34.1–34.4. Directly verified: the chapter's headline 'no significant effects' conclusion set against its single-sentence treatment of fire response; the apparent inconsistency between the chapter's 'no substances requiring special control' statement and the applicant's own Battery Safety Management Plan's acknowledgement of toxic gas release risk.

Chapter 16 — Interactions

Section 26.2 (Crannogs — buffer zone limitation). Directly verified: the chapter's confirmation that the crannog 'protective buffer zone' addresses only direct physical impact, not the indirect hydrological and vibration pathways raised elsewhere in this submission.

Chapter 17 — Schedule of Mitigation Measures

Section 13.2 (Kestrel — MM20 deterrence measure), Section 25.0A (MM84 — aviation consultation timing). Directly verified: the active Kestrel deterrence measure as an implicit acknowledgement of material collision risk; confirmation that no SAR or Coast Guard consultation appears anywhere in the mitigation schedule.

New Legal Precedent — Gibbet Hill Wind Farm (Section 19.7)

Mr Justice Oisín Quinn, Irish High Court, June 2025: permanent shutdown of three turbines at Gibbet Hill Wind Farm, Co. Wexford; €360,000 damages including €60,000 aggravated damages. Defendants described as "seriously unimpressive." Turbines 125m tip height at 1,050m from nearest home. Muingmore proposes 180m turbines at 719.24m from nearest home — 55 metres taller, 300 metres closer.

New Legal Principle — Briels Case (Section 27)

CJEU C-521/12 (Briels, 2014): biodiversity net gain cannot offset Annex I habitat loss at Article 6(3) stage. RWE's BNG claim is legally irrelevant to the Appropriate Assessment test.

New Policy — Adopted RES Verbatim Language (Section 21.0)

Mayo County Council, Variation No. 2, adopted 13 July 2026. Six new sub-sections (21.0.1–21.0.6) cite verbatim RES policy on Unsuitable designation, peat exclusion, exceeded targets, Ramsar protection, 4x setback benchmark, and Chapter 12 admission.

New Finding — Draft CEMP in NIS (Section 31.8.1)

NIS relies on CEMP described as containing "standard, generalized mitigation measures." Draft CEMP cannot satisfy Waddenzee/People Over Wind mitigation certainty standard at Article 6(3) stage.

New Finding — Concrete and Aggregate QA (Section 33.11.5)

SSE foundation defect precedent (2017): 50 turbines on island of Ireland, defects in concrete foundations, remedial works required. No independent Concrete and Aggregate Quality Assurance Plan submitted for 13,000 cubic metres of structural concrete on deep peat bog.

Technical Appendices Directly Reviewed

In addition to the EIAR chapters listed above, Rural West Environmentalists has directly reviewed and verified the following technical appendices in detail: Technical Appendix 2-1 (CEMP), 2-2 (Forestry Report), 3-3 (Scoping Report), 3-4 (Minutes of Meeting with Mayo County Council), 3-5 (Meeting Records with An Coimisiún Pleanála), 3-6 (Minutes of Meeting with NPWS), 3-7 (Community Consultation Report), 4-1 (Battery Safety Management Plan), 5-1 (Technical Habitat Report), 5-2 (Bird Survey Report), 5-3 (Bat Survey Report), 5-4 (Aquatic Baseline and Fisheries Assessment), 5-5 (Peatland Restoration Plan and Habitat Management Plan), 5-6 (Habitat Condition Assessment Report), 5-7 (Marsh Fritillary Survey Report), 5-8 (Avian Collision Risk Model Report), 6-2 (Peat Landslide and Hazard Risk Assessment), 6-3 (Peat Management Plan), 7-4 (Water Framework Directive Assessment), 7-5 (Surface Water Laboratory Results), 9-2 (Wind Energy Ireland Position Paper on Amplitude Modulation), 9-3 (Baseline Noise Survey Details), 11-1 (Shadow Flicker Modelling Input Data), 13-2 (Aviation Review Statement), 13-3 (Telecommunications Impact Study), and 14-1 (Abnormal Indivisible Load Route Survey), together with the SID Application Form and Addenda 1–12 (addressed specifically at Section 32).

Rural West Environmentalists submits that this index confirms that every chapter of the applicant's EIAR, and the great majority of its supporting technical appendices, have been directly read, cross-checked against the claims made elsewhere in the application, and addressed in this submission — whether by way of a substantial, independently verified ground for refusal, or, where the chapter's content did not disclose a specific deficiency, by way of confirmation that it has nonetheless been reviewed.

New Legal References

Irish High Court judgment, June 2025 — Gibbet Hill Wind Farm, Co. Wexford. Permanent shutdown of three turbines. €360,000 damages to Raymond Byrne and Lorna Moorhead. Mr Justice Oisín Quinn. Operators admitted liability day 11 of 11-day trial. John Rogers SC for plaintiffs, solicitor Joe Noonan. Reported: Waterford News & Star, June 2025.

CJEU, Case C-521/12, T.C. Briels and Others v Minister van Infrastructuur en Milieu [2014] ECLI:EU:C:2014:2232 — biodiversity net gain cannot be used at Article 6(3) stage to offset adverse effects on protected site integrity.

New Policy References

Mayo County Council, Renewable Energy Strategy for County Mayo — Variation No. 2 to the Mayo County Development Plan 2022–2028, formally adopted 13 July 2026. Available from Mayo County Council planning department.

NPWS, Conservation Objectives for Mullet/Blacksod Bay Complex SAC (Site Code 000470), Version 1, 17 December 2014. Habitat 1160 extent 11,169 ha. Available:

npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000470.pdf

NPWS, Conservation Objectives for Broadhaven Bay SAC (Site Code 000472), Version 1, 11 February 2014. Habitat 1160 extent 8,674 ha; Habitat 8330 (sea caves) qualifying interest.

Available: npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000472.pdf

Scottish Natural Heritage et al., Good Practice during Wind Farm Construction, Version 3, September 2015. Industry-regulatory joint guidance citing payback sensitivity to degree of restoration. Available: nature.scot

New Technical References

SSE wind turbine foundation defects, island of Ireland, July 2017. Planning documents filed with Fermanagh and Omagh District Council confirming remedial works required; issues also Cork and Cavan. Source: Sunday Independent, 24 July 2017; reNews renewable energy publication, July 2017.

New Legal References — Coyle Environmental Technical Review Additions

CJEU, Case C-461/13, Bund für Umwelt und Naturschutz Deutschland eV v Bundesrepublik Deutschland (Weser) [2015] ECLI:EU:C:2015:433 — any deterioration of a WFD water body quality element is unlawful unless Article 4(7) exceptions are satisfied. Cited in Section 5 (WFD argument) and Section 8A (combined WFD+Natura argument).

European Commission, Article 17 Habitats Directive Reporting — Ireland's conservation status assessments for Active Blanket Bog (*7130): Unfavourable-Bad (U2), declining; Transition Mire (7140): Unfavourable-Inadequate (U1); Northern Atlantic Wet Heath (4010): Unfavourable-Inadequate (U1). Available: ec.europa.eu/environment/nature/knowledge/rep_habitats.

Coyle Environmental Ltd., Technical Review and Recommendations for Rural West Environmentalists Ltd — Muingmore Wind Farm (PAX16.324387) Objection, 22 July 2026. Independent technical review confirming submission is exceptionally detailed and legally robust, with specific recommendations adopted in this submission.

Section 39: Letter of Support — Dark Sky Ireland

Rural West Environmentalists formally presents and adopts the following Letter of Support from Dark Sky Ireland, the national body dedicated to preserving Ireland's dark-sky environments, advancing responsible lighting policy, and supporting Government commitments under the Programme for Government to address light pollution. Dark Sky Ireland submitted this letter independently in respect of Case Reference PAX16.324387. Rural West Environmentalists adopts and relies upon the expert assessment and recommendations contained in this letter in full.

26th July 2026

Re: Proposed Muingmore Wind Farm project by RWE Renewables

Dear Sir/Madam,

On behalf of Dark Sky Ireland, I write to express serious concerns regarding the proposed Muingmore Wind Farm by RWE Renewables. While renewable-energy development is essential to Ireland's climate goals, projects must comply with environmental law, EU biodiversity policy, and best-practice standards for protecting nocturnal ecosystems. Based on the information currently available, the Muingmore proposal presents significant unresolved risks, particularly relating to light pollution and its documented impacts on coastal, marine, and terrestrial biodiversity.

Dark Sky Ireland is the national body dedicated to preserving Ireland's dark-sky environments, advancing responsible lighting policy, and supporting Government commitments under the Programme for Government to address light pollution. We are also actively preparing technical guidance and policy recommendations in anticipation of Ireland's forthcoming EU Presidency, during which light-pollution regulation and nocturnal-environment protection are expected to feature prominently in EU biodiversity and climate agendas. Protecting exemplary Irish dark-sky environments is therefore a matter of national strategic importance.

Risks to Dark-Sky Quality and the Mayo Dark Sky Park

The Erris region lies adjacent to, and forms part of the broader dark-sky landscape supporting, the international award-winning Mayo Dark Sky Park. This Park is globally recognised for its pristine night-sky conditions, low light pollution, and strong community stewardship. Its

designation brings scientific, ecological, educational, and tourism value, and reflects substantial investment in maintaining naturally dark conditions.

The introduction of industrial-scale infrastructure with aviation-safety lighting, operational lighting, and skyglow risks would directly undermine the integrity of this wider dark-sky environment. Artificial light at night (ALAN) travels far beyond installation boundaries, and even minimal increases in night-sky luminance can compromise astronomical observation, degrade wildlife habitat, and diminish the tourism value of dark skies. Given the national significance of the Mayo Dark Sky Park, the precautionary approach required under EU environmental law should be applied fully.

Impact on Community and County-Level Dark-Sky Conservation

Communities across north and west Mayo, together with Mayo County Council, are currently implementing coordinated measures to achieve Ireland's first-ever Dark Sky County Reserve, a pioneering designation that would place Mayo at the forefront of European dark-sky conservation. This initiative involves development of countywide lighting management strategies, community-led retrofitting of outdoor lighting, collaboration with ecologists, planners, and tourism stakeholders, and alignment with international dark-sky standards and EU biodiversity objectives. The integrity of this long-term effort depends on ensuring that external developments do not reintroduce avoidable skyglow or compromise the county's night-time environment.

Light Pollution Impacts on Aquatic, Marine, and Coastal Ecosystems

The site is hydrologically linked to the Mullet/Blacksod Bay Complex SAC, an ecosystem hosting highly sensitive habitats including seagrass beds, maerl reefs, and filter-feeding structures. Peer-reviewed research and EU-funded projects such as AquaPLAN highlight that artificial light at night affects aquatic organisms by disrupting circadian and seasonal rhythms, altering migration, spawning, and feeding patterns, modifying predator-prey dynamics, and affecting photosynthetic processes in marine flora. Light scatter over coastal waters, reflections at the air-water interface, and skyglow across the horizon can all impair sensitive species even at low intensities. The cumulative effects of aviation lighting, construction-phase illumination, and operational lighting require a detailed Lighting Impact Assessment that meets EU ecological-risk standards.

Obligations Under EU Law and the Nature Restoration Law

The EU Habitats Directive obliges Member States to prevent disturbance of species and degradation of protected habitats, including through non-physical pressures such as light pollution. The EU Nature Restoration Law further requires the reduction of pressures on ecosystems — coastal, marine, freshwater, and peatland included. ALAN is now recognised within EU ecological policy as such a pressure. Any project introducing ALAN lighting impacting a Natura 2000 landscape should demonstrate its necessity, minimise its impact, and apply the Precautionary Principle.

Compliance with Aviation Detection Lighting Systems

The new IAA National Aviation Safeguarding Framework requires an early-stage evaluation of obstacle-lighting obligations for tall structures. High-intensity aviation beacons are visually impactful forms of ALAN in dark sky environments. There are strategies to mitigate this known as Aviation Detection Lighting Systems (ADLS), which use a radar detection system and are now mandatory in other European Member States such as Germany. Unless the developer can demonstrate they are engaging the use of internationally recognised dark-sky-compatible aviation lighting technologies and protocols, the installation of turbines at this scale presents a significant risk to nocturnal ecosystems and to the dark-sky resource that Mayo has worked diligently to protect.

Conclusion and Recommendations

Given the potential environmental, ecological, and policy conflicts posed by the Muingmore project — especially its likely impact on dark-sky quality, sensitive aquatic ecosystems, and Mayo's countywide conservation efforts — Dark Sky Ireland supports calls for rigorous scrutiny of this development. We recommend that the application conclusively demonstrate: full compliance with EU Habitats, Birds, and Nature Restoration Law requirements; a comprehensive, science-based Lighting Impact Assessment addressing terrestrial, marine, and atmospheric pathways; evidence of engagement regarding the adoption of ADLS to minimise impact; lighting mitigation on all site constructions meeting international best practice, including spectral management, curfews, shielding, and aviation lighting minimisation; and protection of the Mayo Dark Sky Park and the wider night-sky environment essential to Ireland's bid to become a leader in EU light-pollution policy ahead of its upcoming EU Presidency.

Dark Sky Ireland remains available to provide expert input on light-pollution assessment, dark-sky protection, and relevant EU and national policy frameworks.

Yours Sincerely,

Brian Espey,
Chairperson
Dark Sky Ireland

New Health Evidence References — Section 23.5

World Health Organisation (2018), Environmental Noise Guidelines for the European Region. WHO Regional Office for Europe, Copenhagen. Identifies wind turbine noise as a recognised environmental health hazard; recommends guideline value of 45 dB Lden. Available: [euro.who.int/en/health-topics/environment-and-](https://euro.who.int/en/health-topics/environment-and-health/noise/publications/2018/environmental-noise-guidelines-for-the-european-region-2018)

[health/noise/publications/2018/environmental-noise-guidelines-for-the-european-region-2018](https://euro.who.int/en/health-topics/environment-and-health/noise/publications/2018/environmental-noise-guidelines-for-the-european-region-2018)
Dumbrille, A., McMurtry, R. and Krogh, C. (2021), "Wind turbines and adverse health effects: Applying Bradford Hill's criteria for causation", Environmental and Nutritional Medicine, Vol. 6, Issue 3, pp. 65-87. Peer-reviewed application of Bradford Hill epidemiological causation framework to wind turbine adverse health effects. Available: journals.lww.com/endi/fulltext/2021/06030/wind_turbines_and_adverse_health_effects__applying.1.aspx

French Court of Appeal ruling, November 2021 — upheld health damage claims for a couple living 700-1,300 metres from wind turbines. Court found turbine operation at those distances caused sleep disturbance, headaches, tinnitus and stress-related symptoms. Reported: The Connexion, 8 November 2021; windaction.org, 7 September 2022.

Shivnen and Others v Enercon Windfarm Services Ireland Ltd and Carrigcannon Wind Farm Ltd — Irish High Court, 2016–2017. Enercon admitted full liability for noise nuisance to seven families in Banteer, Co. Cork, living up to 1km from the wind farm, December 2016. Cases subsequently settled. Reported: Irish Examiner, 11 December 2016; Irish Examiner, 14 June 2017; Irish Acoustical Society (acoustics.ie), 12 December 2016.

North Meath Wind Farm Limited and Element Power Ireland Limited v An Bord Pleanála [2018] IEHC — Mr Justice Twomey. High Court refused certiorari of Board's refusal of 25 turbines at 169m tip height at Castletownmoor, Co. Meath. Confirmed Board has wide latitude in specialist planning areas; reasonable basis for refusal sufficient to withstand judicial review. Source: courts.ie; Irish Legal News, 13 March 2018.

Ardagh Wind Farm Ltd v An Bord Pleanála — Mr Justice Simons. High Court upheld Board's refusal of wind farm development against developer's judicial review challenge. Confirmed formal Board decision must be read with inspector's report; significant negative impacts documented in inspector's report sufficient to support lawful refusal.

Section 38: Community and Diaspora Petition — 498 Signatures — 312 Online and 186 Paper

This petition is submitted as community evidence alongside the main formal observation of Rural West Environmentalists Limited. This submission now includes 498 signatures in total: 312 online signatures collected between 5 August 2023 and 2 July 2026, and 186 paper signatures collected in person at clinic events and community gatherings in Geesala, Doolough, Bangor Erris, Belmullet, and surrounding areas in July 2026. The online signatures comprise 262 from Ireland, 31 from the United Kingdom, 9 from the United States, and 10 from other countries including Denmark, Norway, Sweden, France, Italy, Spain, Australia, and Malaysia. The paper signatures are listed separately below including Denmark, Norway, Sweden, France, Italy, Spain, Australia, and Malaysia.

Online Signatories — Ireland (262)

Name	Location	Country
Erris Action Group AGAINST Windfarms	Geesala ,Mount Jubilee , Doolough	Ireland
Laurence Howard	Greystones	Ireland
Martin Munnelly	Geesala, Muingmore	Ireland
Orla Bakeberg	Geesala, Muingmore	Ireland
Brian Bakeberg	Geesala, Muingmore	Ireland
Deborah O'Sullivan	Geesala, Muingmore	Ireland
Sandra Brogan	Geesala, Muingmore	Ireland
Pamela Kennedy	Longford	Ireland
Martin Butler	Monkston	Ireland
Mary O'Connell	Tallaghan Duff Geesala Ballina Co. Mayo	Ireland
Donna McNally	Belmullet	Ireland
James Mangan	Ballina	Ireland
Aisling Lavelle	Geesala, Muingmore	Ireland
Mary Ruddy	Belmullet, Co Mayo	Ireland
Sara Kerrigan	Belmullet	Ireland
Michelle Barrett	Geesala, Muingmore	Ireland
Therese O'Connor	Geesala, Muingmore	Ireland
Ann Cosgrove	Geesala, Muingmore	Ireland
Gillian Deane	Belmullet	Ireland
Catherine Donohoe	Bangor erris	Ireland
Tracey Ginty	Geesala, Muingmore	Ireland

RURAL WEST ENVIRONMENTALISTS LIMITED — FORMAL OBSERVATION — PAX16.324387 MUINGMORE
WIND FARM

John Coyne	Ballina	Ireland
Eamon Barrett	Mayo	Ireland
Carla Todd	Kilkee	Ireland
Michael John Ruddy	Geesala, Muingmore	Ireland
Celestine Brady	Geesala, Muingmore	Ireland
Helen Wims	Geesala, Muingmore	Ireland
Tara Cosgrove	Geesala, Muingmore	Ireland
Helen McCann	Geesala, Muingmore	Ireland
Anne Barrett	Belmullet	Ireland
Brian Barrett	Northampton	Ireland
Cathy Newell	Dublin	Ireland
Averil Pearson	Geesala, Muingmore	Ireland
Michael Coyle	BALLINA	Ireland
Conor Convey	Dowra	Ireland
Mary Mc Caffrey	Leitrim	Ireland
Tracy Langan	Geesala, Muingmore	Ireland
Kevin Barrett	Geesala, Muingmore	Ireland
Henry Coyle	Ballina	Ireland
Patricia Barrett	London	Ireland
Martin Skey	Belmullet	Ireland
Damien Murphy	Geesala, Muingmore	Ireland
Andrew Kerrigan	Geesala, Muingmore	Ireland
Jessica Coyle	Ballina	Ireland
Ed Shevlin	Geesala, Muingmore	Ireland
Patricia Donohue	Mayo	Ireland
Thomas Cosgrove	Geesala, Muingmore	Ireland
declan conway	Dublin	Ireland
Anna Gallagher	Geesala, Muingmore	Ireland
Thomas Munnelly	Geesala, Muingmore	Ireland
Doreen Hoare	Roscommon	Ireland
Mary Conroy	Geesala, Muingmore	Ireland
Christopher Woolven	Drogheda	Ireland
Brie Loughman	Geesala, Muingmore	Ireland
Geraldine Cassidy	Nenagh	Ireland
Emer O'Donnell	Geesala, Muingmore	Ireland
Cusack Sheila	Geesala, Muingmore	Ireland
O'Neill Jason	Portlaoise	Ireland
Marie Sweeney Khalifa	Ballincollig	Ireland
Stephen Corcoran	Dublin	Ireland
Sarah O'Connor	Geesala, Muingmore	Ireland
Keith Clarke	Geesala, Muingmore	Ireland

RURAL WEST ENVIRONMENTALISTS LIMITED — FORMAL OBSERVATION — PAX16.324387 MUINGMORE
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Patricia McGinley	Kilcar	Ireland
ANNE O NEILL	DUBLIN	Ireland
Caroline Smyth	Ashbourne	Ireland
Noreen O'Shea	Castlebar	Ireland
Michael Ruddy	Belmullet co Mayo	Ireland
K.N Adams	Geesala, Muingmore	Ireland
Edyta Zach	Dublin	Ireland
Debra Munnelly	Ballina	Ireland
Sinead Sweeney	Mayo	Ireland
Shepherd Deane	Geesala, Muingmore	Ireland
Breege Walsh	Mayo	Ireland
Tina Kavanagh	Bray	Ireland
V O Connor	Galway	Ireland
Aine Barrett	Geesala, Muingmore	Ireland
Mehdi Habibzadeh	Geesala, Muingmore	Ireland
Ateka Naagi	Geesala, Muingmore	Ireland
Mark Coyne	Oldham	Ireland
Naz Na	Geesala, Muingmore	Ireland
Annmarie Reilly	Ballina	Ireland
Bridget Reilly	Ballina	Ireland
Michael Reilly	Geesala, Muingmore	Ireland
Joan Walker	Geesala, Muingmore	Ireland
Kevin Reilly	Geesala, Muingmore	Ireland
Samuel Kinghorne	Geesala, Muingmore	Ireland
Norma Gleeson	Tipperary	Ireland
James Lindsay	Geesala, Muingmore	Ireland
Jacqueline McGrath	Geesala, Muingmore	Ireland
Sabine Paschen	Geesala, Muingmore	Ireland
Lisa Reynolds	Wicklow	Ireland
Annmarie Reilly	Ballina	Ireland
Peter Gaughan	Mount Jubilee	Ireland
Mary Barrett	Geesala, Muingmore	Ireland
Eamon Costello	Geesala, Muingmore	Ireland
Carol Kane	Geesala, Muingmore	Ireland
Christine Lama	Killarney	Ireland
Muhammad Iqbal	Geesala, Muingmore	Ireland
Pam Bradshaw	Dublin	Ireland
Frances Moran	Belmullet Mayo	Ireland
Anne Hayes	Geesala, Muingmore	Ireland
Thomas Lawrence	Geesala, Muingmore	Ireland
Noreen Howard	Shannon	Ireland

RURAL WEST ENVIRONMENTALISTS LIMITED — FORMAL OBSERVATION — PAX16.324387 MUINGMORE
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Kathleen Munnelly	Geesala, Muingmore	Ireland
Kevin Munnelly	Mount jubilee	Ireland
Pavel Fomenko	Cork	Ireland
Marcella Butler	Ballina	Ireland
Brighde Barnes	Willesden	Ireland
Nerissa Walsh	Sligo	Ireland
Marian Lavelle	Geesala, Muingmore	Ireland
John Fitzsimons	Geesala, Muingmore	Ireland
Luke Fitzsimons	Geesala, Muingmore	Ireland
Karen Munnelly	Geesala, Muingmore	Ireland
Bernadette Beyer	Dublin	Ireland
Rory McAndrews	Geesala, Muingmore	Ireland
Margaret Conroy	Geesala, Muingmore	Ireland
Denise Brook	Dublin	Ireland
Lisa Carey	Geesala, Muingmore	Ireland
Mary O'Riordan	Geesala, Muingmore	Ireland
Jane Sinot	Wexford	Ireland
P F	Cork	Ireland
Enda Brogan	Geesala, Muingmore	Ireland
Grainne Kavanagh	Carlow	Ireland
Saoirse Cawley	Geesala, Muingmore	Ireland
SERGIU GROSU	Geesala, Muingmore	Ireland
Martha O'Farrell	Geesala, Muingmore	Ireland
Shakera Looby	Geesala, Muingmore	Ireland
Holly McAndrew	Mayo	Ireland
Todd O'Reilly	Newport	Ireland
Joanie Raftis	Waterford	Ireland
Phyllis Moran	Geesala, Muingmore	Ireland
Olive Moran	Dublin	Ireland
John Benson	Geesala, Muingmore	Ireland
Philip Foster	Dublin	Ireland
Helen Doherty	Lucan	Ireland
Marie Burke	Geesala, Muingmore	Ireland
Ellen Moloney	Clare	Ireland
Niamh Munnelly	Geesala, Muingmore	Ireland
.Máire Ni Ghruagáin	Newmarket-On-Fergus	Ireland
Gareth Dennis	Geesala, Muingmore	Ireland
Gillian Cosgrave	Dublin	Ireland
Aileen Donagher McGowan	Geesala, Muingmore	Ireland
Dave Murphy	Wicklow	Ireland
Martin Mc daid	Dublin	Ireland

RURAL WEST ENVIRONMENTALISTS LIMITED — FORMAL OBSERVATION — PAX16.324387 MUINGMORE WIND FARM

BRIGID MC CULLAGH	Geesala, Muingmore	Ireland
Patricia Sharkey	Donegal	Ireland
Joan Hanlon	Glenties	Ireland
Kathleen Hanly	Dublin	Ireland
Kenneth Moran	Geesala, Muingmore	Ireland
Agnieszka Plewa	Dublin	Ireland
Pat Ward	Dublin	Ireland
Elaine Hennessy	Geesala, Muingmore	Ireland
Katie Ferry	Limerick	Ireland
Caroline Kilker	Belmullet	Ireland
Maggie Power	Enniscorthy	Ireland
Andrea Cully O'Donnell	Swinford, Co Mayo	Ireland
Gerard Barrett	Geesala, Muingmore	Ireland
Sandra Murphy	Crossmolina	Ireland
Michael Lehane	Geesala, Muingmore	Ireland
Marie Pearse	Dublin	Ireland
Donna Kemp	Ballinasloe	Ireland
Cathal Reynolds	Geesala, Muingmore	Ireland
Mairead McAndrew	Geesala, Muingmore	Ireland
Martin Barrett	Belmullet	Ireland
Padraig Kelleher	Geesala, Muingmore	Ireland
Jim Fahy	Ballinrobe	Ireland
Magdalena Krawiec	Geesala, Muingmore	Ireland
Katrina McDermott	Geesala, Muingmore	Ireland
John Gallagher	Sligo	Ireland
Hilda Nicell	Dungarvan	Ireland
Seamus Reddington	Geesala, Muingmore	Ireland
Art Mion	Dublin	Ireland
Ronan Bilbow	Geesala, Muingmore	Ireland
Derrick Hambleton	Galway	Ireland
Annmarie McDonagh	Geesala, Muingmore	Ireland
Aaron O'Hara	Geesala, Muingmore	Ireland
Marie Kelly	Geesala, Muingmore	Ireland
Anna Sadlo	Dublin	Ireland
Derek Murphy	Geesala, Muingmore	Ireland
Shelagh Delphyne	Ballina	Ireland
William Hughes	Geesala, Muingmore	Ireland
Eugene Nolan	Cork	Ireland
Josephine Gallagher	Geesala, Muingmore	Ireland
Mark Ryan	Geesala, Muingmore	Ireland
Emma Mannix Ryan	Geesala, Muingmore	Ireland

RURAL WEST ENVIRONMENTALISTS LIMITED — FORMAL OBSERVATION — PAX16.324387 MUINGMORE WIND FARM

Sam K	Dublin	Ireland
Jessica Ronayne	Geesala, Muingmore	Ireland
Felim Mullane	Newcastle West	Ireland
Ann Croke	Galway	Ireland
Joanne Canning	Galway	Ireland
Marie Cronin	Cork	Ireland
Aiden Munnelly	Geesala, Muingmore	Ireland
Mahesh Babu Kalluri	Geesala, Muingmore	Ireland
Yvonne Gregory	Cork	Ireland
Michael Munnelly	Geesala, Muingmore	Ireland
Margaret Bilbow	Geesala, Muingmore	Ireland
Mary Murphy	Ballina	Ireland
Miriam Ross	Geesala, Muingmore	Ireland
Louise Mooney	Westmeath	Ireland
Vincent Murphy	Ballina	Ireland
Denise Murphy	Kilcock	Ireland
Regina McNulty	Dublin	Ireland
Niamh Leneghan	Belmullet	Ireland
Anne Cullinan	Dublin	Ireland
Eilise Mcgarrell	Williamstown	Ireland
Roberto Martinez	Dublin	Ireland
Ray Donagh	Dublin	Ireland
John Langdon	Belmullet	Ireland
Anna Deane	Geesala, Muingmore	Ireland
Orla Cafferkey	Rickmansworth	Ireland
Tatiana Petrova	Geesala, Muingmore	Ireland
Maura McNulty	Belmullet	Ireland
Michael Reilly	Geesala, Muingmore	Ireland
Donal Munnelly	Kildare	Ireland
Mark Higgins	Geesala, Muingmore	Ireland
Bincymol Augustine	Dublin	Ireland
Jobins Philip	Geesala, Muingmore	Ireland
Daniel Ruddy	Geesala, Muingmore	Ireland
Anthony Coyle	Mayo	Ireland
Mary Lindsay	Geesala, Muingmore	Ireland
Annie Mangan	Geesala, Muingmore	Ireland
William Creedon	Geesala, Muingmore	Ireland
James Bruce	Geesala, Muingmore	Ireland
Brenda Dowling	Dublin	Ireland
Breege Jackson	Dublin	Ireland
Ada Flynn	Geesala, Muingmore	Ireland

RURAL WEST ENVIRONMENTALISTS LIMITED — FORMAL OBSERVATION — PAX16.324387 MUINGMORE
WIND FARM

Wiktoria Sedek	Geesala, Muingmore	Ireland
Packie Sweeney	Geesala, Muingmore	Ireland
Raymond Matthews	Dublin	Ireland
Michelle Ray	Mayo	Ireland
Aine Mcgrath	Geesala, Muingmore	Ireland
Kathlyn O'Neill	Geesala, Muingmore	Ireland
Malgorzata Gozdek	Boosterstown	Ireland
Ciara Mooney	Geesala, Muingmore	Ireland
Maryann Welch	Geesala, Muingmore	Ireland
Christiane Meub	Carrick-on-Shannon	Ireland
Katie Shannon	Geesala, Muingmore	Ireland
Lorcan O'Brien	Geesala, Muingmore	Ireland
E Fagan	Geesala, Muingmore	Ireland
Sadhbh O'Toole	Geesala, Muingmore	Ireland
Sheeba Alex	Geesala, Muingmore	Ireland
Daniel Everitt	Geesala, Muingmore	Ireland
grace kelly	Geesala, Muingmore	Ireland
Craig Melvin	Geesala, Muingmore	Ireland
Luke Nolan	Dublin	Ireland
Cillian murphy	Geesala, Muingmore	Ireland
Miroslav Kapustinski	Geesala, Muingmore	Ireland
Laura Lynskey	Geesala, Muingmore	Ireland
Mena O'Mahony	Kenmare	Ireland
Kateryna Rodrigues	Geesala, Muingmore	Ireland
Pauline GERAGHTY	Belmullet	Ireland
Evelyn Barron	Geesala, Muingmore	Ireland
Muhammad Khan	Geesala, Muingmore	Ireland
Mary Reynolds	Geesala, Muingmore	Ireland
Marie Clarke	Doohoma Head	Ireland
Trish McAndrew	Belmullet	Ireland
Amy Walsh	Geesala, Muingmore	Ireland
Jackie Mehigan	Geesala, Muingmore	Ireland
Patrick McAndrew	Barnatra	Ireland
Deborah Heaphy	Geesala, Muingmore	Ireland
Elaine McDonagh	Galway	Ireland
Anita Kilbride	Tallaght	Ireland

Online Signatories — United Kingdom (31)

Name	Location	Country
Janet Bennett	London	United Kingdom
Connor Butler	Bristol	United Kingdom
Declan Conroy	Camborne	United Kingdom
Colleen O'Callaghan	Milton Keynes	United Kingdom
Annie Edwards	Boston	United Kingdom
Lisa Cosgrove	Runcorn	United Kingdom
Matthew Coyne	Hemel Hempstead	United Kingdom
Bernie Convey	Abbey Wood	United Kingdom
Jayde Elgood	Kensington	United Kingdom
Jp Lally	Hornsey	United Kingdom
Mrs D Barrett	Forest Hill	United Kingdom
Declan Mangan	Blackheath	United Kingdom
David Reilly	Tadcaster	United Kingdom
Mary Howard	Colindale	United Kingdom
Paul Smitten	Crawley	United Kingdom
Amy Harrington	London	United Kingdom
David Conroy	Manchester	United Kingdom
John Gielty	Edinburgh	United Kingdom
Carol O'Connell	Chalfont St. Giles	United Kingdom
Liam Boyle	Luton	United Kingdom
Ann Edwards	Louth	United Kingdom
Siobhan Cafferkey	Clapham	United Kingdom
John Deane	Hemel Hempstead	United Kingdom
Sean McCormack	Norwich	United Kingdom
Paul Leneghan	Newcastle Upon Tyne	United Kingdom
Anne Townson	Ches	United Kingdom
Theresa Mann	Bolton	United Kingdom
Geraldine Hargreaves	Preston	United Kingdom
Finola Geraghty	London	United Kingdom
Loretta Munden	Preston	United Kingdom
Dee Smith	Market Harborough	United Kingdom

Online Signatories — United States (9)

Name	Location	Country
Annie Mai Reilly	New York	United States
Jon Inwood	Brooklyn	United States
Skeleton Key	Los Angeles	United States
Maureen McNeil	San Mateo	United States
Josephine Carolan	Teaneck	United States
Georgia Pettitt	Dayton	United States
Clarence Nugent	Dayton	United States
Mark Plotczyk	Windham Center	United States
Declan Carey	Chicago	United States

Online Signatories — Other Countries (10)

Name	Location	Country
Stephen Sweeney		Denmark
Giampiero Leonardo	Enna	Italy
Nikki Vik	Tromsdalen	Norway
Hayley Gray	Sydney	Australia
Derek Cosgrove	Stockholm	Sweden
Florence TREBOUTTE	Paris	France
Jonathan Murphy	Copenhagen	Denmark
Rosa Cabrerizo	Hospitalet de Llobregat	Spain
WONG YOON JYE	Kuala Lumpur	Malaysia
GERALDINE GERAGHTY	London	Spain

Paper Petition Signatures — 186 Signatures Collected in Person (July 2026)

In addition to the 312 online signatures above, Rural West Environmentalists collected 186 signatures in person at submission clinics and community gatherings in Geesala, Doolough, Bangor Erris, Belmullet, Mount Jubilee, Doohoma, and surrounding areas during July 2026. These signatures were collected on paper sheets headed "We Say No to the Proposed RWE Muingmore Project — Too Big Too Close." A further 18 entries on the original sheets could not be read with confidence and have been omitted; the original paper sheets remain the primary record for those entries.

Paper Petition — Community Signatures (168 signatures)

Name	Location	Country
Rita Healy	Doolough	Ireland
Pat Carey	Glade	Ireland
Josie Murphy	Belmullet	Ireland
Kathleen Devine	Bangor	Ireland
W. Coyle	Geesala	Ireland
Ann Donohue	Mount Jubilee	Ireland
Rose Griffin	Ballina	Ireland
Myra Gill	Ballina	Ireland
R. Barrett	Shraigh	Ireland
Mary Monaghan	Dooyork	Ireland
Maureen Monaghan	Meadow	Ireland
Cathy Carey Haugh	Meadoran	Ireland
Ann Kate Haugh	Meadoran	Ireland
Denis Haugh	Meadoran	Ireland
Mary O'Connell (Barrett)	Tallaghduff	Ireland
Julie O'Connell	Roy	Ireland
Mary Kate Rooney	Manorhamilton	Ireland
Bridget Flood	Doolough, Geesala	Ireland
Anna Coyle	Tullaghbaun	Ireland
Anthony Munnelly	Geesala	Ireland
Alvin Tinniswood	Tullaghanbaun	Ireland
Helen Roger	Tullaghbaun	Ireland
Kathleen Doherty	Bangor	Ireland
Ann McGuire	Dooyork	Ireland
Brendan McGuire	Dooyork	Ireland
Ann Marie Reilly	Geesala	Ireland
Peggy Murphy	Geesala	Ireland
Aidan Thorpe	Crossmolina	Ireland
Michael Walsh	Shraigh	Ireland
Doreen Walsh	Shraigh	Ireland
John Conlon	Derryhillagh	Ireland
Gregory Conlon	Derryhillagh	Ireland
Anne Arnold	Doohoma	Ireland
Nadia Montero	Pullathomas	Ireland
Ferran Balaguer	Pullathomas	Ireland
Martin O'Malley	Doolough	Ireland
Deborah O'Sullivan	Doolough	Ireland

RURAL WEST ENVIRONMENTALISTS LIMITED — FORMAL OBSERVATION — PAX16.324387 MUINGMORE
WIND FARM

Sean Harrington	Belmullet	Ireland
Caroline Scanlon	Dooyork	Ireland
Tamara Sainz	Dooyork	Ireland
Con Conroy	Tallagh	Ireland
Rose Pollock	Aghadoon	Ireland
Ann McDonnell	Mount Jubilee	Ireland
Anna Barrett	Mount Jubilee	Ireland
James Monaghan	Muings	Ireland
Trevor Conway	Doolough Beach	Ireland
Eddie Shevlin	Geesala	Ireland
James Gaughan	Geesala	Ireland
Alan Coyle	Geesala	Ireland
John Coyle	Geesala	Ireland
Gerard Coyle	Geesala	Ireland
Donal Munnelly	Geesala	Ireland
Betty Munnelly	Carragh Mheas	Ireland
John McAndrew	Glencastle	Ireland
Peter Gaughan	Mount Jubilee	Ireland
Jennifer Chester	Foxford	Ireland
Siobhan Cosgrove	Ballina	Ireland
Mary Ellen Walsh	Geesala	Ireland
J. Barrett	Bangor Erris	Ireland
Rosie Conroy	Geesala	Ireland
Michael John Carey	Bangor Erris	Ireland
Anne Carey	Bangor Erris	Ireland
Sheeran Carey	Bangor Erris	Ireland
Nancy Harker	Tallaghanduff	Ireland
Greta McGrath	Mount Jubilee	Ireland
Mary Mulcahy	Mount Jubilee	Ireland
Geraldine Coyle	Geesala	Ireland
Clara Coyle	Geesala	Ireland
Marie Mangan	Roy	Ireland
Grace Meade	Roy	Ireland
Christina Winters	Cloontakille	Ireland
Emma Winters	Cloontakille	Ireland
John Donohue	Shraigh	Ireland
Kelly Lindsay	Mount Jubilee	Ireland
Patricia Donohue	Shraigh West	Ireland
Mary Walsh	Geesala	Ireland
Mark Lally	Roy, Doohoma	Ireland
Molly Arnold	London	Ireland

RURAL WEST ENVIRONMENTALISTS LIMITED — FORMAL OBSERVATION — PAX16.324387 MUINGMORE
WIND FARM

Kate Arnold	London	Ireland
Edel Sweeney	Bangor Erris	Ireland
Conor Mason	Pullathomas	Ireland
Brona Barrett	Roy	Ireland
Elaine Lindsay	Belmullet	Ireland
Tony Lindsay	Belmullet	Ireland
Harry Kerrigan	Doolough	Ireland
Margaret Kerrigan	Doolough	Ireland
Teresa Lally	Roy	Ireland
Jim Lally	Roy	Ireland
H. Barrett	Doolough	Ireland
O. Barrett	Doolough	Ireland
Michael Lynn	Crossmolina	Ireland
Mary Lynn	Crossmolina	Ireland
Stephen Munnelly	Mount Jubilee	Ireland
J. Furlong	Mount Jubilee	Ireland
Richard Furlong	Mount Jubilee	Ireland
C. Neville	Roy, Doohoma	Ireland
Darren Carey	Geesala	Ireland
Kevin Carey	Geesala	Ireland
Terese Munnelly	Mount Jubilee	Ireland
James Manahan	Geesala	Ireland
Brendan O'Boyle	Geesala	Ireland
Mary Ruddy	Doohoma	Ireland
Ann Cusack	Doohoma	Ireland
Julie McAndrew	Geesala	Ireland
Nellie McAndrew	Geesala	Ireland
Helen Moran	Cloontakille	Ireland
Vera Coyle	Geesala	Ireland
Caroline Munnelly	Geesala	Ireland
Sarah Munnelly	Geesala	Ireland
Angela Lallabox	Doogh	Ireland
Denise Doyle	Geesala	Ireland
Emer Lindsey	Mount Jubilee	Ireland
John O'Connor	Bangor Erris	Ireland
Martin Harrington	Geesala	Ireland
Jan Thorpe	Mount Jubilee	Ireland
Mary Reilly	Mount Jubilee	Ireland
Joe Carey	Geesala	Ireland
Lorraine Faherty	Glencastle	Ireland
Brenda Mangan	Geesala	Ireland

RURAL WEST ENVIRONMENTALISTS LIMITED — FORMAL OBSERVATION — PAX16.324387 MUINGMORE
WIND FARM

Kathleen Mangan	Geesala	Ireland
Trish Markey	Geesala	Ireland
Aoife Coursnane	Cahersiveen, Kerry	Ireland
Kathleen McAdam	Glencastle	Ireland
Anne Marie Mary Calvey	Doohoma	Ireland
Fidelma McDermott	Bangor	Ireland
Mary Henry	Tallaghan	Ireland
Mary Gorman	Tallaghan	Ireland
David Barrett	Mount Jubilee	Ireland
Christina Barrett	Larganmore	Ireland
Anna Murray	Shanahee	Ireland
Noel Cosgrove	Shanahee	Ireland
Kellyn Murray	Shanahee	Ireland
Mary Mangan	Geesala	Ireland
John Mangan	Geesala	Ireland
Kathleen Mangan	Geesala	Ireland
Grace Mangan	Geesala	Ireland
Ava Mangan	Geesala	Ireland
N. Thorpe	Mount Jubilee	Ireland
M. Harris	Mount Jubilee	Ireland
N. Mangan	Mount Jubilee	Ireland
Wendy Davies Mangan	Geesala	Ireland
V. Houlihan	Belmullet	Ireland
J. McGahern	Geesala	Ireland
Maria Mellon	Geesala	Ireland
Maura Clarke	Tullaghan	Ireland
Martina Mullarkey	Mount Jubilee	Ireland
Marie Sweeney Khalifa	Doolough	Ireland
Walid Khalifa	Doolough	Ireland
Erika Coyle	Geesala	Ireland
Geraldine Mangan	Doohoma	Ireland
Terri Bradshaw	Geesala	Ireland
Lauren Healy	Geesala	Ireland
Amy Healy	Geesala	Ireland
Gabriel Healy	Geesala	Ireland
Padraig Sweeney	Geesala	Ireland
Maureen Coleman	Tallaghan	Ireland
Trish Howard	Geesala	Ireland
Mary Barrett	Belmullet	Ireland
James Gaughan	Doohoma	Ireland
Andrew McGuire	Geesala	Ireland

Francis McGuire	Geesala	Ireland
Paudge Moran	Dooyork	Ireland
John Reilly	Doolough	Ireland
Maureen Kennedy	Dooyork	Ireland
M. O'Boyle	Dooyork	Ireland
Ann Healy	Ballinaboy	Ireland
John Healy	Ballinaboy	Ireland
Tommy Sweeney	Doohoma	Ireland

Clinic Petition — "We Say No" Signatures (18 signatures)

Name	Location	Country
Natalie Padden	Belmullet	Ireland
Kate Sheahy	Belmullet	Ireland
Miriam Reilly	Belmullet	Ireland
Martin Ruddy	Doolough	Ireland
Mary Ruddy	Doolough	Ireland
Breege Vaughan	Bangor	Ireland
Marian Kenny	Blacksod	Ireland
K. Terry	Doolough	Ireland
L. Terry	Doolough	Ireland
Ciaran Quinn	Corclough West	Ireland
Mark Kennedy	Belmullet	Ireland
Rose Kennedy	Belmullet	Ireland
Ken Kennedy	Belmullet	Ireland
Delia Geraghty	Clogher	Ireland
Fiona Howard	Belmullet	Ireland
Seamus Howard	Belmullet	Ireland
Lisa Lynnelly	Belmullet	Ireland
Peter Balaz	Belmullet	Ireland

Rural West Environmentalists further notes an internal inconsistency that goes to the heart of the applicant's biodiversity metric. Technical Appendix 5-5 (Section 3.4.2.9) confirms that the UK Government's Statutory Biodiversity Metric — which the applicant's own ecologists describe as the industry standard — applies a fixed difficulty multiplier of 0.33, reflecting the assumption that approximately two-thirds of restoration effort will fail. The applicant deliberately chose the SSE Metric instead precisely because it permits manual adjustment of this multiplier. The applicant then substituted the statutory 0.33 for a 'moderate difficulty' multiplier of 0.67 — doubling the assumed success rate — based on 'professional judgement' rather than any site-specific evidence. This manipulation directly inflates the projected biodiversity net gain from the development. An Coimisiún Pleanála should treat any BNG calculation built on a manually-adjusted, non-statutory foreign metric with extreme caution, particularly where the adjustment has the direct effect of making an otherwise failing application appear to achieve net gain.

- **Aggregate source:** the source of all aggregate, concrete, and imported stone for turbine foundations, crane hardstands, access roads, the substation, and the BESS compound

- **Geological and petrographic testing:** independent geological and petrographic testing of each aggregate source, with specific reference to the risk of problematic minerals given Mayo's documented defective concrete block history

- **Standards compliance:** compliance with relevant Irish Standards and European Standards for structural concrete in wind turbine foundations

- **Independent certification:** independent third-party testing and certification of each concrete batch, separate from the contractor's own quality control

- **Full traceability:** full traceability of aggregate source, concrete mix design, batch records, delivery dockets, and pour records for every foundation

- **Long-term inspection:** a programme of independent long-term structural inspection of every turbine foundation throughout the 35-year operational life, with defined trigger points for remedial action

- **Turbine-specific design:** confirmation that the final structural foundation design will be specific to the confirmed turbine model and independently verified ground conditions at each individual turbine location before construction commences

- **Defect response:** a clear, publicly available process for notifying An Coimisiún Pleanála and Mayo County Council of any identified foundation cracking, movement, or deterioration

— **Foundation design:** approval of the final foundation design by an independent structural engineer before any concrete is poured

— **Mica risk:** a specific assessment of the risk of problematic aggregate sourced from quarries within or adjacent to the affected geological zones given Mayo's experience with the defective concrete block crisis