Appropriate Assessment Screening Report

for proposed

Serviced Sites at Castlepollard

in accordance with the requirements of Article 6(3) of the EU Habitats Directive

by

CAAS Ltd

for

Westmeath County Council

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CAAS Ltd, 2nd Floor, the Courtyard, 25 Great Strand Street, Dublin 1

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	Author/Reviewer	Date
Prepared by	Callum O'Regan	Various dates to 28 September 2023
Reviewed by	Karen Dylan Shevlin	09 October 2023
	Paul Fingleton	06 October 2023
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1. Introduction

1.1. Background

CAAS has been appointed by Westmeath County Council (the competent authority) to prepare this Appropriate Assessment Screening Report (AASR) for a proposed development of Serviced Sites at Castlepollard (the proposed development). AA is a procedure carried out in accordance with the requirements of Article 6(3) of Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (as amended) (hereafter referred to as the "Habitats Directive"). This AASR has been prepared to assist the competent authority in assessing whether or not the proposed development will be subject to a *Stage Two* Appropriate Assessment.

1.2. Report structure

This report sets out the legislative context for the assessment process with reference to relevant guidelines and highlight the experience and qualifications of the author (See Appendix V for author qualifications). It then details the proposed development and the works associated with this which are then interrogated to identify any possible effects which may be ecologically relevant for European sites. Following this, the metrics for the assessment of 'significance' of these effects are explained and applied to each of the European sites with ecological connectivity to the proposed development area. This assessment is undertaken in view of the conservation objectives and known sensitivities of the qualifying interests and special conservation interests for each European site. Other plans and projects are then considered to identify any likely in-combination effects which may result in the likelihood of potential significant effects on European sites.

1.3. Legislative context

The Habitats Directive provides legal protection for habitats and species of European importance. The overall aim of the Habitats Directive is to maintain or restore the "favourable conservation status" of habitats and species of European Community Interest. These habitats and species are listed in the Habitats and Birds Directives (Habitats Directive as above and Directive 2009/147/EC on the conservation of wild birds) with Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) designated to afford protection to the most vulnerable among them. These two designations are collectively known and referred to as European sites. Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to affect such sites. Article 6(3) establishes the requirement for AA. These requirements are implemented in the Republic of Ireland by the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended) and the Planning and Development Act 2000 (as amended).

Article 6(3) of the Habitats Directive States:

> *'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'.*

The AA process relates to the protection of species listed in Annex I and Annex II of the Habitats Directive which form the Natura 2000 network (Article 3(1)). Species breeding and resting places of species listed in Annex IV of the Habitats Directive are nationally protected in Ireland as per Articles 15 and 16 of the Habitats Directive. The actual species listed in Annex IV do not form part of the Natura 2000 network as they are not mentioned in Article 3(1) of the Directive which defines the Natura 2000 network.

Article 3(1) of the Habitats Directive States:

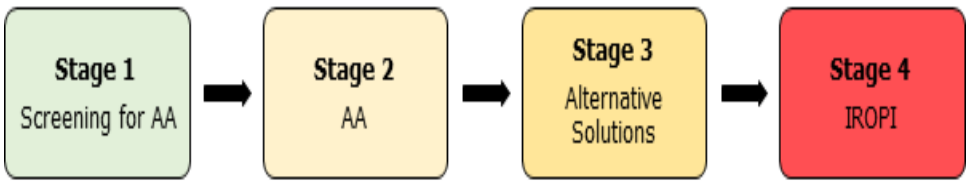
> *'A coherent European ecological network of special areas of conservation shall be set up under the title Natura 2000. This network, composed of sites hosting the natural habitat types listed in Annex I and habitats of the species listed in Annex II, shall enable the natural habitat types and the species' habitats concerned to be maintained or, where appropriate, restored at a favourable conservation status in their natural range'.*

AA is an assessment of the likely potential significant effects arising from a plan or project, either individually or in combination with other plans or projects, to assess if the plan or project will have potential for significant effect on any European site concerned, and implications in view of the European site's conservation objectives. These sites consist of SACs and SPAs and provide for the protection and long-term survival of Europe's most valuable and threatened species and habitats. Where a formal consent process applies, the AA process is concluded by the relevant competent authority making a determination in accordance with article 6(3) of the Habitats Directive.

1.4. Overview of the Habitats Directive and Appropriate Assessment process

The Habitats Directive itself promotes a hierarchy of avoidance, mitigation and compensatory measures. This approach aims to avoid any effects on European sites by identifying possible effects early in the plan or project making process and avoiding such effects. Second, the approach involves the application of mitigation measures, if necessary, during the AA process to the point where no adverse impacts on the site(s) remain. If potential significant effects on European sites remain, and no further practicable mitigation is possible, the approach requires the consideration of alternative solutions. If no alternative solutions are identified and the plan or project is required for imperative reasons of overriding public interest, then compensation measures are required for any remaining adverse effects.

There are four main stages in the AA process:



Stage One: Appropriate Assessment Screening

The process that identifies the likely impacts upon a European site of a project or plan, either alone or in combination with other projects or plans and considers whether these impacts are likely to be significant.

Stage Two: Appropriate Assessment (AA)
The consideration of the impact on the integrity of the European 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 effects mitigation measures are required to avoid or minimise potential effects. The details of these mitigation measures are then assessed in the context of the ecological integrity of the plan/project characteristics to ensure no significant adverse effects on European sites. If this assessment process shows there are no residual significant effects, then the process may end at this stage, stage two, of the AA process which are formalised in Natura Impact Statements (NIS) reports which support the overall AA process. However, if the likelihood of significant impacts remains, then the process must proceed to Stage Three.

Stage Three: Assessment of Alternative Solutions
The process that examines alternative ways of achieving the objectives of the project or plan that avoids adverse impacts on the integrity of the European site.

Stage Four: Imperative Reasons of Overriding Public Interest (IROPI)
An assessment of compensatory measures, where no alternative solutions exist and where adverse impacts remain, but in the light of an assessment of IROPI, it is deemed that the project or plan should proceed.

1.5. Approach

This AA screening report is based on best scientific knowledge and has utilised ecological expertise, and is supported by desktop research on national databases including the National Biodiversity Data Centre[1]; the NPWS[2] (including mapping and available reports for relevant sites, and in particular the qualifying interests/special conservation interests described and their conservation objectives); the EPA[3] mapping websites; data collected for the most recent Article 12 and 17 conservation status reporting cycle, 2019; and, *The Status of Protected EU Habitats and Species in Ireland* report (NPWS, 2019).

The ecological desktop study that has been completed for the AA screening of the proposed development, comprised the following elements:

- Identification of European sites within 15 km[4] of the subject lands;
- Identification of European sites pathways for effects from the site have been identified (if relevant[5]) greater than 15 km from the subject lands;
- Review of the NPWS site synopses and conservation objectives for European sites within 15 km and for which potential pathways from the proposed development area have been identified; and

[1] Available at: https://maps.biodiversityireland.ie/
[2] Available at: https://www.npws.ie/protected-sites and https://dahg.maps.arcgis.com/apps/webappviewer/index.html?id=8f7060450de3485fa1c1085536d477ba
[3] Available at: https://gis.epa.ie/EPAMaps/
[4] While the actual zone of influence is likely to be much smaller, the default 15km zone extent has been applied on a precautionary basis further detail on this is identified in section 3.2
[5] This is particularly relevant for all sites with hydrological connectivity or other significant ecological pathways

- Examination of available information on protected species.

Source-Pathway-Receptor model

Ecological impact assessment of potential effects on European sites is conducted following a standard source-pathway-receptor model, where, in order for an effect to be established, all three elements of this mechanism must be in place. The absence or removal of one of the elements of the mechanism is sufficient to conclude that a potential effect is not of any relevance or significance.

- Source(s) – e.g., pollutant run-off from proposed development;
- Pathway(s) – e.g., groundwater connecting to nearby qualifying wetland habitats; and,
- Receptor(s) – qualifying aquatic habitats and species of European sites.

In the context of this report, a receptor is an ecological feature that is known to be utilised by the qualifying interests or special conservation interests of a European site. A source is any identifiable element of the Proposed development that is known to interact with ecological processes. A pathway is any connection or link between the source and the receptor[6].

This report provides information on whether direct, indirect and cumulative potential significant effects could arise from the proposed development.

Guidance

The AA screening has been prepared taking into account the relevant legislation (ref s1.3) and guidance, including:

- *Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities, Department of the Environment, Heritage and Local Government, 2009;*
- *Commission Notice: Managing Natura 2000 sites - The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC", European Commission 2018;*
- *Assessment of plans and projects in relation to Natura 2000 sites – Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, European Commission Notice, Journal of the European Union, 2021;*
- *Practice Note PN01: Appropriate Assessment Screening for Development Management, Office of the Planning Regulator, 2021*

[6] qualifying interest or special conservation interests of the European site in question and the known sensitivities of these key ecological receptors

2. Description of Proposed Development

2.1. Receiving environment overview

The proposed development is located on the southern outskirts of Castlepollard town, County Westmeath (Figure 2.1). A site visit was conducted by an ecologist on September 4th 2023 to assess the potential of the site for ex-situ foraging potential and hydrological connectivity. The proposed development site consists of agricultural grassland habitat that has been intensively grazed for agriculture long term, and is still utilised as such. The site is heavily poached (i.e., trampled by continual use of large farm animals) and is almost continually occupied by large grazing farm animals (cattle) (Figure 2.1). The proposed development site is directly boarded by residential dwellings to the west and north-west, wire and post fencing only along the south of the site, and is directly adjacent to the R395 Dublin Road along the entire eastern and north-eastern boundary of the site.

In the wider context, the proposed site is surrounded by a number of residential areas, with the town of Castlepollard located to the north, and significant areas of agricultural landscape, which extend to the south, east and west of the proposed development (Figure 2.1 and Figure 2.2). In consulting satellite imagery and the EPA databases on water courses[7], there are no surface water courses adjacent to the site; the closest water course lies approximately 120 m to the south of the proposed development (Figure 2.2). The proposed development site has no direct surface hydrological connection with any surface water course in the surrounding landscape[7].

2.2. The proposed development

The proposed development site is 1.022 Ha (Figure 2.1), and consists of site development and enabling works for the construction of 9 Serviced Sites located at Deerpark, Castlepollard, Co. Westmeath. The proposed development site is zoned for "Purposed Residential" in the Westmeath County Development Plan 2021-2027[8]. The purpose of the construction of 9 Serviced Sites is to increase the accessibility of private, residential housing for the local area, and so, each of the 9 Serviced Sites will become private residential dwellings for the local areas in the coming 2-3 years, as part of the Irish Government's "Ready to Build Scheme (Services Sites for New Homes)". Each site will then be subject to its own planning permission application for the design, landscaping, construction and operation of the residential home.

The proposed development involves stripping an area of the site which will then be split into 9 separate sites, with areas of retained grassland also (Figure 2.3). Each of the 9 sites shall have the following services installed as part of the proposed development:

- an access point;
- a mains water connection;
- a foul sewer to WWTP (wastewater treatment plant) connection; and
- an electricity mains connection.

All removed earth as a result of the proposed development will be retained on site in order to level the site as required. The proposed development site has existing foul sewer and surface water drainage infrastructure running through the site (due to the existing surrounding residential

[7] Accessed at: https://gis.epa.ie/EPAMaps/ 28th September 2023

[8] Westmeath County Development Plan 2021-2027 land use zoning mapping tool available here.

developments), which the proposed services above will connect to. Each of the 9 sites proposed will be partly soft standing area and will be able to attenuate their own surface water, however, an attenuation tank is also proposed for the site as a whole, for surface run off from the installed access routes and any secondary run off from the proposed 9 sites. It was deemed by the Local Authority that a Flood Risk Assessment is not required for the proposed development.

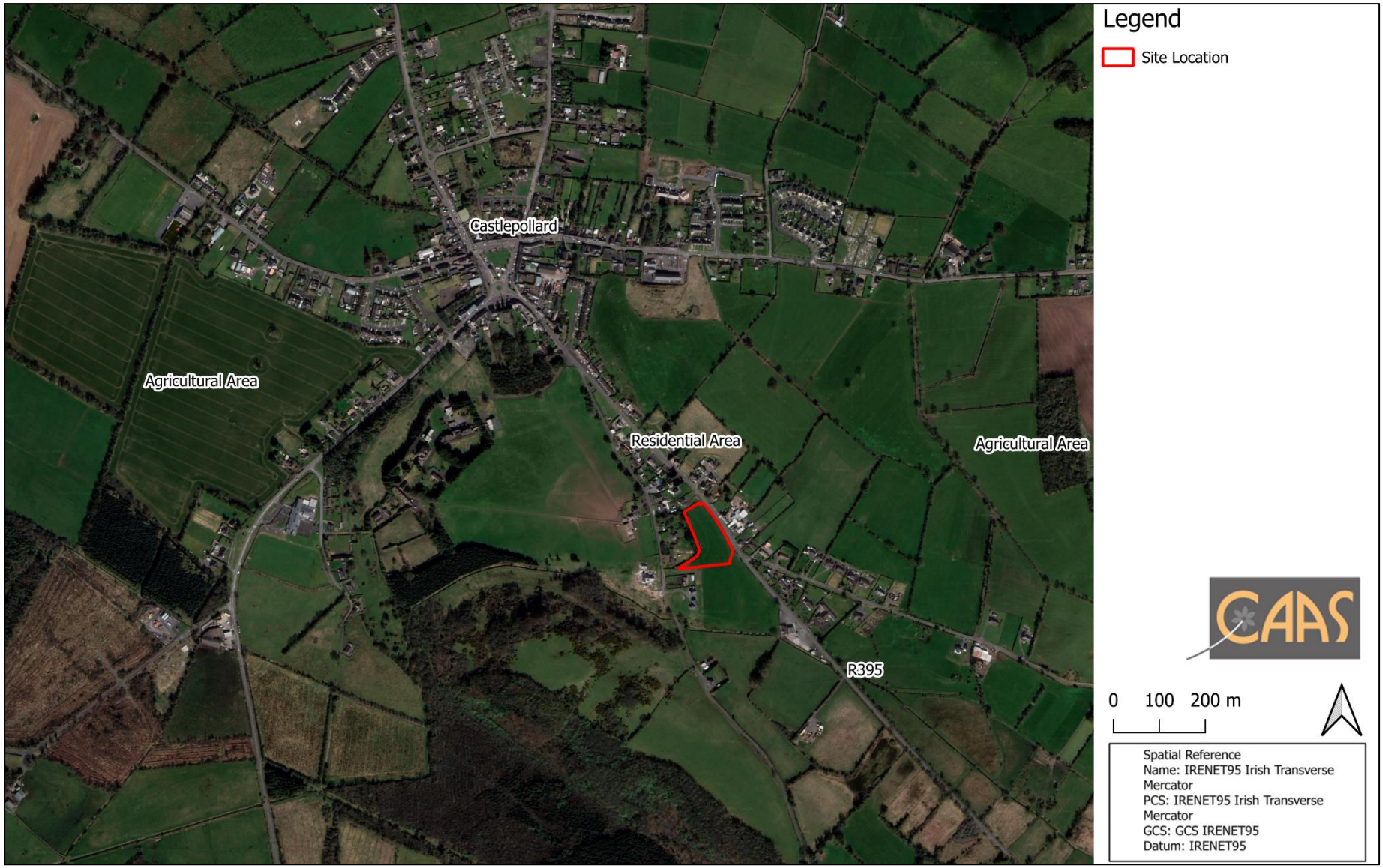


Figure 2.1. Location of the proposed development site

Figure 2.2. Location of EPA rivers relative to the proposed development site

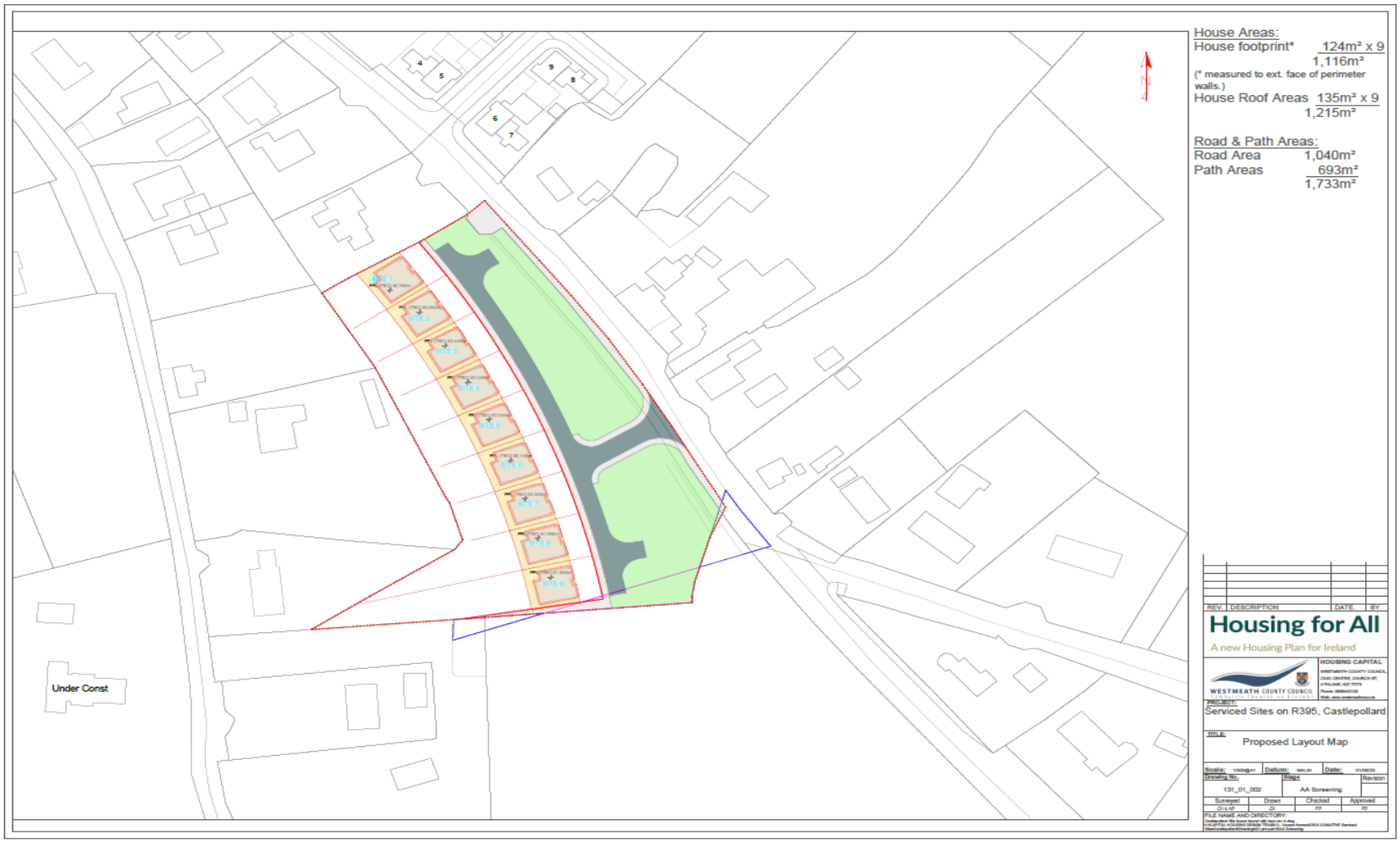


Figure 2.3. Plan of proposed development[9]

[9] Source: Westmeath County Council (See accompanying drawing set for full scaled versions of all drawings)

3. Screening for Appropriate Assessment

3.1. Introduction

This stage of the process identifies any likely significant effects on European sites arising from the project, either alone or in combination with other projects or plans. A series of questions are asked in order to determine:

- Whether a plan or project can be excluded from AA requirements because it is directly connected with or necessary to the management of a European site.
- Whether the project will have a potentially significant effect on a European site, either alone or in combination with other projects or plans, in view of the site's conservation objectives or if residual uncertainty exists regarding potential impacts.

An important element of the AA process is the identification of the "'Conservation Objectives", "Qualifying Interests" (Qis) and/or "Special Conservation Interests" (SCIs) of European sites requiring assessment. Qis are the habitat features and species listed in Annexes I and II of the Habitats Directive for which each Special Area of Conservation (SAC) has been designated and afforded protection under the Habitats Directive. SCIs are bird species listed within Annexes I and II of the Birds Directive for which each Special Protection Area (SPA) has been designated and afforded protection under the Habitats Directive. Under the requirements of the Habitats Directive, the threats and pressures on the ecological / environmental conditions that are required to support QIs and SCIs, with specific regard to the Conservation Objectives of each site, are considered as part of the assessment.

Site-Specific Conservation Objectives (SSCOs) have been designed to define favourable conservation status for a particular habitat or species at that site. According to the European Commission interpretation document 'Managing Natura 2000 sites: The provisions of Article 6 of the Habitats Directive 92/43/EEC', paragraph 4.6(3):

> *"The integrity of a site involves its ecological functions. The decision as to whether it is adversely affected should focus on and be limited to the site's conservation objectives."*

Favourable conservation status of a habitat is achieved when:

- Its natural range, and area it covers within that range, are 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; and
- The conservation status of its typical species is favourable.

The favourable conservation status of a species is achieved when:

- 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; and
- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

3.2. Identification of relevant European sites

The Zone of Influence (ZoI) is defined in the relevant guidance[10,11] as the geographical area, relative to the proposed development, over which the proposed development could have effects on the ecological receiving environment in a way that could result in potential significant effects on the Qualifying Interests or Special Conservation Interests of a given European site.

The Department of Environment, Heritage and Local Government (2009) Guidance on Appropriate Assessment (AA) recommends that a search zone of up to 15 km be considered for AA for Plans and acknowledges that this search zone could be much less for the AA of projects. As an initial search zone, this 15 km zone was applied for this assessment. Beyond 15 km, potential effects arising from the proposed development across terrestrial pathways (i.e., non-hydrological) at this scale are not identified to have any potential to cause significant effects due to the scale of the proposed development and the distances involved. However, further considerations were given to hydrological pathways (i.e., surface and/or groundwater) connecting the proposed development to European sites, as these may extend beyond the 15 km search zone.

Within the initial 15 km search zone, the ZOI was then established based on the nature of the proposed development and connectivity to European sites, their sensitivities, and Qualifying Interests (species and habitats designated for SACs) and Special Conservation Interests (species designated for SPAs). An assessment of the sources of effects (see Section 3.3 below) identifies that there are no significant direct or indirect hydrological pathways, or tributaries / connections to SACs or SPAs.

European sites that are designated for SCI species that are known to utilise (i.e., forage and or roost) isolated / ex-situ resources across the landscape (i.e., outside of the designated SPA boundary) could intersect with the zone of influence for the proposed development, and the proposed development site is considered in this context during the assessment report.

Therefore, considering the nature of the proposed development, the small size of the proposed site and the minor nature of the proposed work, in the context of the current site use and the surrounding area; any potential effects arising from the proposed development are likely to be within a localised ZOI of 200 m for the proposed development.

European sites that occur within the 15 km initial search zone, or that have been identified to have ecological connectivity pathways (e.g., hydrological) with the proposed development, or have been identified as having designated species which may utilise recourses contained within the proposed development area, are listed and analysed in Table 3.1.

In order to determine the potential effects of the proposal, information on the qualifying features, known vulnerabilities and threats pertaining to any potentially affected European sites has been reviewed. Background information on threats to individual sites and vulnerability of habitats and species that was used during this assessment included the following:

- Ireland's Article 17 Report to the European Commission *"Status of EU Protected Habitats*

[10] *Practice Note PN01: Appropriate Assessment Screening for Development Management, Office of the Planning Regulator, 2021.*

[11] CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.2. Chartered Institute of Ecology and Environmental Management, Winchester.

and Species in Ireland" (NPWS, 2019);

- Ireland's Article 12 Report to the European Commission *"Bird species' status and trends reporting format for the period 2008-2012-"* (NPWS, 2012)
- Site Synopses[12]; and
- NATURA 2000 Standard Data Forms[12].

The analysis in Table 3.1 considers the SSCOs of each of the sites within the 15 km initial search zone, and the 200 m ZOI, and any additionally connected sites. Since the Conservation Objectives for the European sites focus on maintaining the favourable conservation condition of the QIs/SCIs of each site, the screening process has concentrated on assessing the potential effects of the proposed development against the QIs/SCIs of each site and their Conservation Objectives.

[12] NPWS (2019); NPWS Database of protected site data and associated documents for each European site; available at https://www.npws.ie/protected-sites: last accessed 26th October 2022

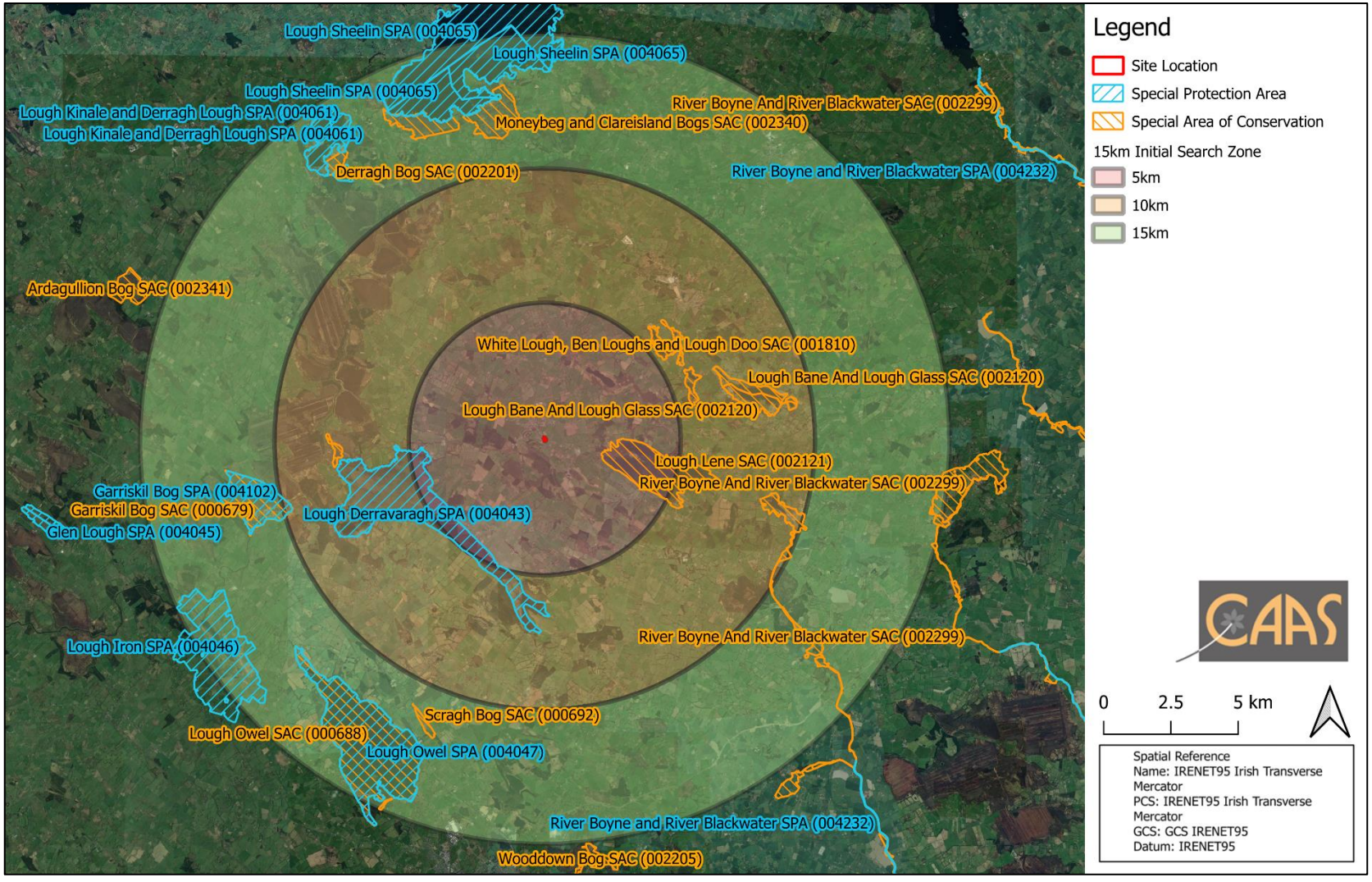


Figure 3.1. European sites within 15km of the proposed development boundary[13]

[13] Source: NPWS (datasets downloaded 25th September 2023)

3.3. Assessment criteria

3.3.1. Is the development necessary to the management of European sites?

Under the Habitats Directive, projects that are directly connected with or necessary to the management of a European site do not require AA. For this exception to apply, management is required to be interpreted narrowly as nature conservation management in the sense of Article 6(1) of the Habitats Directive. This refers to specific measures to address the ecological requirements of annexed habitats and species (and their habitats) present on a site(s). The relationship should be shown to be direct and not a by-product of the project, even if this might result in positive or beneficial effects for a site(s).

The primary purpose of the proposed development is not the nature conservation management of the site, but to construct 9 Serviced Sites at Castlepollard, and all associated site works. Therefore, in the context of the Habitats Directive, the proposed development would not be considered by the Habitats Directive to be directly connected with or necessary to the management of European designated sites.

3.4. Characterising potential significant effects

This section details the parameters utilised by this AASR when assessing potential effects[14].

- **Direct and Indirect Impacts** - An impact can be caused either as a direct or as an indirect consequence of a Plan/Project.
- **Magnitude** - Magnitude measures the size of an impact, which is described as high, medium, low, very low or negligible.
- **Extent** - The area over that the impact occurs – this should be predicted in a quantified manner.
- **Duration** - The time that the effect is expected to last prior to recovery or replacement of the resource or feature.
  - Temporary: Up to 1 Year;
  - Short Term: The effects would take 1-7 years to be mitigated;
  - Medium Term: The effects would take 7-15 years to be mitigated;
  - Long Term: The effects would take 15-60 years to be mitigated; and
  - Permanent: The effects would take 60OR years to be mitigated.
- **Likelihood** – The probability of the effect occurring taking into account all available information.
  - Certain/Near Certain: >95% chance of occurring as predicted;
  - Probable: 50-95% chance as occurring as predicted;
  - Unlikely: 5-50% chance as occurring as predicted; and
  - Extremely Unlikely: <5% chance as occurring as predicted.

The Chartered Institute of Ecology and Environmental Management (CIEEM) guidelines for ecological impact assessment (2016) define: an ecologically significant impact as an impact (negative or

[14] Parameters used have been adapted from the following guidance documents on the conduction Appropriate Assessments and Ecological Impact Assessments:

- Department of the Environment, Heritage and Local Government (2009) Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities
- CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.2. Chartered Institute of Ecology and Environmental Management, Winchester; and,

positive) on the integrity of a defined site or ecosystem and/or the conservation status of habitats or species within a given geographic area; and the integrity of a site as the coherence of its ecological structure and function, across its whole area, which enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified.

The Habitats Directive requires the focus of the assessment at this stage to be on the integrity of the site as indicated by its Conservation Objectives. It is an aim of NPWS to draw up conservation management plans for all areas designated for nature conservation. These plans will, among other things, set clear objectives for the conservation of the features of interest within a site.

SSCOs have been prepared for a number of European sites. These detailed SSCOs aim to define favourable conservation condition for the qualifying habitats and species at that site by setting targets for appropriate attributes which define the character habitat. The maintenance of the favourable condition for these habitats and species at the site level will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

> **Favourable conservation status** of a **species** can be described as being achieved when: '*population data on the species concerned indicate that it is maintaining itself, and the natural range of the species is neither being reduced or likely to be reduced for the foreseeable future, and there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.*'
>
> **Favourable conservation status** of a **habitat** can be described as being achieved when: '*its natural range, and area it covers within that range, is stable or increasing, and the ecological factors that are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and the conservation status of its typical species is favourable*'.

First Order Site-specific Conservation Objectives are designated by the NPWS for a number of European sites that SSCOs have yet to be prepared for.

A First Order Site-specific Conservation Objective for a SAC is provided below:

- To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.

A First Order Site-specific Conservation Objective for a SPA is provided below:

- To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for the SPA.

3.4.1. Types of potential effects

EC guidance[15] outlines the types of effects that may affect European sites. These include effects from the following activities:

- Land take

[15] 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 Environment DG, 2001

- Resource requirements (drinking water abstraction etc.)
- Emissions (disposal to land, water or air)
- Excavation requirements (removal of soil and vegetation)
- Transportation requirements
- Duration of construction, operation, decommissioning

The 2001 European Commission AA guidance outlines the following potential changes that may occur at a designated site, which may result in effects on the Conservation Objectives of that site:

- Reduction of habitat area
- Disturbance to key species
- Habitat or species fragmentation
- Reduction in species density
- Changes in key indicators of conservation value (water quality etc.)
- Climate change

The elements detailed above were considered within the context of the European sites identified in this AASR (Table 3.1 and Figure 3.1) below.

Loss/reduction of habitat area

There are no European sites present within the proposed development boundary (The closest European site to the proposed development site is, Lough Lene SAC (002121), at 2.11 km from the proposed development site). No Annex I habitats or supporting habitat for Annex II species were identified within the proposed development boundary[16]. There are also no sources for potential significant effects via indirect surface water drainage or direct hydrological connectivity to European sites as a result of the proposed development considering the nature of the proposed development (s2.2), the distance to European sites, and the lack of hydrological connectivity (S2.1 and Figure 2.2). Therefore, there are no sources with a likelihood for potential significant effects posed to European sites in this regard.

Habitat or species fragmentation

The proposed development site itself is composed of an existing agricultural grassland habitat (of 1.022 Ha in size) that, depending on management, could have value as ex-situ foraging habitat for SCI species, and there will be a permanent loss of this existing agricultural grassland as a result of the majority of the existing grassland as a result of the proposed development.

However, a site visit that was conducted by an ecologist on September 4th 2023 to assess the potential of the site for ex-situ foraging potential, found that the grassland habitat of the site itself is significantly damaged, evidenced from continual heavy poaching of the site by herds of cattle for grazing over the winter months, and through the spring and summer seasons. As a result, the proposed development site is of low value for ex-situ foraging of SCI species in its current use. In addition, the proposed development site is subject to continual high levels of disturbance as it is directly bordered by the busy R395 Dublin Road along the entire eastern and north-eastern boundary of the site (Figure 2.1).

[16] Consulting current data sets for the proposed development location supplied by the NPWS (https://www.npws.ie/maps-and-data) and the NBDC (https://maps.biodiversityireland.ie/)

Considering these factors, along with the wide availability of alternate ex-situ foraging resources in less disturbed locations for foraging SCI species in the wider surrounding landscape (Figure 2.2), there are no sources with a likelihood for potential significant effects posed to European sites in terms habitat or species fragmentation due to loss of ex-situ foraging habitat for SCI species as a result of the proposed development.

Disturbance to key species

There will be a minor, short-term increase in noise and dust levels during the construction phase, but these will be negligible in terms of potential significant effects in terms of disturbance to key species, due to the small-scale and temporary duration of the construction phase, the location of the proposed development site on the outskirts of an urban centre, and the distance to European sites. The site is over 2.11 km from the nearest SPA which is a sufficient distance to ensure there is no likelihood of significant disturbance effects through noise in the construction phase[17, 18]. The operational phase of the proposed development will not result in any significant increase in noise levels for the location and surrounding areas due to the small-scale nature of the proposed development, and the disturbed nature of the sub-urban and urban areas surrounding the proposed development site.

Disturbance to key species could also occur via disturbance of ex-situ foraging SCI species. A site visit that was conducted by an ecologist on September 4th 2023 to assess the potential of the site for ex-situ foraging potential. It was found that the grassland habitat of the site itself (of 1.022 Ha in size) is significantly damaged, evidenced from continual heavy poaching of the site by herds of cattle for grazing over the winter months, and through the spring and summer seasons. As a result, the proposed development site is of low value for ex-situ foraging of SCI species in its current use. In addition, the proposed development site is subject to continual high levels of disturbance as it is directly bordered by the busy R395 Dublin Road along the entire eastern and north-eastern boundary of the site (Figure 2.1). Therefore, there are no sources for likely significant effects for SCI species in surrounding SPAs via indirect disturbance to ex-situ foraging. In addition, there is a wide availability of suitable alternate ex-situ foraging resources at a landscape scale for SCI species. Therefore, there are no sources with a likelihood for potential significant effects posed to European sites with regard to disturbance to key species.

Reduction in species density

Reduction in species density could also occur via loss of habitat for ex-situ foraging SCI species. The proposed development site itself is composed of an existing agricultural grassland habitat (of 1.022 Ha in size) that, depending on management, could have value for ex-situ foraging SCI species, and there will be a permanent loss the majority of this agricultural grassland as a result of the proposed development. However, a site visit that was conducted by an ecologist on September 4th 2023 to assess the potential of the site for ex-situ foraging potential. It was found that the grassland habitat of the site itself is significantly damaged, evidenced from continual heavy poaching of the site by herds of cattle for grazing over the winter months, and through the spring and summer seasons. As a

[17] Ruddock, M. and Whitfield, D.P., 2007. A review of disturbance distances in selected bird species. A report from Natural Research (Projects) Ltd to Scottish Natural Heritage, 181.

[18] Bright, J.A., Langston, R. and Anthony, S., 2009. Mapped and written guidance in relation to birds and onshore wind energy development in England. Sandy: RSPB.

result, the proposed development site is of low value for ex-situ foraging of SCI species in its current use. In addition, the proposed development site is subject to continual high levels of disturbance as it is directly bordered by the busy R395 Dublin Road along the entire eastern and north-eastern boundary of the site (Figure 2.1). Therefore, there are no sources for likely significant effects for SCI species in surrounding SPAs via the loss of potential ex-situ foraging habitat. In addition, there is a wide availability of suitable alternate ex-situ foraging resources at a landscape scale for SCI species. There will also be no direct loss of SAC or SPA habitat as a result of the proposed development.

The nearest water course[19] is approximately 120 m to the south of the proposed development, which has no direct surface connectivity to the proposed development site, and therefore, there is no direct surface hydrological connection between the proposed development and this water course. There will be a change in hard surfaced area as a result of the proposed development, which can cause a slight increase of surface water run-off, however, due to the scale and nature of the proposed development, any changes introduced to potential surface water run-off area will be negligible. An attenuation tank is proposed for the operational phase of the proposed development, however, this is not a prescribed measures for the purposed of AA, but rather site management, as the proposed development does not introduce any sources for potential significant effect via hydrological direct or indirect connectivity due to the small nature of the development, the distance to European sites, and the lack of connectivity to European sites. The proposed development will install new gullies to connect surface area to the existing underground surface water drainage infrastructure that runs through the site. It is not envisioned that the change in surface to hard area as a result of the proposed development will result in any change that could significantly increase the amount of surface water runoff in the construction and operational phase. The operational phase of the proposed development will also create new connections with the existing foul sewer infrastructure which is running through the site. It has been confirmed by the Local Authority that there will be sufficient capacity in a local WWTP to accommodate the number of residents envisioned for each of the planned for the Services Sites when they are constructed (after each undergoing individual planning applications) at a later stage. Therefore, there are no sources with a likelihood for significant effects posed to European sites with regard to Reduction in species density.

Changes of indicators of conservation value

Water quality is an important indicator for the Conservation Objectives of many European sites. There is no direct surface hydrological connection between the proposed development and any surface water courses. The nearest water course[20] is approximately 120 m to the south of the proposed development, which has no direct surface connectivity to the proposed development site, and therefore, there is no direct surface hydrological connection between the proposed development and this water course. There will be a change in hard surfaced area as a result of the proposed development, which can cause a slight increase of surface water run-off, however, due to the scale and nature of the proposed development, any changes introduced to potential surface water run-off area will be negligible. An attenuation tank is proposed for the operational phase of the proposed development, however, this is not a prescribed measures for the purposed of AA, but rather site management, as the proposed development does not introduce any sources for potential significant effect via hydrological direct or indirect connectivity due to the small nature of the development, the distance to European sites, and the lack of connectivity to European sites. The

[19] Accessed at: https://gis.epa.ie/EPAMaps/ 27th September 2023

[20] Accessed at: https://gis.epa.ie/EPAMaps/ 27th September 2023

proposed development will install new gullies to connect surface area to the existing underground surface water drainage infrastructure that runs through the site. It is not envisioned that the change in surface to hard area as a result of the proposed development will result in any change that could significantly increase the amount of surface water runoff in the construction and operational phase. The operational phase of the proposed development will also create new connections with the existing foul sewer infrastructure which is running through the site. It has been confirmed by the Local Authority that there will be sufficient capacity in a local WWTP to accommodate the number of residents envisioned for each of the planned for the Services Sites when they are constructed (after each undergoing individual planning applications) at a later stage. Therefore, there are no sources with pathways for potential significant effects that may affect conservation indicators of European sites, such as water quality.

Climate change

The proposed development will result in a slight increase in greenhouse gas emissions during the construction phase, which will be localised and temporary. There will be a slight increase in emissions form the operational phase of the proposed development due to the nature of the proposed development. However, given the small scale and temporary timeline of the proposed development's construction phase, the small nature of the operational phase in the context of the town of Castlepollard, the emissions from the construction and operational phases are determined to be of such a minor scale that they will not affect changes projected to arise from climate change to the degree that it would affect the QIs or SCIs of the European sites considered.

3.5. Identification of likely significant effects of the proposed development

This part of the screening assessment process identifies whether the changes brought about by the proposed development may introduce sources with pathways for introducing direct, indirect or secondary potential effects (either alone or in combination with other plans or projects) on the European sites considered in this report, in the absence of any controls, conditions, or mitigation measures (as required for an AASR). A number of factors have been taken into account including the sites' conservation objectives and known threats. Certain standardised metrics are utilised in this AASR to describe and assess the likely significant effects, thus standardising the assessment process across all plans and projects. These metrics are described, alongside the guidelines used in compiling them, in section 3.4 above.

The overall aim of the AASR is to predict the potential effects that can be reasonably foreseen to have a likelihood of causing potential significant effects on European sites as a result of the implementation of the proposed development.

The construction and operational phase elements of the proposed development with potential to introduce sources for effects on ecological processes are identified below. These will be discussed and considered below and in Table 3.1 for a likelihood of potential significant effects in view of the Special Conservation Interests, and Qualifying Interests of the European sites, and their sensitivities, and Qualifying Interests. Subsequently it will be stated whether or not likely significant effects have been identified as a result of the proposed development.

Construction phase potential effects

The construction phase will be localised, small-scale and temporary. Sources for potential effects that have been identified from the construction phase of the proposed development are:

- Disturbance effects through noise;
- Dust; and
- Surface water run-off.

Each of these potential effects are discussed below in the context of the proposed site, the surrounding landscape, the sensitivities of and pathways to European sites, and the likelihood of significant effects arising from these potential effects.

Disturbance effects through noise

Considering the distance from European sites, the construction phase of the proposed development has sources for potential for effects for disturbance through noise to ex-situ foraging SCI species only. However, the noise disturbance during the construction phase will be temporary (i.e., less than one year), small in size, and localised. SCI species are sensitive to disturbance effects; in general distances beyond 2 km are seen to be sufficient to preclude such effects[21,22]. These distances can vary due to factors such as species and/or time of year[23,24]. Given that the closest SPA is the Lough Derravaragh SPA, at 4.23 km from the proposed development, it is deemed that this is sufficient distance to ensure that there are no sources that have pathways for likely significant effects via construction phase noise disturbance during the construction phase of the proposed development.

Dust

There will be an increase in dust emissions during the construction phase of the proposed development only. The operational phase will not introduce any sources for effects in this regard due to its nature as a serviced site development. However, given the distances between the proposed development site and the closest European sites of 2.11 km; the small scale of the proposed development; and, the temporary nature of the construction phase it is deemed that there are no sources that have pathways for likely significant effects via construction related dust as a result of the proposed development.

Surface water run-off

The nearest water course[25] is approximately 120 m to the south of the proposed development, which has no direct surface connectivity to the proposed development site, and therefore, there is no direct surface hydrological connection between the proposed development and this water course. There is however indirect connectivity via surface water runoff to the surrounding landscape. There will be a change in hard surfaced area as a result of the proposed development, which can cause a slight increase of surface water run-off, however, due to the scale and nature of the proposed development, any changes introduced to potential surface water run-off area will be

[21] Rudock, M. and Whitfield, D.P., 2007. A review of disturbance distances in selected bird species. A report from Natural Research (Projects) Ltd to Scottish Natural Heritage, 181.

[22] Bright, J.A., Langston, R. and Anthony, S., 2009. Mapped and written guidance in relation to birds and onshore wind energy development in England. Sandy: RSPB.

[23] Bötsch, Y., Tablado, Z. and Jenni, L., 2017. Experimental evidence of human recreational disturbance effects on bird-territory establishment. Proceedings of the Royal Society B: Biological Sciences, 284(1858), p.20170846.

[24] Goss-Custard, J.D., Hoppe, C.H., Hood, M.J. and Stillman, R.A., 2020. Disturbance does not have a significant impact on waders in an estuary close to conurbations: importance of overlap between birds and people in time and space. Ibis, 162(3), pp.845-862.

[25] Accessed at: https://gis.epa.ie/EPAMaps/ 27th September 2023

negligible. An attenuation tank is proposed for the operational phase of the proposed development, however, this is not a prescribed measures for the purposed of AA, but rather site management, as the proposed development does not introduce any sources for potential significant effect via hydrological direct or indirect connectivity due to the small nature of the development, the distance to European sites, and the lack of connectivity to European sites.

The proposed development will install new gullies to connect surface area to the existing underground surface water drainage infrastructure that runs through the site. It is not envisioned that the change in surface to hard area as a result of the proposed development will result in any change that could significantly increase the amount of surface water runoff in the construction and operational phase.

Operational phase potential effects

The operational phase will be localised, small-scale and permanent. Potential effects identified from the operational phase of the proposed development are:

- Loss of habitat (agricultural grassland);
- Water quality (via surface water runoff and foul sewer capacity)

Each of these potential effects are discussed below in the context of the proposed site, the surrounding landscape, the sensitivities of and pathways to European sites, and the likelihood of significant effects arising from these potential effects.

Loss of habitat

The proposed development site itself is composed of an existing agricultural grassland habitat (of 1.022 Ha in size) that, depending on management, could have value for ex-situ foraging SCI species, and there will be a permanent loss the majority of this agricultural grassland as a result of the proposed development. However, the grassland habitat of the site itself is significantly damaged, evidenced from continual heavy poaching of the site by herds of cattle for grazing over the winter months, and through the spring and summer seasons. As a result, the proposed development site is of low value for ex-situ foraging of SCI species in its current use. In addition, the proposed development site is subject to continual high levels of disturbance as it is directly bordered by the busy R395 Dublin Road along the entire eastern and north-eastern boundary of the site (Figure 2.1), there is a wide availability of suitable alternate ex-situ foraging resources at a landscape scale for SCI species. Therefore, it is deemed that there are no sources with pathways for likely significant effects via habitat loss.

Water quality

The nearest water course[26] is approximately 120 m to the south of the proposed development, which has no direct surface connectivity to the proposed development site, and therefore, there is no direct surface hydrological connection between the proposed development and this water course (Figure 2.2). There will be a change in hard surfaced area as a result of the proposed development, which can cause a slight increase of surface water run-off, however, due to the scale and nature of the proposed development, any changes introduced to potential surface water run-off area will be negligible in terms of European sites. An attenuation tank is proposed for the operational phase of the proposed development, however, this is not a prescribed measures for the purposed of AA, but

[26] Accessed at: https://gis.epa.ie/EPAMaps/ 27th September 2023

rather site management, as the proposed development does not introduce any sources for potential significant effect via hydrological direct or indirect connectivity due to the small nature of the development, the distance to European sites, and the lack of connectivity to European sites. The proposed development will install new gullies to connect surface area to the existing underground surface water drainage infrastructure that runs through the site. It is not envisioned that the change in surface to hard area as a result of the proposed development will result in any change that could significantly increase the amount of surface water runoff in the construction and operational phase.

The operational phase of the proposed development will also create new connections with the existing foul sewer infrastructure which is running through the site. It has been confirmed by the Local Authority that there will be sufficient capacity in a local WWTP to accommodate the number of residents envisioned for each of the planned for the Services Sites when they are constructed (after each undergoing individual planning applications) at a later stage.

Therefore, it is deemed that the proposed development does not present a source with pathways for likely significant effects on European sites due to any significant change to surface water and wastewater drainage or hydrological connectivity.

3.5.1. Summary of likely significant effects

Therefore, in summary, for the purposes of this AASR of the proposed development, and considering the precautionary principle[27], the proposed development is identified as having no sources with pathways for likely significant effects from the construction or operational phases of the proposed development.

The identified potential effects above are also considered and discussed in section 3.6 and Table 3.1 below, in the context of each of the European sites identified by this assessment report, in view of each of their sensitivities (i.e., threats and pressures) and their Conservation Objectives.

3.6. Screening of European sites

This section of the report concerns the final stage of the screening process. Information has been collected and is presented on the sensitivity of each relevant European site (ref 3.2), and potential effects on each European site resulting from the proposed development have been identified (in s3.5 which assumed the absence of any controls, conditions, or mitigation measures, as required in AA screening). In determining the likelihood for significant effects on European sites as a result of the proposed development, a number of factors have been taken into account. First the sensitivity and reported threats to European sites and second, the individual elements of the of the proposed development and the potential significant effects they may cause on European sites were considered. These factors are analysed per European site considered, in view of each of their sensitivities (i.e., threats and pressures), and their Conservation Objectives, and presented in Table 3.1.

Sites are screened out based on one or a combination of the following criteria:

- where it can be shown that there are no significant pathways such as hydrological links

[27] Case law: (C127/02 Waddenzee).

between activities of the proposed development and a site;

- where a site is located at such a distance from proposed development area that effects are not foreseen; and
- where known threats or vulnerabilities of a site cannot be linked to potential impacts that may arise from the proposed development.

Table 3.1 Screening assessment of the potential effects arising from the proposed development

Site code	Site name	Distance (km)	Qualifying feature[28]	Known threats and pressures	Analysis of potential effects	Likelihood of potential significant effects	Likelihood of potential in-combination effects
002121	Lough Lene SAC	2.11	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140], White-clawed crayfish *(Austro-potamobius pallipes)* [1092]	Abandonment of pastoral systems lack of grazing [A04.03], Fertilisation [A08], Agriculture activities not referred to above [A11], Piers or tourist harbours or recreational piers [D03.01.02], Diffuse pollution to surface waters due to household sewage and waste waters [H01.08], No threats or pressures [X]	Considering the Qualifying Interests and known sensitivities of this European site (detailed in Appendix I of this AASR) in the context of the potential effects identified in S3.5, this SAC is sensitive to hydrological interactions, direct land use management activities and groundwater interactions. The site is 2.11 km from the proposed development. There are no sources for effect for direct land use management to the SAC as this site is outside of the proposed development boundary. Given the nature and scale of the proposed development, the absence of direct hydrological pathways, and sources for likely significant effect via indirect hydrological pathways such as surface water runoff (as discussed in 3.4.1 and s3.5), there is no likelihood for potential significant effects via hydrological interactions. In addition, due to the nature and size of the proposed development, and the significant dilution factor involved, there are no sources for effect via groundwater interactions with this European site. Considering the QIs of this SAC, and given the nature of the proposed development, the distances involved; there are no sources with a likelihood for potential significant effects, and no further assessment is required.	No	No
004043	Lough Derravaragh SPA	4.23	Tufted Duck *(Aythya fuligula)* [A061], Whooper Swan *(Cygnus cygnus)* [A038], Wetland and Waterbirds	Animal breeding [A05.01], Fertilisation [A08], Sylviculture, forestry [B], Leisure fishing [F02.03], Hunting [F03.01]	Considering the Special Conservation Interests and known sensitivities of this European site (detailed in Appendix I of this AASR) in the context of the potential effects identified in S3.5, this SPA is sensitive to hydrological interactions, direct land use management activities and disturbance effects. The site is 4.23 km from the proposed development. There are no sources for effect for direct land use management to the SPA	No	No

[28] Qualifying Feature here represents either Qualifying Interest (in the case of SACs), or Special Conservation Interest (in the case of SPAs)

Site code	Site name	Distance (km)	Qualifying feature[28]	Known threats and pressures	Analysis of potential effects	Likelihood of potential significant effects	Likelihood of potential in-combination effects
			[A999], Pochard *(Aythya ferina)* [A059], Coot *(Fulica atra)* [A125]		as this site is outside of the proposed development boundary. Given the nature and scale of the proposed development, the absence of direct hydrological pathways, and sources for likely significant effect via indirect hydrological pathways such as surface water runoff (as discussed in s3.4.1 and s3.5), there is no likelihood for potential significant effects on this European site via hydrological interactions. SCI species are sensitive to noise disturbance effects; in general distances beyond 2km are seen to be sufficient to preclude such effects[29,30]. These distances can vary due to factors such as species and/or time of year[31,32]. Given the distance between the proposed development area and the SPA there are no pathways for disturbance effects identified in this regard. These SCI species are highly vagile and therefore may utilise ex-situ ecological resources which may have interactions with a proposed development that holds potential habitat for ex-situ foraging. The proposed development site itself is composed of an existing agricultural grassland habitat (of 1.022 Ha in size) that, depending on management, could have value for ex-situ foraging SCI species, and there will be a permanent loss the majority of this agricultural grassland as a result of the proposed development. However, considering the low ecological value of the receiving environment of the proposed development site for ex-situ foraging (as detailed in s3.4.1 and s3.5 above), the high levels of disturbance to the site itself, and the availability of alternate resources, the local scale interactions with ex-situ resources are not likely to present sources with pathways for likely significant effects on the SPA regarding ex-situ foraging for SCI species.		

[29] Ruddock, M. and Whitfield, D.P., 2007. A review of disturbance distances in selected bird species. A report from Natural Research (Projects) Ltd to Scottish Natural Heritage, 181.

[30] Bright, J.A., Langston, R. and Anthony, S., 2009. Mapped and written guidance in relation to birds and onshore wind energy development in England. Sandy: RSPB.

[31] Bötsch, Y., Tablado, Z. and Jenni, L., 2017. Experimental evidence of human recreational disturbance effects on bird-territory establishment. Proceedings of the Royal Society B: Biological Sciences, 284(1858), p.20170846.

[32] Goss-Custard, J.D., Hoppe, C.H., Hood, M.J. and Stillman, R.A., 2020. Disturbance does not have a significant impact on waders in an estuary close to conurbations: importance of overlap between birds and people in time and space. Ibis, 162(3), pp.845

Site code	Site name	Distance (km)	Qualifying feature[28]	Known threats and pressures	Analysis of potential effects	Likelihood of potential significant effects	Likelihood of potential in-combination effects
					Considering the SCIs of this SPA, and given the nature of the proposed development, the distances involved; there are no sources with a likelihood for potential significant effects, and no further assessment is required.		
001810	White Lough, Ben Loughs and Lough Doo SAC	5.19	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140], White-clawed crayfish *(Austropotamobius pallipes)* [1092]	Abandonment of pastoral systems lack of grazing [A04.03], Fertilisation [A08], Agriculture activities not referred to above [A11], Disposal of inert materials [E03.03], Trapping, poisoning, poaching [F03.02.03], Outdoor sports and leisure activities, recreational activities [G01], Landfill, land reclamation and drying out, general [J02.01]	Considering the Qualifying Interests and known sensitivities of this European site (detailed in Appendix I of this AASR) in the context of the potential effects identified in S3.5, this SAC is sensitive to hydrological interactions, direct land use management activities and groundwater interactions. The site is 5.19 km from the proposed development. There are no sources for effect for direct land use management to the SAC as this site is outside of the proposed development boundary. Given the nature and scale of the proposed development, the absence of direct hydrological pathways, and sources for likely significant effect via indirect hydrological pathways such as surface water runoff (as discussed in s3.4.1 and s3.5), there is no likelihood for potential significant effects via hydrological interactions. In addition, due to the nature and size of the proposed development, and the significant dilution factor involved, there are no sources for likely significant effect via groundwater interactions with this European site. Considering the QIs of this SAC, and given the nature of the proposed development, the distances involved; there are no sources with a likelihood for potential significant effects, and no further assessment is required.	No	No
002120	Lough Bane and Lough Glass SAC	6.73	White-clawed crayfish *(Austropotamobius pallipes)* [1092], Hard oligo-mesotrophic waters with	Removal of hedges and copses or scrub [A10.01], Surface water abstractions for public water supply [J02.06.02]	Considering the Qualifying Interests and known sensitivities of this European site (detailed in Appendix I of this AASR) in the context of the potential effects identified in S3.5, this SAC is sensitive to hydrological interactions, direct land use management activities and groundwater interactions. The site is 6.73 km from the proposed development. There are no sources for effect for direct land use management to the SAC	No	No

Site code	Site name	Distance (km)	Qualifying feature[28]	Known threats and pressures	Analysis of potential effects	Likelihood of potential significant effects	Likelihood of potential in-combination effects
			benthic vegetation of Chara spp. [3140]		as this site is outside of the proposed development boundary. Given the nature and scale of the proposed development, the absence of direct hydrological pathways, and sources for likely significant effect via indirect hydrological pathways such as surface water runoff (as discussed in s3.4.1 and s3.5), there is no likelihood for potential significant effects via hydrological interactions. In addition, due to the nature and size of the proposed development, and the significant dilution factor involved, there are no sources for likely significant effect via groundwater interactions with this European site. Considering the QIs of this SAC, and given the nature of the proposed development, the distances involved; there are no sources with a likelihood for potential significant effects, and no further assessment is required.		
000679	Garriskil Bog SAC	7.48	Degraded raised bogs still capable of natural regeneration [7120], Depressions on peat substrates of the Rhynchosporion [7150], Active raised bogs [7110]	Non intensive cattle grazing [A04.02.01], Mechanical removal of peat [C01.03.02], Invasive non-native species [I01], Problematic native species [I02], Burning down [J01.01], Other human induced changes in hydraulic conditions [J02.15]	Considering the Qualifying Interests and known sensitivities of this European site (detailed in Appendix I of this AASR) in the context of the potential effects identified in S3.5, this SAC is sensitive to hydrological interactions, groundwater interactions and direct land use management activities. The site is 7.48 km from the proposed development. There are no sources for effect for direct land use management to the SAC as this site is outside of the proposed development boundary. Given the nature and scale of the proposed development, the absence of direct hydrological pathways, and sources for likely significant effect via indirect hydrological pathways such as surface water runoff (as discussed in s3.4.1 and s3.5), there is no likelihood for potential significant effects via hydrological interactions. In addition, due to the nature and size of the proposed development, and the significant dilution factor involved, there are no sources for likely significant effect via groundwater interactions with this European site. Considering the QIs of this SAC, and given the nature of the	No	No

Site code	Site name	Distance (km)	Qualifying feature[28]	Known threats and pressures	Analysis of potential effects	Likelihood of potential significant effects	Likelihood of potential in-combination effects
					proposed development, the distances involved; there are no sources with a likelihood for potential significant effects, and no further assessment is required.		
002299	River Boyne and River Blackwater SAC	8.26	Alluvial forests with Alnus glutinosa and Fraxinus excelsior *(Alno-Padion, Alnion incanae, Salicion albae)* [91E0], Atlantic salmon *(Salmo salar)* [1106], River lamprey *(Lampetra fluviatilis)* [1099], Alkaline fens [7230], Otter *(Lutra lutra)* [1355]	Cultivation [A01], Mowing or cutting of grassland [A03], Stock feeding [A05.02], Use of biocides, hormones and chemicals [A07], Fertilisation [A08], Removal of hedges and copses or scrub [A10.01], Artificial planting on open ground (non-native trees) [B01.02], Sand and gravel extraction [C01.01], Roads, motorways [D01.02], Bridge, viaduct [D01.05], Other patterns of habitation [E01.04], Industrial or commercial areas [E02], Disposal of industrial waste [E03.02], Other discharges [E03.04], Storage of materials [E05], Outdoor sports and leisure activities, recreational activities [G01], Other sport or leisure complexes [G02.10], Other human intrusions and disturbances [G05], Tree surgery, felling for public safety, removal of roadside trees [G05.06], Pollution to surface waters [Limnic & terrestrial, marine & brackish) [H01], Invasive non-native	Considering the Qualifying Interests and known sensitivities of this European site (detailed in Appendix I of this AASR) in the context of the potential effects identified in S3.5, this SAC is sensitive to direct land use management activities, hydrological interactions and groundwater interactions. The site is 8.26 km from the proposed development. There are no sources for effect for direct land use management to the SAC as this site is outside of the proposed development boundary. Given the nature and scale of the proposed development, the absence of direct hydrological pathways, and sources for likely significant effect via indirect hydrological pathways such as surface water runoff (as discussed in s3.4.1 and s3.5), there is no likelihood for potential significant effects via hydrological interactions. In addition, due to the nature and size of the proposed development, and the significant dilution factor involved, there are no sources for likely significant effect via groundwater interactions with this European site. Considering the QIs of this SAC, and given the nature of the proposed development, the distances involved; there are no sources with a likelihood for potential significant effects, and no further assessment is required.	No	No

Site code	Site name	Distance (km)	Qualifying feature[28]	Known threats and pressures	Analysis of potential effects	Likelihood of potential significant effects	Likelihood of potential in-combination effects
				species [I01], Human induced changes in hydraulic conditions [J02], Modifying structures of inland water courses [J02.05.02], Management of aquatic and bank vegetation for drainage purposes [J02.10], Siltation rate changes, dumping, depositing of dredged deposits [J02.11], Other human induced changes in hydraulic conditions [J02.15]			
004102	Garriskil Bog SPA	9.67	Greenland White-fronted Goose *(Anser albifrons flavirostris)* [A395]	Grazing [A04], Restructuring agricultural land holding [A10], Forest planting on open ground [B01], Railway lines, Fire and fire suppression [J01], Modifying structures of inland water courses [J02.05.02]	Considering the Special Conservation Interests and known sensitivities of this European site (detailed in Appendix I of this AASR) in the context of the potential effects identified in S3.5, this SPA is sensitive to hydrological interactions, direct land use management activities and disturbance effects. The site is 9.67 km from the proposed development. There are no sources for effect for direct land use management to the SAC as this site is outside of the proposed development boundary. Given the nature and scale of the proposed development, the absence of direct hydrological pathways, and sources for likely significant effect via indirect hydrological pathways such as surface water runoff (as discussed in s3.4.1 and s3.5), there is no likelihood for potential significant effects via hydrological interactions. SCI species are sensitive to noise disturbance effects; in general distances beyond 2km are seen to be sufficient to preclude such effects[33,34]. These distances can vary due to factors such as	No	No

[33] Ruddock, M. and Whitfield, D.P., 2007. A review of disturbance distances in selected bird species. A report from Natural Research (Projects) Ltd to Scottish Natural Heritage, 181.

[34] Bright, J.A., Langston, R. and Anthony, S., 2009. Mapped and written guidance in relation to birds and onshore wind energy development in England. Sandy: RSPB.

Site code	Site name	Distance (km)	Qualifying feature[28]	Known threats and pressures	Analysis of potential effects	Likelihood of potential significant effects	Likelihood of potential in-combination effects
					species and/or time of year[35,36]. Given the distance between the proposed development area and the SPA there are no pathways for disturbance effects identified in this regard. This SCI species is highly vagile and therefore may utilise ex-situ ecological resources which may have interactions with a proposed development that holds potential habitat for ex-situ foraging. The proposed development site itself is composed of an existing agricultural grassland habitat (of 1.022 Ha in size) that, depending on management, could have value for ex-situ foraging SCI species, and there will be a permanent loss the majority of this agricultural grassland as a result of the proposed development. However, considering the low ecological value of the receiving environment of the proposed development site for ex-situ foraging (as detailed in s3.4.1 and s3.5 above), the high levels of disturbance to the site itself, and the availability of alternate resources, the local scale interactions with ex-situ resources are not likely to present sources with pathways for likely significant effects on the SPA regarding ex-situ foraging for its SCI species. Considering the SCIs of this SPA, and given the nature of the proposed development, the distances involved; there are no sources with a likelihood for potential significant effects, and no further assessment is required.		
000692	Scragh Bog SAC	10.91	Alkaline fens [7230], Slender green feather-moss *(Hamatocaulis vernicosus)* [6216], Transition	Fertilisation [A08], Agriculture activities not referred to above [A11], Paths, tracks, cycling tracks [D01.01], Diffuse pollution to surface waters due to household sewage and waste waters [H01.08], Invasive	Considering the Qualifying Interests and known sensitivities of this European site (detailed in Appendix I of this AASR) in the context of the potential effects identified in S3.5, this SAC is sensitive to hydrological interactions, groundwater interactions and direct land use management activities. The site is 10.91 km from the proposed development. There are no sources for effect for direct land use management to the SAC	No	No

[35] Bötsch, Y., Tablado, Z. and Jenni, L., 2017. Experimental evidence of human recreational disturbance effects on bird-territory establishment. Proceedings of the Royal Society B: Biological Sciences, 284(1858), p.20170846.

[36] Goss-Custard, J.D., Hoppe, C.H., Hood, M.J. and Stillman, R.A., 2020. Disturbance does not have a significant impact on waders in an estuary close to conurbations: importance of overlap between birds and people in time and space. Ibis, 162(3), pp.845

Site code	Site name	Distance (km)	Qualifying feature[28]	Known threats and pressures	Analysis of potential effects	Likelihood of potential significant effects	Likelihood of potential in-combination effects
			mires and quaking bogs [7140]	non-native species [I01]	as this site is outside of the proposed development boundary. Given the nature and scale of the proposed development, the absence of direct hydrological pathways, and sources for likely significant effect via indirect hydrological pathways such as surface water runoff (as discussed in s3.4.1 and s3.5), there is no likelihood for potential significant effects via hydrological interactions. In addition, due to the nature and size of the proposed development, and the significant dilution factor involved, there are no sources for likely significant effect via groundwater interactions with this European site. Considering the QIs of this SAC, and given the nature of the proposed development, the distances involved; there are no sources with a likelihood for potential significant effects, and no further assessment is required.		
002340	Moneybeg and Clareisland Bogs SAC	11.19	Depressions on peat substrates of the Rhynchosporion [7150], Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110]	Forestry clearance [B02.02], Mechanical removal of peat [C01.03.02], Disposal of household or recreational facility waste [E03.01], Hunting [F03.01], Other sport or leisure complexes [G02.10], Invasive non-native species [I01], Burning down [J01.01], Other human induced changes in hydraulic conditions [J02.15]	Considering the Qualifying Interests and known sensitivities of this European site (detailed in Appendix I of this AASR) in the context of the potential effects identified in S3.5, this SAC is sensitive to hydrological interactions, groundwater interactions and direct land use management activities. The site is 11.19 km from the proposed development. There are no sources for effect for direct land use management to the SAC as this site is outside of the proposed development boundary. Given the nature and scale of the proposed development, the absence of direct hydrological pathways, and sources for likely significant effect via indirect hydrological pathways such as surface water runoff (as discussed in s3.4.1 and s3.5), there is no likelihood for potential significant effects via hydrological interactions. In addition, due to the nature and size of the proposed development, and the significant dilution factor involved, there are no sources for likely significant effect via groundwater interactions with this European site. Considering the QIs of this SAC, and given the nature of the	No	No

Site code	Site name	Distance (km)	Qualifying feature[28]	Known threats and pressures	Analysis of potential effects	Likelihood of potential significant effects	Likelihood of potential in-combination effects
					proposed development, the distances involved; there are no sources with a likelihood for potential significant effects, and no further assessment is required.		
000688	Lough Owel SAC	11.59	Alkaline fens [7230], White-clawed crayfish *(Austropotamobius pallipes)* [1092], Transition mires and quaking bogs [7140], Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140]	Piers or tourist harbours or recreational piers [D03.01.02], Airports, flightpaths [D04], Hunting [F03.01], Outdoor sports and leisure activities, recreational activities [G01], Other sport or leisure complexes [G02.10], Diffuse pollution to surface waters due to agricultural and forestry activities [H01.05], Landfill, land reclamation and drying out, general [J02.01], Surface water abstractions for public water supply [J02.06.02], No threats or pressures [X]	Considering the Qualifying Interests and known sensitivities of this European site (detailed in Appendix I of this AASR) in the context of the potential effects identified in S3.5, this SAC is sensitive to hydrological interactions, groundwater interactions and direct land use management activities. The site is 11.59 km from the proposed development. There are no sources for effect for direct land use management to the SAC as this site is outside of the proposed development boundary. Given the nature and scale of the proposed development, the absence of direct hydrological pathways, and sources for likely significant effect via indirect hydrological pathways such as surface water runoff (as discussed in s3.4.1 and s3.5), there is no likelihood for potential significant effects via hydrological interactions. In addition, due to the nature and size of the proposed development, and the significant dilution factor involved, there are no sources for likely significant effect via groundwater interactions with this European site. Considering the QIs of this SAC, and given the nature of the proposed development, the distances involved; there are no sources with a likelihood for potential significant effects, and no further assessment is required.	No	No
004047	Lough Owel SPA	11.59	Wetland and Waterbirds [A999], Shoveler *(Anas clypeata)* [A056], Coot *(Fulica atra)* [A125]	Fertilisation [A08], Sylviculture, forestry [B], Leisure fishing [F02.03], Hunting [F03.01], Human induced changes in hydraulic conditions [J02]	Considering the Special Conservation Interests and known sensitivities of this European site (detailed in Appendix I of this AASR) in the context of the potential effects identified in S3.5, this SPA is sensitive to hydrological interactions, direct land use management activities and disturbance effects. The site is 11.59 km from the proposed development. There are no sources for effect for direct land use management to the SAC	No	No

Site code	Site name	Distance (km)	Qualifying feature[28]	Known threats and pressures	Analysis of potential effects	Likelihood of potential significant effects	Likelihood of potential in-combination effects
					as this site is outside of the proposed development boundary. Given the nature and scale of the proposed development, the absence of direct hydrological pathways, and sources for likely significant effect via indirect hydrological pathways such as surface water runoff (as discussed in s3.4.1 and s3.5), there is no likelihood for potential significant effects via hydrological interactions. SCI species are sensitive to noise disturbance effects; in general distances beyond 2 km are seen to be sufficient to preclude such effects[37,38]. These distances can vary due to factors such as species and/or time of year[39,40]. Given the distance between the proposed development area and the SPA there are no pathways for disturbance effects identified in this regard. These SCI species are highly vagile and therefore may utilise ex-situ ecological resources which may have interactions with a proposed development that holds potential habitat for ex-situ foraging. The proposed development site itself is composed of an existing agricultural grassland habitat (of 1.022 Ha in size) that, depending on management, could have value for ex-situ foraging SCI species, and there will be a permanent loss the majority of this agricultural grassland as a result of the proposed development. However, considering the low ecological value of the receiving environment of the proposed development site for ex-situ foraging (as detailed in s3.4.1 and s3.5 above), the high levels of disturbance to the site itself, and the availability of alternate resources, the local scale interactions with ex-situ resources are not likely to present sources with pathways for likely significant effects on the SPA regarding ex-situ foraging for SCI species.		

[37] Ruddock, M. and Whitfield, D.P., 2007. A review of disturbance distances in selected bird species. A report from Natural Research (Projects) Ltd to Scottish Natural Heritage, 181.

[38] Bright, J.A., Langston, R. and Anthony, S., 2009. Mapped and written guidance in relation to birds and onshore wind energy development in England. Sandy: RSPB.

[39] Bötsch, Y., Tablado, Z. and Jenni, L., 2017. Experimental evidence of human recreational disturbance effects on bird-territory establishment. Proceedings of the Royal Society B: Biological Sciences, 284(1858), p.20170846.

[40] Goss-Custard, J.D., Hoppe, C.H., Hood, M.J. and Stillman, R.A., 2020. Disturbance does not have a significant impact on waders in an estuary close to conurbations: importance of overlap between birds and people in time and space. Ibis, 162(3), pp.845

Site code	Site name	Distance (km)	Qualifying feature[28]	Known threats and pressures	Analysis of potential effects	Likelihood of potential significant effects	Likelihood of potential in-combination effects
					Considering the SCIs of this SPA, and given the nature of the proposed development, the distances involved; there are no sources with a likelihood for potential significant effects, and no further assessment is required.		
004061	Lough Kinale and Derragh Lough SPA	11.90	Tufted Duck *(Aythya fuligula)* [A061], Pochard *(Aythya ferina)* [A059], Wetland and Waterbirds [A999]	Animal breeding [A05.01], Fertilisation [A08], Sylviculture, forestry [B], Leisure fishing [F02.03], Hunting [F03.01], No threats or pressures [X]	Considering the Special Conservation Interests and known sensitivities of this European site (detailed in Appendix I of this AASR) in the context of the potential effects identified in S3.5, this SPA is sensitive to hydrological interactions, direct land use management activities and disturbance effects. The site is 11.90 km from the proposed development. There are no sources for effect for direct land use management to the SAC as this site is outside of the proposed development boundary. Given the nature and scale of the proposed development, the absence of direct hydrological pathways, and sources for likely significant effect via indirect hydrological pathways such as surface water runoff (as discussed in s3.4.1 and s3.5), there is no likelihood for potential significant effects via hydrological interactions. SCI species are sensitive to noise disturbance effects; in general distances beyond 2 km are seen to be sufficient to preclude such effects[41,42]. These distances can vary due to factors such as species and/or time of year[43,44]. Given the distance between the proposed development area and the SPA there are no pathways for disturbance effects identified in this regard. These SCI species are highly vagile and therefore may utilise ex-situ ecological resources which may have interactions with a proposed development that holds potential habitat for ex-situ foraging. The proposed development site itself is composed of	No	No

[41] Ruddock, M. and Whitfield, D.P., 2007. A review of disturbance distances in selected bird species. A report from Natural Research (Projects) Ltd to Scottish Natural Heritage, 181.

[42] Bright, J.A., Langston, R. and Anthony, S., 2009. Mapped and written guidance in relation to birds and onshore wind energy development in England. Sandy: RSPB.

[43] Bötsch, Y., Tablado, Z. and Jenni, L., 2017. Experimental evidence of human recreational disturbance effects on bird-territory establishment. Proceedings of the Royal Society B: Biological Sciences, 284(1858), p.20170846.

[44] Goss-Custard, J.D., Hoppe, C.H., Hood, M.J. and Stillman, R.A., 2020. Disturbance does not have a significant impact on waders in an estuary close to conurbations: importance of overlap between birds and people in time and space. Ibis, 162(3), pp.845

Site code	Site name	Distance (km)	Qualifying feature[28]	Known threats and pressures	Analysis of potential effects	Likelihood of potential significant effects	Likelihood of potential in-combination effects
					an existing agricultural grassland habitat (of 1.022 Ha in size) that, depending on management, could have value for ex-situ foraging SCI species, and there will be a permanent loss the majority of this agricultural grassland as a result of the proposed development. However, considering the low ecological value of the receiving environment of the proposed development site for ex-situ foraging (as detailed in s3.4.1 and s3.5 above), the high levels of disturbance to the site itself, and the availability of alternate resources, the local scale interactions with ex-situ resources are not likely to present sources with pathways for likely significant effects on the SPA regarding ex-situ foraging for SCI species. Considering the SCIs of this SPA, and given the nature of the proposed development, the distances involved; there are no sources with a likelihood for potential significant effects, and no further assessment is required.		
004065	Lough Sheelin SPA	12.28	Tufted Duck *(Aythya fuligula)* [A061], Pochard *(Aythya ferina)* [A059], Goldeneye *(Bucephala clangula)* [A067], Wetland and Waterbirds [A999], Great Crested Grebe *(Podiceps cristatus)* [A005]	Animal breeding [A05.01], Fertilisation [A08], Sylviculture, forestry [B], Leisure fishing [F02.03]	Considering the Special Conservation Interests and known sensitivities of this European site (detailed in Appendix I of this AASR) in the context of the potential effects identified in S3.5, this SPA is sensitive to hydrological interactions, direct land use management activities and disturbance effects. The site is 12.28 km from the proposed development. There are no sources for effect for direct land use management to the SAC as this site is outside of the proposed development boundary. Given the nature and scale of the proposed development, the absence of direct hydrological pathways, and sources for likely significant effect via indirect hydrological pathways such as surface water runoff (as discussed in s3.4.1 and s3.5), there is no likelihood for potential significant effects via hydrological interactions. SCI species are sensitive to noise disturbance effects; in general distances beyond 2 km are seen to be sufficient to preclude	No	No

Site code	Site name	Distance (km)	Qualifying feature[28]	Known threats and pressures	Analysis of potential effects	Likelihood of potential significant effects	Likelihood of potential in-combination effects
					such effects[45,46]. These distances can vary due to factors such as species and/or time of year[47,48]. Given the distance between the proposed development area and the SPA there are no pathways for disturbance effects identified in this regard. These SCI species are highly vagile and therefore may utilise ex-situ ecological resources which may have interactions with a proposed development that holds potential habitat for ex-situ foraging. The proposed development site itself is composed of an existing agricultural grassland habitat (of 1.022 Ha in size) that, depending on management, could have value for ex-situ foraging SCI species, and there will be a permanent loss the majority of this agricultural grassland as a result of the proposed development. However, considering the low ecological value of the receiving environment of the proposed development site for ex-situ foraging (as detailed in s3.4.1 and s3.5 above), the high levels of disturbance to the site itself, and the availability of alternate resources, the local scale interactions with ex-situ resources are not likely to present sources with pathways for likely significant effects on the SPA regarding ex-situ foraging for SCI species. Considering the SCIs of this SPA, and given the nature of the proposed development, the distances involved; there are no sources with a likelihood for potential significant effects, and no further assessment is required.		
002201	Derragh Bog SAC	12.52	Degraded raised bogs still capable of natural regeneration [7120], Bog	Forestry clearance [B02.02], Invasive non-native species [I01], Problematic native species [I02], Burning down [J01.01], Other human induced	Considering the Qualifying Interests and known sensitivities of this European site (detailed in Appendix I of this AASR) in the context of the potential effects identified in S3.5, this SAC is sensitive to hydrological interactions, groundwater interactions	No	No

[45] Ruddock, M. and Whitfield, D.P., 2007. A review of disturbance distances in selected bird species. A report from Natural Research (Projects) Ltd to Scottish Natural Heritage, 181.

[46] Bright, J.A., Langston, R. and Anthony, S., 2009. Mapped and written guidance in relation to birds and onshore wind energy development in England. Sandy: RSPB.

[47] Bötsch, Y., Tablado, Z. and Jenni, L., 2017. Experimental evidence of human recreational disturbance effects on bird-territory establishment. Proceedings of the Royal Society B: Biological Sciences, 284(1858), p.20170846.

[48] Goss-Custard, J.D., Hoppe, C.H., Hood, M.J. and Stillman, R.A., 2020. Disturbance does not have a significant impact on waders in an estuary close to conurbations: importance of overlap between birds and people in time and space. Ibis, 162(3), pp.845

Site code	Site name	Distance (km)	Qualifying feature[28]	Known threats and pressures	Analysis of potential effects	Likelihood of potential significant effects	Likelihood of potential in-combination effects
			woodland [91D0]	changes in hydraulic conditions [J02.15]	and direct land use management activities. The site is 12.52 km from the proposed development. There are no sources for effect for direct land use management to the SAC as this site is outside of the proposed development boundary. Given the nature and scale of the proposed development, the absence of direct hydrological pathways, and sources for likely significant effect via indirect hydrological pathways such as surface water runoff (as discussed in s3.4.1 and s3.5), there is no likelihood for potential significant effects via hydrological interactions. In addition, due to the nature and size of the proposed development, and the significant dilution factor involved, there are no sources for likely significant effect via groundwater interactions with this European site. Considering the QIs of this SAC, and given the nature of the proposed development, the distances involved; there are no sources with a likelihood for potential significant effects, and no further assessment is required.		
004046	Lough Iron SPA	13.10	Coot *(Fulica atra)* [A125], Wetland and Waterbirds [A999], Wigeon *(Anas penelope)* [A050], Shoveler *(Anas clypeata)* [A056], Whooper Swan *(Cygnus cygnus)* [A038], Golden Plover *(Pluvialis apricaria)* [A140], Teal *(Anas crecca)* [A052], Greenland White-	Grazing [A04], Fertilisation [A08], Sylviculture, forestry [B]	Considering the Special Conservation Interests and known sensitivities of this European site (detailed in Appendix I of this AASR) in the context of the potential effects identified in S3.5, this SPA is sensitive to hydrological interactions, direct land use management activities and disturbance effects. The site is 13.10 km from the proposed development. There are no sources for effect for direct land use management to the SAC as this site is outside of the proposed development boundary. Given the nature and scale of the proposed development, the absence of direct hydrological pathways, and sources for likely significant effect via indirect hydrological pathways such as surface water runoff (as discussed in s3.4.1 and s3.5), there is no likelihood for potential significant effects via hydrological interactions. SCI species are sensitive to noise disturbance effects; in general	No	No

Site code	Site name	Distance (km)	Qualifying feature[28]	Known threats and pressures	Analysis of potential effects	Likelihood of potential significant effects	Likelihood of potential in-combination effects
			fronted Goose *(Anser albifrons flavirostris)* [A395]		distances beyond 2km are seen to be sufficient to preclude such effects[49,50]. These distances can vary due to factors such as species and/or time of year[51,52]. Given the distance between the proposed development area and the SPA there are no pathways for disturbance effects identified in this regard. These SCI species are highly vagile and therefore may utilise ex-situ ecological resources which may have interactions with a proposed development that holds potential habitat for ex-situ foraging. The proposed development site itself is composed of an existing agricultural grassland habitat (of 1.022 Ha in size) that, depending on management, could have value for ex-situ foraging SCI species, and there will be a permanent loss the majority of this agricultural grassland as a result of the proposed development. However, considering the low ecological value of the receiving environment of the proposed development site for ex-situ foraging (as detailed in s3.4.1 and s3.5 above), the high levels of disturbance to the site itself, and the availability of alternate resources, the local scale interactions with ex-situ resources are not likely to present sources with pathways for likely significant effects on the SPA regarding ex-situ foraging for SCI species. Considering the SCIs of this SPA, and given the nature of the proposed development, the distances involved; there are no sources with a likelihood for potential significant effects, and no further assessment is required.		

[49] Ruddock, M. and Whitfield, D.P., 2007. A review of disturbance distances in selected bird species. A report from Natural Research (Projects) Ltd to Scottish Natural Heritage, 181.

[50] Bright, J.A., Langston, R. and Anthony, S., 2009. Mapped and written guidance in relation to birds and onshore wind energy development in England. Sandy: RSPB.

[51] Bötsch, Y., Tablado, Z. and Jenni, L., 2017. Experimental evidence of human recreational disturbance effects on bird-territory establishment. Proceedings of the Royal Society B: Biological Sciences, 284(1858), p.20170846.

[52] Goss-Custard, J.D., Hoppe, C.H., Hood, M.J. and Stillman, R.A., 2020. Disturbance does not have a significant impact on waders in an estuary close to conurbations: importance of overlap between birds and people in time and space. Ibis, 162(3), pp.845

3.7. Other plans and projects

Article 6(3) of the Habitats Directive requires an assessment of a plan or project to consider other plans or projects that might, in combination with the plan or project, have potential for significant effects on European sites.

Section 3.2 - receiving environment overview - identifies the overall characteristics of the area with respect to existing condition and general land use. For considerations of in combination with respect to emerging or recent developments a search of the Dept of Housing, Local Government and Heritage planning database was undertaken to identify relevant plans and programmes which relate to the proposed development. All developments from the receiving area were considered; the area considered is defined by the authoring ecologist using criteria which depend on the characteristics of the proposed development and the associated sources (identified above); these criteria include:

- Having direct or indirect connectivity to a European site;
- Being in close proximity to a European site;
- Being of a substantial scale relative to the conditions and/or current works taking place in the surrounding landscape;
- Having disperse emissions or far-reaching sources for effects;
- Having sources for effects on ecological connectivity.

These factors are considered in the context of characteristics of the proposed development and on this basis a search radius of 200 m was selected to be used to search for projects within the receiving environment. The sources for effects from the proposed development are considered in combination with the potential sources for effects from the receiving environment for potential additive or interactive effects on the receiving environment.

Plans of relevance for consideration of possible in-combination effects:

- Westmeath County Development Plan 2021-2027
- Westmeath County Council Climate Change Adaptation Strategy 2019-2024

Considering that the proposed development has a small-scale, temporary construction phase and the operational phase is consistent with the current site use, and the land use zoning of the above plan, it is not foreseen that proposed development will have any likely significant in-combination effects with the above plans.

Projects considered for consideration of possible in-combination effects:
Further to section 3.2 – which details the existing land uses and general characteristics of the area – a focus was placed on current and future development applications. To identify projects for consideration for the in-combination effects section, the Dept of Housing, Local Government and Heritage planning database was used[53]. A review of all planning applications within the identified zone was conducted focusing on all application within the past 5 years[54].

[53] Accessed at: https://data-housinggovie.opendata.arcgis.com/datasets/planning-application-sites-2010-onwards; 28th September 2023
[54] Planning applications have a standard lifespan of 5 years as per Section 40 (3)(b) of the Planning & Development Act 2000, as amended; therefore, these are viewed to be the 'live' applications, all other projects as these would not have any in-combination effects' with ' as there are not relevant other than refused and withdrawn applications, as these would not have any in-combination effects

There are a number of other proposed developments in the vicinity of the proposed development including works which are at planning stage or underway on various sites. The database search found that these projects within the area are relating to the construction and alteration of residential structures, all of which undergo Appropriate Assessment where required. Table 3.2 provides a list of the proposed developments within 200 m of the proposed development. 200m was deemed a suitable search radius as the proposed development site is within the suburban landscape of Castlepollard town environs.

Due to the scale and nature of the proposed development, there are no sources with a likelihood for significant effects identified as a result of the implementation of the proposed development. On this basis, the assessment guidance given in CIEEM, 2018 indicates that there is no need to consider cumulative effects. However, in taking a precautionary approach, relevant plans and projects have nonetheless been reviewed and assessed in-combination with the proposed development.

The proposed development is a small scale, temporary construction phase, and an operational phase that is consistent with current site use and environment. The projects in the local area, as listed in Table 3.2 below, are small in scale and have been subject to compliance with applicable AA and EIA screening requirements with Appropriate Assessment and/or EIA screening carried out if required. Therefore, given the nature and scale of the proposed development, and the lack of any sources with a likelihood for potential significant effects, there are no likely in-combination significant effects with the below projects or above plans, on any European site considered in this report.

Table 3.2 Extant planning permissions for proposed developments within 200 m[55, 56]

Project details	Decision	Description	Distance from proposed development (m)	Status	Characteristics of the potential interactions between the projects; sources and pathways	Likelihood of potential significant in-combination effects
Project Code: 2319 Grant Date: 2023-06-01 Project Area (sq m): 9144.20	Conditional	construction of new site entrance and access road, upgrade of existing footpath with tactile pavings and dropped kerbs, partial demolition of existing boundary wall to allow proposed site entrance, soakaway for surface water drainage and all associated site works. The proposed site entrance will replace the existing site entrance due to poor vehicular sightlines	5.81	PERMISSION	This is a small-scale project with a temporary construction phase and the operational phase will have localised effects that will be in keeping with the context and character of the surrounding environment. The consent process for this project was subject to applicable EIA and AA requirements. Considering the above, in combination with the lack of any potential for effects on European sites arising from the proposed development, it is not considered that there is any potential for significant in-combination effects on any European sites.	No
Project Code: 186038 Grant Date: 2018-07-30 Project Area (sq m):	Conditional	private dwelling house, connection to public foul drainage infrastructure, entrance onto public road, domestic garage and all ancillary site services.	0.00	PERMISSION	This is a small-scale project with a temporary construction phase and the operational phase will have localised effects that will be in keeping with the context and character of the surrounding environment. The consent process for this project was subject to applicable EIA and AA requirements. Considering the above, in combination with the lack of any potential for effects on European sites arising from the proposed development, it is not considered that there is any potential for significant in-combination effects on any European sites.	No

[55] Parameters used: planning application from within the last 5 years, within a radius of 200 m around the proposed scheme boundary

[56] The majority of surrounding developments are minor projects with no risk of in-combination effects. Therefore, a summary list is provided here of the four largest proposed schemes within the below stated parameters

Project details	Decision	Description	Distance from proposed development (m)	Status	Characteristics of the potential interactions between the projects; sources and pathways	Likelihood of potential significant in-combination effects
7290.80						
Project Code: 206301 Grant Date: 2021-02-18 Project Area (sq m): 3814.90	Conditional	Permission for a private dwelling house, connection to public foul drainage infrastructure, entrance onto public road, domestic garage and all ancillary site services	34.35	PERMISSION	This is a small-scale project with a temporary construction phase and the operational phase will have localised effects that will be in keeping with the context and character of the surrounding environment. The consent process for this project was subject to applicable EIA and AA requirements. Considering the above, in combination with the lack of any potential for effects on European sites arising from the proposed development, it is not considered that there is any potential for significant in-combination effects on any European sites.	No
Project Code: 206246 Grant Date: 2020-12-10 Project Area (sq m): 3693.10	Conditional	open an off-licence sales facility in their premises	142.16	PERMISSION	This is a small-scale project with a temporary construction phase and the operational phase will have localised effects that will be in keeping with the context and character of the surrounding environment. The consent process for this project was subject to applicable EIA and AA requirements. Considering the above, in combination with the lack of any potential for effects on European sites arising from the proposed development, it is not considered that there is any potential for significant in-combination effects on any European sites.	No

4. Conclusion

This Appropriate Assessment Screening Report has considered potential effects which may arise during the construction and operational phases as a result of the development of the proposed serviced sites at Castlepollard. Through an assessment of the potential sources and potential pathways for significant effects; an evaluation of the project characteristics; taking account of the processes involved and the distance of separation from European sites, it has been evaluated by this report, which intends to inform the competent authority on the Appropriate Assessment process, that there is no likelihood of potential significant effects occurring on the Qualifying Interests, Special Conservation Interests or The Conservation Objectives of any designated European site as a result of the implementation of the proposed development.

Given its small scale, temporary timeline, and its nature in the context of the local environment setting, and the nature and context of the other plans and projects identified in this report; the proposed development is not foreseen to have any likelihood for potential significant in-combination effects arising from any other plans or projects.

It is concluded by this AA Screening Report that the proposed development is not foreseen to have any likelihood of significant effects on any European sites, alone or in combination with other plans or projects – and therefore any potential for significant effects on any European site as a result of the proposed development can be ruled out. This conclusion is made in view of the Conservation Objectives of the habitats or species for which these sites have been designated. Consequently, this report informs the competent authority undertaking the Appropriate Assessment process that the proposed development does not need to be subject to Stage Two Appropriate Assessment and a Natura Impact Statement is not required for it.

Appendix I Background information on European sites[57]

Site code	Site name	Qualifying feature[58]	Pressure codes	Known threats and pressures
000679	Garriskil Bog SAC	Degraded raised bogs still capable of natural regeneration [7120], Depressions on peat substrates of the Rhynchosporion [7150], Active raised bogs [7110]	A04.02.01, J02.15, I02, I01, C01.03.02, J01.01	Non intensive cattle grazing, other human induced changes in hydraulic conditions, problematic native species, invasive non-native species, mechanical removal of peat, burning down
000688	Lough Owel SAC	Alkaline fens [7230], White-clawed crayfish *(Austropotamobius pallipes)* [1092], Transition mires and quaking bogs [7140], Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140]	J02.06.02, D03.01.02, G01, H01.05, D04, J02.01, G02.10, F03.01, X	Surface water abstractions for public water supply, piers or tourist harbours or recreational piers, outdoor sports and leisure activities, recreational activities, diffuse pollution to surface waters due to agricultural and forestry activities, airports, flightpaths, landfill, land reclamation and drying out, general, other sport or leisure complexes, hunting, no threats or pressures
000692	Scragh Bog SAC	Alkaline fens [7230], Slender green feather-moss *(Hamatocaulis vernicosus)* [6216], Transition mires and quaking bogs [7140]	D01.01, I01, H01.08, A11, A08	Paths, tracks, cycling tracks, invasive non-native species, diffuse pollution to surface waters due to household sewage and waste waters, agriculture activities not referred to above, fertilisation
001810	White Lough, Ben Loughs and Lough Doo SAC	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140], White-clawed crayfish *(Austropotamobius pallipes)* [1092]	A11, J02.01, A04.03, A08, G01, E03.03, F03.02.03	Agriculture activities not referred to above, landfill, land reclamation and drying out, general, abandonment of pastoral systems lack of grazing, fertilisation, outdoor sports and leisure activities, recreational activities, disposal of inert materials, trapping, poisoning, poaching
002120	Lough Bane and Lough Glass SAC	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140], White-clawed crayfish *(Austropotamobius pallipes)* [1092]	A10.01, J02.06.02	Removal of hedges and copses or scrub, surface water abstractions for public water supply
002121	Lough Lene SAC	White-clawed crayfish *(Austropotamobius pallipes)* [1092], Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140]	A08, A11, H01.08, X, D03.01.02, A04.03	Fertilisation, agriculture activities not referred to above, diffuse pollution to surface waters due to household sewage and waste waters, no threats or pressures, piers or tourist harbours or recreational piers, abandonment of pastoral systems lack of grazing
002201	Derragh Bog	Bog woodland [91D0], Degraded raised bogs still	B02.02, I02, J02.15, J01.01, I01	Forestry clearance, problematic native species, other human induced changes in hydraulic conditions, burning down, invasive

[57] That have functional connectivity (ecological pathways) to the proposed development area including their Qualifying Interests, known threats and pressures

[58] Qualifying Feature here represents either Qualifying Interest (in the case of SACs), or Special Conservation Interest (in the case of SPAs)

Site code	Site name	Qualifying feature[58]	Pressure codes	Known threats and pressures
	SAC	capable of natural regeneration [7120]		non-native species
002299	River Boyne and River Blackwater SAC	River lamprey *(Lampetra fluviatilis)* [1099], Alkaline fens [7230], Alluvial forests with Alnus glutinosa and Fraxinus excelsior *(Alno-Padion, Alnion incanae, Salicion albae)* [91E0], Atlantic salmon *(Salmo salar)* [1106], Otter *(Lutra lutra)* [1355]	A01, A03, G01, B01.02, A08, G02.10, C01.01, E01.04, G05, G05.06, D01.02, H01, E03.04, A05.02, A07, D01.05, I01, A10.01, J02, E03.02, E02, E05, J02.11, J02.15, J02.05.02, J02.10	Cultivation, mowing or cutting of grassland, outdoor sports and leisure activities, recreational activities, artificial planting on open ground (non-native trees), fertilisation, other sport or leisure complexes, sand and gravel extraction , other patterns of habitation, other human intrusions and disturbances , tree surgery, felling for public safety, removal of roadside trees, roads, motorways, pollution to surface waters (limnic & terrestrial, marine & brackish), other discharges, stock feeding, use of biocides, hormones and chemicals, bridge, viaduct, invasive non-native species, removal of hedges and copses or scrub, human induced changes in hydraulic conditions, disposal of industrial waste, industrial or commercial areas, storage of materials, siltation rate changes, dumping, depositing of dredged deposits, other human induced changes in hydraulic conditions, modifying structures of inland water courses, management of aquatic and bank vegetation for drainage purposes
002340	Moneybeg and Clareisland Bogs SAC	Active raised bogs [7110], Depressions on peat substrates of the Rhynchosporion [7150], Degraded raised bogs still capable of natural regeneration [7120]	I01, J02.15, G02.10, B02.02, J01.01, F03.01, E03.01, C01.03.02	Invasive non-native species, other human induced changes in hydraulic conditions, other sport or leisure complexes, forestry clearance, burning down, hunting, disposal of household or recreational facility waste, mechanical removal of peat
004043	Lough Derravaragh SPA	Whooper Swan *(Cygnus cygnus)* [A038], Tufted Duck *(Aythya fuligula)* [A061], Pochard *(Aythya ferina)* [A059], Coot *(Fulica atra)* [A125], Wetland and Waterbirds [A999]	F03.01, F02.03, B, A08, A05.01	Hunting, leisure fishing, sylviculture, forestry, fertilisation, animal breeding
004046	Lough Iron SPA	Coot *(Fulica atra)* [A125], Wetland and Waterbirds [A999], Greenland White-fronted Goose *(Anser albifrons flavirostris)* [A395], Shoveler *(Anas clypeata)* [A056], Whooper Swan *(Cygnus cygnus)* [A038], Wigeon *(Anas penelope)* [A050], Teal *(Anas crecca)* [A052], Golden Plover *(Pluvialis apricaria)* [A140]	A04, A08, B	Grazing, fertilisation, sylviculture, forestry
004047	Lough Owel SPA	Wetland and Waterbirds [A999], Coot *(Fulica atra)* [A125], Shoveler *(Anas clypeata)* [A056]	F02.03, J02, B, F03.01, A08	Leisure fishing, human induced changes in hydraulic conditions, sylviculture, forestry, hunting, fertilisation

Site code	Site name	Qualifying feature[58]	Pressure codes	Known threats and pressures
004061	Lough Kinale and Derragh Lough SPA	Tufted Duck *(Aythya fuligula)* [A061], Pochard *(Aythya ferina)* [A059], Wetland and Waterbirds [A999]	B, X, F03.01, A05.01, A08, F02.03	Sylviculture, forestry, no threats or pressures, hunting, animal breeding, fertilisation, leisure fishing
004065	Lough Sheelin SPA	Goldeneye *(Bucephala clangula)* [A067], Great Crested Grebe *(Podiceps cristatus)* [A005], Pochard *(Aythya ferina)* [A059], Wetland and Waterbirds [A999], Tufted Duck *(Aythya fuligula)* [A061]	A05.01, B, F02.03, A08	Animal breeding, sylviculture, forestry, leisure fishing, fertilisation
004102	Garriskil Bog SPA	Greenland White-fronted Goose *(Anser albifrons flavirostris)* [A395]	A04, D01.04, J02.05.02, B01, A10, J01	Grazing, railway lines, modifying structures of inland water courses, forest planting on open ground, restructuring agricultural land holding, fire and fire suppression

Appendix II Qualifying Interests of SACs that have undergone assessment[59]

EU code	Qualifying interests	Article 17 report summary - threats and pressures	Threats and pressures codes	Known threats and pressures	Sensitivity of qualifying interests
[1092]	White-clawed Crayfish (*Austropotamobius pallipes)*	The main pressures facing this species is related to the non-indigenous crayfish species (NICS) and Crayfish Plaque, a waterborne disease specific to freshwater crayfish.	I01, I05	Invasive alien species of union concern, plant and animal diseases, pathogens and pests	Invasive species, disease, surface water dependent. Highly sensitive to hydrological change. Very highly sensitive to pollution.
[1099]	River Lamprey (*Lampetra fluviatilis)*	The main pressures on River Lampreys are associated with hydropower infrastructure and changes in rainfall due to climate change. The use of synthetic and natural fertilisers, drainage and also infrastructure related to shipping are also considered to be pressures on the species.	A19, A20, A31, D02, E03, N01, N02, N03	Application of natural fertilisers on agricultural land, application of synthetic (mineral) fertilisers on agricultural land, drainage for use as agricultural land, hydropower (dams, weirs, run-off-the-river), including infrastructure, shipping lanes, ferry lanes and anchorage infrastructure (e.g., canalisation, dredging), temperature changes (e.g., rise of temperature & extremes) due to climate change, increases or changes in precipitation due to climate change	Surface water dependent. Highly sensitive to hydrological change. Availability of suitable spawning ground is a considerable issue for the species.
[1106]	Salmon (*Salmo salar)*	Known pressures include exploitation at sea in commercial fisheries, interceptor fisheries in coastal waters, aquaculture and predation. In addition, the negative influence of climate change on prey structure as well as alterations in habitat and water quality are also pressures on the species.	A25, A26, B23, D02, F12, F28, G11, G19, G20, I02, J01, K05, L06, N01	Agricultural activities generating point source pollution to surface or ground waters, agricultural activities generating diffuse pollution to surface or ground waters, forestry activities generating pollution to surface or ground waters, hydropower (dams, weirs, run-off-the-river), including infrastructure, discharge of urban waste water (excluding storm overflows and/or urban run-offs) generating pollution to surface or ground water, modification of flooding regimes, flood protection for residential or recreational development, illegal harvesting, collecting and taking, other impacts from marine aquaculture, including infrastructure, abstraction of water, flow diversion, dams and other modifications of hydrological conditions for freshwater aquaculture, other invasive alien species (other than species of union concern), mixed source pollution to surface and ground waters (limnic and	Disease, parasites and barriers to movement.

[59] Including known treats and pressures and sensitivities of qualifying interests

EU code	Qualifying interests	Article 17 report summary - threats and pressures	Threats and pressures codes	Known threats and pressures	Sensitivity of qualifying interests
				terrestrial), physical alteration of water bodies, interspecific relations (competition, predation, parasitism, pathogens), temperature changes (e.g., rise of temperature & extremes) due to climate change	
[1355]	Otter (*Lutra lutra)*	There are no pressures facing this species	Xxp, Xxt	No pressures, no threats	Surface and marine water dependent. Moderately sensitive to hydrological change. Sensitivity to pollution.
[3140]	Hard oligo-mesotrophic waters with benthic vegetation of muskgrass (*Chara spp.)*	The hard-water lake habitat is under significant pressure from eutrophication, the primary sources of nutrient and organic pollution being agriculture and municipal and industrial wastewaters.	A25, A26, A31, B23, B27, C05, F12, F13, F33, I02	Agricultural activities generating point source pollution to surface or ground waters, agricultural activities generating diffuse pollution to surface or ground waters, drainage for use as agricultural land, forestry activities generating pollution to surface or ground waters, modification of hydrological conditions, or physical alteration of water bodies and drainage for forestry (including dams), peat extraction, discharge of urban waste water (excluding storm overflows and/or urban run-offs) generating pollution to surface or ground water, plants, contaminated or abandoned industrial sites generating pollution to surface or ground water, abstraction of ground and surface waters (including marine) for public water supply and recreational use, other invasive alien species (other than species of union concern)	Surface and groundwater dependant. Highly sensitive to hydrological changes. Highly sensitive to pollution.
[7110]	Active raised bogs	The main pressures on active raised bog are peat extraction, drainage, afforestation and burning.	A11, B01, C05, K02, N01	Burning for agriculture, conversion to forest from other land uses, or afforestation (excluding drainage), peat extraction, drainage, temperature changes (e.g., rise of temperature & extremes) due to climate change	Surface water interactions. Groundwater isolated system with sensitivities related to the bog basin. Drainage and land use management are the key things.
[7120]	Degraded raised bogs still capable of natural regeneration	The main pressure on degraded bogs come from peat extraction, drainage, afforestation and burning.	A11, B01, C05, K02, N01	Burning for agriculture, conversion to forest from other land uses, or afforestation (excluding drainage), peat extraction, drainage, temperature changes (e.g., rise of temperature & extremes) due to climate change	Surface water interactions. Groundwater isolated system with sensitivities related to the bog basin. Drainage and land use management

EU code	Qualifying interests	Article 17 report summary - threats and pressures	Threats and pressures codes	Known threats and pressures	Sensitivity of qualifying interests
					are the key things.
[7140]	Transition mires and quaking bogs	The main pressures facing transition mires in Ireland are afforestation, water pollution, drainage and hydrological changes with grazing/agricultural management also being a pressure.	A06, A09, B01, C05, J01, K01, K02, K04, L02	Abandonment of grassland management (e.g., cessation of grazing or of mowing), intensive grazing or overgrazing by livestock, conversion to forest from other land uses, or afforestation (excluding drainage), peat extraction, mixed source pollution to surface and ground waters (limnic and terrestrial), abstraction from groundwater, surface water or mixed water, drainage, modification of hydrological flow, natural succession resulting in species composition change (other than by direct changes of agricultural or forestry practices)	Surface water interactions. Groundwater isolated system with sensitivities related to the bog basin. Drainage and land use management are the key things.
[7150]	Depressions on peat substrates of the Rhynchosporion	The main pressures on the habitat are associated with impacts on the supporting bog habitats, especially overgrazing, burning, peat extraction, drainage and conversion to forestry.	A09, A11, B01, C05, K02, N01	Intensive grazing or overgrazing by livestock, burning for agriculture, conversion to forest from other land uses, or afforestation (excluding drainage), peat extraction, drainage, temperature changes (e.g., rise of temperature & extremes) due to climate change	Surface and ground water interactions. Drainage and land use management are the key things.
[7230]	Alkaline fens	The main pressures facing this habitat are land abandonment (and associated succession), overgrazing, drainage and pollution.	A06, A09, A26, J01, K01, K02, K04, L02, N02, N03	Abandonment of grassland management (e.g., cessation of grazing or of mowing), intensive grazing or overgrazing by livestock, agricultural activities generating diffuse pollution to surface or ground waters, mixed source pollution to surface and ground waters (limnic and terrestrial), abstraction from groundwater, surface water or mixed water, drainage, modification of hydrological flow, natural succession resulting in species composition change (other than by direct changes of agricultural or forestry practices), temperature changes (e.g., rise of temperature & extremes) due to climate change, increases or changes in precipitation due to climate change	Surface and groundwater dependent. Highly sensitive to hydrological changes. Inappropriate management.
[91D0]	Bog woodland	Pressures facing this habitat are related to drainage, invasive species and burning.	A11, B09, C05, I02, K01	Burning for agriculture, clear-cutting, removal of all trees, peat extraction, other invasive alien species (other than species of union concern), abstraction from groundwater, surface water or mixed water	Changes in management. Changes in nutrient or base status. Introduction of alien species.

EU code	Qualifying interests	Article 17 report summary - threats and pressures	Threats and pressures codes	Known threats and pressures	Sensitivity of qualifying interests
[91E0]	Alluvial forests with Alder and Ash (*Alnus glutinosa, Fraxinus excelsior, Alno-Padion, Alnion incanae, Salicion albae)*	Many of the pressures facing this habitat include invasive species, particularly sycamore *(Acer pseudoplatanus)*, beech *(Fagus sylvatica)*, Indian balsam *(Impatiens glandulifera)* and currant species *(Ribes nigrum* and *R. rubrum)* as well as some native species such as brambles *(Rubus fruticoses agg.)* and common nettle, along with over felling.	B09, I02, I04, I05	Clear-cutting, removal of all trees, other invasive alien species (other than species of union concern), problematic native species, plant and animal diseases, pathogens and pests	Surface and groundwater dependent. Highly sensitive to hydrological changes. Changes in management.

Appendix III Special Conservation Interests of SPAs that have undergone assessment[60]

Species code	Common name	Scientific name	Threats and pressures codes	Known threats and pressures
A050	Eurasian Wigeon	*Anas penelope*	C03, F01, F03, G01, H01, H03, H07, I01, J02, J03	Renewable abiotic energy use, marine and freshwater aquaculture, hunting and collection of wild animals (terrestrial), outdoor sports and leisure activities, recreational activities, pollution to surface waters (limnic & terrestrial, marine & brackish), marine water pollution, other forms of pollution, invasive non-native species, human induced changes in hydraulic conditions, other ecosystem modifications
A056	Northern Shoveler	*Anas clypeata*	C03, F03, G01, H01, H03, H07	Renewable abiotic energy use, hunting and collection of wild animals (terrestrial), outdoor sports and leisure activities, recreational activities, pollution to surface waters (limnic & terrestrial, marine & brackish), marine water pollution, other forms of pollution
A059	Common Pochard	*Aythya ferina*	C03, F03, G01, H01, H07, M02	Renewable abiotic energy use, hunting and collection of wild animals (terrestrial), outdoor sports and leisure activities, recreational activities, pollution to surface waters (limnic & terrestrial, marine & brackish), other forms of pollution, changes in biotic conditions
A061	Tufted Duck	*Aythya fuligula*	C03, F03, G01, H01, H07, M02	Renewable abiotic energy use, hunting and collection of wild animals (terrestrial), outdoor sports and leisure activities, recreational activities, pollution to surface waters (limnic & terrestrial, marine & brackish), other forms of pollution, changes in biotic conditions
A067	Common Goldeneye	*Bucephala clangula*	C03, F01, F03, G01, H01, H03, H07, M02	Renewable abiotic energy use, marine and freshwater aquaculture, hunting and collection of wild animals (terrestrial), outdoor sports and leisure activities, recreational activities, pollution to surface waters (limnic & terrestrial, marine & brackish), marine water pollution, other forms of pollution, changes in biotic conditions
A125	Eurasian Coot	*Fulica atra atra*	C03, G01, H01	Renewable abiotic energy use, outdoor sports and leisure activities, recreational activities, pollution to surface waters (limnic & terrestrial, marine & brackish)
A140	European Golden Plover	*Pluvialis apricaria*	A02, A04, B01, C01, C03, F01, G01, H03, J01, K03, M02	Modification of cultivation practices, grazing, forest planting on open ground, mining and quarrying, renewable abiotic energy use, marine and freshwater aquaculture, outdoor sports and leisure activities, recreational activities, marine water pollution, fire and fire suppression, interspecific faunal relations, changes in biotic conditions
A395	Greater White-Fronted Goose	*Anser albifrons flavirostris*	A02, A04, A06, A11, B01, C03, D02, D05, F01, F03, G01, H03, H07, K03, M01, M02	Modification of cultivation practices, grazing, annual and perennial non-timber crops, agriculture activities not referred to above, forest planting on open ground, renewable abiotic energy use, utility and service lines, improved access to site, marine and freshwater aquaculture, hunting and collection of wild animals (terrestrial), outdoor sports and leisure activities, recreational activities, marine water pollution, other forms of pollution, interspecific

[60] Including known treats and pressures of SCIs

Species code	Common name	Scientific name	Threats and pressures codes	Known threats and pressures
				faunal relations, changes in abiotic conditions, changes in biotic conditions

Appendix IV Conservation Objectives[61]

NPWS (2015) Conservation Objectives for Garriskil Bog SAC [IE0000679] Version 1.
NPWS (2018) Conservation Objectives for Lough Owel SAC [IE0000688] Version 1.
NPWS (2018) Conservation Objectives for Scragh Bog SAC [IE0000692] Version 1.
NPWS (2021) Conservation Objectives for White Lough, Ben Loughs and Lough Doo SAC [IE0001810] Version 1.
NPWS (2021) Conservation Objectives for Lough Bane and Lough Glass SAC [IE0002120] Version 1.
NPWS (2021) Conservation Objectives for Lough Lene SAC [IE0002121] Version 1.
NPWS (2023) Conservation Objectives for Derragh Bog SAC [IE0002201] Version 1.
NPWS (2021) Conservation Objectives for River Boyne and River Blackwater SAC [IE0002299] Version 1.
NPWS (2016) Conservation Objectives for Moneybeg and Clareisland Bogs SAC [IE0002340] Version 1.
NPWS (2022) First Order Site-specific Conservation Objectives for Lough Derravaragh SPA [IE0004043] Version 1.
NPWS (2022) First Order Site-specific Conservation Objectives for Lough Iron SPA [IE0004046] Version 1.
NPWS (2022) First Order Site-specific Conservation Objectives for Lough Owel SPA [IE0004047] Version 1.
NPWS (2022) First Order Site-specific Conservation Objectives for Lough Kinale and Derragh Lough SPA [IE0004061] Version 1.
NPWS (2022) First Order Site-specific Conservation Objectives for Lough Sheelin SPA [IE0004065] Version 1.
NPWS (2022) First Order Site-specific Conservation Objectives for Garriskil Bog SPA [IE0004102] Version 1.

[61] NPWS/Department of Culture, Heritage and the Gaeltacht

Appendix V Contributor details

Author - Callum O'Regan is an ecologist who holds a B.Sc. degree in Zoology from University College Cork and obtained a Master's degree in Conservation Behaviour from Galway-Mayo Institute of Technology in 2021. Callum has skills in data management and analysis, report writing and mapping. Callum has also worked on the fieldwork for and preparation of a number of reports including Ecological Impact Assessments (EcIAs) and Appropriate Assessment Screenings for private and public projects of various sizes and complexities.

Supervisor - Karen Dylan Shevlin is an ecologist with over 9 years' experience working in multiple capacities in ecology in Irish and international research institutions and organisations, and holds a MSc degree in Biodiversity and Conservation from Trinity College Dublin (2013). Karen has significant skills in leading ecological surveys of bats, birds, insects, habitats and mammals and data analysis, mapping and compiling reports. Karen has worked on producing AA screenings, NISs, and EIARs for a range of public and private projects ranging from smaller facilities upgrades projects to major wind turbine sites. Karen is also a specialist in ecological theory and the impacts/effects that altering natural dynamics may have on the surrounding environment. This combination of skills and knowledge provides the backbone of the assessment process, and ensure that all of the baseline and detailed data gathered in the field is interpreted in a manner that is grounded in best scientific knowledge.

Reviewer - Paul Fingleton has an MSc in Rural and Regional Resources Planning (with specialisation in EIA) from the University of Aberdeen. Paul is a member of the International Association for Impact Assessment as well as the Institute of Environmental Management and Assessment. He has over twenty-five years' experience working in the area of Environmental Assessment. Over this period, he has been involved in a diverse range of projects including contributions to, and co-ordination of, numerous complex EIARs and EIA screening reports. He has also contributed to and supervised the preparation of numerous AAs and AA screenings.

Paul is the lead author of the current EPA Guidelines and accompanying Advice Notes on EIARs. He has been involved in all previous editions of these statutory guidelines. He also provides a range of other EIA related consultancy services to the EPA. Paul is regularly engaged by various planning authorities and other consent authorities to provide specialised EIA advice.