

Daire

LDG-081452-25

Digital PPAO



An Coimisiún Pleanála

### Planning Appeal Online Observation

Online Reference  
NPA-OBS-004825

#### Online Observation Details

Contact Name  
Anne Marie Sheahan ✓

Lodgement Date  
14/07/2025 19:08:01 ✓

Case Number / Description  
322787 ✓

#### Payment Details

Payment Method  
Online Payment

Cardholder Name  
Keith Sheahan

Payment Amount  
€50.00 ✓

#### Processing Section

S.131 Consideration Required

Yes — See attached 131 Form

N/A — Invalid

Signed



Date

22/7/25

#### Fee Refund Requisition

Please Arrange a Refund of Fee of

€

Lodgement No

LDG—

Reason for Refund

Documents Returned to Observer

Yes  No

Request Emailed to Senior Executive Officer for Approval

Yes  No

Signed

Date

#### Finance Section

Payment Reference

ch\_3RkqnFB1CW0EN5FC0H61Y7w

Checked Against Fee Income Online

EO/AA (Accounts Section)

Amount

€

Refund Date

Authorised By (1)

SEO (Finance)

Authorised By (2)

Chief Officer/Director of Corporate Affairs/SAO/Board Member

Date

Date

File With

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SECTION 131 FORM

Appeal No

ABP-322787

Defer Re O/H

Having considered the contents of the submission dated/received

14/7/25

from Anne Marie Steadman I recommend that section 131 of the Planning and Development Act, 2000 be not be invoked at this stage for the following reason(s):

no new material information

Section 131 not to be invoked at this stage.

Section 131 to be invoked — allow 2/4 weeks for reply.

Signed

Drake W. Clark

Date

06/08/25

EO

Signed

[Empty box]

Date

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SEO/SAO

M

Please prepare BP — Section 131 notice enclosing a copy of the attached submission.

To

[Empty box]

Task No

[Empty box]

Allow 2/3/4 weeks

BP

Signed

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Date

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EO

Signed

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Date

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AA

Handwritten signature and date: 24/07/25

Observation Submission – An Bord Pleanála  
Case Reference: ABP-322787

**To:**  
The Secretary  
An Bord Pleanála  
64 Marlborough Street  
Dublin 1  
D01 V902

Planning Authority Reference 245503

ABP Case Reference 322787

Name: Anne Marie Sheahan & Conor Clark

Address: Lisgriffin, Buttevant, Co.Cork

Email Address: ameriessheahan123@gmail.com

Contact Number: 083 034 2406

Date: 09.07.2025

Dear Sir/Madam,

I wish to ~~make an~~ observation in respect of the above-mentioned planning appeal currently before An Bord Pleanála.

As an interested party and resident of the area, I have concerns regarding the potential impact of the proposed development, particularly in relation to:

1. RFI ITEM 1 – Conflict with Planned N72/N73 Relief Road
2. RFI ITEM 2 – Karst Risk at Turbine Sites
3. RFI ITEM 3 – Otter Activity and Impact from Underground Drilling
4. RFI ITEM 4 – Bat Activity and Mitigation Near Turbines and Grid Route
5. RFI ITEM 5 – Bird Survey Methodology and Pond Placement
6. RFI ITEM 6 – Hedgerow Removal at Townland Boundary Near T2
7. RFI ITEM 7 – Clarity on Hedgerow & Field Layouts
8. RFI ITEM 8 – Landowner Consent for Measures Outside Red Line Boundary
9. RFI ITEM 9 – Inclusion of Derelict Houses as Sensitive Receptors
10. RFI ITEM 10 – Rewilding and Hedgerow Creation Proposals

Observation Submission – An Bord Pleanála  
Case Reference: ABP-322787

11. RFI ITEM 11 – Impact on Local Water Supply (Wells)
12. RFI ITEM 12 – Inconsistencies in Number and Use of Site Entrances
13. RFI ITEM 13 – Telecom Interference
14. RFI ITEM 14 – Emergency Service Access
15. RFI ITEM 15 – Reinstatement of Land Post-Construction
16. RFI ITEM 16 – Haul Route Safety and Impact
17. RFI ITEM 17 – Third Party Transport Infrastructure (Irish Rail & TII)
18. RFI ITEM 18 – Flood Risk Along Grid Cable Route
19. RFI ITEM 19 – Land Ownership (Folio CK29333)
20. RFI ITEM 20 – Fire Risk Management
21. RFI ITEM 21 – Visual Impact of Photomontages
22. RFI ITEM 22 – Equine Impact Assessment
23. RFI ITEM 23 – Revised Layout Drawings
24. RFI ITEM 24 – Decommissioning and Site Restoration

I respectfully request that the Board take my concerns into consideration when making its decision and urge that permission for this development be refused or significantly amended.

Please find enclosed the required fee as part of this valid observation submission, as well as any relevant supporting documentation.

Yours sincerely,

Anne Marie Sheahan & Conor Clark

**RFI ITEM 1** from the Tullacondra Green Energy Project RFI response addresses the interaction between the proposed **grid connection route** and the **N72/N73 relief road**. Below are the key **red flags** and **inconsistencies** identified:

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● **Red Flags and Concerns:**

**1. No Updated EIAR Despite Infrastructure Change:**

- The response clearly states that **no changes to the proposed development** have been made as a result of the RFI and therefore the **EIAR has not been revised**.
- However, the relocation of **joint bays** and planned interaction with the **proposed flyover** could **constitute a material change** to infrastructure layout.
- This raises a red flag as **regulatory guidance typically requires revised assessments** when physical changes affect routing or interaction with third-party infrastructure.

**2. Conditional Agreement with NRO:**

- While the Cork National Roads Office (NRO) has **accepted the joint bay relocation proposal**, the agreement appears **conditional on the flyover being built** before grid cable commissioning.
- This introduces **dependency risk**; if the N72/N73 road is delayed or reconfigured, the grid route may need redesign, affecting both cost and planning compliance.

**3. Potential Planning Condition Dependency:**

- The developer has offered to **accept a planning condition requiring a bond** to cover grid diversion costs.
- This suggests **cost uncertainties remain unresolved**, and the need for a bond indicates that the developer anticipates the **potential need for substantial remedial works**.

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◆ **Inconsistencies and Ambiguities:**

**1. Stated "No Change" vs. Actual Design Alteration:**

- The response says **no changes have been made to the development**, but proposes a **new layout of joint bays** to facilitate future cable diversion via a flyover.

- This is inconsistent with the claim that the development has not been altered.

## 2. Reliance on Future Construction of Flyover:

- The cable layout is designed to assume that the **relief road and flyover will be completed** prior to grid connection commissioning.
- This assumption is **not within the applicant's control**, creating a risk that project timelines may conflict or require retrofitting if the flyover is delayed.

## 3. Environmental Assessment Omission:

- There's a claim that the **relocated joint bays "do not affect the EIAR assessment"**, but no clear evidence or modeling is provided to justify this.
- No supplemental analysis or addendum to the EIAR is presented to verify this claim, creating uncertainty.

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### Supporting Evidence:

- *Page 17 of the PDF (Section 1.2):* Outlines the applicant's agreement with Cork NRO and proposal for joint bay relocation.
- *Appendix 1.1:* Visualizes the **new joint bay locations** and their integration into the existing road and relief road corridor.
- *Appendix 1.2:* Includes correspondence affirming NRO's acceptance **subject to conditions**, and developer's offer of a planning bond for future works.

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### Recommendation:

Cork County Council should:

- Request a **formal amendment or addendum to the EIAR** to reflect infrastructure layout changes.
- Clarify the **binding nature and enforceability of the NRO agreement**.
- Evaluate potential **planning risk** if the flyover timeline is delayed or altered from its current proposal.

Would you like a risk matrix or summary sheet highlighting these points for submission or internal review?

Sources

Let's **dig deeper** into the technical, procedural, and planning implications of **RFI ITEM 1** for the **Tullacondra Wind Farm Project**, focusing on **material inconsistencies, potential regulatory weaknesses, and legal/strategic exposure.**

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## **RFI ITEM 1 – GRID CONNECTION & N72/N73 RELIEF ROAD INTERFACE**

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### **1. Material Inconsistency in Project Scope vs. EIAR Claims**

#### **Claim:**

"The proposed relocation of the joint bays does not affect the assessment within the EIAR."

#### **Contradiction:**

- Appendix 1.1 clearly shows **new infrastructure (joint bays)** being installed in a **different spatial relationship** to the existing road and proposed flyover.
- This implies **construction and cable placement activities** will now interact with a **different topography, traffic pattern, and construction timeline** than originally assessed.
- Yet, no **updated environmental or engineering modelling** is provided to validate this "no impact" conclusion.

#### **Deeper Implication:**

- Under Section 172(1D) of the Planning and Development Act 2000 (as amended), **any significant change to a development's location or method of construction** may warrant an updated EIAR.
  - The response **attempts to avoid triggering a revised EIAR**, which may not be legally defensible if challenged by third parties or on judicial review.
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### **2. Dependency Risk on Uncertain Third-Party Infrastructure**

#### **What's Happening:**

- The revised grid layout **assumes** the N72/N73 flyover **will be constructed before grid energisation**, so the cable can be routed into ducts in the flyover.
- If the relief road construction is **delayed**, the developer would be left with:
  - A live cable needing future diversion (expensive and risky),
  - A gap in the ducting network,
  - Potential interruption to power generation timeline.

#### **Strategic Oversight:**

- The approach effectively **externalizes risk** to the National Roads Office and ESB Networks.
- This could result in:
  - A **temporary energisation layout**, with future reworks,
  - The need for a **new planning application** if a major redesign occurs.

● **Red Flag:**

The project lacks a **Plan B** or formal **dependency mitigation schedule** — this should be seen as a **material risk** during planning assessment.

### 3. **Financial & Legal Exposure – Use of Planning Conditions**

**Proposal by Developer:**

“We propose to lodge a bond to secure the completion of diversion works if needed.”

**Why This Is Problematic:**

- Bonds are **not typically used to resolve future uncertainty** over engineering deliverables **not fully within the developer’s control**.
- The **planning authority cannot compel future redesigns of national road infrastructure** to accommodate a wind farm connection.
- Reliance on such a bond is **administratively weak**, especially if:
  - Cost estimates are inaccurate,
  - The required works become materially different (e.g., larger ducting, relocation of access roads),
  - The ESBN or NRO changes technical requirements post-approval.

**Legal Context:**

- This leaves the project open to **judicial review** on grounds of “inadequate environmental assessment” and “failure to assess cumulative impacts with reasonably foreseeable projects.”

### 4. **Technical Ambiguity – No Engineering Model of Interface**

- There is **no integrated engineering drawing** or simulation showing how:
  - The **joint bays**, flyover ducting, and road construction **interact**,
  - **Grid reliability** is maintained during and after works,
  - **ESB de-energisation/energisation protocols** align with the flyover build timeline.

**Implication:**

- Regulatory reviewers (e.g., An Bord Pleanála) are left to **infer compatibility**, which **violates the “precautionary principle”** in both EU and Irish planning law.

#### 5. Procedural Weakness – EIAR Volume III Appendix Reference Errors

- The response references **EIAR Volume III Appendix 3.2** as containing consultation records, but this appendix is actually reserved for **other surveys**, not consultation with NRO.
- Actual correspondence is in **Appendix 1.2**, meaning the EIAR references in this context are **technically incorrect**.

#### What This Means:

- This weakens the applicant’s claim of **“documented engagement”**, and shows a **lack of procedural rigour**, which can be cited as a basis for further information requests or planning delays.

#### 6. Cumulative Impact Consideration Overlooked

- The N72/N73 relief road is a **major infrastructure project** with potential:
  - Ground vibration during construction,
  - Dust and pollution affecting installation conditions,
  - Traffic management impacts on turbine and cable deliveries.
- Yet **no cumulative impact analysis** is provided — this is a serious omission under **EU Directive 2014/52/EU** amending the EIA Directive.

#### Summary Matrix

Issue	Nature	Severity	Implication
EIAR not updated	Legal/procedural	● High	Judicial review risk, non-compliance
Assumes flyover timeline	Technical/strategic	● High	Construction mismatch, grid delay
Planning bond proposal	Legal/financial	● Medium	Weak enforceability, precedent risk
Missing cumulative impact analysis	Environmental compliance	● High	EIA Directive breach
Referencing errors in documentation	Procedural	● Low	Undermines credibility/document tracking

Issue	Nature	Severity	Implication
No visual engineering integration	Technical/planning	● High	Planning ambiguity, integration failure

### 1. Executive Summary

RFI Item 1 addresses the interface between the proposed underground grid connection route and the N72/N73 relief road. While the applicant asserts compliance through consultation and minor design adjustments, a detailed review reveals several material inconsistencies and risks that warrant further scrutiny and possibly additional submissions or clarification prior to determination.

### 2. Summary of Key Issues

Issue	Nature	Severity	Implication
EIAR not updated	Legal/procedural	High	Judicial review risk and potential non-compliance with Planning and Development Act 2000 (as amended)
Dependency on N72/N73 relief road	Strategic/technical	High	Grid connection integrity and timeline risks if relief road is delayed
Reliance on planning bond	Legal/financial	Medium	Precedent risk and weak enforceability of contingent infrastructure alignment
Missing cumulative impact assessment	Environmental compliance	High	Breach of EIA Directive (2014/52/EU) and EU planning obligations
Documentation referencing errors	Procedural	Low	Undermines transparency and traceability of consultation records
No integrated engineering layout	Technical	High	Ambiguity in how the grid/flyover interaction functions spatially and operationally.

### 3. Detailed Analysis

#### 3.1 EIAR Revision Avoidance

- Claim: No change to project scope; EIAR remains valid.
- Reality: The relocation of joint bays constitutes a physical and functional change in

infrastructure alignment.

- Risk: May not comply with Section 172(1D) of the Planning and Development Act 2000.

### **3.2 Reliance on Third-Party Timelines**

- Issue: Grid design assumes flyover completion prior to grid commissioning.
- Risk: Delay in relief road project renders current cable layout unusable or temporarily energised, introducing operational and safety risks.

### **3.3 Use of Planning Condition & Bond**

- Issue: Developer proposes a bond to ensure diversion costs are covered if road is delayed.
- Concern: Financial bonds do not resolve engineering or spatial risks; weak tool for managing inter-agency infrastructure dependencies.

### **3.4 Cumulative Impacts Not Assessed**

- Observation: No analysis of joint impacts between relief road and grid works (e.g., vibration, traffic, noise, overlapping construction timelines).
- Non-compliance: Fails to satisfy EU requirements on cumulative impact assessment.

### **3.5 Procedural Accuracy**

- Error: RFI response incorrectly references Appendix 3.2 for consultation records (rather than survey appendix); actual correspondence is in Appendix 1.2.

### **3.6 Missing Engineering Simulation**

- Issue: No integrated layout or technical cross-section demonstrating flyover and cable interaction.
- Risk: Ambiguity around construction sequencing, maintenance access, and ESBN interface.

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#### 4. Recommendations

1. **Request a formal EIAR addendum** addressing the relocated joint bays and interaction with future relief road infrastructure.
2. **Require contingency planning documentation** for the grid connection in the event of delay or cancellation of the relief road.
3. **Mandate submission of integrated engineering drawings** showing grid joint bays, flyover ducting, and access requirements.
4. **Seek clarification from ESBN and Cork NRO** confirming technical feasibility under variable construction timelines.
5. **Verify planning bond terms** and consider legal review to ensure enforceability and sufficiency.
6. **Request updated cumulative impact assessment**, particularly for overlapping construction impacts with the relief road.

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#### 5. Conclusion

While the applicant asserts that the changes associated with RFI Item 1 are non-material, the dependency on third-party infrastructure, the absence of an EIAR revision, and procedural/documentary shortcomings introduce significant planning, legal, and technical risks. Additional clarifications and safeguards should be pursued prior to making a planning determination

**RFI ITEM 2** concerns the risk posed by karst features (e.g. sinkholes, voids, solution-enlarged fractures) at proposed turbine locations **T1 and T5** of the Tullacondra Wind Farm. Cork County Council requested a more detailed quantification of structural risk due to karst. While the applicant responded with borehole and geophysical survey data, a detailed review reveals multiple **red flags** and **technical inconsistencies**.

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## Red Flags and Inconsistencies – RFI ITEM 2: Karst Risk Assessment

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### 1. Superficial Treatment of Karst Risk Despite Identified Geophysical Anomalies

#### Claim:

"No obvious core loss was recorded... No cavities found... The karst risk is low."

#### Inconsistency:

- The 2022 **2D resistivity surveys** flagged **weathered limestone** at both T1 and T5—classic indicators of potential karstification.
- The 2024 borehole investigation only drilled **two locations**, yet conclusions were extrapolated to **multiple turbine sites**, assuming uniform geology.

#### Red Flag:

- This extrapolation is unjustified. Karst terrain can be **highly localized and unpredictable**. A small shift in turbine foundation location could intersect a feature not visible in limited borehole sampling.
- 

### 2. Insufficient Borehole Coverage Relative to Site Sensitivity

#### Data Provided:

- 1 borehole each at T1 and T5, drilled in December 2024 (BH-T01 and BH-T05).
- Depths: ~20–21.5m. Weathered bedrock found at T5 between 5.6–12.5m.

#### Technical Concern:

- **Two boreholes** on a multi-turbine limestone-dominated site is **insufficient** to validate that karst risk is "low."
- Especially inadequate given that **T1 and T5 were specifically identified** as at-risk locations in the EIAR.

#### Comparison:

- Best practice for wind farms on karst terrain includes **multiple boreholes, rotary core with downhole geophysics**, and possibly **cone penetration testing (CPT)** to detect solution features.
-

### 3. **Geophysical Data Not Re-validated by Boreholes**

**Claim:**

"Findings verify the 2D geophysics interpretation."

**Inconsistency:**

- No cross-sectional visual correlations are provided (e.g. matching borehole logs to resistivity profiles).
- The geophysics and borehole findings are only **narratively reconciled**, not spatially plotted.

**Red Flag:**

- This weak correlation undermines the confidence that **no subsurface voids or solution-enlarged joints** exist near critical infrastructure.
- 

### 4. **Overreliance on Gravity and Piling Foundations Without Site-Specific Justification**

**Claim:**

"Gravity and piling foundation designs assessed and are appropriate."

**Missing:**

- No detail on what foundation type is assigned per turbine.
- No explanation of **design safety factors** related to karst-induced subsidence or void collapse.

**Risk:**

- In karst, gravity foundations are at higher risk of differential settlement unless **underlain by grouted voids or rock bolts**.
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### 5. **No Updated Karst Hazard Map or GIS Risk Overlay**

- There is **no visual risk model** included in the response.
  - No karst susceptibility map overlaying turbine locations, despite this being **standard industry practice** for wind farms in limestone terrain.
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### 6. **Deficient Integration into EIAR**

**Claim:**

"No update to EIAR necessary."

**Conflict:**

- The EIAR states that **karst features were identified**, and that **further site investigation would be needed**. The RFI response provides this but then claims no new conclusions arise, and **no EIAR amendment is needed**.

**Red Flag:**

This is a procedural vulnerability: **new data was generated, but not integrated into the statutory assessment** (as required under the Planning and Development Act 2000).

**Summary Table**

Issue	Nature	Severity	Implication
Limited borehole investigation	Technical	● High	Insufficient data for risk classification in karst-prone areas
Poor correlation with geophysical data	Technical	● Medium	Undermines conclusion that weathered limestone poses no risk
Assumption of site-wide uniformity	Scientific	● High	Karst is localized; assumptions may mask voids outside borehole zones
No karst hazard mapping or overlays	Procedural/Visual	● Medium	Planning decision-maker lacks visual risk context
No EIAR update or risk integration	Legal/Procedural	● High	Vulnerable to legal challenge for omission of new material considerations
Lack of detailed foundation analysis	Engineering	● Low	Piling vs. gravity risk factors not site-assigned or assessed

**✂✂ Recommendations to Planning Authority**

- 1. Request a Revised Karst Risk Map:**
  - Overlay of turbine locations with karst susceptibility zones and ground investigation points.
- 2. Demand Additional Boreholes or Geophysical Validation:**
  - Especially for turbines T1–T6, all of which are on limestone.
- 3. Require an EIAR Addendum:**
  - Integrate karst risk findings formally under Soils and Geology chapter.
- 4. Clarify Foundation Design Strategy:**
  - Assign foundation type (gravity or pile) per turbine with rationale based on karst risk.
- 5. Condition Planning Approval on Karst Monitoring During Construction:**

- Include stop-work triggers for unexpected voids, with real-time reporting to the planning authority.
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**RFI ITEM 3** deals with the lack of assessment on **otter activity** near the proposed **Horizontal Directional Drilling (HDD)** under the **South Caherduggan Stream**—a tributary of the **River Blackwater SAC**, which is protected under the EU Habitats Directive.

While the applicant provides a response, including a confirmatory otter survey and revised Natura Impact Statement (NIS), a detailed review reveals several **red flags** and **procedural inconsistencies** that could significantly weaken the project's legal and ecological compliance.

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## Red Flags and Inconsistencies – RFI ITEM 3: Otter Survey and NIS

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### 1. Lack of Survey Data in Original NIS Was a Serious Deficiency

#### Background:

- The original application included **no otter survey data** at the HDD location.
- This meant the NIS **could not legally conclude** no adverse effect on the integrity of the River Blackwater SAC—home to **Lutra lutra (otter)**, a qualifying interest species.

#### Red Flag:

- This is a **procedural failure** under the **EU Habitats Directive (92/43/EEC)** and Irish transposing legislation. An NIS must be based on “**best scientific knowledge**” and include **species-specific field data**.

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### 2. The Otter Survey Was Conducted After the RFI — But Still Has Gaps

#### Details:

- Survey done on **31 January 2025**, nearly 5 months **after** the RFI was issued.
- No signs of otters (spraints, holts, prints, couches) were found **within 150m upstream/downstream** of the HDD site.

#### Inconsistency:

- Otters are **highly mobile**, nocturnal, and cryptic. The lack of signs in one visit **does not guarantee absence**—especially during winter when spraint marking is reduced.

#### Red Flag:

- A **single survey in winter** is **not enough** to rule out use of the stream by otters. **Multiple seasonal surveys** are typically recommended under NPWS and CIEEM guidance.

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### 3. No Detailed Risk Assessment for Frack-Out Event or Water Quality Impacts

#### Stated Concern:

- The applicant acknowledges the potential for **frack-out** (uncontrolled release of drilling fluid into the stream).

**Missing:**

- No detailed **probabilistic risk assessment** of frack-out occurrence or impact.
- No site-specific **method statement** for preventing or remediating frack-out scenarios.

**Red Flag:**

- Frack-out into an SAC-designated stream, even if temporary, can have **significant indirect effects** (sediment, contamination, prey loss) on otters.

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**4.  Imhof No Impact Based on No Evidence, Not Evidence of No Impact**

**Logical Fallacy:**

- The applicant argues that because **no otters were detected**, the HDD works won't affect them.

**Scientific Principle:**

- **Absence of evidence ≠ evidence of absence.**
- Especially in **Annex II species** assessments, precautionary principle applies.

**Red Flag:**

- This logic **undermines the integrity of the Appropriate Assessment screening** and exposes the decision to legal challenge under **EU case law (e.g., Sweetman, CJEU C-258/11)**.

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**5. Revised NIS Is Not Independently Peer-Reviewed or Statutorily Validated**

**Context:**

- The applicant revised the NIS to reflect the January 2025 otter survey.

**Missing:**

- No documentation that the **NPWS or an independent ecological authority** has reviewed or accepted the adequacy of the revision.

**Red Flag:**

- Without external validation, the revised NIS remains open to dispute—especially given its dependence on **minimal survey effort** and generic mitigation.

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**6.  Consideration of Prey Availability or Foraging Habitat Connectivity**

**Oversight:**

- The NIS fails to consider:

- Whether the stream provides critical **foraging habitat** (small fish were observed).
- Whether it serves as a **commuting corridor** to/from the River Blackwater.

**Red Flag:**

- Habitat connectivity is a key concept in **Articles 6(3) and 10** of the Habitats Directive. Overlooking it **invalidates conclusions of no adverse effect**.

**Summary Table**

Issue	Type	Severity	Implication
No original otter data in NIS	Legal/Procedural	● High	Initial application was not lawfully complete
Single winter survey post-RFI	Scientific	● High	Inadequate to confirm species absence
No frack-out risk modelling	Technical	● High	Violates precautionary approach under EU Habitats law
Logical fallacy in impact conclusion	Legal/Scientific	● High	Absence of evidence ≠ evidence of absence
Revised NIS lacks external review	Procedural	● Medium	No statutory acceptance of revised mitigation
Foraging/connectivity not assessed	Ecological	● Medium	Misrepresents indirect impacts

**Recommendations for Planning Authority or Objectors**

1. **Demand a multi-season otter survey**, with at least one breeding season survey, per CIEEM standards.
2. **Require detailed HDD risk modelling**, including worst-case frack-out scenario and remediation protocol.
3. **Insist on independent validation of revised NIS**, preferably by NPWS or a qualified ecologist.
4. **Consider requesting a Natura 2000 Impact Statement Addendum**, to fully address indirect and cumulative effects.
5. **Invoke the precautionary principle**: if doubt remains about otter presence, the application **must not proceed** unless “no adverse effect” is beyond reasonable doubt.

## RedFlags and Inconsistencies – RFI ITEM 4: Bat Protection and Survey Adequacy

RFI ITEM 4 relates to the adequacy of bat surveys and impact mitigation concerning the wind turbines and associated infrastructure (notably hedgerows and bridges). The applicant asserts compliance with best practices, but the response contains several red flags and inconsistencies in survey timing, spatial impact buffers, and roost risk assessments. Here's a deeper analysis:

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### KeyRed Flags and Inconsistencies

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#### 1. Survey Timing Misrepresented in EIAR

##### Issue:

- The applicant initially stated that **spring bat surveys were not carried out**, triggering the RFI.
- They later claimed this was a **“typographical error”**, and that spring surveys were indeed performed.

##### Red Flag:

- This admission calls into question the **accuracy and reliability of the EIAR**, especially Chapter 7 on Biodiversity.
  - If such a fundamental error occurred, it undermines confidence in other data presented.
  - No independent audit or verification of these corrected survey records is provided.
- 

#### 2. Inadequate Consideration of Buffer Distances and Turbine Relocation

##### Issue:

- The Planning Authority recommended re-siting turbines T5 and T7 to **increase bat flight buffer zones**.
- The response claims **re-siting T7 is not feasible** and **moving T5 by 20m would have no effect**, based on expert judgment.

##### Inconsistency:

- This conclusion is based solely on **bat activity levels**, ignoring **cumulative edge effect** risks, hedgerow attraction, and turbine height.

##### Red Flag:

- No quantitative risk modelling was provided for bat collision or barotrauma.
- The decision to dismiss re-siting appears based on convenience, not ecological necessity.

- The proposal of curtailment as an alternative is not clearly defined or committed (e.g., no curtailment schedule or trigger thresholds offered).
- 

### 3. Bridge and Culvert Roost Assessment Lacks Depth

#### Issue:

- The Ballyvinitter Road Bridge (potential roost site) was surveyed only **once**, visually and without remote sensing (e.g., bat detectors or thermal cameras).

#### Red Flag:

- The structure was deemed “low potential” based on **surface inspection only**—without internal structural access, dusk emergence surveys, or acoustic monitoring.
  - Best practice (e.g., BCI/Ireland and SNH guidelines) require **multiple dusk/dawn surveys** and the use of detectors when evaluating manmade roost substrates.
- 

### 4. Failure to Address Licensing Requirements Proactively

#### Issue:

- The applicant notes that “a derogation license would be required” if roosts are found—but does **not confirm** if a license has been applied for, or if one will be required post-consent.

#### Red Flag:

- This **passes risk to the post-planning stage**, when roost disturbance becomes illegal without a license.
  - A competent ecological response would include a **license screening request to NPWS** during the planning phase.
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### 5. Mitigation Measures Are Generic and Unquantified

#### Examples:

- Proposed planting under the Habitat Management Plan (HMP) is cited to improve alternative bat foraging areas.
- A curtailment regime is mentioned but **no commitment to implementation thresholds or durations** is given.

#### Red Flag:

- The mitigation language is **vague and unenforceable**.
  - There is no measurable biodiversity benefit analysis (e.g., expected net habitat gain or bat activity redistribution).
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## Summary Table

Issue	Nature	Severity	Implication
Spring survey omission in EIAR	Procedural	● High	Undermines trust in baseline data and integrity of biodiversity chapter
Inadequate bat buffer rationale for T5/T7	Ecological/Technical	● High	Risks avoidable bat collisions; buffer deviation not robustly justified
Weak bridge roost assessment	Survey Methodology	● Medium	Misses chance to detect low-use roosts often found in bridges
No bat license engagement	Legal/Procedural	● Medium	Deferred risk; potential non-compliance with Wildlife Acts if roosts are discovered
Generic mitigation and curtailment commitments	Implementation	● Low	No enforceable mechanism to ensure proposed measures are effective

## Recommendations

1. **Verify spring survey data independently**, and require documented detector logs and survey dates to confirm.
2. **Request formal collision risk modelling** for bats based on turbine placement, rotor-swept height, and local bat densities.
3. **Require dusk/dawn emergence surveys at the Ballyvinitter Bridge** or other crossing structures.
4. **Insist on submission of a bat derogation license screening request** to NPWS before planning determination.
5. **Condition curtailment with specific thresholds** (e.g., wind speed + temperature + acoustic triggers) and include this in a planning compliance schedule.

**RFI ITEM 5** addresses the adequacy of **avian impact assessments**, specifically regarding survey effort, nocturnal migration, transect coverage, and habitat enhancement risks near turbines. The applicant attempts to close gaps identified by Cork County Council, but a deeper examination reveals several **red flags**, inconsistencies, and procedural weaknesses that undermine the reliability of the ornithology assessment.

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## Red Flags and Inconsistencies – RFI ITEM 5: Avian Impact Assessment

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### 1. Survey Effort Misrepresentation (Item 5a)

#### Claim:

- Spring bird surveys were carried out, despite the RFI noting their absence.
- Applicant attributes this to a **duplication of a typographical error from RFI Item 4a** (bat surveys).

#### Red Flag:

- Misreporting of bird survey effort in the EIAR damages confidence in the overall baseline.
- The applicant's claim of a "typographical error" across species groups (bats and birds) suggests **sloppy document control**, raising questions about other data.

#### Inconsistency:

- No raw survey data or timestamps have been submitted to verify when surveys occurred.
- 

### 2. No Nocturnal Migration Surveys (Item 5b)

#### Claim:

- The site is not located on a known flyway; therefore, nocturnal surveys are not needed.
- Low daytime detection of migratory wildfowl (e.g., Whooper Swan) is used to dismiss night-time use.

#### Red Flag:

- **Nocturnal migration** is a well-documented phenomenon across many passerine and wader species.
- Absence of a known flyway **does not mean nocturnal migration does not occur**—especially near the River Blackwater, a wetland-rich corridor.

#### Omission:

- No radar monitoring, thermal imaging, or acoustic sensors were deployed—despite growing standard use in wind energy impact studies.
-

### 3. **Transect Coverage Deficiency (Item 5c)**

#### **Claim:**

- Figure 8.1 of the Ornithology Baseline Report accidentally omitted Transects C and D, which were carried out near Turbines 1–4.
- A “corrected figure” is included in Appendix 5.1.

#### **Red Flag:**

- The omission of major data collection routes from submitted maps is a serious documentation error.
- It prevents stakeholders from validating survey locations or coverage density in sensitive turbine zones.

#### **Inconsistency:**

- No explanation for why transects A and B were chosen initially and why C and D were only added during the **non-breeding season of 2022/2023**.
- 

### 4. **Habitat Enhancement Near T1 Risks Increased Bird-Turbine Interaction (Item 5d)**

#### **Issue:**

- A pond 110m south of Turbine 1 is proposed for ecological enhancement (to reduce eutrophication, improve biodiversity).

#### **Claim:**

- The enhancement will not attract significant bird activity because the pond is small (0.08 ha) and pre-existing.

#### **Red Flag:**

- The argument contradicts itself: if habitat enhancement is expected to improve the site for biodiversity, it could **logically increase bird use**—including by species at risk of collision.

#### **Omission:**

- No modelling of flight paths or bird attraction radius is presented.
  - No contingency or adaptive management is proposed if increased bird use near T1 occurs.
- 

### 5. **Overreliance on Qualitative Judgement and Professional Experience**

#### Across all four sub-items:

- The applicant leans heavily on “professional judgement” of surveyors and past experience.

- Minimal new empirical data is provided.
- No collision risk modelling (CRM) results or zone of collision potential is shown per turbine.

**Red Flag:**

- The precautionary principle and EIA best practice require **quantitative risk assessments** for sensitive receptors, not just narrative opinion.

**Summary Table**

Issue	Nature	Severity	Implication
Misrepresentation of spring surveys (5a)	Procedural	● High	Damages reliability of the EIAR's ornithology baseline
No nocturnal migration surveys (5b)	Methodological	● High	Potentially underestimates migratory bird use of the site
Transect coverage omitted and late (5c)	Mapping/Data Integrity	● Medium	Reduces confidence in spatial accuracy of bird data
Bird-attractive habitat enhancement near T1 (5d)	Ecological	● Medium	Risk of increased turbine collisions due to habitat improvements
Overreliance on expert opinion	Evidence	● High	Lacks transparent, replicable risk assessments required under EIA regulations

**Planning and Legal Recommendations**

1. **Request formal submission of bird survey logs and timestamps**, confirming spring survey coverage.
2. **Require nocturnal migration assessment**, via radar, acoustic, or thermal camera methods.
3. **Mandate an ornithological collision risk model (CRM)** with turbine-specific outputs.
4. **Insist on adaptive management plan** if pond enhancement leads to elevated avian activity near T1.
5. **Apply the precautionary principle** under the EIA Directive if data deficiencies persist.

Here are the key **red flags and inconsistencies with RFI ITEM 6** from the Tullacondra Wind Farm RFI response, which focuses on the partial removal of a mature hedgerow near Turbine 2 (T2), and the lack of clarity in the mapping of hedgerow/treeline impacts.

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## Red Flags and Inconsistencies – RFI ITEM 6

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### 1. Incomplete Quantification of Hedgerow Loss

#### Issue:

The response confirms the removal of a 10–12 m section of a mature hedgerow but:

- Fails to provide the total number of trees/shrubs affected.
- No arboricultural or species-specific inventory is included.

#### Why It Matters:

This hedgerow is a **historic townland boundary** and classified as of “**high significance**” in the Hedgerow Appraisal (Appendix 6.1). Given this, any loss should have been **fully quantified** and supported by a **tree/hedgerow removal plan**.

● **Red Flag:** Without a detailed species-level impact statement, the response risks downplaying the **ecological, historical, and landscape value** of the removal.

---

### 2. Overreliance on Future Offsetting to Justify Present Loss

#### Claim:

The applicant states that loss will be offset through:

- “Improved management” of the remaining hedgerow,
- New hedgerow and treeline planting as per the Habitat Management Plan.

#### Concern:

This offsetting is **deferred, general, and non-specific**:

- No plan submitted shows **exact planting location, timeline, or species mix**.
- No monitoring or maintenance commitments are outlined.

● **Red Flag:** The response does not comply with **mitigation hierarchy** (avoid → reduce → mitigate → offset). It jumps to offsetting **without adequate exploration of avoidance**.

---

### 3. No Evidence of Route Alternatives Considered

#### Issue:

The RFI specifically asks for **alternative routing or methods** to avoid impacting the mature hedgerow.

**Claim:**

The response simply says that loss is “unavoidable” due to connection of T1 to the rest of the site.

**Missing:**

- No demonstration of **horizontal design alternatives** (e.g., cable realignment, trenchless installation),
- No use of visual overlays or comparative route options,
- No reference to if underground directional drilling (HDD) was considered to avoid surface impacts.

● **Red Flag:** This is a **procedural failure**—the applicant did not meaningfully engage with the RFI’s request to **investigate avoidance**.

---

● **4. Minimisation Measures Are Not Clearly Defined**

**Claim:**

The route was selected to minimize hedgerow loss “where possible,” referencing design iterations.

**Concern:**

- No quantitative comparison of hedgerow impacts between layout versions.
- The final layout still intersects a **high-value ecological boundary**.
- It is unclear if mitigation by realignment was ever truly considered.

● **Red Flag:** The term “minimised” is used narratively, not analytically. The council cannot verify the impact trade-off.

---

● **5. Unclear or Missing Mapping of Hedgerow Impacts**

**Issue:**

RFI Item 6(b) requests maps clearly showing:

- All existing hedgerows/treelines,
- All proposed removals.

**Response:**

- The applicant says maps are included in RFI Item 7.

- However, **no example maps are included in Item 6**, and the response to Item 7 says the maps "**do not change**" anything—they are just "for clarity."

● **Red Flag:** The applicant has **technically deferred** the mapping request without submitting a targeted response under RFI Item 6.

### Summary Table

Issue	Type	Severity	Implication
No species-specific tree/shrub inventory	Ecological/Procedural	● High	Impact on protected or significant features not fully assessed
Offset mitigation lacks detail and timelines	Implementation	● Medium	No assurance biodiversity losses will be meaningfully compensated
No analysis of alternative routes to avoid hedgerow	Planning/Design	● High	Breaches EIA/mitigation hierarchy: "avoid" not properly considered
Minimisation measures unsupported by design evidence	Procedural	● Low	Claims of impact reduction are not transparent or auditable
Mapping not directly included in RFI Item 6	Documentation/Clarity	● Medium	Makes it harder to understand and verify scope of hedgerow/treeline impacts

### Recommendation for Planning Authority

1. **Require detailed tree/shrub inventory** for the section of hedgerow to be removed.
2. **Request a formal Alternatives Assessment** showing whether cable/track routing can avoid the hedgerow via trenchless methods or re-alignment.
3. **Mandate submission of updated mapping** with:
  - All hedgerows/treelines clearly shown,
  - Removals differentiated,
  - Overlaid with turbine and track positions.
4. **Condition detailed mitigation and offsetting plan** with:
  - Species and planting layout,
  - Planting schedule,
  - Maintenance and monitoring commitment for at least 5 years.

RFI Item 7 requested a *clear, accurate, and comprehensive set of site layout plans* that:

1. **Show all existing hedgerows/treelines**
2. **Differentiate:**
  - existing vs. new farm lanes
  - permanent vs. temporary access tracks
  - new field openings
3. Replace **confusing colour coding**, particularly **green** used for hedgerow loss
4. Include a **legend** for clarity
5. Submit revised versions of Figures 7-7 (pages 1–4) from the EIAR

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### ◆ **Key Issues, Red Flags & Inconsistencies in RFI Item 7 Response**

#### ● **1. Lack of Substantive Change — Only “For Clarity”**

- The response states that **"the proposals for removal of hedgerows/treelines remain the same"** as originally submitted.

◆ **Concern:** The Planning Authority explicitly requested impact mitigation—not just clarity.

● **Red Flag:** Applicant treats this as a formatting issue rather than re-evaluating layout to minimize impacts.

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#### ● **2. No Visual Evidence in the RFI Report Itself**

- The updated drawings are **referenced** but **not included** in the body of the response (only listed by number, e.g., 20910-NOD-XX-XX-DR-C-8005 to C-8028).

◆ **Concern:** Reviewers must cross-reference a separate drawing pack, which is inefficient and may obscure discrepancies.

● **Red Flag:** Lack of embedded visuals weakens transparency and traceability.

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#### ● **3. Ambiguity Around Colour Correction**

- The Council asked for the **replacement of green** to indicate hedgerow **loss**, as it misleadingly implies vegetation **gain or preservation**.
  - The response says new drawings are provided "for clarity" but **does not confirm** if the **colour-coding was changed** as requested.


● **Red Flag:** Failure to confirm this change creates ambiguity and may imply non-compliance.

---

#### ● **4. No New Mitigation Measures for Hedgerow Impact**

- Despite being asked to "**demonstrate how it is proposed to mitigate impacts**", the response simply reiterates the original design rationale (i.e. avoidance during planning).

 **Concern:** No site layout redesign or new avoidance strategies are proposed.






 **Red Flag:** Appears dismissive of the Council's concerns.

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#### 5. Potentially Incomplete Response to Mapping Needs

- The Council asked for clarity around:
    - Openings through fields
    - Distinction between modified vs. new farm tracks
  - While the response claims these are addressed in the revised drawing set, it lacks:
    - Confirmation that **all requested features** are represented
    - **No summary table or map extract** to confirm coverage
- 

#### Summary of Red Flags & Inconsistencies

Issue	Description	Severity
1. Misframing the request	Treated as formatting, not mitigation	 High
2. No visual confirmation	No images/maps in the RFI response itself	 High
3. Colour code ambiguity	Unclear if green has been corrected	 High
4. No new mitigation strategies	No redesign proposed despite request	 High
5. Ambiguity on map features	No confirmation all items were addressed	 Medium

---

#### Recommendation:

To address these red flags, the applicant should:

- Embed *sample annotated maps* within the RFI response

- Explicitly confirm **legend and colour adjustments**
  - Summarize **what changed** from the original layout
  - Provide a short **matrix/table** comparing the Council's request vs. their response
-

Here is a detailed review of **RFI Item 8** from the Tullacondra Wind Farm submission, specifically highlighting **red flags** and **inconsistencies** in the applicant's response:

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### **RFI Item 8 – Request Summary (Cork County Council)**

The Planning Authority requested:

1. Identification of **landowners** within the **blue line boundary** (i.e., land not part of the direct red line application boundary but controlled by the developer).
  2. A **layout plan drawing** showing:
    - Landowner boundaries
    - Extent of each landowner's landholding
  3. **Written consent** from each landowner for:
    - Implementation of habitat enhancement and mitigation measures
    - Acceptance of a **Section 47 agreement** (if required) to ensure long-term enforceability
- 

### **Applicant's Response Summary**

- Revised drawings were submitted showing:
    - Landowner boundaries and folios within the blue line boundary (Drawings C-8305 to C-8306 and C-8041 to C-8044).
  - The applicant claimed that **written landowner consents were already included in Section 2, Part 1** of the original application.
  - The applicant stated that **landowners are willing to accept a planning condition or Section 47 legal agreement** to allow implementation and maintenance of measures.
- 

### **Red flags and Inconsistencies**

#### **1. Landowner Consent Is Asserted but Not Re-Submitted**

- The applicant *claims* landowner consent is already in Section 2 of the original application — but **does not reproduce or attach** the letters in the RFI response.
- This makes it **impossible for reviewers to confirm**:
  - Whether the consent **explicitly includes habitat enhancement measures**
  - Whether **all relevant landowners** within the blue line were included
- This is especially risky since the measures are **outside the red line** and not covered by standard planning controls.

*What was needed:* Copies of signed consents specifically referencing habitat works, with matching folios.

---

● **2. No Evidence That Landowners Were Informed of Section 47 Implications**

- The response **asserts** that landowners "are willing" to accept a Section 47 legal agreement **without providing any written confirmation** of this willingness.
- Section 47 agreements are **binding legal covenants** — it is not sufficient to make this assertion **without documentary evidence** from each landowner acknowledging their awareness and consent.

*What was needed:* Signed statements or legal letters acknowledging the Section 47 request.

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● **3. No Clear Mapping of Enhancement Measures per Landholding**

- While the applicant provides drawings showing **land ownership**, it does **not link specific habitat mitigation measures** (e.g., hedgerow planting, pond restoration) to individual landowners or plots.

- The Council asked for:

"... the extent of each landowner's landholding **within the blue line** and confirmation they agree to proposed works **on their land**."

● **Concern:** Without mapping habitat measures to land parcels, it's **unclear who is responsible for what**.

---

● **4. Critical Risk for Enforcement**

- Enhancement works within the blue line may not be enforceable **without formal legal agreement or planning condition backed by proof**.
  - The current response provides **no clear enforcement mechanism**, relying instead on verbal assurances.
- 

◆ **Summary Evaluation**

Issue	Observation	Assessment
1. Landowner consent letters	Claimed to be submitted earlier but <b>not included</b> or cross-referenced clearly	●
2. Section 47 acceptance	Stated without written confirmation or legal acknowledgment	●

Issue	Observation	Assessment
3. Mapping of works to landowners	Blue line boundaries shown, but <b>no link to specific habitat enhancements</b>	●
4. Risk to enforceability	Habitat works outside red line <b>require binding agreements</b>	●
5. Clarity of ownership data	Drawings list folios but do <b>not confirm comprehensive coverage</b>	●

### Conclusion

While the response **addresses the issue in form**, it **lacks documentary rigor** in several critical areas:

- No reproducible landowner consents tied to enhancement works
- No confirmed legal acceptance of Section 47 agreements
- No mapping of specific mitigation actions per landowner parcel

These omissions introduce **risk of future disputes, unclear obligations, and enforcement difficulties**, especially if ownership changes.

### Recommendations for Compliance

1. Submit **copies of all landowner consent letters**, with specific references to:
  - Habitat enhancement works
  - Willingness to accept legal agreements (e.g., Section 47)
2. Map habitat enhancement measures (e.g., hedgerow planting) to **specific landholdings**
3. Provide a **consent matrix**: landowner name → folio number → associated mitigation area → Section 47 status

RFI Item 9 from the Tullacondra Wind Farm submission, highlighting the **key red flags and inconsistencies** in the applicant's response.

---

### **RFI ITEM 9 – Request Summary (Cork County Council)**

The Planning Authority required the applicant to:

1. **Include derelict/dilapidated dwellings** in the list of **sensitive receptors**, in line with:
    - Cork County Development Plan 2022, which promotes **re-use of vacant dwellings**
  2. **Reassess shadow flicker** and other relevant impacts for these structures, in case they become occupied in the future
  3. **Update the list of sensitive receptors** and provide a **map** indicating separation distances in all directions
- 

### **Applicant's Response Summary**

- The applicant **did not include derelict dwellings** as sensitive receptors.
  - Justified this based on the fact that:
    - These dwellings are **currently uninhabitable**
    - There is "no potential for likely significant effects" on them *in their current state*
  - Acknowledged the Development Plan Objective RP 5-30 (encouraging reuse of ruinous dwellings), but argued it conflicts with **mandatory climate objectives** such as CA 17-2, which support renewable energy deployment.
  - Concluded that derelict dwellings **should be given less weight** than renewable energy goals.
  - Provided an **updated receptor table and map** (Appendix 9.1), but still excluded derelict buildings.
- 

### **Red Flags and Inconsistencies**

#### **1. Failure to Address the Core of the RFI**

**The RFI clearly instructed inclusion of derelict dwellings as a precautionary planning principle.**

- The applicant **acknowledged the instruction** but chose to **ignore it**, arguing policy conflict instead.
- The County Development Plan explicitly aims to **support the reuse of vacant buildings**, and the Council has the discretion to **treat these as future receptors** under a **precautionary approach**.

- Instead of complying, the applicant **reframed the issue** into a policy conflict debate.

**Red flag:** This is a non-compliant response — the applicant did not do what was directly requested.

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## ● 2. Misapplication of Policy Hierarchy

- The applicant invokes **national and EU climate policy** (including the EU RED III Directive and Climate Acts) to justify omitting derelict homes.
- While renewable energy development is a **priority**, planning authorities are still required to **balance this with proper planning and sustainable development**, including local housing reuse objectives (RP 5-30).
- The applicant overstates the **policy conflict**, as both objectives can be addressed through **design mitigation**, not exclusion.

**Red flag:** The policy conflict is **inflated** and used to justify avoidance of relatively simple mitigation (e.g., including a structure in shadow flicker control systems).

---

## ● 3. No Contingency for Future Occupancy

- The applicant does **not commit to retroactively adding derelict dwellings** to the shadow flicker or noise control systems **if they become reoccupied**.
- Even if the structures are not currently sensitive receptors, they could become inhabited during the turbine lifetime (20+ years).

● **Missed opportunity:** A **precautionary trigger mechanism** could have been proposed — e.g., “if a derelict dwelling becomes occupied and planning authorities are notified, shadow flicker mitigation will be applied.”

---

## ● 4. Incomplete Environmental Justice Perspective

- Some derelict homes are located near the proposed turbines, and **excluding them** could result in **undocumented impact** if reused.
- This undermines a fair and transparent planning process, especially in rural areas where **rebuilding older properties is encouraged**.

**Red flag:** Ignoring these dwellings creates a **blind spot in environmental impact analysis**.

---

## ● **Summary Table of Red Flags**

Issue	Description	Assessment
Ignoring RFI instructions	Council asked to include derelict homes; applicant did not	Critical
Overuse of climate policy justification	Claims local reuse policy conflicts with national policy	Inflated
No future-proofing	No commitment to mitigation if buildings are reused	Weak
Environmental blind spot	Risk of unassessed impact on future dwellings	High
Receptor map/table provided	Map of current occupied receptors is submitted	Compliant (but incomplete)

### Evaluation

- The response **technically includes a receptor map and table**, but **fails to respond substantively** to the core request.
- It creates **policy-based justifications** instead of offering **reasonable accommodation** or mitigation contingencies.

### Recommendations for Full Compliance

To properly meet the RFI and protect the planning decision from future legal risk:

1. **Add derelict dwellings to the receptor list**, with a note on current status
2. **Include these in shadow flicker and noise assessments** as a **precaution**
3. **Commit to automatic inclusion** in shadow flicker control systems **if occupancy resumes**
4. **Propose a planning condition trigger:**

“Should any derelict dwelling be restored and occupied during the lifetime of the wind farm, the applicant shall include that dwelling in the shadow flicker control and noise compliance regime.”

RFI Item 10 from the Tullacondra Wind Farm RFI response, with a focus on identifying the **red flags and inconsistencies** regarding noise-sensitive receptors and baseline assessment.

---

### **RFI Item 10 – Request Summary**

Cork County Council requested:

1. A **suitably scaled map** showing:
    - All **noise-sensitive receptors (NSRs)**
    - Which dwellings are **associated with the project**
  2. A **tabular list** of the NSRs:
    - In **sequential order**
    - Showing **distances from turbines**
  3. Clearly show the **locations of noise monitoring stations** used to determine baseline noise levels
- 

### **Applicant's Response Summary**

- A map is provided in **Appendix 9.1**, showing:
    - NSRs
    - Associated dwellings
    - Baseline monitoring locations
  - A table of NSRs is also included in **Appendix 9.1**, listing:
    - Receptor coordinates
    - Distances
    - Receptor IDs
  - The applicant refers to **EIAR Chapter 13** and **Volume III, Appendix 13.1** as the primary sources of methodology and receptor classification.
- 

### **RedFlags and Inconsistencies**

#### **1. Receptor Classification May Be Incomplete**

- The response **excludes derelict/uninhabited dwellings** from the NSR list, consistent with their argument in RFI Item 9.
- This contradicts Cork County Council's stated policy (Objective RP 5-30) to encourage reuse of these dwellings.

**Red Flag:** Excluding these structures could undermine the validity of noise predictions if any of them are reused during the 25-year operational lifespan of the wind farm.

---

● **2. “Associated Dwellings” Not Clearly Distinguished**

- The request specifically asked for **clarification of which dwellings are “associated” with the project** (e.g., landowner houses, participant homes).
- The applicant says these are included in the map, but:
  - Does **not provide a visual legend or annotation** on the map to clearly differentiate associated vs. non-associated receptors.
  - The table in Appendix 9.1 **does not flag** which receptors fall into this category either.

**Red Flag:** This obscures potential **bias in noise limits**, as “associated dwellings” are often allowed **higher noise thresholds** under Irish and WHO guidance. Their identity **must be transparent**.

---

● **3. Unclear Whether All Baseline Monitoring Locations Are Shown**

- The response claims monitoring stations are shown on the map in Appendix 9.1, but:
  - **No verification or visual evidence is included in the RFI narrative.**
  - There's **no cross-reference** to which NSRs were used to derive baseline data and how those values were applied across the site.

● **Weakness:** This limits the ability to assess whether **baseline data is spatially representative** of the receptor environment.

---

● **4. Sequential Table Lacks Contextual Noise Limits**

- The table in Appendix 9.1 shows receptor distances but **does not indicate assigned noise limits** (e.g., 40 dB daytime / 43 dB night for non-participating dwellings).
- Nor does it show whether **projected turbine noise** exceeds those thresholds.

● **Weakness:** Without seeing predicted levels at each receptor, it's unclear whether **limits are met or mitigation is needed**.

---

● **5. Missed Opportunity to Address Tonality or Cumulative Effects**

- While tonality is discussed under RFI Item 12, the response to RFI Item 10 could have helped **map cumulative exposure risks** spatially — especially in areas close to multiple turbines or near other wind farms.
- There is **no integration of context** like nearby existing developments or prevailing winds.

● Red Flag: Misses a chance to visually consolidate and assess **cumulative impact zones**, which are key in a rural, low-ambient-noise area.

---

### Summary Table – Red Flags

Issue	Description	Severity
Exclusion of derelict dwellings	Ignores future occupancy risks	● High
Associated dwellings not flagged	No clear ID or special treatment indication	● High
Monitoring station locations unclear	Not definitively verified or explained	● Medium
NSR table lacks predicted noise levels	No way to assess compliance receptor by receptor	● Medium
No cumulative/contextual overlay	Fails to capture full site exposure picture	● High (in strategic terms)

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### Strategic Evaluation

- The response **appears complete**, but it **lacks analytical depth and transparency**.
  - By omitting derelict dwellings, failing to clearly label “associated” homes, and skipping contextual overlays (like noise thresholds or predicted turbine noise), it **fails to provide a full audit trail** for noise impact assessment.
- 

### Recommendations for Compliance and Best Practice

To fully satisfy RFI Item 10 and eliminate ambiguity:

1. **Revise the receptor table** to:
  - Include columns for:
    - Associated dwelling (Yes/No)
    - Noise limit applied

- Predicted turbine noise level
  - Shadow flicker zone (optional)
2. **Visually mark associated receptors** in the receptor map (Appendix 9.1)
  3. **Flag derelict dwellings**, even if noted as “currently uninhabited”
  4. **Clearly overlay baseline monitoring locations** with dates and sampling periods
  5. Provide a **narrative crosswalk** between NSRs, their data source, and their assigned compliance threshold

**RFI Item 10** from the Tullacondra Wind Farm RFI response, with a focus on identifying the **red flags and inconsistencies** regarding noise-sensitive receptors and baseline assessment.

---

### **RFI Item 10 – Request Summary**

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### **Red Flags and Inconsistencies**

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- The response **excludes derelict/uninhabited dwellings** from the NSR list, consistent with their argument in RFI Item 9.
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- The table in Appendix 9.1 shows receptor distances but **does not indicate assigned noise limits** (e.g., 40 dB daytime / 43 dB night for non-participating dwellings).
- Nor does it show whether **projected turbine noise** exceeds those thresholds.

● **Weakness:** Without seeing predicted levels at each receptor, it's unclear whether **limits are met or mitigation is needed**.

---

● **5. Missed Opportunity to Address Tonality or Cumulative Effects**

- While tonality is discussed under RFI Item 12, the response to RFI Item 10 could have helped **map cumulative exposure risks** spatially — especially in areas close to multiple turbines or near other wind farms.
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NSR table lacks predicted noise levels	No way to assess compliance receptor by receptor	● Medium
No cumulative/contextual overlay	Fails to capture full site exposure picture	● High (in strategic terms)

---

---

### Strategic Evaluation

- The response **appears complete**, but it **lacks analytical depth and transparency**.
  - By omitting derelict dwellings, failing to clearly label “associated” homes, and skipping contextual overlays (like noise thresholds or predicted turbine noise), it **fails to provide a full audit trail** for noise impact assessment.
- 

### Recommendations for Compliance and Best Practice

To fully satisfy RFI Item 10 and eliminate ambiguity:

1. **Revise the receptor table** to:
  - Include columns for:
    - Associated dwelling (Yes/No)
    - Noise limit applied

- Predicted turbine noise level
  - Shadow flicker zone (optional)
2. **Visually mark associated receptors** in the receptor map (Appendix 9.1)
  3. **Flag derelict dwellings**, even if noted as “currently uninhabited”
  4. **Clearly overlay baseline monitoring locations** with dates and sampling periods
  5. Provide a **narrative crosswalk** between NSRs, their data source, and their assigned compliance threshold

**RFI Item 12** from the Tullacondra Wind Farm Request for Further Information (RFI) submission, focusing on the identification of **red flags, inconsistencies, and gaps** in how the applicant addressed tonal and impulsive noise assessments.

---

### **RFI ITEM12 – Summary of the Planning Authority’s Request**

The Planning Authority requested:

1. Clarification of **any assessments** carried out for:
    - **Tonality**
    - **Impulsivity**
    - Other **special noise characteristics** (from turbines and substation)
  2. A statement of:
    - Any **resulting changes in cumulative predicted noise levels**
    - Clear linkage between **assessment results** and **conclusions**
    - A **transparent “audit trail”** from raw data to the final evaluation
- 

### **What the Applicant Provided**

- Referred to **EIAR Volume III, Appendix 13.2: Potential Special Characteristics of Turbine Noise**
  - Stated that:
    - Tonality and impulsivity are **rare and cannot be predicted accurately at planning stage**
    - No tonal/impulsive characteristics are expected due to **equipment type and setback distances**
  - Committed to:
    - **Commissioning-stage tonal analysis** following **IoA GPG** (Institute of Acoustics: Good Practice Guide)
    - Applying tonal **penalties** if tones are confirmed
  - Asserted:
    - No special characteristics have been assumed in the **planning-stage noise modelling**
    - Cumulative noise levels are unchanged by tonality assumptions
- 

### **Red Flags and Inconsistencies**

### ● 1. No Actual Tonal Assessment at Planning Stage

**Why this matters:** While it is true that tonal issues are often verified post-construction, **regulatory best practice** recommends attempting a **planning-stage screening**, particularly when turbine type and layout are known.

- The applicant knows the specific model: **Vestas V150–4.5 MW** (confirmed in RFI 11).
- This model has publicly available **tonal performance data**.
- Yet, **no desk-based tonal analysis** (even indicative) was attempted or included.

**Red Flag:** The applicant had **enough technical information to screen for tonal risk**, but deferred all assessment to post-consent phase, which undermines **planning transparency** and **early-stage impact mitigation**.

---

### ● 2. No Discussion of Substation Tonality — Only Dismissal

- The response **dismisses tonal potential** from the substation because of:
  - Modern insulation
  - 235 m distance from the nearest receptor
- However:
  - No **baseline ambient levels** or **substation equipment specs** were cited
  - No spectral analysis or consideration of **low-frequency hum** or **transformer noise** is presented

**Red Flag:** Blanket dismissal without even a simple **frequency-domain consideration** or reference to **equipment-specific data** is insufficient — especially when substations can exhibit tonal components under certain loading conditions.

---

### ● 3. No Mapping of Receptors at Greatest Tonal Risk

- The response lacks any identification of:
  - **Which receptors** are most likely to perceive tonal or impulsive features
  - **Sound propagation paths** where risk may be highest (e.g., ridge lines, low background areas)

● Missed opportunity: Even if tonal assessments are deferred, the response should **highlight where tonal impact would be most critical if detected later**, so this can inform post-construction monitoring plans.


---

### ● 4. Audit Trail Is Incomplete

The RFI requested a clear link between:


- **Data inputs** (turbine specs, layouts)
- **Assumptions** (about noise penalties or not)
- **Outputs** (final predicted levels or contour maps)

While the applicant says tonal penalties **will be applied later if necessary**, there is **no clear indication of how much this would affect compliance margins**.






 **RedFlag:** If predicted noise levels are already close to the planning limits (e.g. 40/45 dB), even a **5 dB tonal penalty** would result in **non-compliance** — but this was not quantified or tested as a hypothetical.

#### **5. Regulatory Reliance on Curtailment Is Not Discussed Here**

- In earlier RFI responses (e.g., Item 4), **curtailment is proposed** as a mitigation for bat impacts.
- Curtailment could also be a **secondary tool** for controlling turbine tonality during certain operating conditions — yet this is **not discussed** under RFI Item 12.

 **Observation:** This is a **minor inconsistency** that misses a chance to **integrate mitigation strategies** across topics (noise, ecology, operations).

#### **Summary of Key Red Flags**

<b>Issue</b>	<b>Description</b>	<b>Assessment</b>
No tonal risk screening	No attempt made despite known turbine model	 High
Dismissal of substation noise	No spectral or equipment-based data	 High
No receptor-based tonal risk mapping	Cannot evaluate sensitivity hotspots	 Medium
No penalty sensitivity test	Does not show effect of 2–5 dB penalty on compliance	 High
No integration with curtailment plans	Missed opportunity to cross-link mitigation	 Minor

#### **Strategic Planning and Legal Risk**

By deferring tonal assessment entirely to the post-consent phase, the applicant introduces several **planning and legal vulnerabilities**:

- If tonal noise is confirmed later, and predicted levels + **penalty** exceed limits, **remedial action may be legally or financially difficult**
- **Omissions in early analysis** could be cited in judicial review if residents object post-

consent

- The Planning Authority is left **without a robust basis** to assess risk magnitude at application stage
- 

### ◀ Recommendations for Full Compliance

To strengthen the tonal/impulsivity analysis, the applicant should:

1. Use available tonal performance data for the Vestas V150 to perform a **desk-based tonal screening**
2. Include a **penalty margin test**:
  - Show predicted noise levels **+ 2 dB, + 5 dB**
  - Identify whether any receptors approach or exceed thresholds
3. Provide a **simple substation noise spectrum** based on equipment spec and distance to receptors
4. Map potential "**tonal sensitivity zones**" (low ambient areas, downwind receptors)
5. Propose a **post-commissioning monitoring plan** with clear thresholds for remedial action

**RFI Item 12** from the Tullacondra Wind Farm Request for Further Information (RFI) submission, focusing on tonality, impulsivity, and special noise characteristics. This item is important because **tonal noise**, if present, can increase annoyance levels and is penalized in noise compliance thresholds.

---

### **RFI Item 12 – Planning Authority Request**

Cork County Council requested the developer to:

1. **Clarify if any assessments were done** for:
    - **Tonality**
    - **Impulsivity**
    - Other **special noise characteristics** (e.g. low-frequency noise, modulation)
  2. **Clearly state:**
    - Any **changes** in predicted cumulative noise levels as a result
    - A **transparent audit trail** from analysis to conclusion
- 

### **Applicant's Response Summary**

The response (referencing **EIAR Volume III, Appendix 13.2**) includes the following key points:

- **No tonal or impulsive characteristics were modelled** during the planning stage.
  - Tonality is considered **“highly unlikely”** and is deferred to **post-construction assessment**.
  - Commitments made to:
    - Carry out **tonal analysis at commissioning**, following **Annex B of the IoA GPG**.
    - Apply tonal penalties **if audible tones are identified**.
  - The **Vestas V150–4.5 MW turbine** was confirmed as the chosen model (RFI Item 11).
  - Substation tonal noise is dismissed due to **distance and modern design** (~235 m to nearest receptor).
- 

### **Deeper Analysis – Key Red Flags and Gaps**

#### ● **1. No Predictive Tonal Risk Assessment Despite Known Turbine Model**

The Vestas V150 is a well-documented turbine model. Manufacturers and industry data (e.g., IEC 61400-11 reports) often include tonal characteristics under various operating conditions.

- The applicant had **sufficient technical input** to carry out a **desktop tonal risk screening**.
- Yet, no attempt was made to:
  - Estimate the **likelihood or severity** of tonal emissions
  - Indicate under which **operating or wind conditions** tonality might emerge

**Red flag:** A full deferral to post-construction testing avoids a known planning risk that could be **quantified now**. The planning authority cannot judge potential non-compliance if tonal penalties (+5 dB) are applied.

---

## ● 2. No Cumulative Impact Analysis with Penalties Applied

The RFI asked whether inclusion of tonal penalties would alter predicted **cumulative noise levels** at receptors.

- No scenario was tested where a **2–5 dB penalty** (as per IoA/ETSU-R-97 guidance) is added to the modelled turbine sound levels.
- No identification of whether **any receptor thresholds** would be exceeded with such penalties.

**Red flag:** This omission prevents the Council from evaluating whether the development would **still comply** with planning limits if tonal noise is present — especially at **tight-margin receptors**.

---

## ● 3. Substation Tonality Rejected Without Supporting Data

The substation is dismissed as a tonal noise source because:

- It's modern
- It's 235 m from the nearest dwelling

However:

- No actual **frequency spectrum, manufacturer specification, or acoustic report** is cited
- No mention of **transformer type, operational load, or tonal content screening**

**Gap:** The rejection is not evidence-based. Even well-designed substations can emit **low-frequency hums** that exhibit **tonal characteristics**, particularly at night or under partial load.

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## ● 4. No Receptor-Specific Tonal Risk Mapping

Not all receptors are equally sensitive to tonal noise. Those in **low ambient areas or downwind of turbines** are more likely to detect tones.

- The response does not:
  - Identify **which NSRs are most at risk**
  - Consider **directional propagation** under prevailing wind conditions
  - Use **cumulative exposure mapping** to show worst-case tone perception zones

**Red flag:** This analytical gap undermines proactive mitigation planning and environmental equity.

---

### 5. Audit Trail Is Incomplete and Generic

The applicant commits to:

- IoA Good Practice Guide
- Penalty application “if tones are found”

However:

- There is **no traceable link** between turbine specs, noise modelling assumptions, and noise risk conclusions
- No receptor-based risk scoring
- No engagement with **standardised tone audibility thresholds or frequency domain data**

Weakness: The audit trail is **theoretical**, not technical.

---

### Summary of Red Flags

Issue	Description	Severity
No predictive tonal screening	Avoids analysing known turbine tonal behaviour	High
No penalty sensitivity test	Doesn't test model with +2 to +5 dB adjustments	High
Substation dismissed without spectral data	No evidence provided	Medium
No receptor-specific risk map	Ignores likely tonal hotspots	Medium
Weak audit trail	No clear data-to-conclusion link	Moderate

---

### Recommendations for Full Planning Compliance

To address the gaps and ensure robust decision-making, the applicant should provide:

1. A **desk-based tonal risk screening**, using:
  - Manufacturer tonal reports
  - IEC 61400-11 test data (if available)
2. A **tonal penalty overlay** to existing modelled noise levels (e.g. +2 dB, +5 dB) at each receptor
3. A **map of receptors at tonal sensitivity risk**, based on:
  - Distance
  - Background noise levels
  - Wind direction
4. Basic **frequency content assumptions** for substation equipment
5. A planning commitment or condition that says:

“If tonal noise is identified post-commissioning and causes cumulative noise to exceed guideline limits at any NSR, the developer shall implement mitigation measures such as curtailment, shielding, or source modification.”

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### **Conclusion**

The response to RFI Item 12 is **procedurally compliant** in intent but **substantively weak**. It avoids foreseeable risks that could be quantified and managed now, leaving too much reliance on post-consent remediation.

**RFI Item 13** from the Tullacondra Wind Farm Request for Further Information (RFI) submission, focused on identifying key **red flags, inconsistencies**, and **due diligence gaps** related to telecommunications interference — particularly concerning the **Vodafone microwave link**.

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### **RFI ITEM 13 – Request Summary**

Cork County Council requested:

1. **Full details** of the **proposed mitigation measures** to address interference with a Vodafone microwave link (Mt. Hilary to Shinanagh).
  2. Submission of a **signed agreement** or **written confirmation** from Vodafone Ireland that:
    - The mitigation strategy is acceptable.
    - The developer will fund the re-routing if required.
- 

### **Applicant's Response Summary**

The applicant provided:

- A technical report from **Ai Bridges Ltd.**, a telecommunications consultant, in **Appendix 13.1**.
  - A **Letter of Reliance** from Ai Bridges in **Appendix 13.2**.
  - Summary of mitigation strategy:
    1. **Re-routing** the affected link via an **alternative feeder site**.
    2. Developer agrees to **fully fund** the re-route (hardware, installation, licensing, etc.).
    3. Vodafone has **agreed in principle** to this mitigation, as confirmed in prior correspondence dated **October 26, 2022**.
- 

### **Red Flags and Inconsistencies**

#### **1. No Actual Signed Letter from Vodafone Ireland**

The RFI specifically asked for a **signed agreement or letter** from Vodafone.

- The response includes:
  - A technical **report prepared by a consultant** (Ai Bridges)
  - A "Letter of Reliance" from the consultant
- But it **does not include a formal, signed letter directly from Vodafone Ireland** confirming:

- Acceptance of the mitigation
- Legal clarity on roles, responsibilities, and cost commitments

**Red Flag:** The Planning Authority does not have direct, verifiable evidence from the **infrastructure owner (Vodafone)** — which is crucial for assessing risk to critical national infrastructure.

---

## ● 2. Outdated Correspondence Used as Agreement Basis

The “agreement” is based on an email or consultation record from **October 2022** — nearly 2.5 years before the submission date (March 2025).

- This is especially problematic in telecommunications, where:
  - Network configurations can change
  - Licensing arrangements may be updated
  - Infrastructure priorities may shift

**Red Flag:** The mitigation agreement may no longer reflect **Vodafone’s current network architecture** or corporate position — and no confirmation of continued validity is provided.

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## ● 3. No Evidence of Licensing or Approval for Re-Route

- Microwave link re-routes often require:
  - **Licensing updates** (e.g., from ComReg)
  - Potential **network design changes**
  - Interference studies with nearby links
- The response **does not include**:
  - Any indication that Vodafone has applied for, or obtained, **spectrum approval** for the new route
  - A map showing the **new path**, link budget analysis, or timeline for implementation

● **Concern:** The re-route is **technically plausible** but **administratively unverified** — raising a risk of **non-executable mitigation** post-consent.

---

## ● 4. No Binding Mechanism or Delivery Schedule for the Mitigation

- The developer states that they will **cover all costs**, but there is:
  - No signed **legal undertaking**
  - No defined **timeline**

- No **performance guarantee** or bond proposed
- No condition is suggested in the planning submission to enforce this prior to construction

**Red Flag:** The mitigation is **not enforceable** under current documentation — exposing the project and the local authority to **liability or service disruption risk** if the re-route fails or is delayed.

**5. Over-Reliance on the Consultant’s Letter of Reliance**

- A Letter of Reliance is useful but is:
  - **Not a substitute** for a direct agreement with Vodafone
  - Limited in enforceability — it confirms the validity of technical assessments but not Vodafone’s **acceptance of risk or delivery obligations**

**Limitation:** It serves as a comfort letter but **not a contractually binding mitigation plan**.

**Summary Table – Red Flags & Gaps**

Issue	Description	Severity
No signed letter from Vodafone	Only third-party consultant confirms agreement	● Critical
Agreement is outdated	Based on October 2022 consultation, not renewed	● Critical
No licensing or route validation	No ComReg or spectrum pathway included	● Significant
No enforceable mitigation schedule	No trigger, condition, or implementation timeline	● High
Consultant letter is not a substitute	Reliance letter ≠ contractual agreement	● Moderate

---

## ◀ Planning & Strategic Risk Implications

- Failure to secure a **direct mitigation agreement** with Vodafone creates a **material risk**:
  - If the wind farm disrupts Vodafone's microwave link, it could cause:
    - **Service outages**
    - **Breach of telecommunications regulation**
    - **Exposure to compensation or injunction proceedings**
- The Planning Authority cannot assume mitigation will proceed unless it is:
  - **Legally committed**
  - **Licensed**
  - **Conditioned or bonded**

---

## ◀ Recommendations for Full Compliance

To meet the intent and legal robustness of RFI Item 13, the applicant should:

1. Provide a **signed letter from Vodafone Ireland** confirming:
  - Acceptance of the re-route
  - Technical feasibility
  - Agreement to proceed before construction
2. Submit a **schedule or condition** to ensure mitigation is implemented **before turbine erection**
3. Include a **contingency plan** in case Vodafone's network plans change
4. Provide **evidence of spectrum licence feasibility** from ComReg (or Vodafone's licensing team)
5. Add a planning condition such as:

*"Prior to commencement of turbine construction, the applicant shall submit written confirmation from Vodafone Ireland that the agreed mitigation strategy has been implemented, licensed, and validated to ensure continuity of service for the Mt. Hilary-Shinanagh microwave link."*

**RFI Item 14** from the Tullacondra Wind Farm Request for Further Information (RFI) submission, focused on **site access sightlines and hedgerow modification**, including **red flags, inconsistencies**, and potential **planning risks**.

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#### **RFI ITEM 14 – Planning Authority Request Summary**

Cork County Council requested the applicant to:

1. Submit revised **sightline drawings** for:
    - The **temporary access** (with a setback of **4.5 m** from the road edge)
    - The **permanent access** (also with a **4.5 m setback**)
  2. **Retain existing hedgerows**, where feasible, and:
    - If modifications are needed, **lower** the hedgerow to a maximum height of **1 metre**
    - Avoid full removal, unless absolutely necessary
  3. If hedgerow works are proposed **outside the applicant's ownership**, submit **written consent** from relevant landowners.
- 

#### **Applicant's Response Summary**

- Submitted **updated sightline drawings** (Drawing No. 23010-BFA-TC-XX-DR-C-1701-P4) as requested.
  - Confirmed:
    - The **permanent access** retains the original **3.0 m setback**, as **agreed with the Roads Department** in March 2023 and reconfirmed via phone call in December 2024.
    - The **temporary access** was revised to the requested **4.5 m setback**.
  - Stated that **removal of hedgerow** is still required, due to:
    - The need to accommodate **delivery vehicle swept paths**
    - **Topographical constraints** preventing compliance via lowering to 1 m
  - Claimed that **hedgerow lowering is insufficient**, as **vertical profile analysis** shows the sightline would require **cutting to 0.23 m height** — below what's viable to retain the hedgerow.
  - Confirmed that **all works are within the red line**, so no additional landowner consent is required.
- 

#### **DeeperAnalysis – Red Flags and Inconsistencies**

### ● 1. Non-compliance with the Requested 4.5 m Setback for Permanent Access

The RFI explicitly required **4.5 m setbacks for both temporary and permanent entrances**.

- The applicant retained the **original 3.0 m setback** for the **permanent access**, citing verbal agreement with the Roads Department.
- No **written confirmation or official letter** is submitted from the Roads Department to substantiate this agreement.

◀ **Red Flag:** The Planning Authority made a **clear instruction** in the RFI. Verbal discussions — especially unrecorded — do **not override formal RFI directions**. This is a **procedural non-compliance** unless justified and documented officially.

---

### ● 2. No Demonstration of Alternatives to Hedgerow Removal

The Planning Authority's intention was to **retain existing roadside hedgerows** where feasible — via **lowering**, rerouting, or visual mitigation.

- The applicant concludes that lowering the hedgerow to 1 m is **not sufficient**, as topography would still require it to be cut to 0.23 m.
- However:
  - No consideration of **alternative access configurations** is offered (e.g., relocating entrance, one-way systems, split delivery routes).
  - No visual simulation of **post-construction reinstatement** or **hedgerow replanting** is provided to offset visual and ecological loss.

◀ **Red Flag:** The applicant **defaults to full removal**, without sufficiently exploring or demonstrating **reasonable avoidance alternatives**.

---

### ● 3. Overreliance on a Verbal Discussion for Planning Justification

- The response states that the **Executive Engineer agreed** to the 3.0 m sightline offset in 2023 and **reconfirmed by phone** in December 2024.
- This approach:
  - Lacks **formal documentation**
  - Bypasses transparent record-keeping
  - Exposes the decision to challenge under legal review

◀ **Red Flag:** Planning justification **must be evidential**. A phone call summary is **insufficient for non-compliance with a statutory RFI**.

---

### ● 4. No Cross-reference to Hedgerow Replacement Strategy or Habitat Plan

- The applicant notes that **hedgerow loss is mitigated elsewhere** (Chapter 7 and Appendix 7.3 — Habitat Management Plan), but:
  - Does not summarize **replacement length**
  - Does not show how or where this **specific hedgerow** will be replanted
  - Omits **visual reconciliation** in the RFI response

● Weakness: The mitigation is vaguely referenced and **not site-specific**, weakening its credibility as an offset to habitat loss.

### 5. Correctly Confirmed Landownership Control

- The response states that **all works are within the red line boundary**, and no third-party land or consent is involved.
- This meets the RFI request regarding **ownership and access rights**.

Strength: This aspect is clearly addressed.

### Summary Table of Issues

Issue	Description	Severity
4.5 m setback not implemented for permanent access	RFI requirement ignored; 3 m used instead	● High
No formal written approval from Roads Department	Relies on verbal communications	● High
No alternative access/hedgerow retention designs	Removes hedgerow without testing options	● High
Weak linkage to habitat mitigation plan	Replanting and visual impact not localized or quantified	● Medium
Ownership of hedgerow confirmed	No external consent needed	Resolved

### Strategic Planning Risk

- Failure to comply with **technical access geometry** requirements and **visual mitigation** for hedgerow removal may:
  - Trigger **further information requests**
  - Undermine public trust, especially in a **biodiversity-sensitive rural setting**
  - Complicate enforcement of **visibility splay and road safety standards**

- Verbal agreements with Council engineers are **non-binding**, and may be challenged at An Bord Pleanála if the application is appealed.
- 

### ◀ Recommendations for Compliance

To fully resolve the planning authority's concerns and strengthen the project defensibility:

1. **Submit a written letter/email** from the Executive Engineer confirming acceptance of a **3.0 m setback** for the permanent entrance.
2. Explore and include:
  - **Alternative access alignments** (angled or single-direction access)
  - **Vehicle-specific swept path modelling** to minimize entrance width
3. Provide a **visual simulation** of:
  - The post-construction state of the entrance
  - Hedgerow loss and replanting extent
4. Reference the **specific location** in the Habitat Management Plan where this hedgerow will be offset
5. Suggest a **planning condition**, e.g.:

*"Any hedgerow removed for sightline purposes shall be replaced in full within the first planting season post-construction, in accordance with the Habitat Management Plan, using native species in the same location or as close as reasonably possible."*

Based on a review of the document titled **EIAR Volume II – Chapter 15: Archaeology and Cultural Heritage** from the Tullacondra Wind Farm proposal, here is a **critical analysis** of the **red flags and inconsistencies** observed in the submission. This chapter evaluates the potential impacts of the proposed development on known and potential cultural heritage assets.


---

## ● Key Red Flags and Inconsistencies

### 1. No Field Survey of All Identified Assets

While the report states that a field inspection was conducted on October 10–11, 2022, it also admits that:

“Not all sites were visited as some monuments/buildings are located in private lands and have no public access.” (page 27)

 **Red Flag** This limits the reliability of the setting assessments and undermines conclusions about visual, physical, or cumulative impacts. For a project of this scale, **site access issues should be disclosed and addressed** via mitigation or stakeholder engagement.

---


### 2. Omission of Visual Impact Assessment Linkages

Although the chapter refers to:

- Wireframes and photomontages from Chapter 14 (LVIA)
- Zone of Theoretical Visibility (ZTV)

...there is no **clear integration** between these outputs and **specific monument settings**. For example:

“Analysis of wireframes and photomontage views to assess setting effects was carried out...” (page 25)

 **RedFlag:** The heritage assessment **relies on visual tools but does not detail** which monuments were affected or what the exact nature of the visual impact is — leaving the Planning Authority to make inferences.

---

### 3. Lack of Discussion of Cumulative Impact with Other Projects

There is mention of cumulative effects (section 15.12), but:

- **No reference to other nearby wind farms** or grid projects with potential combined setting effects.
- **No GIS-based cumulative mapping** of overlapping visibility zones or archaeological landscapes.

**Red Flag:** The cumulative effects section is **superficial**. For a regional-scale development, this is a significant oversight.

---

#### 4. Confusing Use of Terminology Around "Sensitivity"

The methodology relies heavily on tables defining asset sensitivity and magnitude of change (Tables 15.2, 15.4, 15.7). However:

- The significance ratings are ultimately **subjective**, and
- There is no **clear justification** for how key monuments were rated or how conclusions were derived from the matrix.

**Red Flag:** This creates ambiguity. The Planning Authority may find it difficult to understand the **rationale behind the effect ratings** for sensitive features like Blossomfort ringfort (3.71 km away), or nearby ringforts and enclosures (within 1 km).

---

#### 5. Missing Construction Phase Risk Controls

The document describes the nature of archaeological resources within and near the site, including:

- Ringforts
- Enclosures
- Fulachta fia
- Unrecorded cropmarks

But it does not propose:

- A **watching brief**
- **Trial trenching**
- Or **buffer zones** for assets near turbine bases or cable corridors

**Red Flag:** There is **no clearly defined mitigation strategy** for protecting sites that are currently unrecorded or visible only as cropmarks, despite the likelihood of encountering sub-surface archaeology during excavation.

---

#### 6. No Visual Receptor Impact Ranking for Protected Structures or NIAH Assets

Protected Structures and NIAH entries within 5 km are listed, but:

- There is **no ranking of visual or setting sensitivity**
- The potential **impact of turbine visibility on heritage character** is not discussed individually for these features

● **Weakness:** The assessment **lumps visual impact analysis into a general statement** rather than giving detailed case-by-case evaluations of more vulnerable or prominent receptors like Kilmaclenine Castle.

---

## 7. Lack of Clear Method for Undated or Ambiguous Sites

Numerous features are discussed as "undated" or having ambiguous archaeological status (e.g., cropmarks or linear earthworks). Yet:

- These are acknowledged, but not tied to **any field evaluation or mitigation commitment.**

● **Weakness:** This undermines the precautionary principle expected in EIA under EU and Irish legislation.

---

## ● Strengths of the Submission

Includes a **comprehensive desk study** using SMR, RMP, NIAH, aerial photos, cartography, and LiDAR.

Acknowledges relevant legislation, including:

- National Monuments Acts
- Planning and Development Acts
- Historic and Archaeological Heritage and Miscellaneous Provisions Act 2023

Summarises relevant policy objectives from both the **Cork County Development Plan** and **Limerick Development Plan.**

Provides a clear methodology table (Table 15.7) for combining **magnitude of change** with **asset significance.**

---

## ▶ Conclusion

While the chapter includes a solid **desk-based review**, its treatment of **setting impacts**, **field-level confirmation**, and **mitigation strategy** is lacking the level of detail necessary for full planning confidence. The **red flags** around non-assessed assets, unvisited monuments, lack of engagement with visual impact assessment, and missing cumulative effect mapping are particularly problematic.

---

## ▶ Recommendations

1. **Reassess and verify** setting impacts for all monuments within ZTV using up-to-date visual tools.

2. **Conduct trial trenching or non-invasive survey** in areas with undated features or significant cropmarks.
3. **Engage with local heritage officers** to confirm mitigation and monitoring conditions.
4. Provide a **heritage impact matrix** that clearly maps significance, distance, visibility, and proposed mitigation per asset.
5. Establish a **construction-phase watching brief** by a licensed archaeologist for turbine and cable corridor excavations.

**RFI Item 16** from the Tullacondra Wind Farm Request for Further Information (RFI) submission, with identification of **red flags, inconsistencies**, and missing or weak areas. This RFI relates to the **assessment of turbine delivery routes**, landowner consents, road suitability, and potential regulatory gaps.

---

### **RFI ITEM 16 – Planning Authority Request Summary**

Cork County Council requested:

1. A **detailed analysis** of a turbine delivery route from the **N20 via the L5523-18 and L5523-0** to the Kilmacleanine Junction:
    - Including **consent from landowners** if road improvement works are required.
  2. Clarification of the **delivery types** and potential **road impact** for an alternative route via the **R580 and L1319-46 / L1319-64**.
  3. Confirmation of whether a **separate licence or consent** process is proposed for any works to these roads.
  4. Consultation with the **Planning Authority**, where procedural implications may arise.
- 

### **Applicant's Response Summary**

- Confirmed that:
    - Two turbine delivery routes were assessed (see EIAR Chapter 16 and Appendix 16.1).
    - **No landowner consents are required**, as all works are proposed **within the public road network**.
  - Referred to a consultation with the Executive Roads Engineer (27 Jan 2023), who confirmed that **no planning-stage consent** was needed for temporary road works within Cork County Council lands.
  - Clarified that:
    - **R580 and L1319 roads will be used only for standard construction traffic, not turbine component deliveries**.
  - Committed to:
    - Further coordination with Cork County Council and TII during the pre-construction phase.
    - Road condition surveys before, during, and after construction, as per the **Construction Traffic Management Plan (CTMP)**.
- 

### **Red Flags and Inconsistencies**

### ● 1. No Engineering Assessment of Delivery Route Structural Suitability

The RFI asked for a “**detailed analysis**” of the potential delivery route.

- The response provides **planning commentary**, but does **not include**:
  - **Pavement strength analysis**
  - Bridge load capacity calculations along the L5523-18 or L5523-0
  - Turning radii assessments for junctions
- Appendix 16.1 (referred to) does not appear to contain detailed **autotrack or load assessments** for the full delivery corridor

**Red Flag:** Without a formal engineering analysis, the route’s **physical suitability** remains unverified — especially for long blade trucks or 100+ tonne nacelles.

---

### ● 2. No Road Safety or Traffic Conflict Assessment

- There is **no analysis of road safety**, including:
  - Narrow pinch points
  - Risk to non-motorized users (cyclists, pedestrians)
  - Traffic management requirements during delivery
- No **Autotrack drawings** or **photographic surveys** of critical junctions or curves along L5523 are included in this RFI response

**Red Flag:** The applicant **fails to prove road user safety**, despite the Council’s clear instruction to address procedural implications.

---

### ● 3. No Evidence of Updated Consent from Roads Department

- The response cites a meeting with the Executive Engineer in **January 2023** — over two years before turbine deliveries would likely occur.
- There is **no letter, email, or signed record** submitted.
- No evidence is presented to show that Cork County Council has formally reviewed or accepted the **current turbine transport plan**.

**Red Flag:** The Planning Authority specifically requested **consultation if procedural implications arise** — yet no formal correspondence or updated confirmation is included.

---

### ● 4. Minimal Information on Potential Road Upgrades

- The applicant claims **no permanent works** are needed and any temporary measures will occur during construction.

- However:
  - There's no map showing **where** these temporary modifications might be.
  - No **swept path drawings** for constrained segments or crossings
  - No outline of whether road **widening, verge cutting, tree trimming, or signage removal** is anticipated

● **Concern:** Without defined work zones, the Council cannot confirm whether future **road opening licences** or temporary traffic orders will be needed.

● **5. Alternative Route Analysis (R580 and L1319) Lacks Depth**

- The applicant states this route is for:
  - **Building materials**
  - **Worker transport**
- But:
  - No detail is given on **expected traffic volume**, trip generation, or traffic peak timing
  - No route-specific **impact mitigation** is proposed
  - No analysis of **residual risk to road surface or structures**

● **Weakness:** This route may still require oversight under the **CTMP** or a **Section 50 road opening licence**, especially if used by HGVs.

◆ **SummaryTable – Key Issues**

Issue	Description	Assessment
No structural or autotrack analysis of L5523 delivery route	Route unverified for turbine components	● Critical
No road safety/conflict assessment	Impact on public road users not evaluated	● Critical
No recent or formal Roads Department agreement	Meeting from Jan 2023, no written proof	● Critical
Road upgrades not geographically defined	Temporary works left vague	● Medium
Alternative route traffic not quantified	L1319 and R580 may still see impact	● Medium

---

## ◆ Planning and Operational Risks

- The lack of detailed delivery route validation means:
  - Construction-stage permissions could be delayed (e.g., road opening licences, detour agreements).
  - Roads unsuitable for loads may suffer damage or cause public safety incidents.
  - The project risks triggering **public complaints** and **enforcement action** if turbine delivery causes disruption.

---

## ◆ Recommendations for Full Compliance

To close these red flags and ensure a robust submission:

### 1. Provide:

- A **structural and geometric assessment** of the L5523 route, including:
  - Bridge capacities
  - Pavement condition
  - Autotrack analysis
  - Junction turning envelopes

### 2. Include:

- **Photos and map overlays** of tight curves, slopes, or conflict points
- A summary of **any temporary modifications** (e.g., signage removal, vegetation clearance)

### 3. Submit:

- A **letter from Cork County Council's Roads Department**, confirming:
  - No additional planning permissions or licences are needed
  - Acceptance of the delivery route as currently proposed

### 4. Add a planning condition, such as:

*"Prior to commencement of turbine component deliveries, the developer shall submit for approval a detailed route management plan including swept path analysis, road protection*

*measures, and confirmation from the relevant road authority that the selected route is suitable and permitted.”*

**RFI Item 16** from the Tullacondra Wind Farm Request for Further Information (RFI) submission. This item relates to the **suitability of turbine delivery routes, landowner consent, road impact**, and whether **additional consent or licensing** processes are required. Below, you'll find a breakdown of **key red flags, inconsistencies**, and planning implications.

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#### **RFI ITEM16 – Cork County Council’s Request**

Cork County Council asked the applicant to:

1. Provide a **detailed analysis** of a turbine delivery route via the **N20 → L5523-18 → L5523-0 to Kilmaclenine Junction**, and:
    - Confirm whether any **improvement works** would require **landowner consent**.
  2. Confirm the **type of deliveries** using the **R580 and L1319-46 / L1319-64**, and assess whether large vehicle traffic could **impact road integrity**.
  3. Confirm whether **separate consent and/or licensing** is needed for works on these routes.
  4. Consult with the Planning Authority where **procedural implications** may arise.
- 

#### **Applicant’s Response Summary**

- Two turbine delivery routes were assessed (in EIAR Chapter 16 and Appendix 16.1).
- Claimed:
  - **No landowner consent is needed**, as all works occur **within the public road corridor**.
  - Temporary works (e.g., verge clearance) do **not require separate planning consent** at this stage.
- Reference made to a **meeting with Cork County Council’s Executive Roads Engineer** on 27 Jan 2023, where it was stated that no further consents are required **at planning stage**.
- Clarified:
  - **R580 and L1319** routes are for **standard construction traffic only**, not turbine components.
- Reiterated commitment to:
  - **Pre-construction road condition surveys**
  - Further consultation with **Cork County Council and TII**

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## ◆ Deeper Analysis: Red Flags and Inconsistencies

### ● 1. Lack of Detailed Route Engineering or Autotrack Analysis

The RFI required a “**detailed analysis**” of the turbine delivery route.

- The applicant refers to an assessment in the EIAR, but:
  - No **swept path analysis** or **autotrack diagrams** of the **L5523 route** are shown in this RFI response.
  - No **photos, maps, or bridge condition data** are included.
  - There’s no clear evidence of **clearance assessments at tight corners, height restrictions, or weight-bearing limits** of rural roads.

◆ **Red Flag:** The response **lacks technical evidence** proving the proposed delivery route is physically viable for transporting 50–60 m turbine blades and other abnormal loads.

---

### ● 2. Outdated and Unsupported Agreement with Roads Department

- A **meeting in January 2023** (over 2 years prior to construction) is cited as basis for no further consent being needed.
- However:
  - No **written confirmation, email record, or memorandum** from Cork County Council is included.
  - The applicant does **not clarify** whether **new consultations** have occurred post-RFI (issued in October 2024).

◆ **Red Flag:** The Planning Authority asked for **updated procedural clarity** — yet no formal written engagement is provided, undermining transparency.

---

### ● 3. No Discussion of the Cumulative Road Impact or Maintenance Contribution

- Although the route will accommodate **multiple abnormal loads**, there’s **no commitment** to:
  - **Fund road strengthening** or repairs
  - Offer a **financial contribution** under a Section 48 or 47 agreement
- The CTMP is referenced, but no detail is provided about specific **wear and tear mitigation** on rural roads such as L5523.

◆ **Red Flag:** Road degradation risk is not proactively addressed — this may concern the Roads Department or trigger future complaints from the public.

---

#### ● 4. Limited Description of R580/L1319 Use

The Council asked for the types of vehicles and potential structural impacts on these secondary roads.

- The applicant replies these routes are for:
  - **Building materials**
  - **Worker access**
- However:
  - No **traffic volume estimate** is provided.
  - No **vehicle class breakdown** or **HGV percentage** is shown.
  - No **specific mitigation measures** are offered for sensitive or narrow sections.

● **Concern:** While turbine deliveries are excluded, high-frequency HGV use may still compromise rural road quality — particularly over a 12–18 month construction window.

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#### ● 5. No Procedural Plan for Road Licences or Traffic Management Orders

- The applicant states no separate consent is required at the **planning stage**.
- But does **not confirm**:
  - Whether **road opening licences**, **temporary road closures**, or **escort arrangements** will be sought via Cork County Council closer to construction.

● **Weakness:** The absence of a **defined procedural framework** (even if deferred) may lead to approval gaps or construction delays later.

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#### ◆ Summary Table – RFI 16 Key Issues

Issue	Description	Assessment
No route-specific engineering drawings	No swept path, turning radii, bridge data for L5523	● Critical
No written agreement from Roads Department	Cites old meeting, no documentary record	● Critical
Road wear impacts not addressed	No mitigation or contribution proposed	● Critical
R580/L1319 use not fully analysed	No volume data, trip generation, or risk mitigation	● Medium
No clear licensing process proposed	Traffic control/road closure pathway unclear	● Minor

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### ▶ Strategic Risk and Planning Implications

- **Failure to demonstrate physical feasibility** of the turbine delivery route may result in:
  - **Post-consent regulatory delays**
  - Objections from road engineers or local stakeholders
  - Planning conditions requiring last-minute design changes or new routing
- Lack of landowner consent is not problematic **if no verge or off-carriageway works are needed**, but the **absence of route drawings** makes this hard to verify.

---

### ◀ Recommendations for Full Compliance

To close the compliance and risk gaps, the applicant should provide:

**1. A Delivery Route Technical Pack, including:**

- **Autotrack analysis** along L5523 (including critical bends and junctions)
- **Photographic survey** of potential constraints (overhead lines, tight corners, structures)
- **Bridge capacity data**, if applicable

**2. A letter from Cork County Council Roads Department, confirming:**

- That the selected route is **acceptable in principle**
- That no **additional consents or licences** are currently required

**3. A Construction Traffic Plan addendum showing:**

- Traffic volumes by vehicle class
- Proposed mitigation (e.g., speed restrictions, road signage, use of escort vehicles)
- Consultation commitments

**4. A planning condition such as:**

*“Prior to commencement of turbine deliveries, a route validation report including autotrack analysis, structural condition assessment, and road safety measures shall be submitted to and agreed in writing with Cork County Council Roads Department.”*

**RFI Item 17** from the Tullacondra Wind Farm Request for Further Information (RFI) submission. This RFI relates to the assessment of **bridges along the turbine delivery and grid connection routes**, with emphasis on **infrastructure safety, statutory compliance**, and coordination with **Irish Rail and Transport Infrastructure Ireland (TII)**.

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### **RFI ITEM 17 – Cork County Council’s Request Summary**

The Council requested the applicant to:

1. **Assess all bridges** intersected by:
    - The **turbine delivery route**
    - The **grid connection route**
    - To ensure **no structural impact** from proposed works.
  2. Confirm whether any **consents are needed** for working near or on structures, especially near **Irish Rail bridges**.
  3. **Respond to comments received from TII and Irish Rail** concerning bridge impact or interface with national or rail infrastructure.
- 

### **Applicant’s Response Summary**

- Submitted a **Bridge Assessment Report** by Jennings O’Donovan & Partners (Appendix 17.1).
  - Stated that:
    - **All bridges along the delivery and cable routes were assessed.**
    - Proposed works **do not compromise bridge structural integrity.**
  - Submitted a response to **TII and Irish Rail’s comments** in Appendix 17.2.
  - Confirmed:
    - **No in-stream works or direct works** to Irish Rail bridges are planned.
    - Any consents needed will be addressed **closer to construction.**
- 

### **Red Fbgs and Inconsistencies**

#### **1. Lack of Site-Specific Structural Data for Bridges**

The RFI required a full assessment to ensure structural stability is not compromised.

- The summary claims **no impact**, but:
  - The Bridge Assessment Report is not summarized in the RFI response.

- No structural drawings, inspection photos, or technical capacity tables for **individual bridges** are presented.
- There's no evidence of **load-bearing checks** or design tolerances.

**Red Flag:** Without presenting clear evidence (e.g. bridge span dimensions, load ratings, material condition), the Council cannot independently verify **route safety for abnormal loads**.

---

## ● 2. No Proof of Engagement with Irish Rail or TII

- Appendix 17.2 is referenced as a response to Irish Rail and TII, but:
  - The RFI response provides no **summary of those comments**, nor confirms if Irish Rail or TII are **satisfied**.
  - No letter or confirmation is presented from either agency.
  - No evidence is provided that Irish Rail has **cleared proposed proximity works**, even where trenching may occur near a rail corridor.

**Red Flag:** Absence of documentary evidence of Irish Rail or TII's input leaves an **open statutory risk**, especially since bridge interfaces are **critical third-party consent areas**.

---

## ● 3. No Geospatial Mapping of Affected Bridges

- The applicant does not include:
  - A **map or GIS overlay** of the turbine delivery or cable route showing **bridge locations**.
  - This makes it difficult to determine:
    - Which structures were assessed
    - If **heritage bridges**, culverts, or constrained structures are affected
    - Whether any cross **watercourses** or environmentally sensitive zones

● **Concern:** Without geospatial clarity, the **bridge list cannot be verified**, and **cumulative route impact** may be under-represented.

---

## ● 4. No Commitment to Real-Time Bridge Monitoring

- No mention is made of:
  - Whether bridges will be **monitored** during component deliveries.
  - Whether pre- and post-construction **inspections by the road authority or asset owner** will be carried out.
  - No structural **risk management plan** is described for sensitive structures.

● **Concern:** The risk of damage during delivery (e.g. vibration, axle weight loading, vertical clearance) is real and **should be procedurally managed**.

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● **5. Unclear Who Owns and Maintains Each Bridge**

- The applicant does not clarify:
  - Which bridges are **under local authority control** versus **Irish Rail or TII**.
  - Whether all stakeholders have been notified or given clearance.

● **Weakness:** Absence of a **responsibility matrix** creates confusion over who has legal oversight, and when third-party approval is required.

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◆ **Summary Table – RFI 17 Red Flags and Issues**

Issue	Description	Assessment
No structural detail for individual bridges	No load checks, condition ratings, or inspection records	● Critical
No formal response from Irish Rail or TII	Response refers to engagement, but provides no proof	● Critical
No route map showing bridge locations	Affects verifiability of route and bridge count	● Medium
No monitoring plan for deliveries	No structural risk mitigation stated	● Medium
Bridge ownership/responsibility not broken down	Creates procedural ambiguity	● Minor

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◆ **Strategic Planning and Regulatory Risk**

Without clear structural validation or stakeholder correspondence:

- The project risks **non-compliance with Section 50 (Road Opening)** or Irish Rail oversight requirements.

- Failure to engage TII or Irish Rail could result in **construction delays**, particularly if access routes are later found to be non-permissible.
  - Planning approval could be **judicially challenged** if critical infrastructure is affected without full disclosure.
- 

### ◀ **Recommendations for Full Compliance**

To meet the expectations of RFI 17 and mitigate legal/infrastructure risks:

#### **1. Provide a Bridge Matrix Table including:**

- Bridge ID and location
- Asset owner (Local Authority / Irish Rail / TII)
- Construction type and span
- Load-bearing capacity vs turbine transport load
- Proposed clearance or proximity distance
- Risk rating (low / moderate / high)

#### **2. Submit:**

- Letters or emails from **Irish Rail and TII** acknowledging:
  - Receipt of plans
  - No objection or conditions for proceeding

#### **3. Include a map showing:**

- All bridge crossings along delivery and grid routes
- Labels showing infrastructure type (e.g. overpass, culvert, rail bridge)

**4. Propose a pre-and post-delivery inspection protocol, with condition surveys and a contingency plan for damage repair.**

#### **5. Add a planning condition such as:**

*“Prior to commencement of turbine delivery or cable installation, the developer shall submit to the Planning Authority a Bridge Management Plan, including documentary confirmation from relevant infrastructure owners (Irish Rail, TII, and Local Authority), confirming that no adverse structural impact will arise from proposed works and that access is approved.”*

**RFI Item 19** from the Tullacondra Wind Farm Request for Further Information (RFI) submission, with identification of the **key red flags, inconsistencies, and risks** related to **landownership and legal access** along the grid connection route.

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### **RFI ITEM 19 – Planning Authority Request Summary**

Cork County Council requested the applicant to:

Confirm landownership and submit **written consent from landowners** for the section of the **grid connection route (GCR)** that **traverses a private track** between the **N72 and the L12201**. Include a **map** showing the route and the relevant **landholding**.

This request focuses on ensuring that the applicant has **legal authority to carry out works** on non-public lands — a critical issue for enforceability and lawful implementation.

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### **Applicant's Response Summary**

The applicant:

- Confirmed that landowner consent was already submitted in the **original planning application**, under **Part 1, Section 2**.
  - Referred specifically to **Folio CK29333** as the land parcel in question.
  - Submitted a **map showing the location of Folio CK29333** and the **grid route** passing through it (Appendix 19.1).
  - Asserted that the necessary **written consent from the landowner** is on file.
- 

### **Deeper Analysis: Red Flags and Inconsistencies**

#### **1. No Reproduction of the Consent Letter in the RFI Response**

The RFI explicitly asked for written landowner consent, but the applicant merely refers to a **previous application document**, without:

- Reproducing the consent letter
- Verifying that the consent **covers the exact works** on the private track
- Clarifying whether the landowner has agreed to **all required rights of way, reinstatement, and easements**

**Red Flag** The absence of the actual letter or extract in the RFI response **prevents validation** by the Planning Authority — especially since this is a legal right-of-access issue.

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#### **2. Map Provided Lacks Overlay of Infrastructure Works**

- Appendix 19.1 includes a **map of Folio CK29333**, but:
  - It **does not overlay the specific location** of the grid connection route within that folio.
  - It lacks labels showing:
    - Start and end of the private track
    - Location of joint bays or trenching works

❖ **Red Flag:** Without a detailed overlay, the Planning Authority **cannot verify** whether the proposed works lie entirely within CK29333 or whether **adjacent third-party land** may be affected.

---

### ● 3. No Confirmation of Ongoing Validity or Exclusivity of Consent

The response assumes the original consent remains valid but does not address:

- Whether the consent:
  - **Specifically covers the private track** between the N72 and L12201
  - Includes the **grid construction method** (e.g., trenching, HDD)
- Whether there are any **conflicting rights of way or easements** (e.g., if multiple parties use the track)

● **Concern:** The applicant does not confirm **exclusive access or freedom from dispute**, which could affect legal implementation of the grid works.

---

### ● 4. No Clarification of Road Status or Legal Classification

- The route is described as a **private track**, but the applicant does **not clarify**:
  - Whether it has been registered as a **private way, right of way, or access easement**
  - Whether the **local authority considers it to be public or private**

● **Weakness:** This classification affects whether **planning conditions**, road opening licences, or **public notice procedures** are required.

---

### ◆ Summary Table – RFI 19 Red Flags and Gaps

Issue	Description	Severity
No copy of landowner consent in RFI	Relies on previous submission, not reproduced	● High

Issue	Description	Severity
No overlay of route on land folio map	Can't confirm location of works vs ownership	● High
No confirmation of exclusivity or construction scope	Ambiguity on access rights and work type	● Medium
No clarity on private track status	Legal classification remains undefined	● Moderate

### ▶ Planning and Legal Risk

Without clear and visible landowner consent that:

- References the **exact works** and
- Applies to the **correct section** of the route,

...there is a risk that:

- The Planning Authority could view this as **non-compliance** with statutory access requirements.
- The developer may face **delays or injunctions** during construction if access is disputed.
- Post-approval legal challenge could arise for **unauthorised development on private land**.

### ▶ Recommendations for Full Compliance

To fully satisfy the intent of RFI 19, the applicant should:

#### 1. Reproduce or attach the original landowner consent letter, including:

- Landowner name and signature
- Reference to **Folio CK29333**
- Specific approval for **grid connection works** on the private track
- Agreement to **temporary disturbance and reinstatement**

#### 2. Provide a detailed overlay map, showing:

- The GCR alignment over Folio CK29333
- Start and end points of the affected section
- Location of any **joint bays, manholes, or access pits**

**3. Include a legal note clarifying:**

- Whether the track is registered as a **private way** or has **public access status**
  - Whether any **easement or right of way** exists for other land users
- 

**Conclusion**

While the applicant addresses the surface-level requirements of RFI Item 19, they fail to provide **traceable proof** of consent and **spatial specificity** of works on the private track. This introduces a **real legal and procedural risk** that could be easily mitigated with documentary clarity.

**RFI Item 19** from the Tullacondra Wind Farm Request for Further Information (RFI) submission. This RFI focuses on **landowner consent** for a section of the **grid connection route (GCR)** that crosses a **private track** — an issue of legal access and enforceability under planning law.

---

### **RFI Item 19 – Cork County Council Request Summary**

The Planning Authority requested:

"It is noted that the grid connection route traverses a **private track between the N72 and the local road L12201**. You are requested to provide **clarification in respect of the landowner(s) consent** in relation to the planning application and carrying out the proposed development. A **letter of consent** from the relevant landowner(s) and the **associated map** should be submitted."

---

### **Applicant's Response Summary**

- The applicant claims that:
    - Landowner consent was already included in **Part 1, Section 2** of the original planning application.
    - This includes consent from the **owner of Folio CK29333**, through which the private track passes.
  - A **map of Folio CK29333** is provided in **Appendix 19.1**, showing the land boundary and grid route alignment.
  - The applicant states that this consent covers the relevant section of the GCR.
-

## Deeper Analysis – Red Flags and Inconsistencies

### 1. No Reproduction or Summary of the Consent Letter

While the applicant asserts that the consent is already on file, **they do not reproduce** the consent letter or provide a **summary of its contents** in the RFI response.

- We are not shown:
  - The **name of the landowner**
  - The **date** or **scope** of consent
  - Whether it **explicitly covers** the **private track section**, or just a general agreement

❖ **Red Flag:** Without visibility of the actual letter, the Planning Authority cannot verify that consent was:

- **Informed,**
  - **Legally valid,** and
  - **Specific** to the proposed grid infrastructure crossing a private track.
- 

### 2. The Map Does Not Confirm the Extent or Location of the Works on the Track

- The map in Appendix 19.1 shows the **folio boundary**, but:
  - It does **not clearly overlay** the **grid cable route, joint bays, or construction footprint**.
  - It lacks:
    - Annotations showing the **private track alignment**
    - Any indication of **where the cable trench or HDD entry/exit points** intersect the folio

❖ **Red Flag:** The Planning Authority cannot be confident that the works are **fully contained within the consented folio**, or whether **adjacent landowners might also be impacted**.

---

### 3. No Confirmation of Access Rights or Easements

The track is described as "private", but the submission **does not clarify**:

- Whether it is:
  - **Solely owned** by the CK29333 landowner
  - A **shared access track** or **right of way** used by multiple parties
- Whether the developer will require:
  - A **temporary easement**

- Legal access for **construction vehicles and maintenance**

● **Concern:** If other parties have rights over the track, or if it connects to land not in control of the consenting landowner, **additional consent or legal clarification may be required.**

● **4. No Statement of Construction Methodology on the Track**

- The response does **not confirm** how the cable will be installed:
  - **Trenching vs. HDD**
  - Temporary access points, laydown areas, or joint bays
- This is relevant to the **extent of disruption** to the private track and whether the landowner's consent **includes surface disturbance** or just subsurface works.

● **Weakness:** Without this, it's unclear if the original consent remains **valid and applicable** to the specific works now proposed.

● **5. No Confirmatory Planning Statement from the Landowner**

- Best practice would include a statement such as:

"I, [name], owner of Folio CK29333, confirm that I consent to the construction and maintenance of the grid connection as proposed in the planning application [ref number], including trenching or HDD works along the private track identified on the attached map."

● This was not included, so the **consent is assumed, not demonstrated.**

◆ **Summary Table – RFI 19: Red Flags and Gaps**

Issue	Description	Severity
No visible or summarized consent letter	Planning Authority cannot verify consent scope	● Critical
Map lacks route overlay or construction detail	Impossible to confirm works align with folio	● Critical
No clarification of shared rights or track status	Possible legal or access disputes	● Moderate
No method statement for works on private track	Ambiguity around level of impact or disturbance	● Low
No confirmatory landowner declaration	Weakens transparency and procedural defensibility	● Low

---

## ▶ Planning and Legal Risks

- Failure to provide **clear and traceable landowner consent** — especially for development **outside public roads** — creates:
  - A **compliance risk under Section 34** of the Planning and Development Act
  - Exposure to **injunctions or objections** during or after construction
  - Potential for **enforcement action** or **revocation of permission**

---

## ▶ Recommendations for Full Compliance

To fully satisfy RFI Item 19 and remove all legal doubt:

### 1. Reproduce or summarize the landowner consent letter, confirming:

- Consent applies to **Folio CK29333**
- The **specific nature of the grid works** is covered (HDD, trenching, etc.)
- Consent covers the **private track segment** in question

### 2. Submit a detailed map overlay, showing:

- The exact route of the cable across the folio
- The **start/end points**, trenching zone, and any surface works
- Reference to **ownership boundaries and track alignment**

### 3. Clarify:

- Whether the private track is used by other landowners
- Whether any **legal easements or shared access rights** are present

**4. Optional: Include a new signed landowner confirmation, ideally referencing the current route and drawings.**

---

## ▶ Conclusion

The applicant's response to RFI Item 19 **assumes** that a previously submitted letter suffices but fails to provide **critical verification**. Without visible documentation, mapped alignment, and a

scope-specific statement of consent, the response remains **non-compliant** with the clear intent of the RFI.

**RFI Item 20** from the Tullacondra Wind Farm Request for Further Information (RFI) submission. This item concerns the **design and layout of the substation**, and whether it has been sufficiently defined in compliance with planning requirements. Below is a breakdown of the **red flags, inconsistencies**, and key risks.

---

### **RFI ITEM 20 – Cork County Council Request Summary**

*"It is noted that it is stated that the final layout and design of the substation will be to ESBN specifications.*

*You are requested to provide clarification in relation to the layout and design of the substation. A full set of plans should be submitted."*

This request seeks to:

- Clarify whether a **concrete design proposal** is available
  - Ensure that **substation dimensions, layout, and components** are adequately presented for planning assessment
  - Avoid vague or "**design by condition**" deferrals
- 

### **Applicant's Response Summary**

- Reaffirms that the **substation will be built to ESB Networks (ESBN) specifications**.
  - Claims that:
    - The design has already been included in the planning application.
    - The substation will follow the layouts shown in Drawing Nos:
      - **20910-NOD-XX-XX-DR-E-04211**
      - **20910-NOD-XX-XX-DR-E-04220**
  - States that **notes on these drawings have been updated** to reflect that they comply with ESBN's standard.
- 

### **Red Flags and Inconsistencies**

#### **1. Deferral of Key Design Elements to ESBN Standards Without Explanation**

The applicant says the final layout will follow ESBN specifications but does **not explain** what these standards are, or how they are incorporated into the current design.

- No clear description is provided of:
  - The **equipment to be installed**
  - The **substation footprint dimensions**
  - **Security fencing, access roads, or lighting**

- It is unclear whether ESNB has formally approved or reviewed the proposed layout.

**Red Flag:** Without specificity, the Planning Authority cannot confirm that the layout will be in line with environmental, landscape, or visual impact assumptions made elsewhere in the EIAR.

---

## 2. Updated Drawings Are Referenced, Not Shown or Described

The response references revised drawing numbers but **does not reproduce or summarize** what those drawings now contain.

- No drawing extracts are included in the RFI response.
- No overview is provided of:
  - The **substation footprint**
  - **Building elevations**
  - Internal equipment layout or compound boundaries

**Red Flag:** This undermines transparency and forces reviewers to locate and cross-reference drawings manually. This approach fails to address the **intent of the RFI**, which is to confirm clarity and sufficiency of design detail.

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## 3. No Visual Impact Commentary

Given the substation's location within the wind farm, it may contribute to **landscape and visual impacts**, especially due to:

- Lighting
- Equipment height
- Perimeter fencing

However:

- The response does not confirm whether the **Landscape and Visual Impact Assessment (LVIA)** or **photomontages** included the updated substation design.
- No mention of whether **cut-and-fill, bunding, or screening measures** are proposed.

**Concern:** Without visual or contextual integration, the Planning Authority **cannot verify** whether visual impacts are fully captured.

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## 4. No Confirmation of Technical Feasibility or Compliance with EIAR Commitments

The EIAR may include assumptions about:

- **Footprint size**

- **Drainage**
- **Noise levels**
- **Security features**

The applicant does not clearly confirm that the submitted substation drawings:

- **Match** what was assessed in the EIAR
- Reflect the **actual electrical requirements** of a 38kV system for 9 turbines
- Have been **reviewed by ESBN**

● **Weakness:** This opens the door to future revisions under “compliance with ESBN design,” which may differ from what was actually assessed.

● **5. No Cross-Reference to Environmental Constraints**

- The applicant does not confirm whether the proposed substation site:
  - Lies within any **ecological buffer zones**
  - Overlaps **existing drainage ditches**, hedgerows, or archaeological features

● **Weakness:** A location-specific impact screening should have been included or re-confirmed.

◆ **Summary Table – RFI 20 Issues**

<b>Issue</b>	<b>Description</b>	<b>Severity</b>
Defers key design detail to ESBN standards without showing what's included	Lacks clarity and transparency	● High
Updated drawings are referenced but not shown or summarized	Limits traceability	● High
No mention of visual or landscape impact integration	Potential conflict with EIAR	● Medium
No confirmation that design is final or technically validated	Raises uncertainty about implementation	● Moderate
Environmental/land-use implications of the substation footprint not addressed	Reduces planning certainty	● Moderate

◆ **Planning and Compliance Risk**

Without clearer substation design confirmation, the project risks:

- **Planning conditions requiring further approval**, delaying construction

- **Incompatibility with EIAR assumptions**, particularly for visual impact, drainage, or material assets
  - **Design revisions post-approval**, potentially leading to **non-material amendments or enforcement issues**
- 

### **Recommendations for Full Compliance**

To satisfy RFI Item 20 fully and eliminate ambiguity:

**1. Submit a summary description of the substation design, including:**

- Size and layout of the compound
- Building and transformer dimensions
- Fencing, lighting, and access track layout

**2. Include annotated drawing excerpts (e.g. from E-04211/E-04220) showing:**

- Plan view
- Elevations
- Key infrastructure elements

**3. Confirm that:**

- The design is **technically validated for the project's generation capacity**
- It matches what was assessed in the **EIAR (landscape, drainage, noise)**

**4. Propose a planning condition, if applicable:**

*"Any material deviation from the submitted substation layout (Drawings E-04211 and E-04220) shall be subject to prior written agreement with the Planning Authority to ensure consistency with the environmental assessment."*

**RFI Item 21** from the Tullacondra Wind Farm Request for Further Information (RFI) submission. This item relates to **landscape and visual impact assessment (LVIA)**, specifically regarding **photomontage viewpoint clarity**. The focus is on the **presentation and verification** of visual assessments for the project.

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### **RFI ITEM 21 – Cork County Council Request Summary**

“It is noted that partial key plans are included in the visualisations. In the interests of clarity, please submit **one clear map showing all the viewpoints** associated with the photomontages.”

#### **Purpose:**

- To help the Planning Authority and public clearly understand **where each viewpoint is located** in relation to the proposed development.
  - To ensure the photomontage viewpoints are **accurately located and traceable** on a single reference map.
- 

#### **Applicant’s Response Summary**

- A new map has been provided in **Appendix 21.1**, which includes:
    - All photomontage viewpoints in a **single consolidated map**.
    - Larger scale mapping for clarity.
  - The applicant states that this map complements the **visual materials already included** in the EIAR (Chapter 14 – Landscape and Visual Impact Assessment).
- 

#### **Red Flags and Inconsistencies**

##### **1. No Cross-Check Between Map and EIAR Viewpoints Table**

While the new map is submitted, the applicant **does not explicitly cross-reference** it to:

- The **original viewpoint numbering** and descriptions in the EIAR
- The **photomontages or visual simulations** presented in Volume III

**Red Flag:** This limits the ability of the Planning Authority or third parties to **verify that each viewpoint was correctly mapped, assessed, and visualised**.

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##### **2. No Justification for Viewpoint Selection Scope**

The new map shows **where** the viewpoints are, but not **why** these locations were chosen — or whether they:

- Cover **all key visual receptors** (e.g. houses, roads, walking trails)

- Comply with **best practice LVIA guidance** (e.g. SNH/GLVIA3)
- Address **worst-case visibility** from sensitive areas

● **Concern:** Without a short narrative or updated table, there's no way to confirm that the **selection is complete and justified**, especially now that the map has been isolated from the EIAR narrative.

---

### ● 3. No Overlay of Zone of Theoretical Visibility (ZTV)

A map showing photomontage viewpoints should ideally be paired with a **ZTV (Zone of Theoretical Visibility)** map to:

- Demonstrate **why those points were selected**
- Highlight **areas with expected turbine visibility**
- Provide **coverage assurance** across the visual catchment

● **Red Flag:** The new map is **incomplete without ZTV context**, especially since the turbines may be visible over a broad rural landscape.

---

### ● 4. No Annotation of Visual Sensitivity (e.g. residential, recreational)

- The new map appears to **just show viewpoint locations**, without:
  - Annotating **what type of receptor** each viewpoint represents (e.g. residential, road user, tourist site)
  - Indicating **elevation or distance** to turbines
- This makes it harder to assess the **visual significance** of each viewpoint.

● **Weakness:** It reduces the analytical usefulness of the map and misses an opportunity to better connect with LVIA sensitivity classifications.

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### ● 5. No Statement on Consistency with Planning Guidelines

The Guidelines for Planning Authorities on Wind Energy Development (2006) and GLVIA3 recommend:

- Viewpoints should be representative of **the most visually sensitive and publicly accessible locations**.
- Maps should be **comprehensively referenced** in the visual assessment narrative.

● **Omission:** The RFI response does not explicitly confirm that the revised map was created in alignment with these guidelines.

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## ● Summary Table – RFI 21 Red Flags

Issue	Description	Severity
No cross-reference to EIAR viewpoint table	Makes visual audit and verification difficult	● High
No ZTV overlay to justify selection	Weakens planning justification of visual coverage	● High
Viewpoint types not labelled	Misses key sensitivity classification	● Moderate
No narrative rationale for viewpoint selection	Limits transparency and robustness	● Medium
Compliance with LVIA guidelines not restated	Weakens procedural defensibility	● Low

### ▶ Strategic Planning Risk

While the updated map addresses the visualisation clarity issue, the response **misses key context** that would:

- Confirm compliance with **LVIA standards**
- Show that **visual sensitivities have been addressed**
- Provide **traceability between EIAR conclusions and viewpoint locations**

### ▶ Recommendations for Full Compliance

To satisfy the RFI and ensure visual assessment traceability:

#### 1. Include a revised table listing:

- Viewpoint number
- Location name and coordinates
- Type of receptor (e.g. residential, road, heritage)

- Distance to nearest turbine
- Visibility (e.g. full, partial, screened)

**2. Overlay the ZTV (Zone of Theoretical Visibility) on the same map or a companion map.**

**3. Add a narrative or note confirming that:**

- The selected viewpoints reflect **GLVIA3** and **national wind energy planning guidance**
- No sensitive visual receptors were omitted

**4. Optional planning condition:**

*“Photomontage viewpoints and visual impact conclusions shall be based on those outlined in Appendix 21.1 and the associated EIAR. Any change in turbine location or height that affects visibility shall require reassessment and agreement with the Planning Authority.”*

**RFI ITEM 22** relates to **equine welfare concerns** regarding the proximity of the proposed Tullacondra Wind Farm to adjacent equine businesses and routes used by horses.

The applicant's response attempts to rely on a **consultant report (Appendix 22.1)** based on **British Horse Society (BHS) 2015 guidelines**. While it superficially addresses the Planning Authority's concerns, a deeper review reveals several **red flags and inconsistencies** in the submission.

## ● Red Flags and Inconsistencies – RFI ITEM 22

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### 1. Outdated and Misapplied Guidelines

#### Claim:

The project adheres to BHS (2015) guidelines recommending a 200 m or 3x blade tip height separation.

#### Inconsistency:

- The report selectively applies BHS guidance, which is **cautionary**, not prescriptive.
- It **ignores context-specific risk factors** the BHS also highlights, such as:
  - Wind orientation,
  - Horse habituation,
  - Noise levels and turbine shadow flicker,
  - Startle responses for young or high-performance horses.

**Red Flag:** A one-size-fits-all distance metric is **not sufficient** under best practice; **contextual risk analysis** is missing.

---

### 2. Dismissal of Operational Risk Without Evidence

#### Claim:

"No significant long-term adverse impacts on equine welfare."

#### Red Flag:

- The report lacks **on-site behavioral monitoring**, noise and shadow flicker modelling specific to **the equine facility in question**.
- It downplays staff safety concerns, assuming horses "will habituate" — a claim **not supported with local data** or references to equine behavior under turbine stressors.

#### Example Omission:

- No engagement or site walk-through with the affected equine business owner(s) is documented.

- No risk matrix for **construction noise, blasting, or rotational flicker exposure** is presented.
- 

### 3. **Distance Measurements Lack Verifiability**

#### **Claim:**

Nearest equine infrastructure is 630–1,090 m away; nearest public road used for riding is 735 m away.

#### **Inconsistency:**

- These distances are not presented on scaled maps in the response.
- No geospatial or CAD drawings (e.g., turbine overlay on equine landholding boundaries) are provided to **verify the claimed buffers**.

**Red Flag:** In the absence of visual confirmation, these numbers **cannot be independently validated**.

---

### 4. **No Noise Sensitivity Analysis for Horses**

#### **Observation:**

- The applicant provides **no equine-specific noise sensitivity threshold analysis**, despite submitting one for human receptors (Appendix 9.1).

#### **Why This Matters:**

- Horses can detect low-frequency sounds and vibration, which **can affect their stress and behavior**.
  - The consultant's assertion that horses are “generally unperturbed” is based on **anecdotal site visits to unrelated wind farms**, not controlled observations or decibel mapping at the subject site.
- 

### 5. **Legal or Regulatory Engagement Plan**

#### **Issue:**

- If equine operations are disrupted, this could trigger **nuisance complaints**, insurance complications, or reputational damage.

#### **Omission:**

- The applicant does **not offer a grievance redress mechanism**, or a **stakeholder engagement strategy** specific to equine operators.
- 

### 6. **Mitigation Measures Are Vague and Unquantified**

**Claim:**

Mitigation will be implemented as per Appendix 3 of the consultant's report.

**Problem:**

- Appendix 3 provides **general good-practice language** (e.g., "ongoing communication", "monitor noise"), but **no enforceable or time-bound actions**.
- There is **no commitment to post-construction monitoring** of horse stress indicators or staff incident reports.

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**Summary Table**

Issue	Type	Severity	Implication
Use of generic UK guidelines	Technical	● High	Not adapted to specific local equine conditions
Dismissal of stress/health risks	Scientific	● High	No behavioral baseline data or monitoring offered
Unverified distance claims	Procedural	● Medium	Lack of mapping undermines credibility
No horse-specific noise impact analysis	Technical	● High	Misses key turbine impact vector for equine health
No grievance redress or dialogue process	Legal/Community	● Medium	Inadequate engagement and mitigation pathway
Vague mitigation language	Implementation	● Low	Measures not enforceable or verifiable

**RFI Item 23** from the Tullacondra Wind Farm Request for Further Information (RFI) submission, focused on the **protection of existing water infrastructure** — specifically in relation to **Uisce Éireann (Irish Water) assets** along the **Grid Connection Route (GCR)**.

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### **RFI ITEM 23 – Cork County Council Request Summary**

Uisce Éireann records indicate that a 3-inch water pipe and two large water mains (400 mm & 315 mm) lie within the public road network between the L1207, L5320, and L1220 roads.

You are required to:

1. Engage with Uisce Éireann's **Diversions Team** to assess the **feasibility of build-over and/or diversion**.
  2. Submit:
    - The **outcome** of this engagement, or
    - **Revised plans and layouts** showing that **separation distances** as per **Uisce Éireann's Standards and Codes of Practice** can be achieved.
- 

### **Applicant's Response Summary**

- Did **not submit evidence of engagement** with Uisce Éireann's Diversions Team.
  - Instead, provided:
    - A set of **revised drawings** (Drawing Nos. 20910-BFA-XX-XX-DR-C-8301 to C-8312) showing the grid route in relation to existing utilities.
    - A **technical report** (Appendix 23.1) stating that **required separation distances can be achieved**.
  - Concluded that **no diversion** is necessary and that the design remains **compliant** with Irish Water standards.
- 

### **Red Flags and Inconsistencies**

#### **1. No Evidence of Actual Engagement with Uisce Éireann**

The RFI required formal **consultation with the Uisce Éireann Diversions Team**.

- The applicant did **not submit**:
  - A letter, email, or meeting note from Uisce Éireann
  - Any response confirming agreement with the proposed solution
- The absence of this engagement undermines the assurance that Uisce Éireann:
  - Has reviewed the plans

- Accepts build-over or proximity without diversion

**Red Flag:** This is a **non-compliant response**. It fails to meet the Planning Authority's clear instruction for coordination with the utility owner.

---

## ● 2. Unverified Assumption That Separation Distances Are Acceptable

While the technical report claims compliance with Irish Water standards, it does not:

- Cite the **specific separation requirements** from Uisce Éireann's Codes of Practice (e.g. 3 m lateral, 600 mm vertical).
- Explain how these were measured (e.g. via GPR, as-built maps, or site surveys).
- Provide assurance that **actual pipe locations** (not assumed ones) were used in design.

**Red Flag:** Without verification of utility position (especially older or undocumented 3-inch pipes), the design may **fail during construction**.

---

## ● 3. No Details on Risk Mitigation During Construction

Even if minimum separation is achieved on paper, there is **no mention** of how:

- Potential utility strikes will be avoided
- Ground conditions and hydrostatic pressure will be managed around live water mains
- Construction methodology (trenching, HDD) will reduce risk

● **Concern:** Irish Water normally expects a **Method Statement** for works near critical assets — none is included.

---

## ● 4. Drawings Not Annotated to Highlight Critical Crossings

The set of 12 revised drawings (C-8301 to C-8312):

- Are provided without a **cover sheet or legend** highlighting:
  - Where the critical water mains are located
  - Where **proximity is tightest** and clearances are narrowest
- There is no **summary drawing or risk register** indicating which crossings are sensitive and why.

● **Concern:** This reduces clarity and burdens the Planning Authority with needing to cross-examine dozens of drawings to locate key constraints.

---

## ● 5. No Contingency Plan If Separation Cannot Be Maintained

- The applicant does **not confirm** what happens if, during construction:
  - The pipe is found to be closer than expected
  - Separation distances **cannot** be maintained without diversion

● **Weakness:** This omission limits confidence in the **constructability and compliance** of the project.

### Summary Table – RFI 23 Red Flags

Issue	Description	Severity
No documented engagement with Uisce Éireann	Key stakeholder not consulted as required	● Critical
Separation distance assumptions unverified	No GPR survey or Irish Water confirmation	● High
No construction risk mitigation plan	Risk to water infrastructure not managed	● Medium
Drawings not clearly annotated or summarised	Risk zones difficult to identify	● Medium
No contingency for insufficient separation	No diversion protocol or fallback	● Moderate

### Strategic and Planning Risks

By failing to consult Uisce Éireann directly:

- The developer risks a **Section 50 refusal** or **delays during grid connection works**.
- Uisce Éireann may require late-stage design changes or impose costly diversions during construction.
- Planning consent could be granted based on **incorrect utility assumptions**, risking later enforcement or redesign.

## ◀ Recommendations for Full Compliance

To resolve RFI Item 23 appropriately and ensure infrastructure protection:

### **1. Submit evidence of consultation:**

- An **email or letter** from Uisce Éireann confirming:
  - Review of proposed separation
  - No objection or required modifications

### **2. Include a utility conflict matrix identifying:**

- All known pipe crossings
- Minimum measured clearances (horizontal and vertical)
- Construction method (e.g. open cut, HDD)
- Risk classification

### **3. Submit a method statement for working near critical pipes, including:**

- Utility location verification (e.g. GPR, trial holes)
- Emergency response protocol
- Communication plan with Irish Water

### **4. Add a planning condition such as:**

*“Prior to grid connection works in the vicinity of existing Uisce Éireann infrastructure, the developer shall submit confirmation from Uisce Éireann that proposed separation distances are acceptable and that no diversion is required. Any deviations from approved plans shall require written agreement.”*

**RFI Item 24** from the Tullacondra Wind Farm Request for Further Information (RFI) submission. This item concerns the **Outline Decommissioning and Restoration Plan (DRP)** for the proposed development and is essential for demonstrating long-term environmental stewardship and regulatory compliance.

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### **RFI ITEM 24 – Cork County Council Request Summary**

*“Please submit an Outline Decommissioning and Restoration Plan (DRP) for the project. This shall make provision for the **restoration of habitats, including hedgerows.**”*

#### **Planning Intent:**

- Ensure that the developer commits to a clear plan for **removing infrastructure** at end of life (typically 25–30 years).
  - Confirm that the site, especially **habitats disturbed during construction**, will be **restored or reinstated**.
  - Provide assurance that **biodiversity net gain is preserved** beyond the operational phase.
- 

#### **Applicant’s Response Summary**

- Submitted **Appendix 24.1**, titled *Outline Decommissioning and Restoration Plan*.
  - Confirms that:
    - Turbines, cables, and temporary infrastructure will be removed.
    - The site will be **restored to agricultural use**, and reinstatement will align with the **Habitat Management Plan (HMP)**.
    - Reinstatement includes **hedgerows and ecological buffers** affected during construction.
  - States that the DRP will be further developed prior to decommissioning, in consultation with relevant authorities.
- 

#### **Deeper Analysis – Red Flags and Inconsistencies**

##### **1. Lack of Specificity in Habitat and Hedgerow Restoration Measures**

Although the DRP mentions habitat and hedgerow reinstatement, it **does not detail**:

- **Which hedgerows** will be restored
- The **method of restoration** (e.g. replanting species, fencing, management regime)
- How it ties into specific locations impacted during construction (e.g. access routes, cable corridors)

**Red Flag:** The response is **generic**. It does not demonstrate that the restoration plan is **tailored to the site-specific biodiversity impacts**.

---

## ● 2. No Proposed Timeline or Trigger for Implementation

The DRP lacks a **clear timeline** or explanation of:

- When decommissioning would begin (e.g. within 6–12 months of final shutdown)
- How long it will take
- Whether reinstatement would occur **concurrently or in phases**

**Red Flag:** Without a timeline, the Planning Authority cannot assess whether **delays in decommissioning or extended abandonment** could harm the environment or local community.

---

## ● 3. No Financial Security or Bond Proposed

Standard planning practice often requires that decommissioning is supported by a **financial guarantee or bond** to ensure that restoration is completed even if the operator is insolvent or unwilling.

- The DRP makes **no mention** of:
  - A **decommissioning fund**
  - Whether the developer is prepared to offer a bond or escrow arrangement

● **Concern:** This omission creates a **long-term enforcement risk** for the Planning Authority and local residents.

---

## ● 4. No Clarity on Subsurface Infrastructure Removal (e.g. cables, foundations)

The DRP should distinguish between:

- What infrastructure will be **fully removed**
- What will be **left in situ** (e.g. buried cables, concrete turbine bases)
- Whether **full or partial foundation removal** is proposed

● **Concern:** Leaving in-place infrastructure may affect future **land use, drainage, or soil productivity**, and should be clearly justified.

---

## ● 5. No Link Between DRP and Habitat Management Plan (HMP) Goals

- Although the DRP references the HMP, it does not:
  - Explain **how HMP biodiversity gains will be retained** post-decommissioning

- Confirm whether **habitat enhancements (e.g. bat corridors, wetlands)** will remain or be removed

● **Weakness:** The DRP appears **operationally disconnected** from the ecological design goals of the overall project.

---

### Summary Table – RFI 24 Red Flags

Issue	Description	Severity
No specific hedgerow or habitat restoration plan	Lacks spatial or species-level detail	● High
No decommissioning timeline or triggers	Delays in restoration are unregulated	● High
No financial guarantee or bond	Weakens enforceability over 30-year horizon	● Medium
No details on underground infrastructure removal	Unclear land recovery scope	● Medium
Weak linkage to Habitat Management Plan	Post-closure biodiversity continuity unconfirmed	● Low

---

### Planning and Long-Term Compliance Risks

If these issues are not addressed, the project risks:

- **Post-closure environmental degradation**, especially in sensitive habitats (e.g. if hedgerows or bat corridors are removed or unmanaged).
  - **Enforcement difficulties** if no financial security is in place and the developer fails to act.
  - A perception of **weak life-cycle planning**, undermining community confidence.
-

## Recommendations for Full Compliance

To fully address RFI Item 24 and future-proof the project's ecological integrity:

### 1. Submit a detailed habitat and hedgerow restoration plan, including:

- Specific hedgerows to be restored (by location or reference)
- Species mix and planting method
- Aftercare and monitoring period

### 2. Include a timeline for decommissioning, such as:

- "Works will commence within 6 months of final shutdown and be completed within 18 months."

### 3. Address subsurface infrastructure by confirming:

- Will all turbine foundations and cables be removed?
- If not, what will remain and why?

### 4. Commit to a decommissioning fund or financial bond, for example:

*"Prior to construction, the developer shall agree with the Planning Authority a financial security mechanism (e.g. bond or escrow) to cover decommissioning and full ecological restoration."*

### 5. Link to the HMP explicitly:

- Clarify which biodiversity enhancements (e.g. hedgerow corridors, ponds, bat features) will be **retained post-closure** and which will be removed.

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## Conclusion

While the submitted DRP meets the basic requirement of RFI Item 24, it lacks the **granularity, enforceability, and ecological accountability** expected for a wind farm of this scale and sensitivity. A clearer, more accountable, and biodiversity-aligned plan is needed to satisfy the Planning Authority and ensure long-term land recovery.

## RFI ITEM 24 – Cork County Council Request Summary

"Please submit an **Outline Decommissioning and Restoration Plan (DRP)** for the project. This shall make provision for the **restoration of habitats**, including **hedgerows**."

### Planning Intent:

To ensure that:

- Wind farm infrastructure will be **fully removed** at end-of-life.
- A clear framework exists for **ecological restoration**, especially for habitats like hedgerows affected by construction.

- The site's **pre-development land use** or **biodiversity value** is reinstated or improved.
- 

#### **Applicant's Response Summary**

- Submitted **Appendix 24.1: Outline Decommissioning and Restoration Plan**.
  - The DRP includes the following commitments:
    - Removal of wind turbines, access tracks (where applicable), underground cables, substation infrastructure, and the met mast.
    - Restoration of the site to **agricultural use**, in keeping with pre-development conditions.
    - Reinstatement of **hedgerows**, and other habitats lost or altered, in line with the **Habitat Management Plan (HMP)**.
    - Implementation of decommissioning in consultation with the Planning Authority and other relevant bodies.
  - States that a **detailed DRP** will be prepared nearer the decommissioning stage.
-