

Ballymahon Solar Farm

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Appropriate Assessment Screening and Natura Impact Statement

BNRG Ballymahon Limited

September 2025

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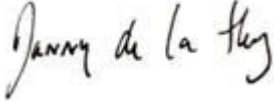


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EXECUTIVE SUMMARY

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Contents	Summary
<p>Site Location</p>	<p>The proposed Ballymahon Solar Farm and Battery Energy Storage System (BESS) development, hereafter referred to as “the site”, is located approximately 2 km northwest from Ballymahon village within the townlands of Cartronbrack, Tirlickeen, Clogh, Corryena, and Lismacmurogh, County Longford. The proposed area is circa. 111.1 hectares in size with 94.18 hectares of developable land. The site is comprised of three land areas, labelled as Site 1, 2 and 3.</p>
<p>Proposals</p>	<p>The proposed development includes approximately 700,000 sqm of solar PV arrays (355,000 sqm of which are ground-mounted), 18 MV stations, and a BESS compound with 56 containerised storage modules. Supporting infrastructure will comprise 1.8 km of underground cabling along public roads, 3.8 km of internal access tracks, temporary site compounds, welfare facilities, and secure storage areas. Additional features include security fencing, pole-mounted CCTV, access via two existing entrances, and landscaping and biodiversity enhancement measures.</p>
<p>Scope of this Report</p>	<p>The report consists of an Appropriate Assessment Screening and a Natura Impact Statement of the Proposed Works. This is to assess the potential for the Proposed to give rise to impacts upon relevant Natura 2000 sites (Special Areas of Conservation and Special Protection Areas). A zone of influence for the Proposed Development of 15 kilometers was determined to be appropriate. This report documents an assessment carried out in two stages. The purpose of Appropriate Assessment Screening is to;</p> <ul style="list-style-type: none"> • Assess if there are relevant receptors within the zone of influence; • Identify conservation objectives of receptors, identify possible pathways; and • Identify if there will be any likely significant effects which may adversely impact on conservation objectives of the receptors. <p>The purpose of the Natura Impact Statement is to assess in detail any likely significant effects when mitigation is implemented and determine if there is an adverse effect on site integrity.</p>

Appropriate Assessment Screening Results	<p>The Appropriate Assessment Screening results identify the following impact pathways that could result in a likely significant effect upon Lough Ree SPA and Lough Ree SAC:</p> <ul style="list-style-type: none">• Surface water pollution c• Ground water pollution
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	<ul style="list-style-type: none"> • Direct mortality (of qualifying species) . • Disturbance during Construction • Habitat fragmentation ; and • Damage to /loss of foraging habitat
<p>Natura Impact Statement</p>	<p>No projects or plans were identified that may have an in-combination effect with the Proposed Works. Assessed alone it was concluded that all impact pathways could be avoided with suitable mitigation measures in place. This includes submission of and adherence to mitigation measures which are described in a Construction Environmental Management Plan</p>
<p>Conclusion</p>	<p>Providing the mitigation detailed within the Natura Impact Statement can be implemented and adhered to in full, an adverse effect upon the integrity of any Natura 2000 site, either alone or in combination with any other plan or project, can be avoided.</p>

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1.0 INTRODUCTION

1.1 BACKGROUND

Tetra Tech Limited (Tetra Tech) was commissioned by BNRG Ballymahon Limited on 15th March 2025 to undertake an Appropriate Assessment Screening (AAS) and Natura Impact Statement (NIS) of Ballymahon Solar Farm, hereafter referred to as “the site.”

The AAS and NIS combine within the Appropriate Assessment process, which aims to establish the potential for the Proposed Development to affect the qualifying interests of Natura 2000 designated sites.

This report has been produced, as required under Stage 1 and Stage 2 of the Appropriate Assessment process and provides all relevant information to the Competent Authority (in this case Longford County Council) in order for it to determine whether the Proposed Development are likely to have a significant effect on the integrity of any Natura 2000 site, or sites, within its zone of influence (ZoI).

This report has been prepared by Principal Ecologist Joe Salkeld BSc (Hons) MSc MCIEEM, and reviewed by Senior Habitats Regulations Assessment Specialist Ashley Endacott BSc (Hons). The report has been verified by Danny de la Hey. The conditions pertinent to it are in Appendix A.

1.2 SITE DESCRIPTION AND ENVIRONMENTAL SETTING

1.2.1 Summary

The Proposed Development site is in the townlands of Tirlickeen, Cartronbrack, Lislom and Lisglassock at Ballymahon, County Longford. The site is approximately one kilometre (km) west of Ballymahon, County Longford. The site is located west of Ballymahon behind a small number of houses in a very well-screened area and offers two methods of access. The Proposed Development consists of two separate blocks – the northern block and southern block in Figure 1. The northern block is located within the townland of Cartronbrack and consists of one parcel (site 1). The southern block is located c. 1.2km–1.4km to the south of the northern block in the townlands of Lislom and Tirlickeen. It consists of three parcels (parcels 1-3).

1.2.2 Hydrology

The two nearest surface waterbodies are un-named tributaries of the River Inny (IE_SH_26I011350) which run to the northeast boundaries of Parcels 1, 2 and 3. These flow south under the Royal Canal (with no hydrological connection) where they join together and then join the River Inny east of Ballymahon. The River Inny then feeds into Lough Ree (JBA Consulting, 2025).

The Royal Canal passes south and east of the site with its nearest point 0.4km away before going north and joining the River Shannon upstream of where it enters Lough Ree.

1.2.3 Geology and hydrogeology

The groundwater body Inny (IE_SH_G_110) spans the entire site and according to WFD Status 2016-2021, this groundwater body has a 'Good' status and is 'Not at Risk'. This Groundwater body also underlies areas of Lough Ree.

The majority of the site is listed as “Moderate” to “High” ground water vulnerability with small areas of the norther block listed as “Extreme Vulnerability” Beneath the site, subsoil permeability is 'Moderate' to 'High', and the average groundwater recharge ranges from 1-200 mm/yr. The aquifer underneath the site is classified as locally important aquifer, which is moderately productive only in local zones (JBA Consulting, 2025).

1.2.4 Flood Risk

None of the site is listed as a flood risk (McCormack, 2020). The site is also not within the mid-range future scenario (MRFS) or high-end future scenario (HEFS) flood extents, nor is it within the National Indicative Flood Mapping extents.

1.2.5 Topography

Both north and south blocks have limited topographical variation but slope slightly to the south east following the lines of the streams. It is classified as low-lying flat terrain between 60 to 75m above sea level¹.

1.2.6 Soils and Subsoils

The soils are a mix of peat, well drained and poorly drained soils across both blocks. The soil types on the site are predominantly fine loamy drift with limestones and small linear areas of peat².

1.2.7 Current Land Use

The majority of the site is comprised of improved agricultural grassland, tilled land, treeline and hedgerow boundaries with additional habitats including wet grassland, mixed broadleaf woodland, poor fen and flush, streams, drainage ditches, and conifer plantation. The site also a stone tower/structure and stone wall boundaries.

1.3 DEVELOPMENT PROPOSALS

1.3.1 Overview

BNRG Ballymahon Ltd, are applying for a 10 Year Planning Permission with an operational lifespan of 40 years, for development of a Solar Farm and Battery Energy Storage System in the townlands of Cartronbrack, Tirlickeen, Clogh, Corryena, and Lismacmurogh, County Longford.

The proposed development will consist of a solar farm including:

- The installation of approximately 700,000 sqm of solar PV panel arrays, to include approximately 355,000 sqm of ground mounted panels supported by steel frame structures and the remainder area as solar array row spacing.
- Installation of approximately 18 MV stations.
- an energy storage compound consisting of 56 no. containerised energy storage modules and associated plant and equipment.

- Installation of underground cabling and ducting, comprising approximately 1.8 km along the R397 and L5527 public roads.
- Provision of temporary site compounds, welfare facilities, and secure materials storage areas.
- Construction of approximately 3.8 km of internal temporary access tracks throughout the site.
- Erection of approximately 550 m of security fencing around the BESS compound and pole-mounted CCTV cameras for site monitoring.
- Construction and operational access via two existing entrances on the R397 and L5527 roads.
- Landscaping and biodiversity enhancement measures.

The proposed development will include drainage, and all ancillary development works and apparatus necessary to facilitate the proposed development.

Note: The development site includes provision for a substation, as indicated by the hatched area on the accompanying figure. While the substation does not form part of the current planning application, it is included within the overall project outline design. Accordingly, its potential ecological impacts have been considered and assessed within the Appropriate Assessment. Ecological receptors within the hatched area have been evaluated as they fall within the Zone of Influence of the proposed development.

¹ [Ireland topographic map, elevation, terrain](#)

² [Geological Survey Ireland Spatial Resources](#)

1.3.2 Solar Panels

The civils works for the panels will use a ground mounted system that avoids undue ground disturbance and works with the existing site topography. The PV panels will sit on angled racks comprised of galvanized steel arranged in portrait or landscape configuration depending on the final system deployed. The Risen N HJT 710W or similar PV panels of approximately 2384mm × 1303mm in dimensions are proposed, with manufacture type to be determined subject to a later procurement exercise. The panels are envisaged to have a maximum height of 3m from the ground and 0.6m minimum distance.

1.3.3 Inverters and transformers

A total no of 14 string inverters units and 14 transformer stations are included in design layout and will be located at various points throughout the proposed development area to support the transfer of electricity from the solar arrays.

Inverter units are typically housed in metal enclosures or container-like structures with cooling vents and may be mounted on concrete pads or skid platforms. The inverter units will be located at the end of the solar panel arrays. Transformer stations are housed in larger metal enclosures on a hardcore or concrete slab base. They are positioned near the edge or central hub of the solar farm.

The inverters will convert the Direct Current (DC) generated by the solar panels into Alternating Current (AC). The transformers will adjust the AC voltage as needed, and the electricity will be transmitted via underground cables to the on-site 110 -kilovolt (kV) substation. The electricity will be exported to the national transmission electricity network from the onsite 110 kV substation.

The precise electrical configuration details will be finalised during construction, as technological advancements may lead to adjustments over time. The final design and technical specifications will be agreed with Longford County Council prior to construction.

1.3.4 Grid Connection and Substation

How the Solar Farm and BESS compound facility will connect to the transmission network will be determined by the Transmission System Operator (TSO), EirGrid.

The grid connection will involve the construction of a new onsite 110 kV substation. The construction of a new 4 bay 110 kV Air Insulated Switchgear (AIS) substation (size area circa 1.6 ha) that will connect to the existing Lanesborough – Mullingar 110 kV overhead circuit via 2 no. overhead line end masts. This type of connection is referred to as a “Loop In Connection”.

The new onsite 110 kV substation and 110 kV underground cable and end masts will be built in accordance with the latest EirGrid specifications.

The proposed substation and grid connection will be subject to a future Strategic Infrastructure Development (SID) application to An Bord Pleanála however they are assessed in this report as part of a “one project” approach.

1.3.5 Underground Cabling

The solar farm comprises of a small number of interconnected agricultural fields. The proposed MV cable route connecting the north and south blocks will follow roads (L5527) and (R397) for c. 1.5km.

The grid connection cable route from the south block to the existing Ballymahon Substation follows roads (R397) and (R392) for c. 2.3km.. Underground cabling ducts will be laid across the site for the purpose of connecting the solar arrays, inverters/transformers and the onsite substation. The cabling will be trenched and contained within the footprint of the internal access tracks where possible. All ducting and cables will be laid in compliance with a method statements set out in a Construction and Environmental Management Plan (CEMP).

As per the submitted plans, the solar farm blocks that do not directly adjoin each other will be connected by means of a 33 kV underground cable that will be laid in the identified public roads (c 1.4 km of cabling). The laying of this cabling will be subject to the road opening license procedures to be agreed with Longford County Council.

1.3.6 Site Access

Northern Block

The northern block is proposed to access the site via L5527 Cartonbrack Road, which already has an existing entrance into the site. Access will be upgraded to include widening small elements of the hedgerow.

Southern Block

The southern block, entrance is proposed off the R379 road using an existing gate. Compacted gravel access tracks up to 3.5 m wide will provide internal access to the solar arrays, BESS compound and associated infrastructure. Note, existing access tracks and internal gates within the land parcels have been used where possible as of the design layout. This will extend to approximately 3.8km of track across the proposed development. Stripped soil arising from the construction of these access tracks will be sustainably reused across the site as part of the landscaping and grass reinstatement in the areas of the temporary construction compounds. Internal gates are strategically positioned for seamless navigation in and out of the proposed development.

The northern and southern blocks are to be connected via a c. 1.5km long MV cable which will follow the line of existing roads (L5527) and (R397). The southern block will be connected to the existing Ballymahon 38kV Substation via a c. 2.3km long HV cable, which will follow the line of existing roads (R397) and (R392).

All roads on site will be constructed from permeable road gravel and roadside drainage will be installed as required.

1.3.7 Battery Energy Storage System Compound

The BESS compound is proposed within the solar farm siting on circa. 0.6 ha. The BESS is designed to efficiently store and manage energy generated by solar panels.

The compound will house a variety of essential components, including large-scale lithium-ion battery storage units, inverters, transformers, and associated electrical equipment, all contained within secure, purpose-built enclosures. These components work together to store excess energy produced during peak sunlight hours and discharge it when demand is high or solar generation is low, ensuring continuous and reliable energy supply.

The 70MW BESS compound within the solar farm is designed to efficiently store and manage excess energy generated by the solar panels. It will contain large-scale lithium-ion battery storage units, inverters to convert DC to AC, and transformers to adjust voltage levels for grid compatibility. The compound will also include advanced control and monitoring systems to optimize the charging and discharging cycles, ensuring maximum efficiency. To ensure safe operation, the compound will be equipped with fire suppression systems and cooling infrastructure to regulate the temperature of the batteries and inverters.

Given its integrated components, the BESS will play a vital role in optimizing the solar farm's efficiency and supporting the reliable supply of renewable energy.

1.3.8 Construction Compound

During the construction phase of the proposed development, a temporary construction compound will be established within the solar farm covering an area of 2000 m². This compound will be used for construction activities throughout the project. Once construction is completed, the compound will be backfilled with solar panels. The compound will serve the site as a parking and storage. No large-scale concrete preparation will take place on site. Any wet concrete needed for solar farm and substation components, such as slabs for inverter/transformer stations, will be delivered by truck. Following the completion of the proposed development, all construction compound areas will be covered with solar panels.

A Landscape and Biodiversity Management Plan (LBMP) will be prepared for the proposed development. A total of 186 hedgerows will be removed to accommodate site access tracks, underground cabling and site entrances. The removal will be minimal given the existing entrances and tracks which will be utilized. The LBMP for the proposed development will focus on protecting and enhancing the local environment throughout its lifecycle. After decommissioning, the site will be restored with rewilding efforts to support biodiversity, ensuring the proposed development will contribute to both renewable energy generation and ecological preservation.

1.3.9 Other Infrastructure

The solar farm will include electrical infrastructure consisting approximately 14 electrical skids spread across 500 m² of land, each enclosed by 2.7m high palisade fencing and acoustic barriers. These skids will house key components such as inverters, transformers, electrical switchgear, and other related equipment.

The solar farm will be equipped with a comprehensive CCTV system to ensure continuous monitoring and security. Strategically positioned cameras will cover key areas of the site, including the perimeter, access points, and high-value infrastructure, providing 24/7 surveillance. This system will be integrated with remote monitoring capabilities, enabling real-time alerts and quick response times in case of any security concerns.

For the site boundary, the existing fencing will be maintained around the site boundary and where needed the perimeter fencing will be replaced with wildlife friendly fencing (rail and post and mesh where needed).

The BESS compound will be secured by high-quality fencing and monitored 24/7 through CCTV surveillance. The compound will be well-lit for safety and security during nighttime operations.

1.4 REQUIREMENTS FOR APPROPRIATE ASSESSMENT

An Appropriate Assessment (AA) is an assessment of the likely significant effect (LSE) of a proposed project or plan on the conservation objectives of any Natura 2000 sites³ designated for nature and, where necessary, an assessment of the mitigation and / or avoidance measures to preclude negative effects from the Proposed Development.

The requirement for an AA is established through Habitats Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora, hereby referred to as the 'Habitats Directive', in Articles 6(3) and 6(4). The Habitats Directive is transposed into Irish law through the EC (Birds and Natural Habitats) Regulations 2011 (SI 477 of 2011). These are hereafter referred to as the 'Habitats Regulations'.

It is the responsibility of each Member State to designate Special Protection Areas (SPAs) and Special Areas of Conservation (SACs), both of which will form part of the Natura 2000 Network of protected sites throughout the European Community. SACs are selected for the conservation of Annex I habitats (including priority types which are in danger of disappearance) and Annex II species (other than birds). SPAs are selected for the conservation of Annex I birds and other regularly occurring migratory birds and their habitats. The annexed habitats and species for which each site is selected correspond to the Qualifying Interests and Special Conservation Interests of the sites; from these the conservation objectives of the site are derived.

1.4.1 European Communities (Birds and Natural Habitats) Regulations 2011

Part 5 of the European Communities (Birds and Natural Habitats) Regulations 2011, as amended, describes the legislative requirements for AAS and the circumstances under which an NIS and AA is required.

Regulation 42(1) requires that *'a screening for Appropriate Assessment of a plan or project for which an application for consent is received, or which a public authority wishes to undertake or adopt, and which is not directly connected with or necessary to the management of the site as a European Site, shall be carried out by the public authority to assess, in view of best scientific knowledge and in view of the conservation objectives of the site, if that plan or project, individually or in combination with other plans or projects is likely to have a significant effect on the European site.'*

Regulation 42(2) indicates that a public authority must carry out a AAS *'before consent for a plan or project is given, or a decision to undertake or adopt a plan or project is taken.'*

Regulation 42(6) requires that *'the public authority shall determine that an Appropriate Assessment of a plan or project is required where the plan or project is not directly connected with or necessary to the management of the site as a European Site and if it cannot be excluded, on the basis of objective scientific information*

³ Inclusive of SPAs, SACs, potential SPAs and possible SACs.

following screening under this Regulation, that the plan or project, individually or in combination with other plans or projects, will have a significant effect on a European site’.

Regulation 42(11) makes clear that the public authority must complete the AA before a decision is taken to approve, undertake or adopt a plan or project, in order to assess whether or not a plan or project would adversely affect the integrity of a Natura 2000 site

1.4.2 Stage 1 Appropriate Assessment Screening

A Stage 1 AAS determines whether a plan or project, either alone or in combination with other plans and projects, is likely to have significant effects on a Natura 2000 site (in lieu of mitigation), in view of its conservation objectives.

1.4.3 Stage 2 Natura Impact Statement

Following Stage 1, a Stage 2 NIS is required to determine the likelihood of significant effects, based on best scientific knowledge, of any plans or projects on Natura 2000 sites (with consideration of mitigation applied). The potential impacts of projects and policies outside the Natura 2000 site, but potentially impacting upon them (i.e., negative effects upon functional habitat used by their qualifying features) must also be included in the assessment.

The obligations in relation to Appropriate Assessment have been implemented in Ireland under Part XAB of the Planning and Works Act 2000, as amended (“the 2000 Act”), and in particular Section 177U and Section 177V thereof. The relevant provisions of Section 177U in relation to an AA screening have been set out below:

1.4.4 Section 177U of the Act

“1) A screening for appropriate a draft Land use plan or application for consent for proposed works shall be carried out by the competent authority to assess, in view of best scientific knowledge, if that Land use plan or proposed works, individually or in combination with another plan or project is likely to have a significant effect on the European site.

(2) A competent authority shall carry out a screening for appropriate assessment under subsection (1) before:

(a) a Land use plan is made including, where appropriate, before a decision on appeal in relation to a draft strategic works zone is made, or

(b) consent for a proposed works is given.

(3) In carrying out screening for appropriate assessment of a proposed works a competent authority may request such information from the applicant as it may consider necessary to enable it to carry out that screening, and may consult with such persons as it considers appropriate and where the applicant does not provide the information within the period specified, or any further period as may be specified by the authority, the application for consent for the proposed works shall be deemed to be withdrawn.

(4) The competent authority shall determine that an appropriate assessment of a draft Land use plan or a proposed works, as the case may be, is required if it cannot be excluded, on the basis of objective information, that the draft Land use plan or proposed works, individually or in combination with other plans or projects, will have a significant effect on a European site.

(5) The competent authority shall determine that an appropriate assessment of a draft Land use plan or a proposed works, as the case may be, is not required if it can be excluded, on the basis of objective information, that the draft Land use plan or proposed works, individually or in combination with other plans or projects, will have a significant effect on a European site.”

A Stage 2 Appropriate Assessment is required under Article 6 of the Habitats Directive where a project or plan may give rise to LSEs upon a European (Natura 2000) Site.

Paragraph 3 states that:

“6(3) Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site, in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.

6(4) – If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted. Where the site concerned hosts a priority natural habitat type and/or a priority species, the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission to other imperative reasons of overriding public interest.”

1.5 AAS AND NIS GUIDANCE

The AAS and NIS process undertaken by Tetra Tech has been developed in accordance with the following guidance:

- Office of the Planning Regulator (OPR) (2021) Practice Note PN01. Appropriate Assessment Screening for Development Management
- Department of Environment, Heritage and local Government (2010) Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities;
- European Commission Guidance (2001) *Assessment of plans and projects significantly affecting Natura 2000 sites* (November 2001);
- European Commission (2015): Directorate-General for Environment, *Natura 2000 and forests. Part I-II*, Publications Office, <https://data.europa.eu/doi/10.2779/699873>
- European Commission Guidance (2018) *Managing Natura 2000 sites: The provisions of Article 6 of the ‘Habitats’ Directive* (2018).

- European Union Habitats Directive, (1992). Council Directives 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora. European Union Birds Directive (2009) Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (codified version).
- National Transport Authority (2023) Guidance for EIA And AA Screening of Active Travel Projects Funded By The NTA. and
- National Parks & wildlife Services (2020) Guidance on Appropriate Assessment for Planning Authorities;

1.6 STATEMENT OF AUTHORITY

This report was prepared by Principal Ecologist Joe Salkeld BSc (Hons) MSc MCIEEM who has 8 years professional experience including working on appropriate assessment and impact assessments for designated sites across Ireland, Northern Ireland England Scotland and Wales. Joe also holds protected species surveys licenses for bats, hazel dormice, reptiles and great crested newts and mitigation licenses for crayfish and hazel dormouse.

This report has been reviewed by Senior HRA Specialist Ashley Endacott BSc (Hons) who has over 8 years experience of reviewing and writing HRAs. Ashley was previous HRA subject matter expert at the Marine Management Organisation (MMO) and has experience of providing technical and strategic HRA advice on cases, including derogations. Ashley has a breadth of experience gleaned from project types including renewables, utilities (water), coastal flood defences, offshore wind, ports, aggregates and also preparation for planning enquiries.

This report has been Verified by Associate Ecologist and HRA Lead Danny de la Hey. Danny has 15 years' experience as Ecological Consultant and extensive experience working with within the Habitats Regulations, including as supporting local authorities in England and Ireland and as Expert witness during a public enquiry.

1.7 LIMITATIONS

This report is based upon the current proposals as stated within Section 1.3, therefore, should any details change relating to the proposed development as noted, then a review of both stages would be required to confirm whether there is a LSE upon any Natura 2000 site.

2.0 METHODOLOGY

2.1 APPROPRIATE ASSESSMENT

In line with the Department of Environment, Heritage and Local Government (2010) *Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities* the Appropriate Assessment process involves four stages as presented in Plate 10.



Plate 1. Outline of the four stages of Appropriate Assessment. Source: Section 3.1 from (Department of Environment, Heritage and Local Government, 2010)

This report relates to Stage 1 and Stage 2. As discussed in Section 1.4.1, only the public authority can prepare an AA. This report provides the required information in the form of a NIS, to assist the public authority in exercising their duties. The definition of these stages in line with the relevant guidance is stated in the following sub-sections.

2.1.1 Stage 1 - Screening for Appropriate Assessment

“Screening is the process that addresses and records the reasoning and conclusions in relation to the first two tests of Article 6(3):

- i. whether a plan or project is directly connected to or necessary for the management of the site, and*
- ii. whether a plan or project, alone or in combination with other plans and projects, is likely to have significant effects on a Natura 2000 site in view of its conservation objectives.*

If the effects are deemed to be significant, potentially significant, or uncertain, or if the screening process becomes overly complicated, then the process must proceed to Stage 2 (AA). Screening should be undertaken without the inclusion of mitigation, unless potential impacts clearly can be avoided through the modification or redesign of the plan or project”

2.1.2 Stage 2 - Appropriate Assessment

“This stage considers whether the plan or project, alone or in combination with other projects or plans, will have adverse effects on the integrity of a Natura 2000 site, and includes any mitigation measures necessary to avoid, reduce or offset negative effects. The proponent of the plan or project will be required to submit a Natura Impact Statement, i.e. the report of a targeted professional scientific examination of the plan or project and the relevant Natura 2000 sites, to identify and characterise any possible implications for the site in view of the site’s conservation objectives, taking account of in combination effects. This should provide information to enable the competent authority to carry out

the appropriate assessment. If the assessment is negative, i.e. adverse effects on the integrity of a site cannot be excluded, then the process must proceed to Stage 4, or the plan or project should be abandoned. The AA is carried out by the competent authority, and is supported by the NIS.”

A NIS is included as part of this report in order to inform Stage 2 AA which is carried out by the public authority.

2.2 NATURA IMPACT STATEMENT

Within the European Communities (Birds and Natural Habitats) Regulations 2011, Regulation 42(3)(a) gives the public authority the discretion to instruct the applicant to provide a NIS. Regulation 42(3)(b) allows it to request any additional information that it considers necessary.

Regulation 42(5) goes on to make clear that the NIS should include such information as the public authority considers necessary to enable it to undertake the AA and to ascertain if a project or plan will affect the integrity of a Natura 2000 site.

In Part 1, Regulation 2(1) defines an NIS as ‘*a report comprising the scientific examination of a plan or project and the relevant European Site or European Sites, to identify and characterise any possible implications of the plan or project individually or in combination with other plans or projects in view of the conservation objectives of the site or sites, and any further information including, but not limited to, any plans, maps or drawings, scientific information or data required to enable the carrying out of an Appropriate Assessment*’.

Department of Environment, Heritage and Local Government (2010) describe that if a LSE cannot be excluded, a NIS will be required. An NIS is a focused and detailed impact assessment of the implications of the plan or project, alone or in combination with other plans and projects, on the integrity of a Natura 2000 site in view of its conservation objectives

An NIS is an impact assessment process that fits within the decision-making framework and tests of Articles 6(3) and 6(4). It assesses the likely and possible impacts of the plan or project on a Natura 2000 site. This comprises a comprehensive ecological impact assessment of a plan or project; it examines the direct and indirect impacts that the plan or project might have on its own or in combination with other plans and projects, on one or more Natura 2000 sites in view of the sites’ conservation objectives.

If it is concluded that adverse effects will likely occur, mitigation measures will be required to either avoid the impact in the first place, or to reduce the ecological effect to such an extent that it is no longer significant. Note that, unlike standard Ecological Impact Assessment, compensation for adverse effects (i.e. creation of alternative habitat) is not permitted to be considered within the NIS.

2.3 INFORMATION USED TO INFORM THE ASSESSMENT

2.3.1 Desk Study

The online mapping tool provided by National Parks and Wildlife Service (NPWS) (<https://www.npws.ie>) was consulted to determine which Natura 2000 sites could be impacted by the Proposed Development. For the Proposed Development site, a 15km search radius for SACs and SPAs was considered appropriate based upon relevant guidance (Office of the Planning Regulator, 2021) (Department of Environment, Heritage and Local Government, 2010).

Other sources of information included;

- Environmental Protection Agency Geoportal (<https://gis.epa.ie/EPAMaps/>) mapping tool.
- Inland Fisheries Ireland data portal (<https://opendata-ifigeo.hub.arcgis.com/>)
- National parks and Wildlife Service habitat and Species data ([Habitat and Species data | National Parks & Wildlife Service](#))
- The National Biodiversity Data Centre [Maps - Biodiversity Maps](#)

Desk study data from the National Biodiversity Data Centre was requested for five, 2km grid squares to fully cover the site this covered tetrad N16k N16L, N16P, N16F, and N16J

2.3.2 Field Surveys

A Preliminary Ecological Appraisal (PEA) of the site was undertaken in April 2025 (Tetra Tech, 2025a). Following this, targeted surveys were carried out for smooth newt *Lissotriton vulgaris* (Tetra Tech, 2025b), badger *Meles meles* (Tetra Tech, 2025c), bats (Tetra Tech, 2025d), and otter *Lutra lutra* (Tetra Tech, 2025e). A technical report for birds was also produced (Tetra Tech, 2025f). The key findings of these surveys were:

- Otter spraint recorded near northern block on Inny tributary
- No bird species listed on site designations were recorded during surveys
- No invasive non native species (INNS) were recorded during the surveys.

3.0 SCOPING OF ASSESSMENT

3.1 DETERMINING ZONES OF INFLUENCE

The selection of Natura 2000 sites was dependent upon the likelihood of the Proposed Development resulting in an impact pathway(s) causing LSE within a ZoI as set out in Section 2.3.1 (See Figure 2) and hydrological connectivity shown on Figure 3. This is considered to be sufficient to capture all Natura 2000 sites which may be impacted by the Proposed Development and that are linked hydrologically.

Section 3.2 and Table 1 presents the Natura 2000 Sites identified within 15 km that could be affected by the Proposed Development and details each site's qualifying and supporting features, any threats to their integrity as identified in the Site plans and, their conservation objectives.

3.2 IDENTIFICATION OF NATURA 2000 SITES WITH POTENTIAL TO BE AFFECTED BY THE PROPOSED DEVELOPMENT

A total of Nine Natura 2000 Sites were recorded within / partially within 15km of the site. They are detailed along with their qualifying features and conservation objectives in Table 1.

Table 1. Natura 2000 Sites

Natura 2000 Site	Distance From Proposed Development	Qualifying Features	Conservation Objectives
000440 Loch Ree SAC	5.1km west of the site	Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> - type vegetation [3150]	To restore the favourable conservation condition of Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> - type vegetation in Lough Ree SAC
		Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (important orchid sites) [6210]	To restore the favourable conservation condition of Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) in Lough Ree SAC
		Active raised bogs [7110]	No conservation objective provided
		Degraded raised bogs still capable of natural regeneration [7120]	To restore the favourable conservation condition of Degraded raised bogs still capable of natural regeneration in Lough Ree SAC,
		Alkaline fens [7230]	To maintain the favourable conservation condition of Alkaline fens in Lough Ree SAC
		Limestone pavements [8240]	To maintain the favourable conservation condition of Limestone pavements in Lough Ree SAC
		Old sessile oak woods with and in the British Isles [91A0]	The status of Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles as a qualifying Annex I habitat for the Lough Ree SAC is currently under review. The outcome of this review will determine whether a site-specific conservation objective is set for this habitat
		Bog woodland [91D0]	To restore the favourable conservation condition of Bog woodland in Lough Ree SAC
		Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) [91E0]	No conservation objective provided
		Otter (<i>Lutra lutra</i>) [1355]	To maintain the favourable conservation condition of Otter in Lough Ree SAC,
004064 Lough Ree SPA	5.1km west of the site	Common Tern (<i>Sterna hirundo</i>) [A193]	To restore the Favourable conservation condition of Common Tern in Lough Ree SPA
		Whooper Swan (<i>Cygnus cygnus</i>) [A038]	To restore the Favourable conservation condition of Whooper Swan in Lough Ree SPA
		Teal (<i>Anas crecca</i>) [A052]	To restore the Favourable conservation condition of Teal in Lough Ree SPA
		Mallard (<i>Anas platyrhynchos</i>) [A053]	To restore the Favourable conservation condition of Mallard in Lough Ree SPA
		Tufted Duck (<i>Aythya fuligula</i>) [A061]	To maintain the Favourable conservation condition of Tufted Duck in Lough Ree SPA
		Common Scoter (<i>Melanitta nigra</i>) [A065]	To restore the Favourable conservation condition of Common Scoter in Lough Ree SPA
		Goldeneye (<i>Bucephala clangula</i>) [A067]	To restore the Favourable conservation condition of Goldeneye in Lough Ree SPA
		Coot (<i>Fulica atra</i>) [A125]	To maintain the Favourable conservation condition of Coot in Lough Ree SPA,
		Golden Plover (<i>Pluvialis apricaria</i>) [A140]	To restore the Favourable conservation condition of Golden Plover in Lough Ree SPA
		Lapwing (<i>Vanellus vanellus</i>) [A142]	To restore the Favourable conservation condition of Lapwing in Lough Ree SPA
		Little Grebe (<i>Tachybaptus ruficollis</i>) [A004]	To maintain the Favourable conservation condition of Little Grebe in Lough Ree SPA
		Wigeon (<i>Mareca penelope</i>) [A855]	To restore the Favourable conservation condition of Wigeon in Lough Ree SPA
		Shoveler (<i>Spatula clypeata</i>) [A857]	To maintain the Favourable conservation condition of Shoveler in Lough Ree SPA
Wetland and Waterbirds [A999]	To maintain the Favourable conservation condition of Wetland habitats in Lough Ree SPA		
002202 Mount Jessop Bog SAC	7.2km north of the site	Degraded raised bogs still capable of natural regeneration [7120]	To restore the favourable conservation condition of Degraded raised bogs still capable of natural regeneration in Mount Jessop Bog SAC

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Natura 2000 Site	Distance From Proposed Development	Qualifying Features	Conservation Objectives
		Bog woodland [91D0]	To maintain the favourable conservation condition of Bog woodland* in Mount Jessop Bog SA
000448 Fortwilliam Turlough SAC	11.km west of the site	Turloughs [3180]	To maintain the favourable conservation condition of Turloughs in Fortwilliam Turlough SAC
002313 Ballymore Fen SAC	12.9 km southeast of the site	Transition mires and quaking bogs [7140]	To maintain the favourable conservation condition of Transition mires and quaking bogs in Ballymore Fen SAC
004045 Glen Lough SPA	13.3km east of the site	Whooper Swan (Cygnus cygnus) [A038]	To restore the Favourable conservation condition of Whooper Swan in Glen Lough SPA
002346 Brown Bog SAC	13.5km north of the site	Active raised bogs [7110]	To restore the favourable conservation condition of Active raised bogs in Brown Bog SAC,
		Degraded raised bogs still capable of natural regeneration [7120]	The long-term aim for Degraded raised bogs still capable of natural regeneration is that its peat-forming capability is re-established; therefore, the conservation objective for this habitat is inherently linked to that of Active raised bogs (7110) and a separate conservation objective has not been set in Brown Bog SAC
		Depressions on peat substrates of the Rhynchosporion [7150]	Depressions on peat substrates of the Rhynchosporion is an integral part of good quality Active raised bogs (7110) and thus a separate conservation objective has not been set for the habitat in Brown Bog SAC
Ballykenny-Fisherstown Bog SPA	14.9km north of the site	Greenland White-fronted Goose (Anser albifrons flavirostris) [A395]	To restore the Favourable conservation condition of Greenland White-fronted Goose in Ballykenny-Fisherstown Bog SPA
Ballykenny-Fisherstown Bog SAC	14.9km north of the site	Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation [3150]	To restore the favourable conservation condition of Natural eutrophic lakes with Magnopotamion or Hydrocharition-type vegetation in Lough Forbes Complex SAC
		Active raised bogs [7110]	To restore the favourable conservation condition of Active raised bogs in Lough Forbes Complex SAC
		Degraded raised bogs still capable of natural regeneration [7120]	The long-term aim for Degraded raised bogs still capable of natural regeneration is that its peat-forming capability is re-established; therefore, the conservation objective for this habitat is inherently linked to that of Active raised bogs (7110) and a separate conservation objective has not been set in Lough Forbes Complex SAC
		Depressions on peat substrates of the Rhynchosporion [7150]	Depressions on peat substrates of the Rhynchosporion is an integral part of good quality Active raised bogs (7110) and thus a separate conservation objective has not been set for the habitat in Lough Forbes Complex S
		Alluvial forests with Alnus glutinosa and Fraxinus excelsior (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) [91E0]	To restore the favourable conservation condition of Alluvial forests with Alnus glutinosa and Fraxinus excelsior (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) in Lough Forbes Complex SAC

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4.0 STAGE 1 SCREENING ASSESSMENT

4.1 ASSESSMENT OF THE LIKELY SIGNIFICANT EFFECTS

The HRA Handbook (DTA Publications, 2025) confirms that during the Screening Stage, *“If significant effects cannot be excluded on the basis of objective information without extensive investigation, a plan or project should be considered to have a likely significant effect and taken through to an Appropriate Assessment”*.

The concept of a ‘likely significant effect’ as embodied in Article 6(3) of the Habitats Directive and paragraph 63(1) of the Habitats Regulations is central to their operation. Its interpretation is well established in law and guidance and embraces the precautionary principle. The screening exercise which applies the phrase ‘would be likely to have a significant effect’ is often referred to as the test for ‘likely significant effect’ or even the test for ‘LSE’, or as ‘the significance test’.

The meaning of likely has been settled by case law - the ECJ Waddenzee ruling states that:

“43 It follows that the first sentence of Article 6(3) of the Habitats Directive subordinates the requirement for an appropriate assessment of the implications of a plan or project to the condition that there be a probability or a risk that the latter will have significant effects on the site concerned; and

...`44 In the light, in particular, of the precautionary principle, which is one of the foundations of the high level of protection pursued by Community policy on the environment, in accordance with the first subparagraph of Article 174(2) EC, and by reference to which the Habitats Directive must be interpreted, such a risk exists if it cannot be excluded on the basis of objective information that the plan or project will have significant effects on the site concerned...Such an interpretation of the condition to which the assessment of the implications of a plan or project for a specific site is subject, which implies that in case of doubt as to the absence of significant effects such an assessment must be carried out.”

Therefore, a likely significant effect can be defined as the risk of a significant effect, and Sweetman defines this further or even a possibility of a risk:

...`47. It follows that the possibility of there being a significant effect on the site will generate the need for an appropriate assessment for the purposes of Article 6(3). The requirement at this stage that the plan or project be likely to have a significant effect is thus a trigger for the obligation to carry out an appropriate assessment.’ There is no need to establish such an effect; it is, as Ireland observes, merely necessary to determine that there may be such an effect’ and not following the dictionary definition of ‘likely’.

The ruling of C-323/17 People Over Wind 2018 has stated that *“Article 6(3)... must be interpreted as meaning that, in order to determine whether it is necessary to carry out, subsequently, an appropriate assessment of the implications, for a site concerned, of a plan or project, it is not appropriate, at the screening stage to take into account measures intended to avoid or reduce the harmful effects of the plan or project on that site”* (paragraph 40).

This means that measures intended to avoid or reduce the harmful effects of a plan or project on Habitats sites (e.g. mitigation) should not be taken into account during the screening stage.

4.2 IS THE PROJECT DIRECTLY CONNECTED WITH OR NECESSARY TO THE SITE MANAGEMENT FOR NATURE CONSERVATION

The Proposed Development is not connected with and is not necessary for the management of any Natura 2000 site detailed in this report, although it does have the potential to affect them.

4.3 IDENTIFICATION OF POTENTIAL IMPACTS

Site selection was dependent upon the likelihood of the Proposed Development resulting in an impact pathway(s) causing LSE to a Natura 2000 site. On evaluation of the conservation objectives for the Natura 2000 site, Table 2 evaluates the potential impact pathways to LSE as a result of the Proposed Development.

The report has assessed the following impact pathways:

- Surface water pollution c
- Ground water pollution
- Direct mortality (of qualifying species) .
- Disturbance during Construction
- Habitat fragmentation ; and
- Damage to /loss of foraging habitat

Further consideration of the potential LSEs for this specific project has resulted in the following being screened out:

- Air pollution from dust construction - In accordance with the Institute of Air Quality Management (IAQM) guidance (Holman et al., 2024) the ZoI of fugitive dust is 50m from construction activities and up to 250m from an entrance / exit of a development site to an ecological receptor. The Proposed Development site is over 5km from any Natura 2000 site. Dust entering water systems is treated as surface water pollution. **No alone LSE, and no in combination assessment required**
- Air pollution from road traffic - The assessment of LSE from road traffic pollution is made in accordance with (Holman et al., 2020). It is understood that road traffic pollution concentrations become indistinguishable from the general 'background' beyond 200m from a Natura 2000 site (Holman et al., 2020) The screening criteria set out by IAQM is a change in Annual Average Daily Traffic (AADT) flows on a given road of 1000 vehicles or 200 heavy duty vehicles (HDVs). The only part of the route to site to be used within 200m of a Natura 2000 site is on the N4 where the AADT over the last 5 years is 13,387 at station TMU N04 090.0 E and as such any change will be nugatory. During operation the Proposed Development will require only limited maintenance during its

operation, including occasional servicing of the electrical infrastructure through the year. This work will be limited to one or two vans and small number of personnel. **No alone LSE, and no in combination assessment required**

- Predator pressure – The site is not assessed to support any key predators that may be displaced and will not be bringing new ones into the area. **No alone LSE, and no in combination assessment required**
- Recreational Pressure – All impacts relating to recreational pressure on Natura 2000 sites can be screened out as the Proposed Development does not involve residential housing and there will be no increase in recreational activity. The site does not currently provide any recreational facilities such as walks or viewing points that would be impacted and potentially shift recreational pressures into the Natura 2000 sites. **No alone LSE, and no in combination assessment required;**
- Direct land take / direct habitat damage - no land is to be taken from any of the Natura 2000 sites and no activities will occur within them. **No alone LSE, and no in combination assessment required;**
- Spreading INNS during construction – During the PEA (Tetra Tech, 2025a) and NVC survey (Tetra Tech, 2025e) no INNS were recorded on site and as such works on the site should not have possibility to cause their spread. **No alone LSE, and no in combination assessment required**

4.4 SCREENING ASSESSMENT FOR STAND ALONE LIKELY SIGNIFICANT EFFECTS

An assessment of the identified pathways to a LSE on each of the Natura 2000 sites is set out in Table 2 detailing if there is a stand-alone LSE.

Table 2. Identifying pathways to Likely Significant Effects

Natura 2000 sites	Qualifying Features	Relevant Threats and Pressures	Impact Pathway	Determination of LSE
000440 Loch Ree SAC (5.1km west of the site)	Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> -type vegetation [3150]	Ground water (construction operation and decommission)	Most of the SAC is located over the same aquifer as the site. The site is in a ground water vulnerable area therefore there is risk of pollution from the site entering the ground and the aquifer. A negative impact on the alkaline fens from this cannot be ruled out at this stage.	LSE – Potential significant impact during works.
		Surface water pollution (construction operation and decommission)	The site is hydrologically connected through the River Inny which flows into the lake and there is a risk of sediment or chemical pollution on site being washed into the SAC and negative impact from this cannot be ruled out at this stage.	LSE – Potential significant impact during works.
	Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (important orchid sites) [6210]	Ground water	The nearest areas of qualifying grassland within the SAC are located 12.5km to the west and over a different ground water body as such there is no route for an impact.	No LSE anticipated
		Surface water pollution	The nearest areas of designated grassland within the SAC are located 12.5km to the west with several rivers in between. Therefore, surface water will flow into lough Ree not into the areas of designated grasslands such there is no route for an impact	No LSE anticipated
	Active raised bogs [7110]	Ground water	Raised bogs a primarily water fed through rainfall and are not depended on ground water. This combined with being located on the far side of Lough Ree means there is no route for an impact.	No LSE anticipated
		Surface water pollution	The areas of active raised bog are approximately XX km away from the site however they are hydrologically linked to the lake and there is a risk of sediment or chemical pollution on site being washed into the SAC and negatively impacting the designated feature.	No LSE anticipated
	Degraded raised bogs still capable of natural regeneration [7120]	Ground water	Raised bogs a primarily water fed through rainfall and are not depended on ground water. This combined with being located on the far side of Lough Ree means there is no route for an impact.	No LSE anticipated
		Surface water pollution	The areas of active raised bog are approximately XX km away from the site however they are hydrologically linked to the lake and there is a risk of sediment or chemical pollution on site being washed into the SAC and negatively impacting the designated feature.	No LSE anticipated
	Alkaline fens [7230]	Ground water (construction operation and decommission)	The alkaline fens are a ground water dependent ecosystem. Most of the SAC is located over the same aquifer as the site. The site is in a ground water vulnerable area therefore there is risk of pollution from the site entering the ground and the aquifer. A negative impact on the alkaline fens from this cannot be ruled out at this stage.	LSE – Potential significant impact during works.
		Surface water pollution (construction operation and decommission)	Given the locations of the alkaline directly connected to the lough habitat there is a risk of sediment or chemical pollution on site being washed into the SAC and having a negative impact on the alkaline fens from this cannot be ruled out at this stage.	LSE – Potential significant impact during works.
	Limestone pavements [8240]	Ground water	The nearest areas of limestone pavement within the SAC are located 12.5km to the west and over a different ground water body as such there is no route for an impact.	No LSE anticipated
		Surface water pollution	The nearest areas of limestone pavement within the SAC are located 12.5km to the west with several rivers in between. Therefore surface water will flow into lough Ree not into the areas of Limestone pavements as such there is no route for an impact.	No LSE anticipated

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Natura 2000 sites	Qualifying Features	Relevant Threats and Pressures	Impact Pathway	Determination of LSE	
	Bog woodland [91D0]	Ground water	The areas of bog woodland are within the raised bog, these habitats are primarily water fed through rainfall and are not depended on ground water. This combined with being located on the far side of Lough Ree means there is no route for an impact.	No LSE anticipated	
		Surface water pollution	The areas of bog woodland are within the raised bog, these habitats are primarily water fed through rainfall and are not depended on in flow from the River Inny. This combined with being located on the far side of Lough Ree means there is no route for an impact.	No LSE anticipated.	
	Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) [91E0]	Ground water (construction operation and decommission)	Area of Alluvial forests within the SAC are not mapped but these habitats require good hydrological connections and as such impacts from pollution from the site entering the ground and the aquifer cannot be ruled out at this stage.	LSE - Potential significant impact during works.	
		Surface water pollution (construction operation and decommission)	Area of Alluvial forests within the SAC are not mapped but these habitats require good hydrological connections and as such impacts from sediment or chemical pollution on site being washed into the SAC and having a negative impact on the designated feature from this cannot be ruled out at this stage	LSE - Potential significant impact during works.	
	Otter (<i>Lutra lutra</i>) [1355]	Direct mortality	The areas of site to be developed are not deemed suitable for otter as they will be restricted to the woodland areas and streams which are to be retained.	No LSE anticipated	
		Loss of foraging habitat (construction operation and decommission)	Otter forage primarily around water, feeding on a range of aquatic species. While the site does not provide suitable foraging habitat it is linked to the river Inny and Lough Ree bough of which could be used by otters. Any surface runoff or dust that negatively impacts the river or the lough will have a subsequent negative impact on their foraging	LSE - Potential significant impact during works.	
		Disturbance (construction and decommission)	Otters may be using the woodland adjacent to the site for holts and resting places and therefore during construction impacts of disturbance cannot be ruled out at this stage.	LSE - Potential significant impact during works	
		Habitat fragmentation and during works	There is no plan to remove the woodland or streams on site which the otters may be transiting through as such there will be no fragmentation of habitat.	No LSE anticipated	
	004064 Lough Ree SPA (5.1km west of the site)	Common Tern (<i>Sterna hirundo</i>) [A193]	Loss of foraging habitat (construction operation and decommission)	Common tern is an aquatic forager so the site does not provide suitable foraging habitat however any surface runoff or dust that negatively impacts Lough Ree will have a subsequent negative impact on their foraging.	LSE - Potential significant impact during works.
			Disturbance	Common tern are predominately an aquatic species as such the nearest suitable habitat is on lough Ree over 5km away and as such will be beyond the range for disturbance	No LSE anticipated
Whooper Swan (<i>Cygnus cygnus</i>) [A038]		Loss of foraging habitat (construction operation and decommission)	Whooper swan primarily forage aquatic but will also make use of grasslands as such there is a risk of losing grassland foraging habitat. In addition any surface runoff or dust that negatively impacts the river or the lough will have a subsequent negative impact on their foraging	LSE - Potential significant impact during works.	
		Disturbance (construction operation and decommission)	There is a risk of whooper swan using the site for foraging or adjacent habitat being disturbed during construction. Disturbance contributes to increased energetic expenditure which can result in increased likelihood of winter mortality or reduced fitness.	LSE - Potential significant impact during works.	

Natura 2000 sites	Qualifying Features	Relevant Threats and Pressures	Impact Pathway	Determination of LSE
	Teal (<i>Anas crecca</i>) [A052]	Loss of foraging habitat (construction operation and decommission)	Teal is an aquatic forager so the site does not provide suitable foraging habitat however any surface runoff or dust that negatively impacts Lough Ree will have a subsequent negative impact on their foraging.	LSE - Potential significant impact during works.
		Disturbance	Teal are predominately an aquatic species as such the nearest suitable habitat is on lough Ree over 5km away and as such will be beyond the range for disturbance	No LSE anticipated
	Mallard (<i>Anas platyrhynchos</i>) [A053]	Loss of foraging habitat (construction operation and decommission)	Mallard is an aquatic forager so the site does not provide suitable foraging habitat however any surface runoff or dust that negatively impacts Lough Ree will have a subsequent negative impact on their foraging.	LSE - Potential significant impact during works.
		Disturbance	Mallard are predominately an aquatic species as such the nearest suitable habitat is on lough Ree over 5km away and as such will be beyond the range for disturbance.	No LSE anticipated
	Tufted Duck (<i>Aythya fuligula</i>) [A061]	Loss of foraging habitat (construction operation and decommission)	Tufted duck is an aquatic forager so the site does not provide suitable foraging habitat however any surface runoff or dust that negatively impacts Lough Ree will have a subsequent negative impact on their foraging.	LSE - Potential significant impact during works.
		Disturbance	Tufted duck are predominately an aquatic species as such the nearest suitable habitat is on lough Ree over 5km away and as such will be beyond the range for disturbance.	No LSE anticipated
	Common Scoter (<i>Melanitta nigra</i>) [A065]	Loss of foraging habitat (construction operation and decommission)	Common Scooter is a diving forager so the site does not provide suitable foraging habitat however any surface runoff or dust that negatively impacts Lough Ree will have a subsequent negative impact on their foraging.	LSE - Potential significant impact during works.
		Disturbance	Common scooter are predominately an aquatic species as such the nearest suitable habitat is on lough Ree over 5km away and as such will be beyond the range for disturbance.	No LSE anticipated
	Goldeneye (<i>Bucephala clangula</i>) [A067]	Loss of foraging habitat (construction operation and decommission)	Goldeneye is a diving forager so the site does not provide suitable foraging habitat however any surface runoff or dust that negatively impacts Lough Ree will have a subsequent negative impact on their foraging.	LSE - Potential significant impact during works.
		Disturbance	Goldeneye are a predominately winter visitor so no risk of breeding disturbance. It also is an aquatic forager as such the nearest suitable habitat is on lough Ree over 5km away and as such will be beyond the range for disturbance.	No LSE anticipated
	Coot (<i>Fulica atra</i>) [A125]	Loss of foraging habitat (construction operation and decommission)	Coot are aquatic foragers so the site does not provide suitable foraging habitat however any surface runoff or dust that negatively impacts Lough Ree will have a subsequent negative impact on their foraging.	LSE - Potential significant impact during works.
		Disturbance	Coot are predominately an aquatic species as such the nearest suitable habitat is on lough Ree over 5km away and as such will be beyond the range for disturbance.	No LSE anticipated
	Golden Plover (<i>Pluvialis apricaria</i>) [A140]	Loss of foraging habitat (construction operation and decommission)	Golden plover primarily forage aquatic species, but will also make use of grasslands as such there is a risk of losing grassland foraging habitat. In addition any surface runoff or dust that negatively impacts the river or the lough will have a subsequent negative impact on their foraging	LSE - Potential significant impact during works.
		Disturbance (construction and decommission)	There is a risk of golden plover using the site for foraging or adjacent habitat being disturbed during construction. Disturbance contributes to increased energetic expenditure which can result in increased likelihood of winter mortality or reduced fitness	LSE - Potential significant impact during works.

Natura 2000 sites	Qualifying Features	Relevant Threats and Pressures	Impact Pathway	Determination of LSE
	Lapwing (<i>Vanellus vanellus</i>) [A142]	Loss of foraging habitat (construction operation and decommission)	Lapwing feed on arable fields and as such the site provides suitable foraging habitat for them that will be impacted during construction	LSE - Potential significant impact during works
		Direct mortality (construction)	Lapwing nest on open farmland, and appear to prefer nesting in fields that are relatively bare (particularly when cultivated in the spring) and adjacent to grass. As such there is a risk of nests being present on site prior to construction and eggs or young being killed.	LSE - Potential significant impact during works
		Disturbance (construction and decommission)	There is a risk of lapwing using the site for foraging or adjacent habitat being disturbed during construction. Disturbance contributes to increased energetic expenditure which can result in increased likelihood of mortality or reduced fitness.	LSE - Potential significant impact during works
	Little Grebe (<i>Tachybaptus ruficollis</i>) [A004]	Loss of foraging habitat (construction operation and decommission)	Little grebe is a diving forager so the site does not provide suitable foraging habitat however any surface runoff or dust that negatively impacts Lough Ree will have a subsequent negative impact on their foraging.	LSE - Potential significant impact during works.
		Disturbance	Little grebe are predominately an aquatic species as such the nearest suitable habitat is on lough Ree over 5km away and as such will be beyond the range for disturbance.	No LSE anticipated
	Wigeon (<i>Mareca penelope</i>) [A855]	Loss of foraging habitat (construction operation and decommission)	Wigeon is an aquatic forager so the site does not provide suitable foraging habitat however any surface runoff or dust that negatively impacts Lough Ree will have a subsequent negative impact on their foraging.	LSE - Potential significant impact during works.
		Disturbance	Wigeon are a predominately winter visitor so no risk of breeding disturbance. It also is an aquatic forager as such the nearest suitable habitat is on lough Ree over 5km away and as such will be beyond the range for disturbance.	No LSE anticipated
	Shoveler (<i>Spatula clypeata</i>) [A857]	Loss of foraging habitat (construction operation and decommission)	Shoveler is a diving forager so the site does not provide suitable foraging habitat however any surface runoff or dust that negatively impacts Lough Ree will have a subsequent negative impact on their foraging.	LSE - Potential significant impact during works.
		Disturbance	Shoveler is an aquatic forager so the site does not provide suitable foraging habitat however any surface runoff or dust that negatively impacts Lough Ree will have a subsequent negative impact on their foraging.	No LSE anticipated
	Wetland and Waterbirds [A999]	Loss of foraging habitat (construction operation and decommission)	Many of the species using the site rely on Lough Rees for food, any surface run off or ground water pollution that affects the water quality will have a knock on effect on their aquatic food species (both plant and animal). This could result in a subsequent negative impact on the waterbird population.	LSE - Potential significant impact during works.
002202 Mount Jessop Bog SAC (7.2km north of the site)	Degraded raised bogs still capable of natural regeneration [7120]	Due to distance and lack of hydrological connectivity no threats or pressures from this development have been identified.	No potential pathways	No LSE anticipated
	Bog woodland [91D0]	Due to distance and lack of hydrological connectivity no threats or pressures from this development have been identified.	No potential pathways	No LSE anticipated

Natura 2000 sites	Qualifying Features	Relevant Threats and Pressures	Impact Pathway	Determination of LSE
000448 Fortwilliam Turlough SAC (11.1km west of the site)	Turloughs [3180]	Due to distance and lack of hydrological connectivity no threats or pressures from this development have been identified.	No potential pathways	No LSE anticipated
002313 Ballymore Fen SAC (12.9 km southeast of the site)	Transition mires and quaking bogs [7140]	Due to distance and lack of hydrological connectivity no threats or pressures from this development have been identified.	No potential pathways	No LSE anticipated
004045 Glen Lough SPA (13.3km east of the site)	Whooper Swan (<i>Cygnus cygnus</i>) [A038]	Due to distance and lack of hydrological connectivity no threats or pressures from this development have been identified.	No potential pathways	No LSE anticipated
002346 Brown Bog SAC (13.5km north of the site)	Active raised bogs [7110]	Due to distance and lack of hydrological connectivity no threats or pressures from this development have been identified.	No potential pathways	No LSE anticipated
	Degraded raised bogs still capable of natural regeneration [7120]	Due to distance and lack of hydrological connectivity no threats or pressures from this development have been identified.	No potential pathways	No LSE anticipated
	Depressions on peat substrates of the <i>Rhynchosporion</i> [7150]	Due to distance and lack of hydrological connectivity no threats or pressures from this development have been identified.	No potential pathways	No LSE anticipated
Ballykenny-Fisherstown Bog SPA (14.9km north of the site)	Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>) [A395]	Due to distance and lack of hydrological connectivity no threats or pressures from this development have been identified.	No potential pathways	No LSE anticipated
Ballykenny-Fisherstown Bog SAC (14.9km north of the site)	Natural eutrophic lakes with Magnopotamion or <i>Hydrocharition</i> - type vegetation [3150]	Due to distance and lack of hydrological connectivity no threats or pressures from this development have been identified.	No potential pathways	No LSE anticipated
	Active raised bogs [7110]	Due to distance and lack of hydrological connectivity no threats or pressures from this development have been identified.	No potential pathways	No LSE anticipated
	Degraded raised bogs still capable of natural regeneration [7120]	Due to distance and lack of hydrological connectivity no threats or pressures from this development have been identified.	No potential pathways	No LSE anticipated
	Depressions on peat substrates of the <i>Rhynchosporion</i> [7150]	Due to distance and lack of hydrological connectivity no	No potential pathways	No LSE anticipated

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Natura 2000 sites	Qualifying Features	Relevant Threats and Pressures	Impact Pathway	Determination of LSE
	Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, <i>Alnion incanae</i> , <i>Salicion albae</i>) [91E0]	Due to distance and lack of hydrological connectivity no threats or pressures from this development have been identified.	No potential pathways	No LSE anticipated

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5.0 NATURA IMPACT STATEMENT

5.1 LIKELY SIGNIFICANT EFFECTS

5.1.1 Surface water pollution (construction operation and decommission)

During the AAS, LSE from surface water pollution was screened in for the following Natura 2000 sites:

- Lough Ree SAC

The habitats within Lough Ree SAC at risk of a LSE from surface water pollution are:

- Natural eutrophic lakes with Magnopotamion or *Hydrocharition* - type vegetation [3150]
- Alkaline fens [7230]: and
- Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*) [91E0]

The anticipated potential impacts from the Proposed Development are silt run off and fuels/oils spills or other chemicals. Silt can increase turbidity, smother aquatic plants and deoxygenate the water. Fuel and other chemical spill can be toxic to aquatic life and deoxygenate water.

5.1.2 Ground water pollution (construction operation and decommission).

During the AAS, LSE from ground water pollution during works was screened in for the following Natura 2000 sites:

- Lough Ree SAC

The habitats within Lough Ree SAC at risk of a LSE from ground water pollution are:

- Natural eutrophic lakes with Magnopotamion or *Hydrocharition* - type vegetation [3150]
- Alkaline fens [7230]: and
- Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*) [91E0]

Fuel, oil, chemical spills can be absorbed into the ground and then enter aquifers contaminating the groundwater for a large area. Due the toxic nature of these chemicals they can then have a adverse effect on a wide variety of organisms and habitats that are reliant on the groundwater in the SAC.

5.1.3 Direct Mortality (construction)

During the AAS, LSE from direct mortality during construction was screened in for the following Natura 2000 sites:

- Lough Ree SPA

5.1.4 Damage to foraging habitat during (construction operation and decommission)

During the AAS, LSE from damage to foraging habitat during construction was screened in for the following Natura 2000 sites:

- Lough Ree SPA; and
- Lough Ree SAC

Impacts can be divided into aquatic and terrestrial foraging depending on the species requirements.

Aquatic Foraging

The species screened in for damage to foraging who utilise primarily aquatic habitats are:

- Otter;
- Common tern;
- Whooper swan;
- Teal;
- Mallard;
- Tufted duck;
- Common scoter;
- Goldeneye;
- Coot;
- Little grebe;
- Wigeon;
- Shoveler; and
- “Waterbird assemblage”

This is linked to impacts from ground water and surface water pollution entering the lough and impacting both aquatic animals and plants that these species depend upon.

Terrestrial Foraging

The following species have terrestrial foraging habitat that was screened in for LSE during construction:

- Lapwing;
- Golden plover; and
- Whooper swan

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All three species have the possibility of making use of the site and adjacent habitat for foraging. The timings of this will vary depending on the species with Whooper swan only being present in the winter while lapwing and golden plover may be present all year round.

Whooper Swan

As detailed in Table 2 there is potential for Whooper swan to be feeding on or near the site over the winter period. Desk study data from the National Biodiversity Data Centre detailed in Section 2.3.1 did not turn up any records for Whooper swan on the site. This suggests that while Whooper swan could use the site it is not prime feeding ground even if it is ex-situ⁴.

Lapwing

As detailed in Table 2 there is potential for lapwing to be feeding on or near the site all year round. Desk study data from the National Biodiversity Data Centre detailed in Section 2.3.1 did not turn up any records for lapwing on the site and none were recorded during any of the surveys carried out in 2025. This suggests that while lapwing could use the site it is not prime feeding ground even if it is functionally linked.

Golden Plover

As detailed in Table 2 there is potential for golden plover to be feeding on or near the site all year round. Desk study data from the National Biodiversity Data Centre detailed in Section 2.3.1 did not turn up any records for golden plover on the site and none were recorded during any of the surveys carried out in 2025. This suggests that while lapwing could use the site it is not prime feeding ground even if it is functionally linked.

5.1.5 Disturbance (construction and decommission)

During the AAS, LSE from disturbance during construction was screened in for the following Natura 2000 sites:

- Lough Ree SPA; and
- Lough Ree SAC

Otter

Otter have the possibility to be using the woodlands on sites for holts and commuting up and down the tributaries on the Inny. During otter surveys spraint was recorded near the north block (Tetra Tech, 2025e). This shows they are in the area and do make use of this habitat however no other signs were recorded and no holts detected. This indicates low levels of activity within the area.

Whooper Swan

As detailed in Section 5.1.4 there is potential for Whooper swan to be feeding on or near the site over the winter period and could be at risk of disturbance during this period from construction. Whooper swan are

⁴ Ex-situ Habitat is land which is outside of the which forms part of the structure and or function of the QI which the habitat supports.

considered to have a medium sensitivity to disturbance and a 600m buffer to be sufficient (Nature Scot, 2022).

Lapwing

As detailed in Section 5.1.4 there is potential for Lapwing to be feeding on or near the site. Lapwing are considered to have a moderate sensitivity to disturbance (Cutts, 2013). As the habitat is not considered prime feeding ground they are unlikely to be in the area and will have other habitat they can move to as disturbance levels are not anticipated more than 300m outside the site boundary.

Golden Plover

As detailed in Section 5.1.4 there is potential for Golden plover to be feeding on or near the site. Golden plover are considered to have a moderate sensitivity to disturbance (Nature Scot, 2022) and (Cutts, 2013). As the habitat is not considered prime feeding ground they are unlikely to be in the area and will have other habitat they can move to as disturbance levels are not anticipated more than 300m outside the site boundary.

5.2 IN-COMBINATION EFFECTS

Article 6(3) of the Habitats Directive (92/43/EEC) and Irish national law (Planning and Development Act, 2000 (as amended)) requires that in-combination effects with other plans or projects are considered. The significance of any identified combined effects of the Proposed Development and other past, present or reasonably foreseeable future plans or projects must also be evaluated.

A review has been undertaken using Longford County Council [Public Planning Application Finder](#) and West Meath County Council [Westmeath Planning Applications](#) to identify if there are any planning permissions on, or near the Proposed Development site that may have an in-combination effect. These are summarised in Table 3. As well as a review of local plans (Longford County Council, 2021)

Table 3. Projects Considered for In-Combination Effects

Planning Reference	Address	Description	Status	Appropriate Assessment Summary
2460325 (Longford)	Foigha	130ha solar farm and energy storage compound facility	Pending	AA carried out by applicant which showed that no likely significant effect on any Natura 2000 site when mitigation applied.
02285 (Longford)	Kepak Longford Unlimited Company	Permitting for WWTP discharging into River Inny	Granted	The NIS carried out by applicant concluded that following mitigation, that the proposed project does not have the potential to adversely effect the conservation objectives of the Lough Ree SPA/SAC

5.3 ASSESSMENT OF POTENTIAL EFFECTS & ASSOCIATED MITIGATION

5.3.1 Mitigation Measures

Construction

A CEMP will be produced setting out the proposed mitigation for the Proposed development. The CEMP includes the following measures which must be implemented to protect the qualifying features of the Natura 2000 sites identified for assessment in the NIS.

Details within the CEMP relating to surface run off must include:

- Prior to works commencing, silt traps will be installed to treat any suspended solids resulting from temporary disturbance of soils;
- Silt fences will be installed downslope of works areas and/or adjacent to streams and ditches;
- All soil stockpiles will be covered (i.e., with a tarpaulin or vegetated) to minimise the risk of rain/wind erosion. Vegetation will be established as soon as possible on all exposed soils;
- The material will be stored away from any existing drains or flow pathways within the site. Movement of material will be minimised to reduce degradation of soil structure and generation of dust. Excavations will remain open for as little time as possible before the placement of fill.
- In the event of an extended dry period, stockpiles will be dampened using water to minimise the risk of airborne particles entering watercourses;
- The site compound will be at least 10m away from any drains or waterways;
- After the installation of the solar panels, chisel ploughing will be carried out by the Contractor between solar panel rows to loosen the soil that will be compacted during construction. Chisel ploughing will reduce soil compaction on the site and promote seed growth; this will increase infiltration rates, reducing runoff rates from the site.

Details within the CEMP relating to surface run off/ ground water pollution must include:

- There will be no refuelling of machinery within or near the watercourses located in the Proposed Development area. Refuelling will take place at designated locations at distances of greater than 30 metres from the watercourse;
- No large-scale concrete preparation will occur on-site. Any wet concrete required for components such as slabs for the inverter and transformer stations will be delivered by truck;
- No vehicles will be left unattended when refuelling and a spill kit including an oil containment boom and absorbent pads will be on site at all times;
- Any fuel needed to be stored on the site will be stored appropriately and at a location that is set back from the river. All other construction materials will be stored in this compound. The compound will also house the site offices and portable toilets. This compound will either be located on ground that is not prone to flooding or will be surrounded by a protective earth bund to prevent inundation;
- All vehicles will be regularly maintained and checked for fuel and oil leaks;

Details within the CEMP relating to protected species will include:

- A pre construction walkover for nesting birds including lapwing to identify any nests present on site. If recorded, then a 300m buffer should be put in place around the nests until the young have fledged. No works should take place within this buffer.
- A pre construction walkover of the woodland to check for otter holts then a 150m buffer will put in place with no works within this area.
- During construction an Ecological Clerk of Works should carry out checks for whopper swan, lapwing and golden plover in the vicinity and advise areas of the site to be worked to avoid disturbance to the birds.

Operation

During the operational phase, visual inspection of silt traps or hydrocarbon interceptors will be carried out to ensure they are operating correctly.

- Spill protection equipment such as absorbent mats, socks and sand will be available to be used in the event of an accidental release. These will be disposed of correctly if used and replaced with new ones immediately.
- All materials taken on-site will be clearly labelled and stored in sealable containers;
- Re-fuelling of maintenance vehicles and the addition of hydraulic oils or lubricants will take place off-site;
- The operator will ensure that no hazardous or noxious materials, including runoff from solar panel cleaning, enter a watercourse or drain;
- The surrounding grassland within the site will be maintained by the landowner as part of the farm's wider grazing regime. This will include managing the grass swards between and beneath the solar arrays either by light grazing by sheep or by mowing.
- This compound will either be located on ground that is not prone to flooding or will be surrounded by a protective earth bund to prevent inundation;
- The Contractor will implement measures for the regular inspection of bunds and emptying of rainwater (when uncontaminated). Bunding must have a minimum capacity of 110% of the volume of the largest tank or 25% of the total storage capacity, whichever is the greater. Bunding will be impermeable to the substance that is being stored in the tank;
- The use of settling lagoons, settling tanks, or equivalent, with outflow control measures will be used for the interception of surface water pumped from an active working area;
- The Contractor will clean equipment prior to delivery to the site. The Contractor will avoid using equipment which leaks fuel, hydraulic oil or lubricant. The Contractor will maintain equipment to ensure efficiency and to minimise emissions.

Decommission

For decommissioning of the site, mitigation measures such as those set out for construction or updated to current best practice at the time.

Following decommissioning, the site area, other than access tracks, will be fully revegetated to return the site to its pre-development condition. The site will undergo a restoration process with rewilding efforts to support biodiversity.

5.3.2 Surface water pollution during works.

With adherence to the mitigation set out in section 5.3.1 it is considered that any potential effects associated with surface water quality, including pollutants, will be fully mitigated.

5.3.3 Ground water pollution during works.

With adherence to the mitigation set out in section 5.3.1 it is considered that any potential effects associated with ground water quality, including pollutants, will be fully mitigated.

5.3.4 Direct Mortality during construction

With adherence to the mitigation set out in section 5.3.1 it is considered that any potential adverse affect associated with direct mortality will be fully mitigated.

5.3.5 Damage to foraging habitat during construction

Aquatic Foraging

The impacts on species aquatic foraging was related to negative impacts from surface and groundwater pollution on freshwater food sources. As adverse effects from these two sources have been ruled out (Sections 5.3.2 and 5.3.3) there will be no negative impact on aquatic foraging for any of the qualifying species and therefore no adverse effect on the site integrity of the Lough Ree SPA or Lough Ree SAC.

Terrestrial Foraging

While some potential foraging habit will be lost through the development this site is not considered an important area for any of the qualifying species with not records of them on site. As such the site is not considered important ex situ habitat, while it is capable of supporting the populations for which the SPA was designated it is not considered necessary to maintain or restore the favourable conservation status of the species.

Some suitable foraging habitat will also be maintained on site through the management set out in section 5.3.1 as such there will be no adverse effect on site integrity of the Lough Ree SPA.

5.3.6 Disturbance during construction

While there may be low levels of disturbance during construction if the mitigation set out in section 5.3.1 then this level of disturbance is not considered to have an adverse effect on site integrity.

5.4 INTEGRITY TEST

The 'integrity' of a site is considered to be the quality or condition of being whole or complete; or in a dynamic ecological context, as having resilience and an ability to evolve in ways that are favourable to conservation. A site can be described as having a high degree of integrity where the inherent potential for meeting site conservation objectives is realised, the capacity for self-repair and self-renewal under dynamic conditions is maintained, and a minimum of external management support is required (DTA Publications, 2025)

The 'integrity of a site' relates to the site's conservation objectives. Taking each qualifying feature in turn, if the conservation objectives for a feature will be undermined, site integrity is necessarily adversely affected.

On the contrary, site integrity cannot be considered to be adversely affected if the findings of an Appropriate Assessment demonstrate that the conservation objectives will not be undermined alone or in combination with other plans or projects. The test is whether there is 'reasonable' scientific doubt rather than an absolute certainty. It is not possible to demonstrate, nor is it necessary to show, an absolute guarantee that there will not be an adverse effect on site integrity (DTA Publications, 2025).

Given that the above assessment has found that there is no adverse effect to the site integrity, either alone or in-combination the

6.0 CONCLUSION

This is a record of the Stage 1 AAS and Stage 2 NIS required by European Communities (Birds and Natural Habitats) Regulations 2011 (SI 477 of 2011) and undertaken by Tetra Tech in respect of the Proposed Development.

The alone AAS Stage 1 assessment concluded that the Proposed Development would be likely to have a significant effect on the following Natura 2000 sites:

- Lough Ree SPA; and
- Lough Ree SAC.

This NIS has provided an assessment of all potential direct or indirect adverse effects on Natura 2000 sites.

Where the potential for any adverse effect on any Natura 2000 site has been identified, the pathway by which any such effect may occur has been robustly mitigated, through the use of avoidance, appropriate design and mitigation measures as set out within this report and its appendices. The measures ensure that the construction, operation and decommissioning of the Proposed Development will not adversely affect the integrity of Natura 2000 sites.

Therefore, it can be objectively concluded that the Proposed Development, individually or in combination with other plans or projects, will not adversely affect the integrity of any Natura 2000 site.

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FIGURES

Figure 1 – Site Location Plan

Figure 2 – Natura 2000 Sites within 15 km

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Site Location Plan

Ballymahon Solar BESS

BNRG Ballymahon

Legend

- Site boundary
- Site boundary (50 m buffer)



Notes:

Drawn by: MELISSA.ANDERSON1

Figure No. 1

Checked by: Adam McFall

Revision No. A

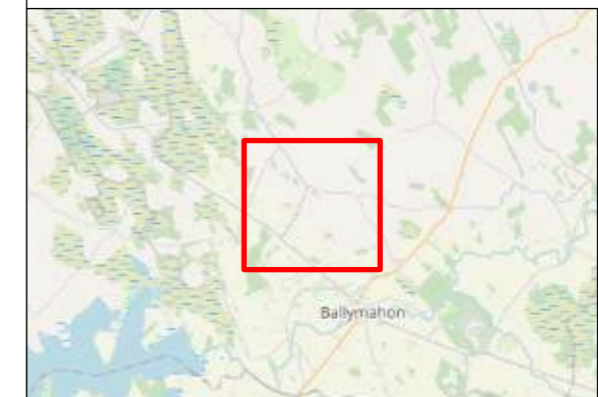
23 September 2025

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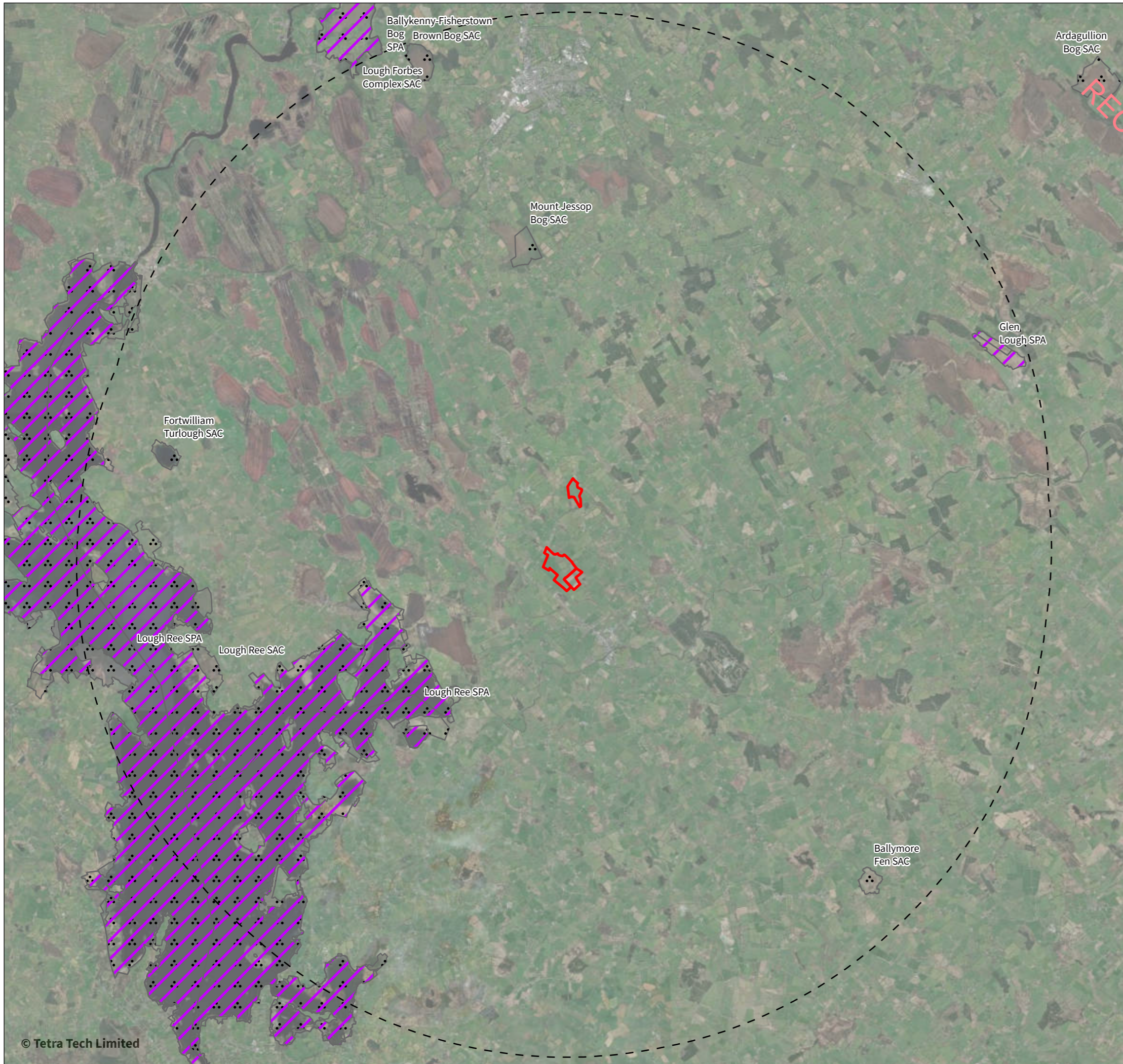
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Habitat sites within 15km

Ballymahon Solar BESS

BNRG Ballymahon

Legend

-  Site boundary
-  Zone of Influence (15 km)
-  Special Protection Area (SPA)
-  Special Area of Conservation (SAC)

Data Sources:
[Special Areas of Conservation](#)
[Special Protection Areas](#)

Notes:

Symbology similar to that used within the MAGIC Application

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Figure No. 2

Checked by: Adam McFall

Revision No. A

13 November 2025



Scale 1:120,000 @A3

TM75 Irish Grid

NGR: 214291E 260598N

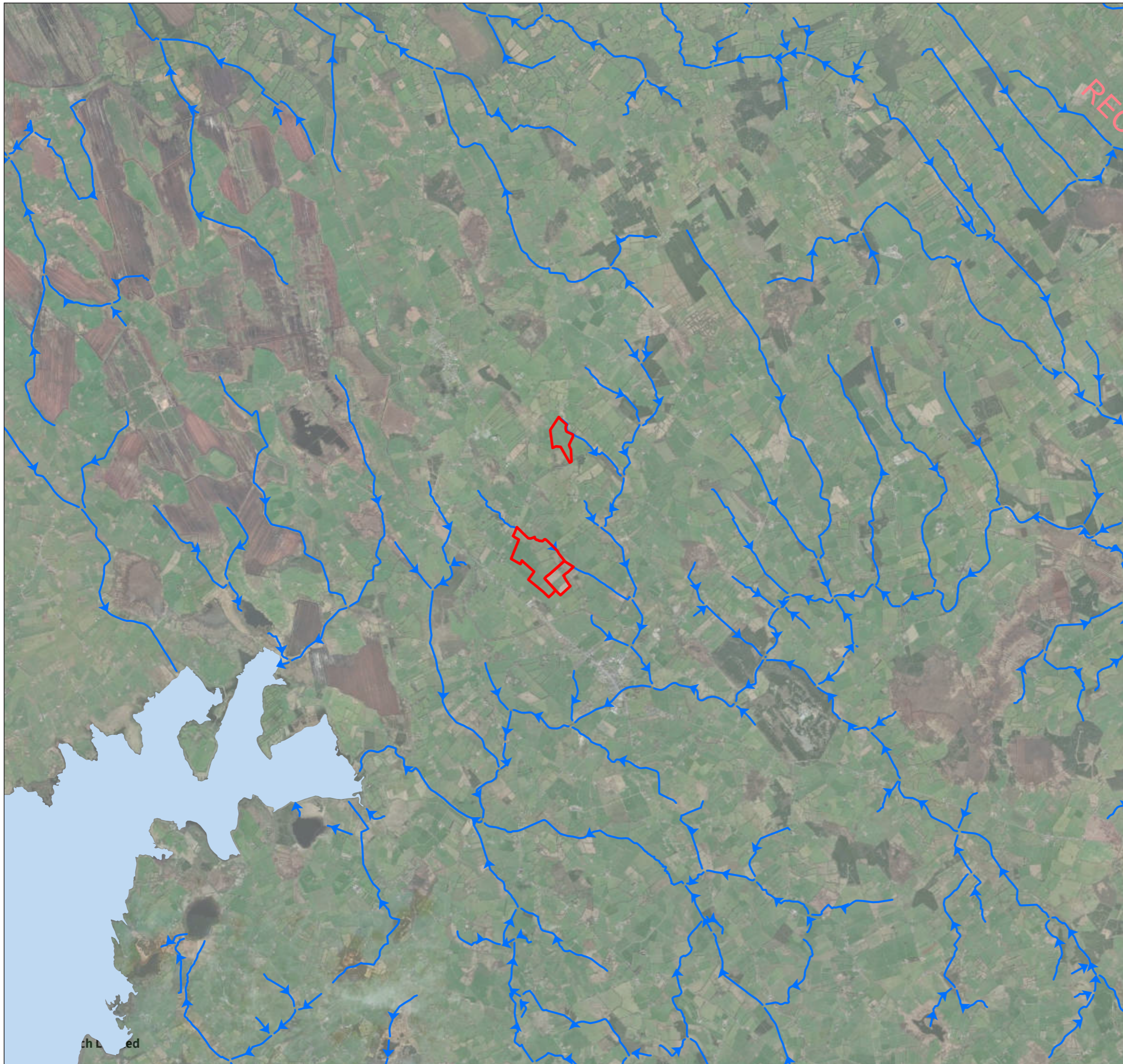
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Waterbody Location Plan

Ballymahon Solar BESS



BNRG Ballymahon

Legend

- Site boundary
- Lakes
- Rivers

Notes:

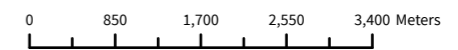
Drawn by: DYLAN.GUSSMAN

Figure No. 6

Checked by: Adam McFall

Revision No. A

13 November 2025



TM75 Irish Grid

NGR: 214682E 260041N

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TETRA TECH

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United Kingdom
LS1 4ER

Tetra Tech Limited.
Registered in England
number: 01959704

APPENDICES

RECEIVED: 14/11/2025

APPENDIX A: REPORT CONDITIONS

This Report has been prepared using reasonable skill and care for the sole benefit of BNRG Ballymahon Limited (“the Client”) for the proposed uses stated in the report by Tetra Tech Limited (“Tetra Tech”). Tetra Tech exclude all liability for any other uses and to any other party. The report must not be relied on or reproduced in whole or in part by any other party without the copyright holder’s permission.

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The report refers, within the limitations stated, to the environment of the site in the context of the surrounding area at the time of the inspections'. Environmental conditions can vary and no warranty is given as to the possibility of changes in the environment of the site and surrounding area at differing times. No investigative method can eliminate the possibility of obtaining partially imprecise, incomplete or not fully representative information. Any monitoring or survey work undertaken as part of the commission will have been subject to limitations, including for example timescale, seasonal and weather-related conditions. Actual environmental conditions are typically more complex and variable than the investigative, predictive and modelling approaches indicate in practice, and the output of such approaches cannot be relied upon as a comprehensive or accurate indicator of future conditions. The “shelf life” of the Report will be determined by a number of factors including; its original purpose, the Client’s instructions, passage of time, advances in technology and techniques, changes in legislation etc. and therefore may require future re-assessment.

The whole of the report must be read as other sections of the report may contain information which puts into context the findings in any executive summary.

Tetra Tech reserves the right to share this Report and any related materials, surveys, drawings and/or documents at any time with the relevant Local Ecological Records Centre (LERC), any relevant statutory body or any equivalent organisation as Tetra Tech may reasonably require from time-to-time.

The performance of environmental protection measures and of buildings and other structures in relation to acoustics, vibration, noise mitigation and other environmental issues is influenced to a large extent by the degree to which the relevant environmental considerations are incorporated into the final design and specifications and the quality of workmanship and compliance with the specifications on site during construction. Tetra Tech accept no liability for issues with performance arising from such factors.

APPENDIX B: SITE MASTERPLAN

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

Outline Design – Solar Panels, Access Roads, Substation & BESS Compound



Ballymahon Solar BESS

BNRG Ballymahon

Legend

-  Site boundary
-  Solar farm areas
-  BESS compound
-  Proposed substation location (not included in current application)
-  Proposed roads
-  MV cable route

Notes:

Drawn by: MELISSA.ANDERSON1

Figure No. 2

Checked by: Adam McFall

Revision No. A

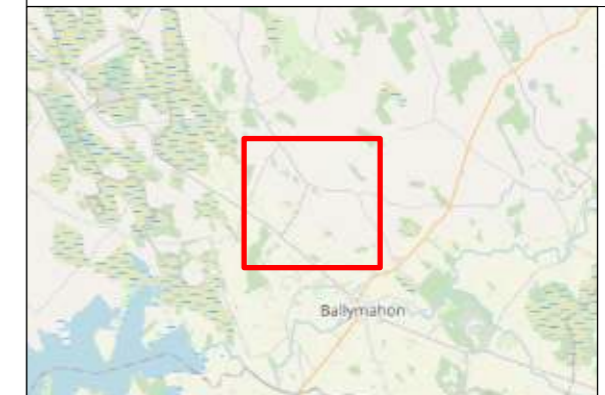
23 September 2025

0 200 400 600 800 Meters TM75 Irish Grid

Scale 1:15,000 @A3

NGR: 214159E 260392N

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