

Noreen McLoughlin, MSc

Environmental Consultant

Whitehill
Edgeworthstown
Co. Longford
☎ (087) 4127248
✉ noreen.mcloughlin@gmail.com

NATURA IMPACT ASSESSMENT OF A PROPOSED DEVELOPMENT AT THE DUCKING STOOL JETTY, BELTURBET, CO. CAVAN



*Cavan County Council
c/o Traynor Environmental Ltd
Belturbet Business Park
Creeny
Belturbet
Co. Cavan*

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1 INTRODUCTION

1.1 REQUIREMENT FOR AN APPROPRIATE ASSESSMENT

This Natura Impact Statement (NIS) was prepared for the proposed development of a new Marina at the Ducking Stool Jetty, The Lawn and lands at Willow Avenue, Belturbet, Co. Cavan. Having regard to the location of the proposed development site and its proximity and connectivity to sites designated under the European Habitats Directive, an Appropriate Assessment of the proposed development was prepared in accordance with Article 6 of the Habitats Directive. This report will allow Cavan County Council, as the competent authority, to undertake an Appropriate Assessment determination of the proposed development.

The purpose of the assessment is to determine the appropriateness of the proposed project, in the context of the conservation status of the site or sites. In Ireland, an Appropriate Assessment takes the form of a Natura Impact Statement (NIS), which is a statement of the likely impacts of the plan or project on a Natura 2000 site. The NIS comprises a comprehensive assessment of the plan or project and it examines the direct and indirect impacts that the plan or project might have on its own or in combination with other plans or projects on one or more Natura 2000 sites in view of the sites' conservation objectives.

1.2 THE AIM OF THE REPORT

This Natura Impact Statement (NIS) has been prepared in accordance with the current guidance (DoEHLG, 2009, Revised February 2010), and it provides an assessment of the impacts of this proposed development on sites designated under European law (Natura 2000 sites).

An NIS should provide the information required in order to establish whether or not a proposed development is likely to have a significant impact on certain Natura sites in the context of their conservation objectives and specifically on the habitats and species for which the Natura 2000 conservation sites have been designated.

Accordingly, a comprehensive assessment of the potential significant effects of this proposed development on designated sites was carried out in December 2025 by Noreen McLoughlin, MSc, MCIEEM of Whitehill Environmental. This assessment allowed areas of potential ecological value and potential ecological constraints associated with this proposed development to be identified and it also enabled potential ecological impacts on Natura 2000 sites associated with the proposed development to be assessed and mitigated for.

1.3 REGULATORY CONTEXT

RELEVANT LEGISLATION

The Birds Directive (Council Directive 2009/147/EC) recognises that certain species of birds should be subject to special conservation measures concerning their habitats. The Directive requires that Member States take measures to classify the most suitable areas as Special Protection Areas (SPAs) for the conservation of bird species listed in Annex 1 of the Directive. SPAs are selected for bird species (listed in Annex I of the Birds Directive), that are regularly occurring populations of migratory bird species and the SPA areas are of international importance for these migratory birds.

The EU Habitats Directive (92/43/EEC) requires that Member States designate and ensure that particular protection is given to sites (Special Areas of Conservation) which are made up of or support particular habitats and species listed in annexes to this Directive.

Articles 6(3) and 6(4) of this Directive also call for the undertaking of an Appropriate Assessment for plans and projects not directly connected with or necessary to the management of, but which are likely to have a significant effect on any European designated sites (i.e. SACs and SPAs).

The Water Framework Directive (WFD) (2000/60/EC), which came into force in December 2000, establishes a framework for community action in the field of water policy. The WFD was transposed into Irish law by the European Communities (Water Policy) Regulations 2003 (S.I. 722 of 2003). The WFD rationalises and updates existing legislation and provides for water management on the basis of River Basin Districts (RBDs). RBDs are essentially administrative areas for coordinated water management and are comprised of multiple river basins (or catchments), with cross-border basins (i.e. those covering the territory of more than one Member State) assigned to an international RBD. The aim of the WFD is to ensure that waters achieve at least good status by 2027 and that status does not deteriorate in any waters.

Appropriate Assessment and the Habitats Directive

Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora – the 'Habitats Directive' - provides legal protection for habitats and species of European importance. Article 2 of the Directive requires the maintenance or restoration of habitats and species of European Community interest, at a favourable conservation status. Articles 3 - 9 provide the legislative means to protect habitats and species of Community interest through the establishment and conservation of an EU-wide network of sites known as *Natura 2000*. Natura 2000 sites are Special Areas of Conservation (SACs) designated under the Habitats

Directive and Special Protection Areas (SPAs) designated under the Conservation of Wild Birds Directive (79/409/EEC).

Articles 6(3) and 6(4) of the Habitats Directive sets out the decision-making tests for plans or projects affecting Natura 2000 sites. Article 6(3) establishes the requirement for Appropriate Assessment:

“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.”

Article 6(4) deals with the steps that should be taken when it is determined, as a result of appropriate assessment, that a plan/project will adversely affect a European site. Issues dealing with alternative solutions, imperative reasons of overriding public interest and compensatory measures need to be addressed in this case.

Article 6(4) states:

“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 States 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.”

The Appropriate Assessment Process

The aim of Appropriate Assessment is to assess the implications of a proposal in respect of a designated site's conservation objectives.

The 'Appropriate Assessment' itself is an assessment which must be carried out by the competent authority which confirms whether the plan or project in combination with other plans and projects will have an adverse impact on the integrity of a European site.

Screening for Appropriate Assessment shall be carried out by the competent authority as set out in Section 177U(1) and (2) of the Planning and Development Act 2000 (as amended) as follows:

'(1) A screening for appropriate assessment of a draft Land use plan or application for consent for proposed development shall be carried out by the competent authority to assess, in view of best scientific knowledge, if that Land use plan or proposed development, 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 development zone is made, or

(b) consent for a proposed development is given.'

The competent authority shall determine that an Appropriate Assessment is not required if it can be excluded, that the proposed development, individually or in combination with other plans or project will have a significant effect on a European site.

Where the competent authority cannot exclude the potential for a significant effect on a European site, an Appropriate Assessment shall be deemed required.

Where an Appropriate Assessment is required, the conclusions of the Appropriate Assessment Report (Natura Impact Statement (NIS)) should enable the competent authority to ascertain whether the plan or proposed development would adversely affect the integrity of the European site. If adverse impacts on the integrity of a European site cannot be avoided, then mitigation measures should be applied during the appropriate assessment process to the point where no adverse impacts on the site remain. Under the terms of the Habitats Directive

consent can only be granted for a project if, as a result of the appropriate assessment either (a) it is concluded that the integrity of any European sites will not be adversely affected, or (b) after mitigation, where adverse impacts cannot be excluded, there is shown to be an absence of alternative solutions, and there exists imperative reasons of overriding public interest for the project should go ahead.

Section 177(V) of the Planning and Development Act 2000 (as amended) outlines that the competent authority shall carry out the Appropriate Assessment, taking into account the Natura Impact Statement (amongst any other additional or supplemental information). A determination shall then be made by the competent authority in line with the requirements of Article 6(3) of the Habitats Directive as to whether the plan or proposed development would adversely affect the integrity of a European site, prior to consent being given.

2 METHODOLOGY

2.1 APPROPRIATE ASSESSMENT

This NIS has been prepared with reference to the following:

- European Commission (2018). Managing Natura 2000 Sites: The Provisions of Article 6 of the 'Habitats' Directive 92/43/EEC.
- European Commission (2021). Assessment of Plans and Projects Significantly Affecting Natura 2000 sites: Methodological Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC.
- European Commission (2006). Nature and Biodiversity Cases: Ruling of the European Court of Justice.
- European Commission (2007). Clarification of the Concepts of: Alternative Solution, Imperative Reasons of Overriding Public Interest, Compensatory Measures, Overall Coherence, Opinion of the Commission.
- Department of Environment, Heritage and Local Government (2009). Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities.
- The AA has also been undertaken in consideration of the European Union (CJEU) judgment on Case C323/17 (People over Wind, Peter Sweetman v Coillte Teoranta), which concluded that "it is not appropriate, at the screening stage, to take account of the measures intended to avoid or reduce the harmful effects [mitigation] of the plan or project on that site.". Other caselaw relevant to Screening are Waddenzee (C127/02), Holohan and Others v An Bord Pleanála (C461/17) and Court of Appeal case C1/2009/0041/QBACF Citation No [2009] EWCA Civ. 1061.
- Most recent and pertinent case law pertaining to AA screening comes from *Eco Advocacy v. An Bord Pleanála* Case C-721/21. This case recently determined that "standard design measures" can be included at design stage if they are an inherent part of the plan, namely a measure: *'incorporated into that plan or project as standard features, inherent in such a plan or project, irrespective of any effect on the site'*.

The EC Guidance sets out a number of principles as to how to approach decision making during the process. The primary one is 'the precautionary principle' which requires that the conservation objectives of Natura 2000 should prevail where there is uncertainty.

When considering the precautionary principle, the emphasis for assessment should be on objectively demonstrating with supporting evidence that:

- There will be no significant effects on a Natura 2000 site;
- There will be no adverse effects on the integrity of a Natura 2000 site;

- There is an absence of alternatives to the project or plan that is likely to have an adverse effect to the integrity of a Natura 2000 site; and
- There are compensation measures that maintain or enhance the overall coherence of Natura 2000.

This translates into a four stage process to assess the impacts, on a designated site or species, of a policy or proposal.

The EC Guidance states that “each stage determines whether a further stage in the process is required”. Consequently, the Council may not need to proceed through all four stages in undertaking the Appropriate Assessment.

The four-stage process is:

Stage 1: Screening – The process which identifies the likely impacts upon a Natura 2000 site of a project or plan, either alone or in combination with other projects or plans, and considers whether or not these impacts are likely to be significant;

Stage 2: Appropriate Assessment – The consideration of the impact on the integrity of the Natura 2000 site of the project or plan, either alone or in combination with other projects or plans, with respect to the site’s structure and function and its conservation objectives. Additionally, where there are adverse impacts, an assessment of the potential mitigation of those impacts;

Stage 3: Assessment of Alternative Solutions – The process which examines alternative ways of achieving objectives of the project or plan that avoid adverse impacts on the integrity of the Natura 2000 site;

Stage 4: Assessment where no alternative solutions exist and where adverse impacts remain – An assessment of the compensatory measures where, in the light of an assessment of imperative reasons of overriding public interest (IROPI), it is deemed that the project or plan should proceed.

In complying with the obligations set out in Articles 6(3) and following the guidelines described above, this screening statement has been structured as a stage by stage approach as follows:

- Description of the proposed project;
- Identification of the Natura 2000 sites close to the proposed development;

- Identification and description of any individual and cumulative impacts on the Natura 2000 sites likely to result from the project;
- Assessment of the significance of the impacts identified above on site integrity. Exclusion of sites where it can be objectively concluded that there will be no significant effects.
- Identification of the mitigation measures required to prevent or offset significant effects upon designated sites.

2.1 STATEMENT OF COMPETENCY

This NIS was carried out by Noreen McLoughlin, BA, MSc, MCIEEM. Noreen has an honours degree in Zoology and an MSc in Freshwater Ecology from Trinity College, Dublin and she has been a full member of the Chartered Institute of Ecology and Environmental Management for over nineteen years. Noreen has over 20 years' experience as a professional ecologist in Ireland. Noreen has recently been awarded an Advanced Diploma in Environmental and Planning Law from Kings Inns, Dublin (2024).

2.2 DESK STUDIES & CONSULTATION

Information on the site and the area of the proposed development was studied prior to the completion of this statement. The following data sources were accessed in order to complete a thorough examination of potential impacts:

- National Parks and Wildlife Service - Aerial photographs and maps of designated sites, information on habitats and species within these sites and information on protected plant or animal species, conservation objectives, site synopses and standard data forms for relevant designated sites.
- Environmental Protection Agency (EPA)- Information pertaining to water quality, geology and licensed facilities within the area;
- Myplan.ie – Mapped based information;
- National Biodiversity Data Centre (NBDC) – Information pertaining to protected plant and animal species within the study area;
- Bing maps & Google Street View – High quality aerials and street images;
- Craftstudio Architects, Traynor Environmental Ltd, Alan Traynor Consulting Engineers Ltd – Plans and Information Pertaining to the Development.
- Cavan County Council – Information on planning history in the area for the assessment of cumulative impacts.

2.3 FIELD BASED STUDIES

HABITATS AND FLORA

Habitats within the site were assessed by personnel from Traynor Environmental in November 2025 and July 2026. The site was surveyed in accordance with the Heritage Council's *Habitat Survey Guidelines* (Smith et al., 2010) and the Institute of Environmental Assessment's *Guidelines for Baselines Ecological Assessment* (IEA, 1995). Habitats within the development site were classified in accordance to Level 3 of *A Guide to Habitats in Ireland* (Fossit, 2000). These habitats are denoted in the text along with their habitat code, e.g., the habitat code for improved agricultural grassland is GA1.

BATS

A desktop review of bat records along with a static surveillance survey of the site was carried out by Dr Tina Aughney of Bat Eco Services in September 2025. The static surveillance consisted of five static units deployed on trees within the proposed development area and adjacent treelines:

- Static 1 - 16th September to 22nd September 2025 (6 nights)
- Static 2 - 16th September to 29th September 2025 (13 nights)

TERRESTRIAL MAMMALS

Mammal surveys were also conducted by Dr Tina Aughney and two rounds of trail camera surveillance was undertaken as follows:

- Autumn Survey 1 – Trail cameras (6 Units, 5 of which were retrieved after flood event) were located within vicinity of Ducking Stool Jetty. Survey dates: 29th September to 15th October 2025 (15 days).
- Autumn Survey 2– Trail cameras (8 Units) were located within vicinity of Ducking Stool Jetty. Survey dates: 15th October to 12th November 2025 (28 days).
- Summer Survey 1 - Trail cameras (6 Units) were in vicinity of Ducking Stool Jetty: 25th April to 11th May 2026 (17 days).

The locations of the trail cameras are presented below in Figure 1.

Walkover surveys of the general area were completed on 15th October 2025 and the 25th April 2026. These were undertaken by two surveyors, one in a kayak (500m either side of the jetty) and the second walking accessible sections of the river banks. Any signs of mammal activity was noted. This element of the survey was concentrated along the River Erne and the 20m

zone of the river bank (where accessible). This is due to the fact that the proposed development is associated with the River Erne and small area adjacent to the river.



Figure 1a – Location of the Mammal Trail Cameras 2025 (Taken from Figure 2c of Mammal Survey Report prepared by Bat Eco Services)



Figure 1b – Location of the Mammal Trail Cameras 2026 (Taken from Figure 2d of Mammal Survey Report prepared by Bat Eco Services)

BIRDS

A bird survey of the site was undertaken by Joseph Adamson MCIEEM on November 13th 2025. The proposed survey area was walked and birds present, either observed or heard along the route were recorded.

2.4 ASSESSMENT METHODOLOGY

The proposed development was assessed to identify its potential ecological impacts and from this, the Zone of Influence (Zol) of the proposed development was defined. Based on the potential impacts and their Zol, the Natura 2000 sites potentially at risk from direct, indirect or in-combination impacts were identified. The assessment considered all potential impact sources and pathways connecting the proposed development to Natura 2000 sites, in view of the conservation objectives supporting the favourable conservation condition of the site's Qualifying Interests (QIs) or Special Conservation Interests (SCIs).

The conservation objectives relating to each Natura 2000 site and its QIs/SCIs are cited generally for SACs as "to maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or Annex II species for which the SAC has been selected", and for SPAs "to maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA".

As defined in the Habitat's Directive, the favourable conservation status of a habitat is achieved when:

- Its natural range and area it covers within that range is stable or increasing;
- The specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future;

The favourable conservation status of a species is achieved when:

- The population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats;
- The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future;
- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

Where site-specific conservation objectives (SSCOs) have been prepared for a European site, these include a series of specific attributes and targets against which effects on conservation condition, or integrity, can be measured. Where potential significant effects are identified, then these SSCO should be considered in detail.

3 DETAILS OF THE PROPOSED DEVELOPMENT

3.1 DEVELOPMENT DESCRIPTION

Cavan County Council are proposing to undertake the following development at the Ducking Stool Jetty, The Lawn and lands at Willow Avenue, Belturbet, Co.Cavan. The proposal is for the upgrade and realignment of the existing jetty and slipway at the Ducking Stool Jetty and the creation of a carpark on lands at Willow Avenue, with the reinstatement of a walkway connecting both. Details of the works include:

- Removal of the existing timber jetties
- Realignment and widening of the slipway providing access to the River Erne
- Reconfiguration and extension of the existing pier, including amended levels
- Installation of floating jetties and jetty access ramp
- Construction of hard landscaped, public recreational open space
- Reinstatement and upgrade of walkway connecting The Ducking Stool Jetty to lands at Willow Avenue
- Reconfiguration and upgrade of existing gravelled area to create new carpark (7no. spaces), including access steps
- Installation of public lighting and refuse storage
- Amendments to site boundaries
- Installation of bike stands
- Installation of wayfinding signage
- Reconfiguration and upgrading of existing drainage and all associated site development works.

Extracts from the planning drawings as submitted are shown in Figures 2a – 2b.

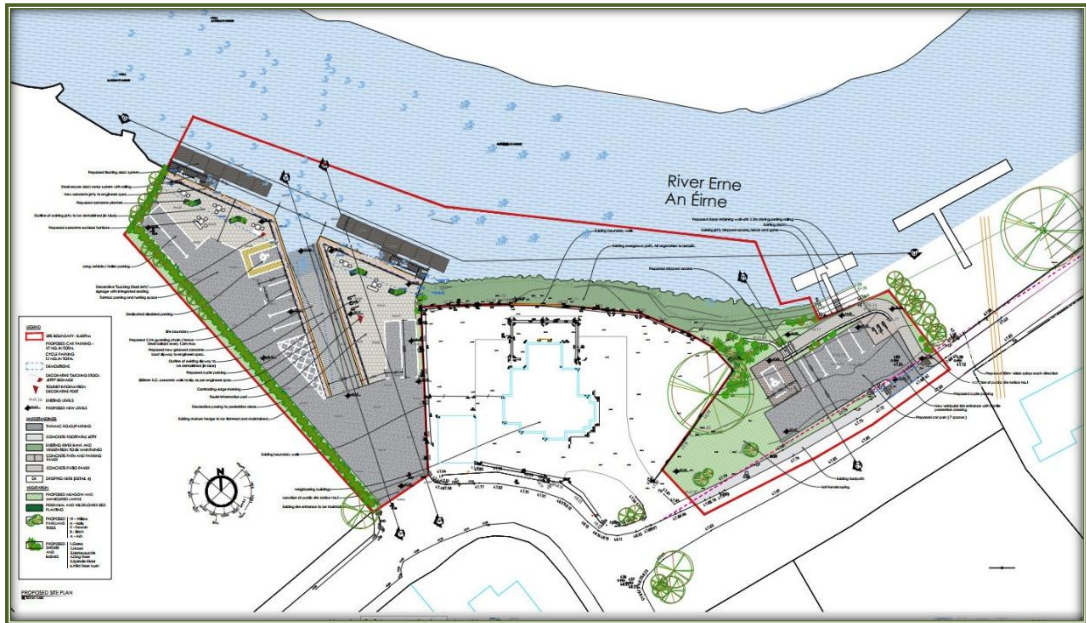


Figure 2a – Extract from Planning Drawings (as prepared by Craftstudio Architecture)



Figure 2b – Proposed Model

3.2 DETAILS OF THE PROPOSED WORKS

The proposed development will involve the following key work phases:

- Tender Stage
- Procurement and appointment of successful Tenderer(s) (hereafter referred to as The Contractor)
- Detailed Design Stage
- Site preparatory works including the preparation of all required Detailed Safety and Health, and Environmental Management documents
- Piling
- Site mobilisation.
- Construction stage
- Completion.

It is anticipated that the construction phase will take 6 months (TBC). The proposed sequence of construction outlined is subject to confirmation once the building contract has been awarded and on completion of the Detailed Construction Environment Management Plan for agreement with Cavan County Council.

Construction Phase

There will also be earth removal (minimal) and piling works associated with the proposed development. A Resource Waste Management Plan (RWMP) will be submitted as part of the detailed design stage.

Construction of the proposed development will initially involve the removal of the existing static jetty, walls and slipway, alongside core-drilling into the bedrock using marine drilling equipment to install the new steel columns. Concrete will be removed to facilitate the new concrete slipway. A method statement was developed by Alan Traynor Consulting Engineers outlines the proposed construction approach for the upgrade of the existing public marina.

Static Jetty Pile Installation

1. Structural Frame Installation
 - Install steel vertical columns
 - Fix steel cross beams and edge beams
2. Precast Decorative Concrete Panels
 - Lift decorative precast panels into position against marina face.
 - Secure panels into steel structure

3. Precast Jetty Deck Slabs

- Lift and place precast slabs onto jetty framing
- Construct required finishes as per structural drawings.
- Install edge protection, bollards, ladders and services.

Floating Jetty Installation

- Floating pontoon constructed in factory conditions and delivered to site via lorry and Hiab crane.
- pontoons fixed to new steel piles via guide brackets.
- Connection of services such as water and power is completed.
- Mooring cleats and safety ladders installed.

Slipway Construction

- Install formwork and reinforcing steel.
- Precast concrete slipway section to be installed in river basin to reduce site/water excavation and damming works.
- In-situ concrete slipway to be formed and cast into precast concrete unit and extended to carpark level.
- Apply non-slip finishes.

Carpark Works

- Strip existing surfacing where required
- Earthworks and grading
- Install new pavement layers
- Linemarking and signage installed
- Landscaping and drainage works completed

Surface Water Management

Permeable paving will be used on proposed car parking surface areas. It is proposed to discharge the surface water flows from the site into the river, via a gravity network. The drainage network including c250 ACO channel and 150mm perforated twin wall pipes will drain to an NSBP003 Class I petrol bypass interceptor or similar approved prior to discharge.

Construction Management Plan

A Construction Management Plan for the works has been prepared by Traynor Environmental Ltd. This plan lays out a detailed description of the methodology that will be used in the development of the marina.

The purpose of the CEMP is to.

- Provide effective, site-specific procedures and mitigation measures to monitor and control environmental impacts throughout the construction phase of the project.
- Ensure that construction activities so far as is practical do not adversely impact amenity, traffic or the environment in the surrounding area.

This CEMP has been reviewed as part of this NIS, and the CEMP has taken into consideration the mitigation measures contained in this NIS for the protection of the Natura 2000 sites.

3.3 SITE LOCATION AND SURROUNDING ENVIRONMENT

The application site is 0.43ha and it is located in the town of Belturbet, along the southern banks of the River Erne and at Ducking Stool Jetty. The site will be accessed via local access roads known as The Lawn and Willow Ave.

The land-use immediately surrounding the site is predominantly urban and it consists of the residential and commercial areas of Belturbet town and suburbs. The main habitats associated with these areas include buildings and artificial surfaces, along with amenity grasslands, gardens and scattered trees. Beyond the urban and sub-urban areas of Belturbet, agriculture is the dominant land use and improved and semi-improved / neutral grasslands are the main habitats associated with these areas. Other habitats represented in the rural areas locally include wet grasslands, wetlands, coniferous and mixed broadleaved woodlands, scrub, hedgerows and treelines. The River Erne flows through Belturbet and the habitats associated with this river include depositing lowland rivers, riparian grasslands and woodlands and other wetlands. Site location maps can be seen in Figures 3 and 4, whilst aerial photographs / Street Views of the site and the surrounding habitats can be seen in Figures 5a to 5c.

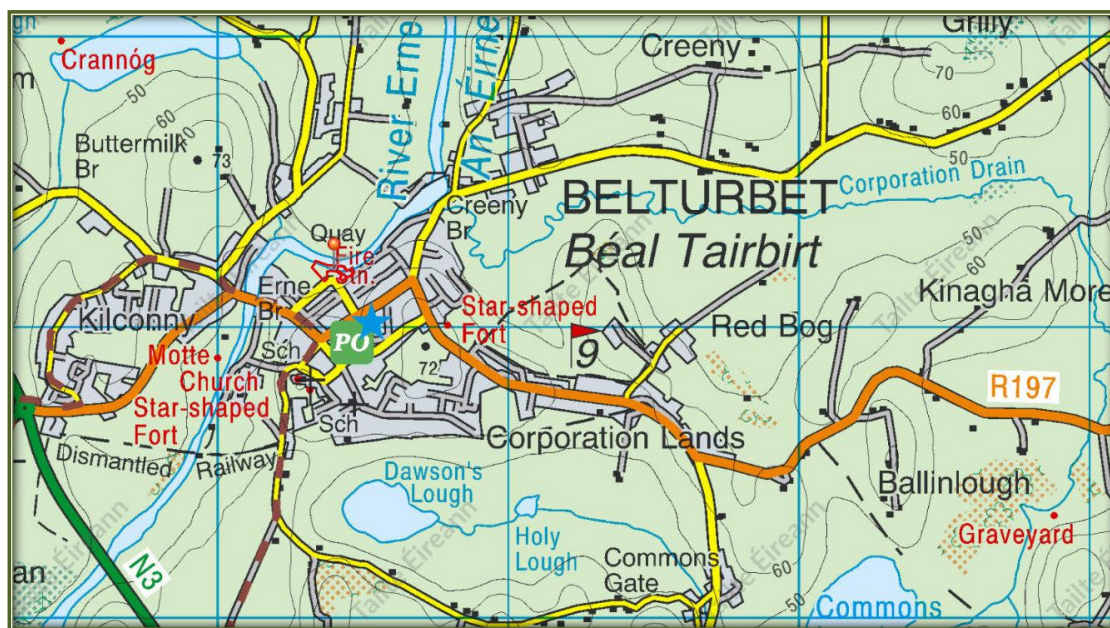


Figure 3 – Site Location Map (Site Pinned). Local Land Holdings Outlined in Orange.

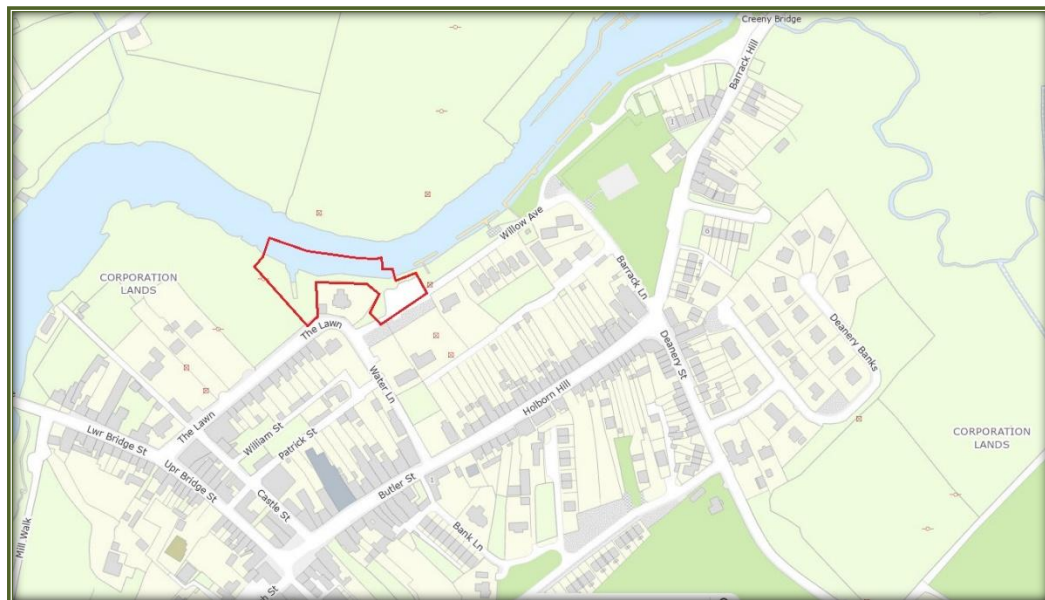


Figure 4– Site Location Map. Site Outlined in Red.

HABITATS WITHIN THE SITE

The application site lies partially within the Lough Oughter and Associated Loughs SAC. In the eastern section of the site, there is an existing carpark and dilapidated wooden jetty that extends down to the banks of the River Erne. A hedgerow extends along the eastern perimeter of the site. The most common species in this hedgerow include sycamore *Acer pseudoplatanus* and willow *Salix* sp.. This car park is currently accessed via The Lawn access road. The western section of the site consists of an area of hard core and amenity grassland that also extends down to the banks of the River Erne. The eastern and western sections of the site are separated by an existing private dwelling. However, they are connected by a line of willow scrub and a grassy verge that extends along the river bank to the rear (north) of this dwelling.

The main habitats within the application site include:

- Buildings and Artificial Surfaces – Fossitt Code BL₃
- Amenity Grasslands – GA₂
- Scrub – WS₁
- Hedgerow – WL₁
- Depositing Lowland River (Erne) – SW₂

An aerial photo of the site and its surrounding habitats is presented in Figure 5a-5f.

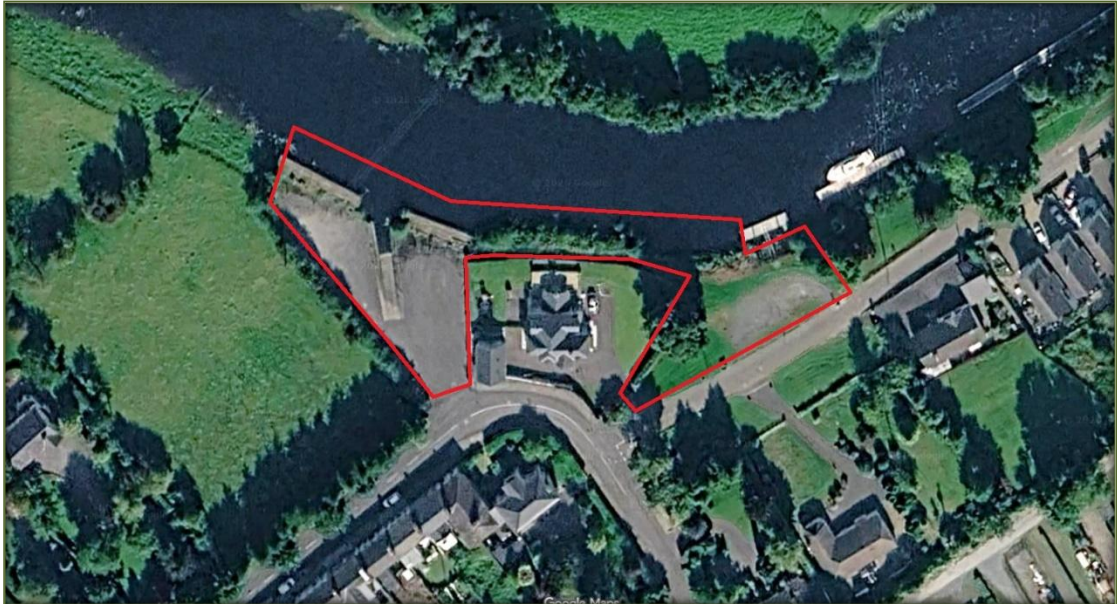


Figure 9a – Aerial Photograph of the Site (Outlined in Red) and its Surrounding Habitats © Google



Figure 9b– Hedgerow Along Eastern Perimeter



Figure 9c – Eastern Section of the Marina



Figure 9d – Current State of Eastern Section of the Marina



Figure 9e – Looking East / Upstream of the River



Figure 9f – Western Section of the Marina

PROTECTED SPECIES

Otter *Lutra lutra*

Otter was captured on three trail cameras in autumn 2025, one located in the agricultural field adjacent to Ducking Stool jetty and the two located on the opposite side of the River Erne in

relation to Ducking Stool jetty. In addition, otter spraints were recorded on a rock in amongst a wooded area on the opposite riverbank to Ducking Stool Jetty. A little further downstream, an area where otters entered the water (i.e. Otter slide) was recorded. A mammal activity hole in amongst scrub was visible from the water during kayaking and this is also attributed to potential access point for otter from adjacent land into the river.

The 2026 otter trail camera survey provided evidence that otter does enter the spaces under the jetty, however, these were brief visits and no "Resting" was recorded. In addition, no Otter spraints were recorded on the rocks under the jetties during the walkover survey and therefore indicates that the visiting Otter is not marking the proposed development area as part of its territory.

Bats

A total of seven bat species were recorded during the bat static surveillance: Common pipistrelle, Soprano pipistrelle, Leisler's bat, Nathusius' pipistrelle, Daubenton's bat, Natterer's bat and Brown long-eared bat. The River Erne is an important riverine habitat for local bat populations, and this is reflected in the static surveillance results. There are a greater level of buildings and amenities on the riverbank on the side of the Ducking Stool jetty while the opposite riverbank for the 500m stretch on either side of the jetty is less developed with a greater degree of tall vegetation (i.e. trees) and less outdoor lighting. The river in vicinity of the jetty is approximately 40m wide and wider during flood conditions.

The jetty itself does not offer roosting opportunities for bats and as a result of the flood waters, the jetty was submerged for several weeks post flooding, which further reduces its suitability as a roosting site.

Birds

A winter bird survey of the proposed walkway at Creeny, Belturbet, Co. Cavan recorded a total of eight bird species, including grey heron, woodpigeon, pied wagtail, robin, blackbird, wren, hooded crow and starling. The species recorded are typical of the habitats present along the route, including hedgerows, trees and the River Erne. Most birds observed were either flying over the survey area or using adjacent habitats. One Amber-listed species, starling (SPEC 3), was recorded, while all other species are Green-listed and considered to be of favourable conservation status. Given the limited size of the survey area and the winter timing of the survey, relatively few species were recorded.

WATER FEATURES AND QUALITY

The application site is located within the Erne Hydrometric Area (36), Catchment (36), Sub-Catchment (030) and the Erne Sub-Basin (100). Instream works will take place within the River Erne.

The EPA has classified the ecological status of the River Erne at points immediately upstream of the Erne Bridge as poor, and status downstream of the Erne Bridge and at the application site is moderate. Moderate status remains in the River Erne until it flows into the Upper Lough Erne. Under the requirements of the Water Framework Directive, this is unsatisfactory and all water bodies are obliged to meet good status within a specified time frame. The next target date for meeting the objectives is 2027. The EPA have not cited the main pressure on the River Erne at points downstream of Belturbet, however upstream of Belturbet the main pressure is cited as agriculture.

The site is within the Clones Groundwater Body and the current status of this waterbody is noted to be good. However, it is considered to be *At Risk* of not maintaining its good status. Within the application site itself, groundwater vulnerability is noted to be extreme. The EPA cite the main pressures on groundwater in this area as being agriculture, anthropogenic pressures and domestic wastewater pressures.

4 STAGE I – APPROPRIATE ASSESSMENT SCREENING

4.1 NATURA 2000 SITES IDENTIFIED

In accordance with the guidelines issued by the Department of the Environment and Local Government, a list of Natura 2000 sites within 15km of the proposed development have been identified and described according to their site synopsis, qualifying interests and conservation objectives. In addition, any other sites further than this, but potentially within its zone of interest were also considered. The zone of impact may be determined by an assessment of the connectivity between the application site and the designated areas by virtue of hydrological connectivity, atmospheric emissions, flight paths, ecological corridors etc.

For significant effects to arise, there must be a potential impact facilitated by having a source, i.e., the proposed development and activities arising out of its construction or operation, a receptor, i.e., the European site and its qualifying interests and a subsequent pathway or connectivity between the source and receptor, e.g., a water course. The likelihood for significant effects on the European site will largely depend on the characteristics of the source (e.g., nature and scale of the construction works), the characteristics of the existing pathway and the characteristics of the receptor, e.g., the sensitivities of the Qualifying Interests (habitats or species) to changes in water quality.

There are three Natura 2000 designated sites within 15km of the application site. These designated areas and their closest points to the application site are summarised in Table 1 and maps showing their locations relative to the application site are shown in Figures 6 and 7. A full description of all these sites can be read on the website of the National Parks and Wildlife Service (npws.ie).

European Site	Distance	Qualifying Interests	Screened In / Out
Lough Oughter and Associated Loughs SAC 000007	Site is Partially Within, Overlapping Area c1,280m ²	- Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i>-type vegetation - Bog woodland - Otter <i>Lutra lutra</i>	<i>Screened In – Due to the proximity of the site to the SAC, potential effects upon the QIs of this site cannot be ruled out. Effects could arise due to pollution, habitats loss, noise, anthropogenic effects and species disturbance.</i>
Lough Oughter Complex SPA 004049	3.9km south	- Great Crested Grebe (<i>Podiceps cristatus</i>) - Whooper Swan (<i>Cygnus cygnus</i>) - Wigeon (<i>Anas penelope</i>) - Wetlands & Waterbirds	<i>Screened Out – Having regard to the separation distance and the fact that there is no hydrological connectivity between the application site and the SPA as the site is downstream of this SPA, potential significant effects can be ruled out. This SPA is hydrologically</i>

			upstream of any influence from the application site. The bird survey carried out by Joe Adamson in November 2025 confirmed that no QI species were observed within or close to the application site on the day of the survey.
Kilroosky Lough Cluster SAC 001786	15km north-east	• Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp. • Calcareous fens with <i>Cladium mariscus</i> and species of the Caricion davallianae • Alkaline fens • <i>Austropotamobius pallipes</i> (White-clawed Crayfish)	Screened Out – Having regard to the separation distance and the fact that there is no hydrological connectivity between the application site and the SPA as the site is downstream of this SPA, potential significant effects can be ruled out.

Table 2 – Designated Sites within 15km of the Application Site

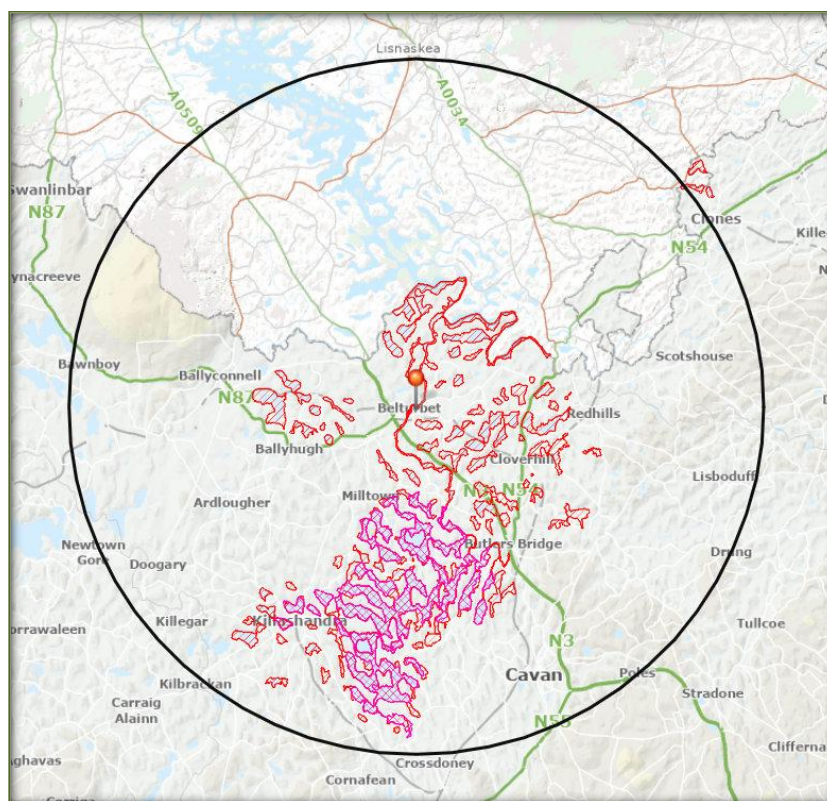


Figure 6 – The Application Site (Pinned) in relation to the Natura 2000 Sites Within 15km (SACs – Red Hatching, SPAs – Pink Hatching).



Figure 7 – The Application Site in relation to the Lough Oughter and Associated Loughs SAC

4.2 IDENTIFICATION OF POTENTIAL EFFECTS

The proposed development at the Ducking Stool Jetty is located partially within the Lough Oughter and Associated Loughs SAC. A detailed evaluation of the available information has been undertaken, including an examination of the characteristics of the proposed development, the receiving environment and the potential pathways for impact. Having regard to the best scientific knowledge available and the application of the precautionary principle, it is the professional opinion of this author that it is not possible to conclude, on the basis of objective information, that the proposed development, either alone or in combination with other plans or projects, will not give rise to likely significant effects on the aforementioned European site.

As the development site is within the Zone of Influence of the Lough Oughter and Associated Loughs SAC, potential significant effects on this site and its qualifying interest habitats and species arising from the construction and operation of the proposed development cannot be ruled out.

The assessment has focused on those elements of the proposed development that have the potential to influence the integrity and conservation objectives of the identified Natura 2000 sites and protected species. The following areas were examined in relation to potential significant effects from the proposed development on the identified Natura 2000 sites:

1. Deterioration of water quality in the Lough Oughter and Associated Loughs SAC arising from pollution to surface water or ground water during site preparation and construction.

2. Deterioration of water quality in the Lough Oughter and Associated Loughs SAC arising from pollution to surface water or ground water during the operation of the site.
3. Habitat loss or fragmentation in the Lough Oughter and Associated Loughs SAC.
4. Effects upon the otter *Lutra lutra* which is a QI of the Lough Oughter and Associated Loughs SAC. Effects could arise from habitat loss, fragmentation, deterioration in water quality, lighting and anthropogenic impacts.
5. Cumulative impacts with other proposed/existing developments.

4.3 SCREENING CONCLUSIONS

The proposed development is not directly connected with or necessary to the nature conservation management of the designated site. Therefore, following consideration of the location of the Lough Oughter and Associated Loughs SAC in relation to the proposed development at the Ducking Stool Jetty in Belturbet and the potential effects that may occur, this project must proceed to the next stage of Appropriate Assessment, namely the Natura Impact Assessment.

5 STAGE II – NATURA IMPACT STATEMENT

5.1 INTRODUCTION

The main objective of this stage (Stage 2, Natura Impact Statement) in the Appropriate Assessment process is to determine whether the proposed development at Belturbet (either alone or in combination with other plans, programmes and projects) will result in significant adverse effects on the Lough Oughter and Associated Loughs SAC with respect to these site's structures, species, functions and/or conservation objectives. This stage also outlines the mitigation measures that should be taken in order to avoid any negative impacts of this application, should it receive consent.

In this section, the Natura 2000 sites identified in the previous section will be described in greater detail in terms of their site characteristics and conservation objectives.

5.2 SITE SPECIFIC CONSERVATION OBJECTIVES

For the site that has been screened in, if Site Specific Conservation Objectives were available these were reviewed in light of the proposed development and the potential impacts that might occur. These Site Specific Conservation Objectives (SSCOs) aim to define the favourable conservation condition for the particular habitats or species at that site. They outline certain attributes (e.g., distribution, population structure, water quality) for different species and habitats with targets, which define favourable condition for a habitat or species at a particular site. The maintenance of habitats and species within the Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at national level. Where available, these SSCOs can be downloaded on the NPWS website. Any potential threats to the attributes and targets as defined in these SSCOs were assessed and where necessary, mitigated for. Where SSCOs were not available, then the SSCOs of other Natura 2000 sites with comparable QIs were referred to.

For each Qualifying Interest of the SAC, the specific conservation objective is either to *maintain or restore* the favourable conservation condition of that interest, by defining a list of attributes and targets which are indicative of the conservation status of that interest. For habitats, the main attributes include habitat area; habitat and community distribution; vegetation structure/composition and physical structure. The main target is to ensure that the habitats are stable or increasing in area and that the other attributes are maintained or restored. For the Annex II species of the SAC, the main attributes are population trend and distribution, whilst the targets aim to ensure that the long term population trends of the

species are stable or increasing and that there is no significant decrease in the numbers or range of areas used by the species, other than that occurring from natural patterns of variation.

5.3 NATURA 2000 SITES IDENTIFIED

LOUGH OUGHTER AND ASSOCIATED LOUGHS SAC 000007

Site Summary

Lough Oughter and its associated loughs occupy much of the lowland drumlin belt in north and central Cavan between Upper Lough Erne, Killeshandra and Cavan town. The site is a maze of waterways, islands, small lakes and peninsulas including some 90 inter-drumlin lakes and 14 basins in the course of the Erne River. The area lies on Silurian and Ordovician strata with Carboniferous limestone immediately surrounding.

This site is a candidate Special Area of Conservation for natural eutrophic lakes and bog woodland, two habitats listed on Annex I of the E.U. Habitats Directive and for the otter, a species listed on Annex II of the same Directive. The site also contains areas of dry woodland, marsh, reedbed and wet pasture.

The Lough Oughter area contains important examples of two habitats listed on Annex I of the E.U. Habitats Directive and supports a population of the Annex II species, otter. The site as a whole is the best inland example of a flooded drumlin landscape in Ireland and has many rich and varied biological communities. Nowhere else in the country does such an intimate mixture of land and water occur over a comparable area, and many of the species of wetland plants, some considered quite commonplace in Lough Oughter and its associated loughs, are infrequent elsewhere.

Site Specific Conservation Objectives

Site Specific Conservation Objectives (SSCOs) for this site have recently been prepared (NPWS, 2021)¹. These SSCO are outlined in Tables 3 – 5.

¹ NPWS (2021) *Conservation Objectives: Lough Oughter and Associated Loughs SAC 000007. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage*

Natural Eutrophic Lakes with Magnopotamion & Hydrocharition-type Vegetation 3150

The SSCO for this habitat is to *restore* its favourable conservation condition which is generally defined by the following list of attributes and targets:

Attribute	Measure	Target
Habitat area	Hectares	Area stable or increasing, subject to natural processes
Habitat distribution	Occurrence	Restore, subject to natural processes
Vegetation composition: Typical species	Occurrence	Typical species present, in good condition, and demonstrating typical abundances and distribution
Vegetation composition: characteristic zonation	Occurrence	All characteristic zones should be present, correctly distributed and in good condition
Vegetation distribution: maximum depth	Metres	Maintain maximum depth of vegetation, subject to natural processes
Hydrological regime: water level fluctuations	Metres	Maintain appropriate natural hydrological regime necessary to support the habitat
Lake substratum quality	Various	Maintain appropriate substratum type, extent and chemistry to support the vegetation
Transparency	Metres	Maintain/restore appropriate Secchi transparency. There should be no decline in Secchi depth/transparency
Nutrients	µg/l P; mg/l N	Restore the concentration of nutrients in the water column to sufficiently low levels to support the habitat and its typical species
Phytoplankton biomass	µg/l Chlorophyll a	Restore appropriate water quality to support the habitat, including good chlorophyll a status
Phytoplankton composition	EPA phytoplankton composition metric	Restore appropriate water quality to support the habitat, including good phytoplankton composition status
Attached algal biomass	Algal cover	Maintain/Restore trace/ absent attached algal biomass (<5% cover)
Water quality: macrophyte status	EPA macrophyte metric (The Free Index)	Restore good macrophyte status
Acidification status	pH units; mg/l	Maintain appropriate water and sediment pH, alkalinity and cation concentrations to support the habitat, subject to natural processes
Water colour	mg/l PtCo	Maintain/Restore appropriate water colour to support the habitat
Dissolved organic carbon (DOC)	mg/l PtCo	Maintain/Restore appropriate organic carbon levels to support the habitat
Turbidity	Nephelometric turbidity units/ mg/l SS/ other appropriate units	Maintain/Restore appropriate turbidity to support the habitat
Fringing habitat: area and condition	Hectares	Maintain?restore the area and condition of fringing habitats necessary to support the natural structure and functioning of the lake habitat

Table 3 – Natural Eutrophic Lakes with Magnopotamion and Hydrocharition-type Vegetation 3150

Potential Significant Effects

This is a qualifying interest of the Lough Oughter and Associated Loughs SAC. Natural eutrophic lakes have nutrient levels that are higher than those of oligotrophic, dystrophic or mesotrophic lakes, resulting in higher natural productivity and they are typically species rich. However, many such lakes have been damaged by over-enrichment with nutrients, resulting in hypertrophic conditions and a reduction in species-richness. The application site is upstream of the Upper Lough Erne, which is representative of this QI lake habitat in this SAC. This lake lies between the border of the Republic of Ireland and Northern Ireland and the section in Northern Ireland no longer has the benefit of the protection of the European Directives. However, the southern half of this lake remains designated as an SAC. The downstream distance between the application site and the Upper Lough Erne is circa 7.4km.

The proposed development of the marina will involve extensive instream works over a period of approximately 4 weeks. These works could result in the generation and mobilisation of silt and / or hydrocarbons downstream. As there is hydrological connectivity between the application site and the Upper Lough Erne via the River Erne, significant effects upon this QI habitat cannot be ruled out and mitigation measures must be included to prevent run-off from the works causing local deteriorations in water quality which could subsequently result in significant effects upon this habitat in downstream areas.

Bog Woodland g1Do

The SSCO for this habitat is to *maintain* its favourable conservation condition which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Habitat area	Hectares	Area stable or increasing, subject to natural processes
Habitat distribution	Occurrence	No decline, subject to natural processes
Woodland size	Ha	Area stable or increasing. Where topographically possible, "large" woods at least 25ha in size and "woods at least 3ha in size
Woodland structure: canopy cover and height	Percentage cover; metres	Total canopy cover at least 30%; downy birch (<i>Betula pubescens</i>) comprises at least 50% of canopy cover; median canopy height at least 4m.
Woodland structure: community diversity and extent	Ha	Maintain diversity and extent of community types.
Woodland structure: tree size classes	Occurrence	Downy birch (<i>Betula pubescens</i>) present in each tree class size.
Woodland structure: regeneration	Occurrence	At least one downy birch (<i>Betula pubescens</i>) sapling of at least 1m tall present within each monitoring stop.
Woodland structure: senescent and dead wood	Occurrence	Senescent or dead wood present
Woodland structure: indicators of local distinctiveness	Occurrence; population size	No decline in distribution and in the case of red listed and other rare or localised species, population size.

Woodland structure: indicators of overgrazing	Occurrence	All four indicators of overgrazing absent.
Woodland structure: dwarf shrub cover	Percentage cover at a representative number of monitoring stops	Native dwarf shrub layer cover less than 50%; ling (<i>Calluna vulgaris</i>) cover less than 40%.
Woodland structure: bryophyte cover	Percentage cover at a representative number of monitoring stops	Bryophyte cover at least 50%; bog moss (<i>Sphagnum</i> spp) cover at least 25%.
Vegetation composition: positive indicator species	Number in a representative number of monitoring stops	Downey birch (<i>Betula pubescens</i>), bog moss (<i>Sphagnum</i> spp) and at least five other positive indicator species present
Vegetation composition: negative indicator species	Percentage cover at a representative number of monitoring stops	Both native and non-native invasive species absent or under control. Total cover should be less than 10%

Table 4 – SSCOs for Bog Woodland

Potential Significant Effects

This is a priority habitat and a qualifying interest of the Lough Oughter and Associated Loughs SAC. Bog woodland includes woodlands of intact ombrotrophic bogs, bog margins and cutover bog. It typically occurs on deep acid peat that is relatively well-drained in the upper layers and is commonly associated with former turf cutting activity or drainage. It may also occur in areas of cutover bog where most of the peat has been removed.

Map 4 of the SSCO document illustrates the current known location of this habitat within the SAC, and it is stated that other locations of this habitat within the SAC are likely. An examination of aerial maps along with EPA soil maps shows that there are no designated areas of woodland on peat soil close to the application site. The proposed development will not give rise to any loss or fragmentation of any bog woodland habitats, and there is no ecological connectivity between the application site and this woodland habitat within the SAC. There will be no significant effects upon this habitat within the SAC, and the attributes, measures and targets that have been set for the maintenance of favourable conservation condition of this habitat within the SAC will not be affected.

Otter (1355)

The SSCO for this species is to *maintain* its favourable conservation condition which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Distribution	% positive survey sites	No Significant Decline
Extent of Terrestrial Habitats	Hectares	No significant decline. Area mapped and calculated as 364.4ha along river banks/ lake shoreline/around ponds
Extent of Freshwater (River) Habitat	Km	No significant decline. Length mapped and calculated as 71.3km
Extent of Freshwater (Laker) Habitat	Hectares	No significant decline. Area mapped and calculated as 1,730.6ha.
Couching Sites and Holts	Number	No significant decline
Fish Biomass Available	Kg	No significant decline
Barriers to connectivity	Number	No significant increase

Table 5 – SSCOs for Otter

Potential Significant Effects

The otter occurs throughout the Lough Oughter system. The presence of this species is positively correlated with good water quality and deterioration of same will lead to impacts upon this species. Otters have two basic requirements – aquatic prey and safe refuges where they can rest. In freshwater areas, the diet of the otter comprises of a variety of fish from sticklebacks to salmon and eels, whilst crayfish and frogs can also be important. Impacts that reduce the availability or quality of, or cause disturbance to, their terrestrial or aquatic habitats are likely to affect otters. The main threats to otters in Ireland are thought to be: (1) habitat destruction, including river drainage and the clearance of bank-side vegetation; (2) pollution, particularly organic pollution resulting in fish kills; (3) disturbance of habitat due to recreational activities, and (4) accidental deaths (NPWS, The Otter Threat Response Plan, 2009).

Records for the otter exist from the entire Lough Oughter catchment. It is known that the territory of the otter is quite large. The territory of female otters in mesotrophic rivers is approximately 7.5 +/- 1.5km in length (Ó Néill, L., 2008), whilst the territories of male otters in mesotrophic and oligotrophic rivers is approximately 13.2 +/- 5.3km in length, with a high degree of variability as territorial males respond quickly to social perturbation.

Static mammal cameras were left along the banks of the River Erne within the application site as part of the mammal survey that was undertaken by Bat Eco Services. A total of 13 locations were surveyed by trail cameras in 2025 with a further 6 in spring 2026.

The otter was observed on the trail camera during in autumn 2025 and spring / summer 2026 and during the walkabout survey, otter spraints were recorded on a rock in amongst a wooded

area on the opposite river bank to Ducking Stool Jetty. A little further downstream, an area where otters entered the water (i.e. Otter slide) was recorded. In 2026, it was noted that otters briefly entered spaces under the jetty, however there was no apparent resting here.

An otter activity map is presented below in Figure 8.



Figure 1 – Location of Otter Activity (Taken from Figure 3e of Mammal Survey Report prepared by Bat Eco Services)

5.4 SUMMARY OF POTENTIAL IMPACTS AND EFFECTS

INTRODUCTION

The identification of potential effects and the assessment of their significance typically requires the identification of the type and magnitude of the effects. For example, will the effects be short term or long term, direct, indirect or cumulative and will they occur during construction or operation. This section will establish whether the effects of the proposed development in Belturbet that were identified in the previous section, are likely to occur and whether or not they are significant. These potential effects will be examined with respect to the conservation objectives of the Natura 2000 site identified.

In the screening section of this report, the following possible effects upon the Natura 2000 sites were listed. These impacts are dealt with in greater detail below.

1. Deterioration of water quality in the Lough Oughter and Associated Loughs SAC arising from pollution to surface water or ground water during site preparation and construction.

2. Deterioration of water quality in the Lough Oughter and Associated Loughs SAC arising from pollution to surface water or ground water during the operation of the site.
3. Habitat loss or fragmentation in the Lough Oughter and Associated Loughs SAC.
4. Effects upon the otter *Lutra lutra* which is a QI of the Lough Oughter and Associated Loughs SAC. Effects could arise from habitat loss, fragmentation, deterioration in water quality, lighting and anthropogenic impacts.
5. Cumulative impacts with other proposed/existing developments.

DETERIORATION IN WATER QUALITY IN DESIGNATED AREAS DURING CONSTRUCTION

During the construction phase of the proposed new marina at the Ducking Stool jetty, the principal risks to water quality will arise from instream works associated with piling, bank modification and installation of pontoons, as well as from general construction activities on adjacent lands. These works have the potential to generate elevated levels of suspended solids through disturbance of the riverbed and bank material. Without appropriate controls, fine sediment can be transported downstream and deposit within slower-moving reaches, where it may smother benthic habitats, reduce interstitial flow and impair the ecological functioning of the river. Excessive turbidity can reduce light penetration, interfere with fish migration and feeding behaviour, and affect the suitability of spawning substrates for sensitive species.

There is also a risk of accidental release of hydrocarbons, concrete leachate, cement washings or other construction-related contaminants. Concrete and uncured cementitious materials can significantly elevate pH if allowed to enter the watercourse, while fuels and lubricants associated with piling rigs, excavators or generators could cause toxic effects even at low concentrations. Pollutants mobilised by rainfall from stockpiles, temporary surfaces or exposed soils could be conveyed to the river via overland flow or the existing drainage network. If not effectively contained, such discharges may lead to localised chemical contamination or nutrient input, which could adversely affect qualifying interest habitats downstream, including the Natural eutrophic lakes feature of the SAC.

Construction compounds and storage areas also present potential pathways for contamination if materials are not managed correctly. Small but repeated spillages, poor housekeeping, or inadequate storage of oils, solvents or wet concrete products can act as chronic local sources of pollution. In combination, these risks underscore the need for stringent site management and protective measures to ensure that the construction phase does not give rise to significant adverse effects on water quality or on the conservation objectives of the Lough Oughter and Associated Loughs SAC.

DETERIORATION IN WATER QUALITY IN DESIGNATED AREAS POST CONSTRUCTION

Potential impacts on water quality arising from the operational phase of the development have also been assessed in detail. The principal risks relate to the discharge of untreated or inadequately treated surface water from the car park and other hardstanding areas into the River Erne. In the absence of appropriate attenuation and treatment, run-off may convey hydrocarbons, suspended solids, heavy metals or de-icing salts to the receiving environment. Such pollutants could lead to negative effects on surface water or groundwater within the Zone of Influence.

Groundwater and surface water interact within the hyporheic zone, the permeable transition area beneath the riverbed where shallow groundwater and surface water mix. Any decline in groundwater quality therefore has the potential to affect downstream surface waters, including those within the Lough Oughter and Associated Loughs SAC. Contaminated run-off could contribute to nutrient enrichment or chemical contamination, which may negatively affect the Natural eutrophic lakes habitat and its associated flora and fauna.

In addition, the operational phase will involve ongoing use of the marina by private and commercial vessels. Poorly maintained engines have the potential to leak fuel or lubricating oil, and small volumes discharged repeatedly can accumulate in sheltered waters. There is also a risk of greywater or blackwater being released from boats that lack compliant holding tanks or from improper use of pump-out facilities. These discharges can introduce hydrocarbons, detergents, organic waste and nutrients to the water column. While individual releases may be minor, cumulative inputs over time or from multiple vessels could lead to localised deterioration in water quality. This may encourage algal growth, alter dissolved oxygen levels and impair the ecological integrity of qualifying interests downstream.

Additional risks during operation include accidental spillages associated with refuelling, storage of maintenance materials within the marina compound, and the potential mobilisation of pollutants during heavy rainfall events. Without appropriate operational controls, these pathways could act as chronic sources of contamination, with potential to affect the conservation objectives of the SAC.

HABITAT LOSS AND FRAGMENTATION

The application site partially overlaps with the boundary of the Lough Oughter and Associated Loughs SAC. It is situated within an urbanised and residential area, and much of the site comprises modified habitats of limited biodiversity value. Nonetheless, a hedgerow is present along the eastern site boundary and a strip of willow scrub occurs along the riverbank to the north of the private dwelling.

Plans indicate that the section of willow scrub along the riverbank will be removed and replaced with a walkway, boulder edging and associated landscaping. This removal will result in the loss and fragmentation of riparian vegetation. Although the scrub is limited in extent, such habitat provides cover, foraging opportunities and commuting routes for local fauna, including otter, which is a Qualifying Interest of the Lough Oughter and Associated Loughs SAC. Any reduction in riparian continuity may diminish the ecological functionality of the river margin by reducing shelter, altering bank structure and increasing exposure to disturbance.

EFFECTS UPON THE OTTER *LUTRA LUTRA*

Mammal surveys confirm that otter occurs within the site and its wider Zone of Influence. Potential impacts on the SAC population may arise from a combination of direct habitat alteration, disturbance and water quality risks associated with construction and operation of the proposed marina.

Construction Phase

- Risk of a pollution event during the removal of the existing jetty or during instream works, with potential to degrade water quality and prey availability.
- Disturbance from increased artificial lighting associated with construction activities, which may deter otter from using the affected bank.
- Disturbance from increased noise, vibration and human presence.
- Loss of riparian habitat and cover along the riverbank to facilitate construction of the proposed walkway, reducing opportunities for resting, foraging and commuting.

Operational Phase

- Disturbance from increased lighting associated with the marina, altering nocturnal behaviour and reducing the suitability of the affected bank as a movement corridor.
- Disturbance from increased human activity and noise arising from marina use.
- Risk of water quality deterioration due to boating activities, including minor fuel leaks, wastewater discharge or accidental spillages, which may affect prey species and overall habitat quality.

The potential impact of the proposed development considers the following points:

- Small proposed development area;
- No holt or resting sites are located within the proposed development area;
- Extent of foraging and commuting habitat associated with the River Erne in the Belturbet area.

The potential impacts of the proposed development on otter during construction is deemed to be Negative, Slight Significant impacts in the long-term.

CUMULATIVE IMPACTS

The potential for cumulative impacts arising from other significant existing or permitted infrastructure are assessed here. Cumulative impacts encompass the combined effects of multiple developments or activities on a range of receptors. Potential cumulative impacts associated with the existing and permitted significant infrastructure within the same water catchments as the proposed development should be considered.

As part of the Appropriate Assessment, in addition to the proposed works, other relevant projects and plans in the region must also be considered. This step aims to identify at this stage any possible significant in-combination or cumulative effects / impacts of the proposed works on the Natura 2000 sites with other such plans and projects.

Cavan County Development Plan

Planning policy at the local level is provided by the Cavan County Development Plan 2022–2028. This plan contains a number of policies relevant to the ecology and nature conservation in Co. Cavan. These are summarised below:

Policy / Objective NHEP₁ - To protect, conserve, manage, enhance and safeguard natural amenity assets and natural heritage features for future generations while maximising their recreational, amenity and tourism potential for the present generation by resisting development that could have a negative impact.

NHEP₂ - To maximise the social, economic and environmental benefits that may be derived from the conservation and management of Cavan's Natural Heritage and green infrastructure.

NHEP₄ - To protect, manage, conserve and seek to enhance the County's biodiversity.

NHEP₅ - To integrate biodiversity consideration into all County activities through the County Biodiversity Action Plan process.

NHEP₆ - To ensure the protection of species of flora and fauna afforded legal protection under Irish and European Legislation.

NHEP₇ - To assess the impact of biodiversity of proposals for large developments, particularly those on Greenfield sites, or in environmentally sensitive areas. Such developments must include measures for the enhancement and protection of biodiversity.

NHEO₂ - To promote the conservation of biodiversity outside of designated areas, including features such as wetlands, woodlands, hedgerows and uplands.

Future Plans / Other Projects

The Cavan County Council planning map tool was used to identify any future plans or projects in the Belturbet area which may potentially impact in combination with the proposed works on the designated sites identified. A search was made for applications in Belturbet within the last three years. In this time, a number of other small scale domestic, commercial and agricultural developments were permitted in the wider Belturbet area. Where necessary, these developments were either screened for AA, or where effects upon the Lough Oughter and Associated Loughs SAC could not be ruled out, a NIS was submitted.

In relation to current and future planning applications, Cavan County Council, as the competent authority, will screen each application for AA. Any new application will be examined and the requirement for screening for AA (NIS) will be determined on a case by case basis to comply with the requirements of Article 6 of the Habitats Directive. Therefore, it is not considered that there will be any significant adverse in combination effects with the proposed works and any other development.

In summary, it is considered that with the implementation of effective mitigation (see Section 5) to avoid/negate any potential adverse impacts, there will be no potential for cumulative impacts arising in combination with any other plans or project which would be of significance in respect of impacts affecting the conservation objectives or integrity of Lough Oughter and Associated Loughs SAC.

6 MITIGATION MEASURES

6.1 INTRODUCTION

In order to protect certain designated sites and species and in order to avoid any reductions in water quality in the area surrounding the proposed development site, a number of site-specific mitigation measures have been recommended and these must be implemented and followed. Additional measures have also been suggested that will help to protect the local biodiversity of the surrounding area and to ensure the protection of local wildlife.

The implementation of these measures will ensure the protection of Natura 2000 habitats and species, and the local non-designated ecological receptors. The primary parties responsible for the implementation of these measures include the applicants, the project manager and the construction contractors.

It is recommended that the measures included herein are included in a Construction and Environmental Management Plan which is presented to the Local Authority prior to the commencement of works. It is also recommended works and ongoing plan progression is supervised by an Ecological Clerk of Works.

6.2 CONSTRUCTION PHASE MITIGATION

Pre-Construction and Construction

- Prior to the commencement of any site works, the applicant and the contractors must be made aware of the overall sensitivity of this site. They must be made familiar with the overall content of this NIS and they must be made aware of the mitigation measures contained in this NIS.
- Site preparation and construction must be confined to the development site only and should adhere to all the mitigation measures outlined in this NIS.
- Work areas must be kept to the minimum area required to carry out the proposed works and the area must be clearly marked out in advance of the proposed works.
- Any construction waste must be removed by a licensed contractor to a registered facility. Records of waste movement and disposal should be retained and provided to the Local Authority upon request. There must be no disposal or deposition of soil or excavated material along with river bank, elsewhere in the SAC or in any other designated area.
- Site preparation and construction must conform to the Inland Fisheries Ireland Requirements for the Protection of Fisheries Habitats during Construction and

Development Works at River Sites (www.fisheriesireland.ie) and The Guidelines on Protection of Fisheries During Construction Works in and Adjacent to Waters (IFI, 2016).

- Consultation with IFI regarding timing of works must be undertaken. Works must not take place in the closed season for salmonids, i.e., October to May unless otherwise approved by IFI. IFI must be notified prior to the commencement of works and regular inspections by IFI during all instream works must be undertaken.
- It is vital that no deterioration of water quality occurs in the River Erne or the watercourses that connect to it. To protect sensitive habitats and species, strict controls must be applied to erosion, sediment, and pollutant generation. This includes attenuation measures such as silt traps and geotextile curtains. The following best practice documents should be followed:
 - CIRIA (2005): Environmental Good Practice on Site (C692)
 - CIRIA (2001): Control of Water Pollution from Construction Sites (C532)
 - CIRIA (2000): Environmental Handbook for Building and Civil Engineering Projects (C512)
 - EPA (2015): List of Waste and Determining if Waste is Hazardous or Non-Hazardous
 - Environment Agency (2015): Technical Guidance WM3 – Waste Classification

Management of Fuel / Oil

Site management must include routine inspection of equipment, material storage areas and drainage features to ensure all protective measures are functioning correctly. The objective is to prevent accidental leaks and to ensure containment.

Appropriate fuel management for the construction of the project must include:

- Tanks and drums must be stored in secure, impermeable areas on flat ground and located at least 50 metres from the River Erne or any other watercourse, drain or gully.
- Fuel containers must be stored within secondary containment such as bunds for static tanks or drip trays for mobile stores. Chemicals must be banded or stored in double-skinned containers capable of holding 110% of contents.
- All ancillary equipment, including hoses and pipes, must be retained within the banded area.
- Taps, nozzles and valves must be fitted with locking mechanisms and inspected regularly for leaks or damage. Tanks and drums will be subject to the same checks.

- Where refuelling of plant is required, it must be undertaken only within a designated area of the temporary construction compound using a delivery fuel truck operated by trained personnel. Only authorised trained operators will refuel plant.
- Rigid and articulated vehicles and all site vehicles (jeeps, cars and vans) must be refuelled off-site.
- Only mechanically sound plant must be permitted on site.
- All control and containment measures must be inspected and maintained. Bunds, gullies, pipework and oil interceptors must be cleaned and serviced regularly to ensure optimal performance.
- Emergency procedures and contingency plans must be in place prior to commencement of works. Spill kits containing booms and absorbent materials must be kept on site, checked regularly and replenished as required. All crews must be trained in spill response.
- For major spills, contact details for an appropriate emergency response service must be kept in the site office.

Management of Concrete

Concrete works will be required during construction of the mainland components. Wet concrete is silty and highly alkaline; preventing accidental release to surface or groundwater is essential.

The following measures will apply:

- A trained operator experienced in concrete handling must be present during pours. Works must be supervised by the Construction Manager, a suitably qualified engineer and the Environmental Manager/ECOW.
- Pour areas must be fully drained before works begin. No concrete shall be poured during prolonged or heavy rainfall or during periods of forecasted intense rain.
- Small volumes of washwater generated by cleaning hand tools, mixers or other plant must be retained on site, allowed to settle and neutralise, and only then released to ground. Settled solids must be removed and disposed of off-site.
- Concrete truck washout must not take place on site.

Excavations

All excavations must be supervised by a suitably qualified and experienced engineer. Method statements will be reviewed and approved before works commence.

- Bulk excavations will be undertaken during dry weather to minimise runoff. No excavation shall take place during heavy or severe rainfall.
- Temporary cuts and excavations must be stabilised or supported as required. Where necessary, cut-off drains must be used to prevent water ingress or erosion.
- Temporary works must be designed to avoid interference with existing drainage regimes.
- Plant and materials will be stored only within designated compounds and not positioned in a way that could surcharge existing or newly formed slopes.
- All excavated soils will be retained on site for reuse in bunding, landscaping and reinstatement. If soils or excavated material must be removed, it should be removed by a registered contractor to a registered site.
- Stockpiling of soil should be avoided as far as possible. No permanent stockpiles must remain after construction.
- Silt control measures must be in place before excavations begin. Temporary stockpiles will be placed on level ground at least 50 metres from the River Erne and any other waterbody or drain, with silt fences or similar measures installed on downgradient sides.

Storage

All storage of materials, containers, stockpiles and waste must follow best practice and take place only within designated areas of the works footprint. Containers must be stored upright and clearly labelled. Storage will be located:

- At least 50 metres from the River Erne and any other waterbody or drain.
- On an impermeable base.
- Under cover.
- In secure areas.
- Away from moving plant and vehicles.

All stockpiles should be inspected as part of routine site checks and monitored for invasive alien species.

In-Stream Piling and Excavation Works

Piling of the riverbed will be required for installation of the marina infrastructure. River bank stabilisation works will also be required. These works will create a direct pathway for sediment release with potential to affect water quality within Lough Oughter and Associated Loughs SAC.

- A continuous silt curtain must be installed around the works area before excavation begins. The curtain will be disinfected prior to delivery to site as part of site biosecurity.
- The curtain must be constructed as a single, joint-free length and secured using clean concrete blocks and ropes.
- Any excavated soft material must be placed in a skip on a pontoon and removed from site for appropriate disposal.
- Visual inspections of the silt-curtained area will be carried out throughout works. Turbidity and pH will be monitored using handheld equipment inside and outside the enclosure.
- If any discolouration is identified outside the curtain, works will cease until the cause is addressed.

Construction Noise and Disturbance

To minimise disturbance to fauna including the otter the following measures are proposed to reduce noise:

- The construction plant and tools used on-site must comply with the relevant Irish regulations in relation to noise and vibration requirements. In particular, it is recommended that all equipment used on site are newer models equipped with noise dampening systems and that the equipment is maintained in good condition and serviced regularly. Site management must also ensure that each item of plant and equipment complies with the noise limits quoted in the relevant European Commission Directive 2000/14/EC. All plant and equipment should be fitted with appropriate mufflers or silencers of the type recommended by the manufacturer. Only plant and equipment that has been designed for that task should be used and all equipment should be shut down or set to minimum when not being used.
- Any compressors required should be sound-reduced models with sealed acoustic covers.

Biosecurity / Control of Invasive Species

Japanese knotweed is known to occur along the River Erne to the north of the site, although it is currently not noted within the application site area (based on survey in December 2025). A pre-construction IAS survey should be undertaken again by a qualified ecologist during the late spring or summer.

To prevent the spread of invasive species during the works, biosecurity measures must be implemented in accordance with:

- The Management of Noxious Weeds and Non-native Invasive Species on National Roads (NRA, 2010).
- Invasive Species Ireland best practice guidance.
- IFI Biosecurity Protocol for Field Survey Work (2010).

Measures include:

- All plant, machinery and vehicles must arrive on site clean and free of invasive species, with validation provided by suppliers.
- All imported materials (soil, fill, sand, gravel, landscaping materials) must be certified as free of invasive species.
- Vehicles, machinery and PPE must be visually inspected and cleaned prior to use on site.
- Where works occur near IAS-infested areas, additional controls must be implemented under direction of the ECoW.
- Any equipment entering water must be treated before and after use to prevent spread of aquatic IAS.

Protection of Otters

The following mitigation measures have been specifically recommended for the protection of the otter within the SAC and the Zone of Influence of the application site. These measures have been recommended by Dr Tina Aughney following the completion of trail cam surveys of the site.

- Retention of Natural Vegetation - The initial plan allowed for the removal of existing bankside vegetation to the rear of the private residence, and the creation of a new pathway and landscaping in this area. In order to protect otters, it was recommended that this does not occur and that it is allowed to remain wild. This would retain suitable otter habitat whilst reducing the potential for direct human disturbance and disturbance through

lighting during operation. Following on from this recommendation, the plans were reviewed and the proposed path in this area has now been omitted. This plan should be adhered to.

- Physical Barriers - The installation of fencing is generally not recommended as it can impede mammal movement and may cause stress or entrapment if mammals enter the site and cannot exit. Where fencing is required for safety or security reasons, it must be designed to maintain permeability for wildlife. Purpose-designed access points will be incorporated at strategic locations, including along known mammal trails, and sized to allow larger mammals such as badger and fox to pass safely through the site. This approach ensures that terrestrial mammals can continue to move freely through the landscape and are not trapped or funnelled by impermeable boundary features.
- Access - It is important that once the works are completed that there is access for otters to use the rock area under the jetties. Therefore, no obstacles should be constructed as part of the proposed development to prevent otters from using this area.

6.3 OPERATIONAL PHASE

Surface Water and Runoff Management (Car Park and Hardstanding Areas)

- Surface water runoff from the car park and access roads must be directed through the onsite Sustainable Urban Drainage System (SuDS), including attenuation, filtration and controlled discharge, to reduce the potential for pollutants entering the River Erne.
- All surface water drainage from hardstanding must pass through silt-trap sumps prior to entering the watercourse.
- Runoff from areas with potential hydrocarbon contamination must be routed through a Class I bypass petrol interceptor with alarm/automatic shut-off prior to discharge.
- The drainage system must be inspected and maintained at scheduled intervals by the marina operator, including removal of silt from manholes, sumps and channels.
- Regular sweeping of the car park and paved areas must be undertaken to prevent build-up of debris, hydrocarbons and sediments that may become mobilised during rainfall.
- Any detergents or cleaning agents used by staff must be biodegradable and phosphate-free.
- A log must be maintained for all drainage inspections, maintenance and incidents.

Boat Operation and Marina Management

Fuel and Oil Controls

- Only vessels in good working order must be permitted to berth; boats showing signs of fuel or oil leakage should be refused entry until repaired.
- Refuelling (if allowed onsite) must occur only at a designated refuelling berth equipped with spill kits, absorbent pads and drip trays.
- When refuelling, boat operators must be required to remain at the pump and use absorbent pads underneath nozzles.
- No bulk fuel storage must occur on pontoons. Any storage areas on land will be bunded, impermeable and subject to routine inspection.
- Marina staff must carry out routine visual checks for sheens, floating contaminants and bilge discharge within the marina basin.

Bilge Water and Sewage Management

- Discharge of untreated bilge water or sewage to the marina basin must be prohibited and clearly communicated to boat owners through signage and mooring agreements.
- Pump-out facilities (if provided at the marina) must be maintained and operated to prevent spillage.
- Boat owners must be encouraged to use environmentally approved bilge-cleaning products only.

Water Quality Protection

- Spill response kits, including booms, absorbent pads and granules, must be located at strategic points along the marina and accessible to staff at all times.
- A spill response procedure must be maintained as part of the Marina Operational Plan and all staff will be trained in its implementation.
- Any accidental spill must be reported immediately to Cavan County Council and Inland Fisheries Ireland in accordance with incident-reporting requirements.
- Regular water quality monitoring (visual inspection for turbidity, sheen, debris and monthly pH/turbidity checks using handheld meters) must be undertaken to ensure no decline in water quality within the marina basin.

Waste, Litter and Materials Management

- Adequate waste and recycling facilities must be provided on land in sheltered, covered, impermeable areas and emptied regularly.
- Disposal of oils, filters, batteries or hazardous materials from boats must take place only at designated hazardous waste collection points off-site.
- Litter control measures must be implemented around the marina, including daily inspections and removal of floating debris.
- Clear user guidelines must be displayed for all marina users on waste management, refuelling and environmental responsibilities.

Biosecurity and Invasive Species Management

- The marina should adopt a “Check, Clean, Dry” policy for all visiting vessels, equipment, trailers and personal watercraft.
- Signage must be installed to instruct boat users on preventing the spread of invasive species such as zebra mussel and curly waterweed.
- Boats arriving from other catchments must be required to provide confirmation that hulls, propellers and intakes are free from invasive species before berthing.
- Annual marina inspections for invasive aquatic plants should be undertaken by a qualified ecologist, with rapid response measures activated if any are detected.

Lighting

The following lighting measures have been recommended. These measures will protect both otters and the seven species of bats that were recorded commuting and foraging within the vicinity of the application site.

It is recommended that outdoor lighting is limited in the car parking area and where lighting is required, luminaire design will be extremely important to achieve an appropriate lighting regime. Luminaires come in a myriad of different styles, applications and specifications which a lighting professional can help to select. The following should be considered when choosing luminaires. This is taken from the most recent BCT Lighting Guidelines (BCT, 2023). It is important that the client checks that any outdoor lighting meets the following guidelines:

- Consideration of a Smart Lighting System where lighting only comes when human activity is detected in the car park, thereby reducing unnecessary lighting particularly during the later hours of the night when there is little or no human activity.
- No lighting should be erected within 25m of the River Erne.
- All luminaires should lack UV elements when manufactured. Metal halide, compact fluorescent sources should not be used.
- LED luminaires should be used where possible due to their sharp-cut-off, lower intensity, good colour rendition and dimming capability.
- A warm white light source (2700 Kelvin or lower) should be adopted to reduce blue light component of luminaires. A 2200 - 2700 Kelvin luminaire appears as a warm yellow due to the reduction in the stark blue light associated with higher Kelvin values (e.g. 4000 Kelvins).

- The “warmer” the light, the less of an impact on nocturnal wildlife. The progression of LED technology means that the majority of luminaires are available at 2700 Kelvins and 2200. Therefore, it is recommended that such luminaires (i.e. 2200 Kelvin) are standard for “biodiversity areas”. The lower the Kelvin level the more Yellow the light appears.
- Light sources should feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats.
- Waymarking inground markers (low output with cowls or similar to minimised upward light spill) to delineate path edges, if required, for pedestrian zones within the proposed development area should be used.
- Column heights should be carefully considered to minimise light spill and glare visibility. This should be balanced with the potential for increased numbers of columns and upward light reflectance as with bollards.
- Only luminaires with a negligible or zero Upward Light Ratio, and with good optical control, should be considered.
- Luminaires should always be mounted horizontally, with no light output above 90° and/or no upward tilt.
- Where appropriate, external security light should be set on motion sensors and set to as short a possible a timer as the risk assessment will allow (e.g. 1-2 minute timer).
- Only if all other options have been explored, accessories such as baffles, hoods or louvres can be used to reduce light spill and direct it only to where it is needed.

Any external lighting for the proposed development should strictly follow the above guidelines and these should be strictly implemented during construction and operation phase of the proposed development. It is also recommended that this system is motion sensed to ensure that it is off when there is no human activity in vicinity of the proposed development site.

If lighting is deemed necessary, then the final lighting design is required to be reviewed and signed off by a bat specialist.

7 APPROPRIATE ASSESSMENT CONCLUSION

This current NIS has been undertaken to evaluate the potential impacts of the proposed development with regard to the effects upon the conservation objectives and qualifying interests (including the habitats and species) of the Lough Oughter and Associated Loughs SAC. It is considered that following mitigation, that the proposed project does not have the potential to significantly affect the conservation objectives of these aforementioned Natura 2000 sites and the integrity of these sites as a whole will not be adversely impacted.

The qualifying interests of the site and their potential to be impacted upon from the potential development were listed in Section 4.2. It is considered that these potential impacts can be successfully mitigated against. With implementation of the mitigation measures there will be no deterioration in water quality or impacts upon natural eutrophic lakes, there will be no loss or disturbances to any habitat that is used by the otter and there will be no direct or indirect impacts upon the bird species that use the lake.

In light of the above, it is considered that the proposed works do not have the potential to significantly affect the conservation objectives or qualifying interests of Lough Oughter and Associated Loughs SAC. The integrity of the site will not be adversely affected. Table 7 follows the integrity of the SAC / SPA checklist, which shows that the integrity of the site would not be affected by the proposed development.

Conservation Objective: Does the project have the potential to:	Yes / No
Cause delays in progress towards achieving the conservation objectives of the site?	N
Interrupt progress towards achieving the conservation objectives of the site?	N
Disrupt those factors that help to maintain the favourable conditions of the site?	N
Interfere with the balance, distribution and density of key species that are the indicators of the favourable condition of the site?	N
Other Objectives: does the project have the potential to:	
Cause changes to the vital defining aspects (e.g. nutrient balance) that determine how the site functions as a habitat or ecosystem?	N
Change the dynamics of the relationships (between, for example, soil and water or plants and animals) that define the structure and/or function of the site?	N

Interfere with predicted or expected natural changes to the site (such as water dynamics or chemical composition)?	N
Reduce the area of key habitats?	N
Reduce the population of key species?	N
Change the balance between key species?	N
Reduce diversity of the site?	N
Result in disturbance that could affect population size or density or the balance between key species?	N
Result in fragmentation?	N
Result in loss or reduction of key features (e.g. tree cover, tidal exposure, annual flooding, etc.)	N

Table 7 – Integrity of Site Checklist (From NPWS, Information Checklist for AA, Box 6, EC (2002))

APPENDIX I - REFERENCES AND FURTHER READING

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