

**Tinahask Residential Development
Ecological Impact Assessment**



Prepared By:


**Moore Group -
Environmental Services**

**On behalf of:
Wicklow County Council**

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1. INTRODUCTION

Moore Group was commissioned by Wicklow County Council to undertake a Habitat Survey and EclA of the site of a proposed new social housing development at Tinahask, Arklow, Co. Wicklow, referred to as the 'Proposed Development'.

This report provides information on ecological features if present within the potential Zone of Influence of the Proposed Development, of particular significance, primarily designated habitats and species, including habitats/species listed in Annex I, II and IV of the EU Habitats Directive, rare flora listed in the Flora Protection Order along with other semi-natural habitats of conservational value.

This report was compiled by Ger O'Donohoe M.Sc. of Moore Group providing information on habitats in the study area. Ger is the principal ecologist with Moore Group and has 30 years' experience in ecological impact assessment. He graduated from ATU Galway in 1993 with a B.Sc. in Applied Freshwater & Marine Biology and subsequently worked in environmental consultancy while completing an M.Sc. in Environmental Sciences, graduating from Trinity College, Dublin in 1999. (He also has over 15 years' experience of carrying out bat surveys and has completed the Bat Conservation Ireland, Bat Detector Workshop which is the standard training for the carrying out of bat surveys in Ireland and follows the Bat Conservation Ireland 'Bat Survey Guidelines' - Aughney *et al.*, 2008'. In addition, Ger is an active member of the Galway Bat Group and Bat Conservation Ireland, which monitors bat populations in Ireland, and facilitates the education of bat communities to the public.

The following important ecological receptors were considered in planning and designing the project, and in assessing its likely ecological effects:

- Sites with nature conservation designations, including proposed NHAs, the reasons for their designation, and their conservation objectives, where available;
- Annex IV (Habitats Directive) species of fauna and flora, and their breeding sites and resting places, which are strictly protected under the European Communities (Birds and Natural Habitats) Regulations, 2011;
- Other species of fauna and flora which are protected under the Wildlife Acts, 1976-2012;
- '*Protected species and natural habitats*', as defined in the Environmental Liability Directive (2004/35/EC) and European Communities (Environmental Liability) Regulations, 2008, including:
 - Birds Directive – Annex I species and other regularly occurring migratory species, and their habitats (wherever they occur);
 - Habitats Directive – Annex I habitats, Annex II species and their habitats, and Annex IV species and their breeding sites and resting places (wherever they occur);
- Other habitats of ecological value in a national to local context, including rocky habitats in the general area;

- Stepping stones and ecological corridors encapsulated by Article 10 of the Habitats Directive.

The report has been compiled in compliance with the European Communities Legal requirements and follows EPA Guidelines on Information to be contained in an EIAR (EPA, 2022) and on Transport Infrastructure Ireland TII policy and guidance outlined in Section 2.

The European Habitats Directive 92/43/EEC (Article 6) indicates the need for plans and projects to be subject to Habitats Directive Assessment (also known as Appropriate Assessment) if the plan or project not directly connected with or necessary to the management of a Natura 2000 site (which includes SACs and SPAs) but which has the potential to have implications on a site's conservation objectives. These implications can be significant effects either individually or in combination with other plans or projects.

As such, a report for the purposes of Appropriate Assessment Screening was undertaken by Moore Group for the proposed development in support of the application. This stand-alone report is presented separately as part of the design package for the Project.

The site location is presented in Figure 1 below.

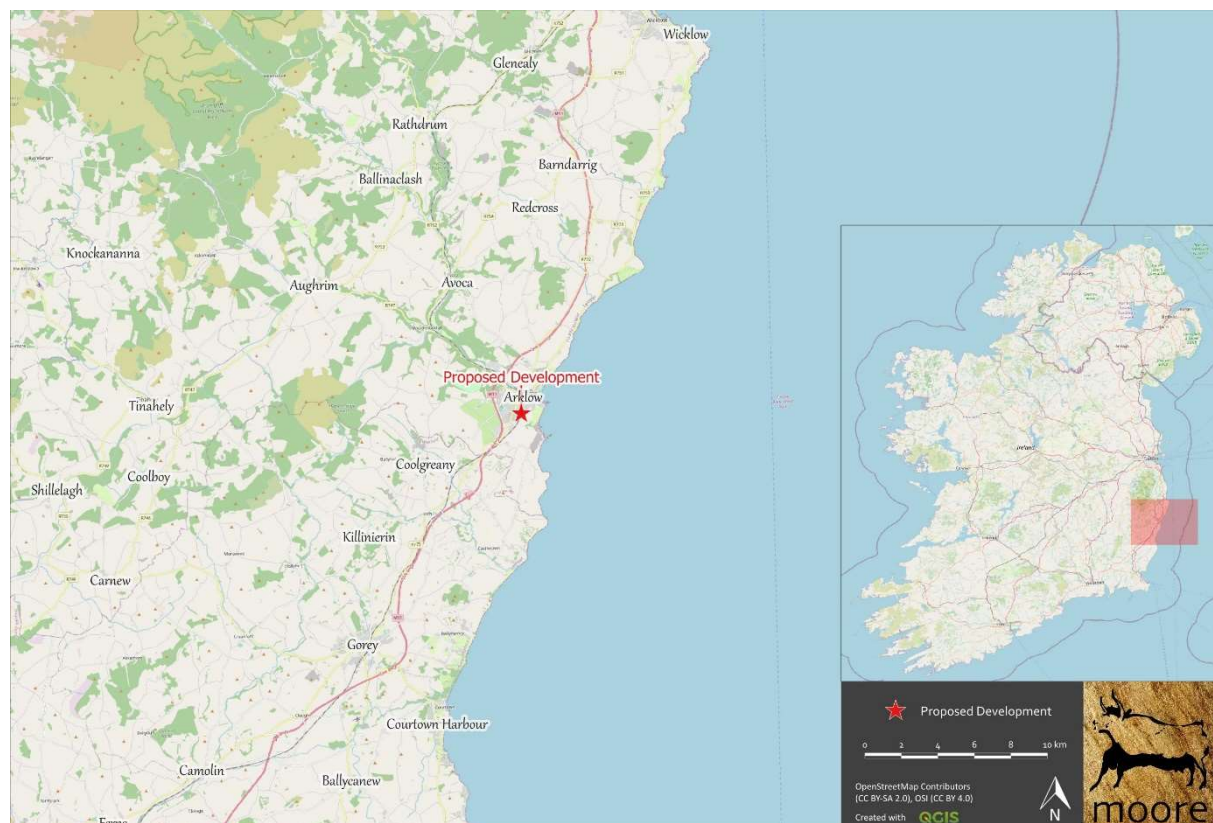


Figure 1. Showing the site location at Arklow, Co. Wicklow.

2. ASSESSMENT METHODOLOGY

2.1. POLICY & LEGISLATION

2.1.1. EU Habitats Directive

The “*Habitats Directive*” (Council Directive 92/43/EEC) on the Conservation of Natural Habitats and of Wild Flora and Fauna) is the main legislative instrument for the protection and conservation of biodiversity within the European Union. The Habitats Directive provides for the designation, conservation and protection of sites comprising Special Areas of Conservation (SACs) and Special Protection Areas (SPAs), collectively forming the Natura 2000 network of ‘European sites’. Article 3 of the Habitats Directive obliges Member States to designate as SACs sites hosting the natural habitat types listed in Annex I and habitats of the species listed in Annex II of the Habitats Directive. Article 10 of the Habitats Directive requires that Member States endeavour to improve the ecological coherence of the Natura 2000 network to manage and conserve features of the landscape which are of major importance for wild fauna and flora, for example ecological corridors or stepping-stones which are important for the migration, dispersal and genetic exchange of species.

Article 6(2) obliges Member States to take the necessary measures to avoid the deterioration of an SAC, or disturbance of a species for which the site is designated. Article 6(3) sets out the requirement for an “Appropriate Assessment”, to ensure that a proposed plan or project will not have an adverse effect on the integrity of a SAC. Article 7 applies the requirements of Article 6(2) and 6(3) of the Habitats Directive to SPAs designated under the Birds Directive.

In addition and separate to the Appropriate Assessment requirements, Article 12 of the Habitats Directive obliges Member States to establish a regime of strict protection for certain species listed in Annex IV of the Directive, wherever they occur within their natural range. The protection for species under Article 12 of the Habitats Directive is not confined to the boundary of SACs. Species listed in Annex IV include the otter and certain species of bat.

2.1.2. EU Birds Directive

The “*Birds Directive*” (European Council (2009) Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds) confers legal protection to all naturally occurring wild birds within the EU territory. Member States are obliged to adopt the necessary measures to maintain the population of bird species, and that includes, in accordance with Article 3, an obligation to create, maintain and manage habitats for birds, and specifically for the species of Bird listed in Annex I of the Directive, Article 4 requires Member States to create SPAs which, by virtue of Article 7 of the Habitats Directive, form part of the Natura 2000 network of European sites and are subject to the Appropriate Assessment requirements under Article 6(3) of the Habitats Directive.

Additionally, Article 5 of the Birds Directive requires that Member States establish a general system of protection for all naturally occurring wild birds within the EU territory, similar to the system of strict protection required for Annex IV species under the Habitats Directive.

2.1.3. Wildlife Acts 1976 - 2021¹

The primary domestic legislation providing for the protection of wildlife in general, and wild birds in particular, and the control of some activities adversely impacting upon wildlife is the Wildlife Act of 1976, as amended. The aims of the Wildlife Act, according to the National Parks and Wildlife Service (NPWS) are “... to provide for the protection and conservation of wild fauna and flora, to conserve a representative sample of important ecosystems, to provide for the development and protection of game resources and to regulate their exploitation, and to provide the services necessary to accomplish such aims.” All wild bird species are protected under the Act. The European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011) made significant amendments to the Wildlife Acts to ensure consistency with the Habitats and Birds Directives.

2.2. SURVEY METHODOLOGY

2.2.1. Desk Study

The assessment was carried out in three stages, firstly through desktop assessment to determine existing records in relation to habitats and species present in the potential Zone of Influence of the Proposed Development. This included research on the NPWS metadata website, the National Biodiversity Data Centre (NBDC) database and a literature review of published information on flora and fauna occurring in the development area.

Sources of information that were used to collate data on biodiversity in the potential Zone of Influence are listed below:

- The following mapping and Geographical Information Systems (GIS) data sources, as required:
 - National Parks & Wildlife (NPWS) protected site boundary data;
 - Ordnance Survey of Ireland (OSI) mapping and aerial photography;
 - OSI/ Environmental Protection Agency (EPA) rivers and streams, and catchments;
 - Open Street Maps;
 - Digital Elevation Model over Europe (EU-DEM);
 - Google Earth and Bing aerial photography 1995-2024;
- Online data available on Natura 2000 sites as held by the National Parks and Wildlife Service (NPWS) from www.npws.ie including:
 - Natura 2000 - Standard Data Form;

¹ Wildlife Act 1976, as amended. Administrative consolidation of the Wildlife Act 1976, Law Reform Commission (2021)

- Conservation Objectives;
- Site Synopses;
- National Biodiversity Data Centre records;
 - Online database of rare, threatened and protected species;
 - Publicly accessible biodiversity datasets.
- Status of EU Protected Habitats in Ireland. (National Parks & Wildlife Service, 2019); and
- Relevant Development Plans in neighbouring areas:
 - Wicklow County Development Plan 2022-2028

2.2.2. Field Study

The second phase of the assessment involved a site visit to establish the existing environment in the footprint of the proposed development area. Areas which were highlighted during desktop assessment were investigated in closer detail according to the Heritage Council Best Practice Guidance for Habitat Survey and Mapping (Smith *et al.*, 2011). Habitats in the proposed development area were classified according to the Heritage Council publication “*A Guide to Habitats in Ireland*” (Fossitt, 2000). This publication sets out a standard scheme for identifying, describing and classifying wildlife habitats in Ireland. This form of classification uses codes to classify different habitats based on the plant species present. Species recorded in this report are given in both their Latin and English names. Latin names for plant species follow the nomenclature of “*An Irish Flora*” (Parnell & Curtis, 2012).

Habitats were surveyed on the 3 August 2023 by conducting a study area walkover covering the main ecological areas identified in the desktop assessment. The survey date is toward the end of the optimal botanical survey period. However, it is adequate given the improved grassland present on site. A photographic record was made of features of interest.

Signs of mammals such as badgers and otters were searched for while surveying the study area noting any sights, signs or any activity in the vicinity especially along adjacent boundaries.

Birds were surveyed using standard transect methodology and signs were recorded where encountered during the field walkover surveys.

A bat detector survey was not undertaken as there will be no development along the eastern boundary of the site where the existing railway line presents a green corridor which will not be developed or affected from proposed street lighting.

2.2.3. Site Evaluation and Impact Assessment

The final part of the assessment involves an evaluation of the study area and determination of the potential impacts on the habitats of the study area. This part of the assessment forms the basis for Impact Assessment and is based on the following guidelines and publications:

- Guidelines for Ecological Impact Assessment in the UK And Ireland Terrestrial, Freshwater, Coastal and Marine September 2018 Version 1.1 - Updated September 2019 (CIEEM, 2019);
- EPA Guidelines on Information to be contained in an EIAR (EPA, 2022);
- Best Practice Guidance for Habitat Survey and Mapping (Heritage Council, 2011);
- Ecological Surveying Techniques for Protected Flora & Fauna (NRA, 2008);
- Guidelines for Assessment of Ecological Impacts of National Road Schemes (NRA, 2009);
- Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities (DEHLG, December 2009, Rev 2010);
- Guidance document on Article 6(4) of the Habitats Directive 92/43/EEC (EC, 2007).

While prepared for linear projects the TII Guidelines for Assessment of Ecological Impacts of National Road Schemes (NRA, 2009) are still relevant and outlines the methodology for evaluating ecological impacts of the project in the present report. According to the TII Guidelines, the Ecological Study should address:

- Designated conservation areas and sites proposed for designation within the zone(s) of influence of any of the Project options,
- All the main inland surface waters (e.g. rivers, streams, canals, lakes and tanks) that are intersected by any of the route corridor options, including their fisheries value and any relevant designations,
- Aquifers and dependent systems and turloughs and their subterranean water systems,
- Any known or potentially important sites for rare or protected flora or fauna that occur along or within the zone(s) of influence of any of the route options,
- Any other sites of ecological value, that are not designated, along or in close proximity to any of the route corridor options,
- Any other relevant conservation designations or programmes (e.g. catchment management schemes, habitat restoration or creation projects, community conservation projects, etc.),
- Any other features of particular ecological or conservation significance along any of the route options.

The TII Guidelines set out a method of evaluating the importance of sites identified and in turn the evaluation of the significance of impacts. The Evaluation Scheme is presented in Appendix 1 for reference.

Impact Assessment is then based on CIEEM Guidelines for Ecological Impact Assessment in the UK and Ireland, 2019.

3. PROJECT DESCRIPTION

The Proposed Development consists of the construction and operation of a social housing development at Tinahask, Arklow, Co. Wicklow.

This will comprise a total of 74 No. units, with 8 No. 1 bed bungalows, 2 No. 1 bed apartment units, 45 No. 2 bedroom, 17 No. 3 bedroom and 2 No. 4 bedroom houses, together with green spaces, car parking, access roads and all ancillary development.

The Proposed Development will be connected to the existing municipal wastewater infrastructure for the treatment of wastewater.

Figure 2 shows a detailed view of the existing site on high resolution aerial photography. Figure 3 shows the layout of the proposed development.



Figure 2. Showing the Proposed Development boundary on recent aerial photography.

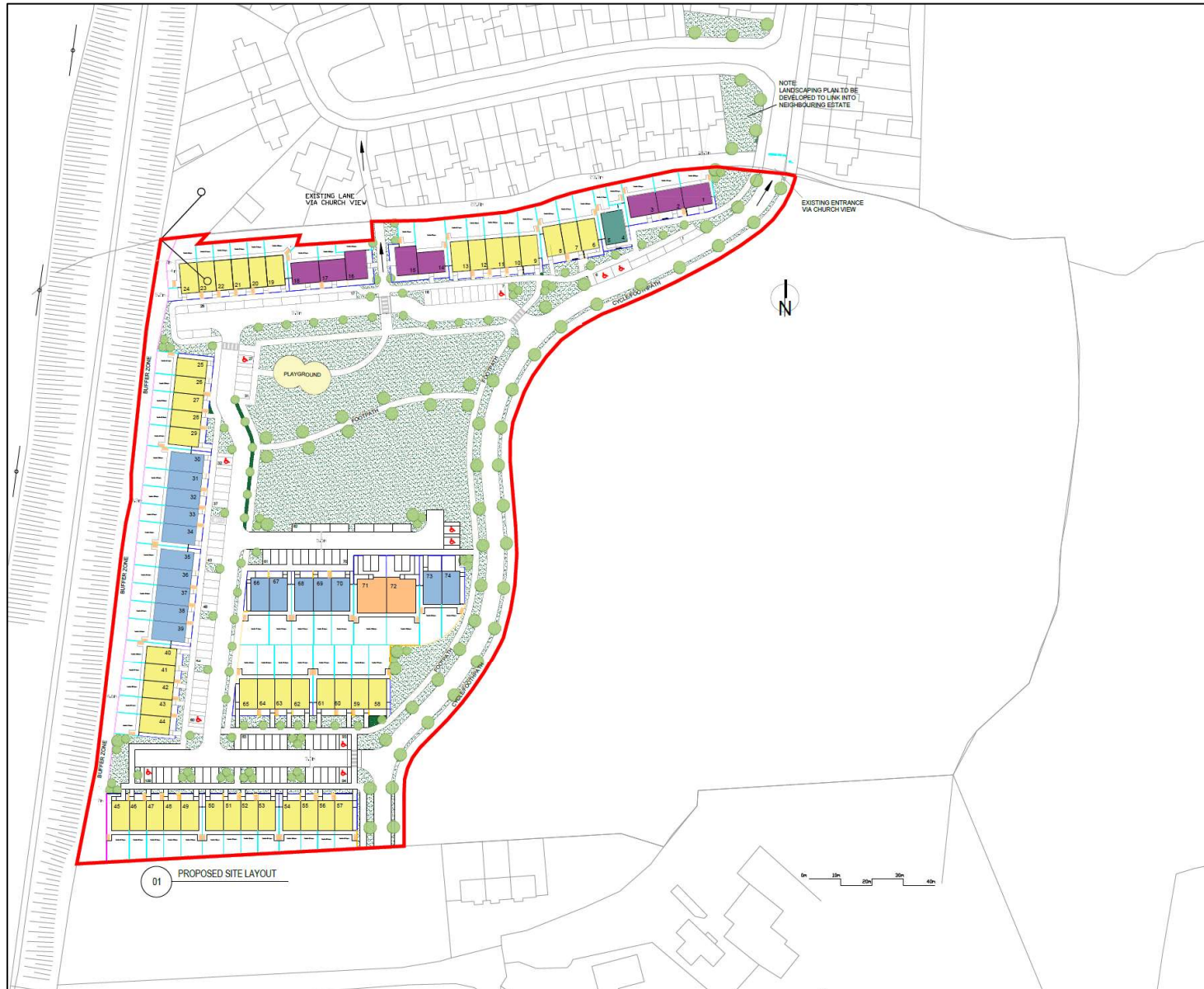


Figure 3. Plan showing layout of proposed development.

4. EXISTING ENVIRONMENT

4.1. DESIGNATED CONSERVATION AREAS

A Zone of Influence (Zoi) of a proposed development is the geographical area over which it could affect the receiving environment in a way that could have significant effects on the Qualifying Interests of a European site. In accordance with the OPR Practice Note (2021), PN01, the Zoi should be established on a case-by-case basis using the Source- Pathway-Receptor framework.

The European Commission's "Assessment of plans and projects in relation to Natura 2000 sites guidance on Article 6(3) and (4) of the Methodological Habitats Directive 92/43/EEC" published 28 September 2021 states at section 3.1.3, that:

"Identifying the Natura 2000 sites that may be affected should be done by taking into consideration all aspects of the plan or project that could have potential effects on any Natura 2000 sites located within the zone of influence of the plan or project. This should take into account all of the designating features (species, habitat types) that are significantly present on the sites and their conservation objectives. In particular, it should identify:

- *any Natura 2000 sites geographically overlapping with any of the actions or aspects of the plan or project in any of its phases, or adjacent to them;*
- *any Natura 2000 sites within the likely zone of influence of the plan or project Natura 2000 sites located in the surroundings of the plan or project (or at some distance) that could still be indirectly affected by aspects of the project, including as regards the use of natural resources (e.g. water) and various types of waste, discharge or emissions of substances or energy;*
- *Natura 2000 sites in the surroundings of the plan or project (or at some distance) which host fauna that can move to the project area and then suffer mortality or other impacts (e.g. loss of feeding areas, reduction of home range);*
- *Natura 2000 sites whose connectivity or ecological continuity can be affected by the plan or project".*

The range of Natura 2000 sites to be assessed, i.e. the zone in which impacts from the plan or project may arise, will depend on the nature of the plan or project and the distance at which effects may occur. For Natura 2000 sites located downstream along rivers or wetlands fed by aquifers, it may be that a plan or project can affect water flows, fish migration and so forth, even at a great distance. Emissions of pollutants may also have effects over a long distance. Some projects or plans that do not directly affect Natura 2000 sites may still have a significant impact on them if they cause a barrier effect or prevent ecological linkages. This may happen, for example, when plans affect features of the landscape

that connect Natura 2000 sites or that may obstruct the movements of species or disrupt the continuity of a fluvial or woodland ecosystem. To determine the possible effects of the plan or project on Natura 2000 sites, it is necessary to identify not only the relevant sites but also the habitats and species that are significantly present within them, as well as the site objectives.

The Zone of Influence may be determined by considering the Proposed Development's potential connectivity with European sites, in terms of:

- Nature, scale, timing and duration of all aspects of the proposed works and possible impacts, including the nature and size of excavations, storage of materials, flat/sloping sites;
- Distance and nature of potential pathways (dilution and dispersion; intervening 'buffer' lands, roads etc.); and
- Location of ecological features and their sensitivity to the possible impacts.

The potential for source pathway receptor connectivity is firstly identified through GIS interrogation and detailed information is then provided on sites with connectivity. European sites that are located within a potential Zone of Influence of the Proposed Development are listed in Table 1 and presented in Figures 4 and 5, below. Spatial boundary data on the Natura 2000 network was extracted from the NPWS website (www.npws.ie) on 14 August 2024. This data was interrogated using GIS analysis to provide mapping, distances, locations and pathways to all sites of conservation concern including pNHAs, NHA and European sites.

Table 1 European Sites located within the potential Zone of Influence² of the Proposed Development.

Site Code	Site name	Distance (km) ³
000729	Buckroney-Brittis Dunes and Fen SAC	6.10
001742	Kilpatrick Sandhills SAC	5.57

The nearest European sites to the Proposed Development are the Buckroney-Brittis Dunes and Fen SAC (Site Code 000729, approximately 6km to the northeast, and the Kilpatrick Sandhills SAC (Site Code 001742), 5.5km to the south. There is no meaningful connectivity to either of these two sites, and they are screened out at this stage.

² All European sites potentially connected irrespective of the nature or scale of the Proposed Development.

³ Distances indicated are the closest geographical distance between the Proposed Development site and the European site boundary, as made available by the NPWS.

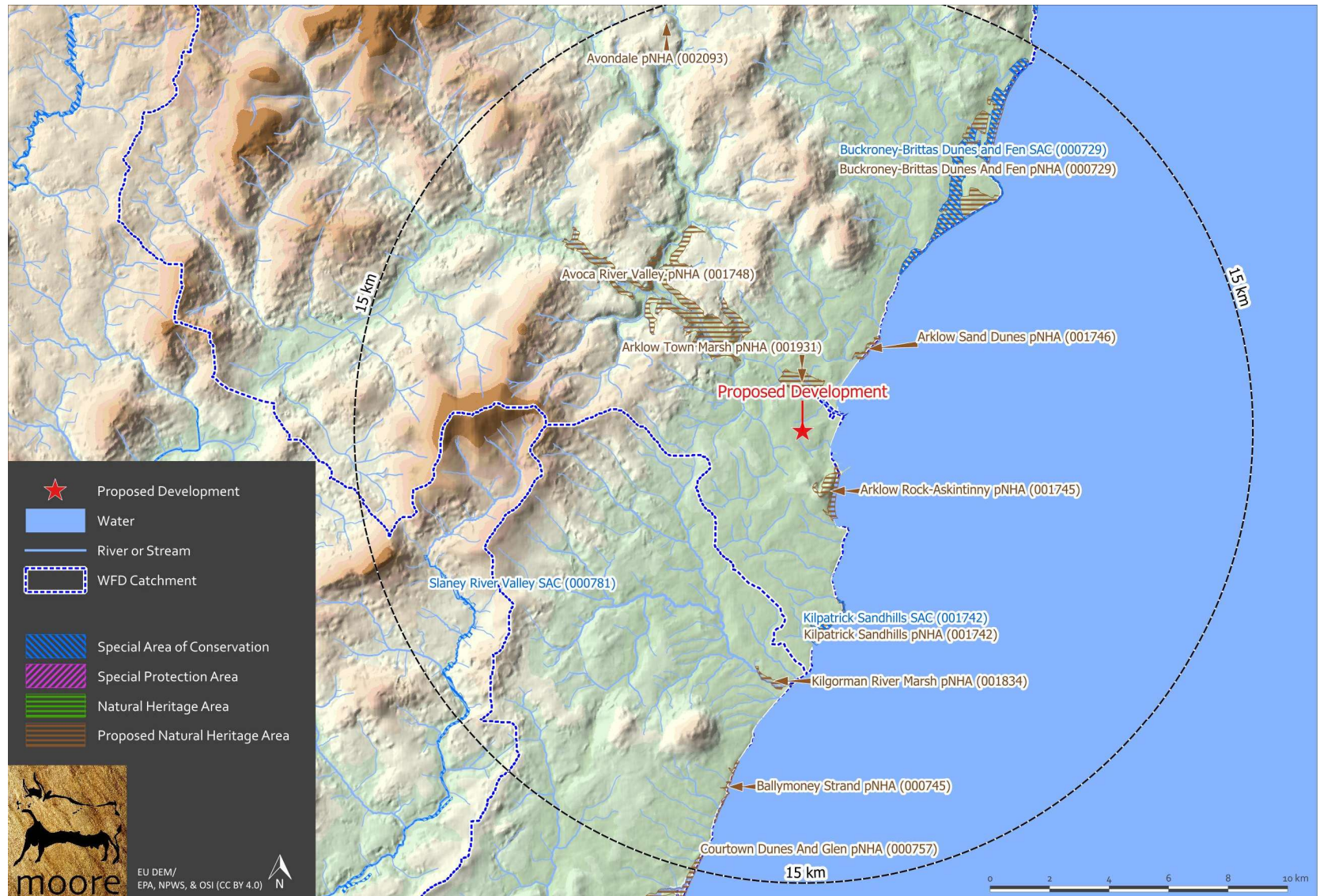


Figure 4. Showing European sites and NHAs/pNHAs within the wider Potential Zone of Influence of the Proposed Development.



Figure 5. Detailed view of European sites in the nearer Potential Zone of Influence of the Proposed Development.

4.2. HABITAT DESCRIPTIONS

There are no records of rare plants in the 1km square in which the Project site is located (T2472).

The proposed development area consists of part of a field of Improved Agricultural Grassland (GA1), with some areas of Scrub (WS1) along the northern and western perimeters.

The grassland area is dominated by Perennial Rye-Grass (*Lolium perenne*), with scattered weedy colonists such as Meadow Buttercup (*Ranunculus acris*), Broad-leaved Dock (*Rumex obtusifolius*), Ribwort Plantain (*Plantago lanceolata*) and Common Chickweed (*Stellaria media*).

The northern and western boundary consists of scattered medium sized hedgerow species including Blackthorn (*Prunus spinosa*), Hawthorn (*Crataegus monogyna*) and Grey Willow (*Salix cinerea*) set among dense Bramble (*Rubus fruticosus*), and tall herbs common in nutrient enriched field boundaries, such as Great Willowherb (*Epilobium hirsutum*), Creeping Thistle (*Cirsium arvense*), Rosebay Willowherb (*Chamerion angustifolium*), False Oat-Grass (*Arrhenatherum elatius*) and Great Horsetail (*Equisetum telmateia*). Other species noted included Tufted Vetch (*Vicia cracca*), Montbretia (*Crocsmia x. crocosmiflora*), St. John's Wort (*Hypericum* sp.), Purple Loosestrife (*Lythrum salicaria*) and Bittersweet (*Solanum dulcamara*). Several non-native species were noted close to the adjacent houses, including Purple Toadflax (*Linaria purpurea*) and *Fuchsia*.

There were no invasive species recorded at the proposed development site.

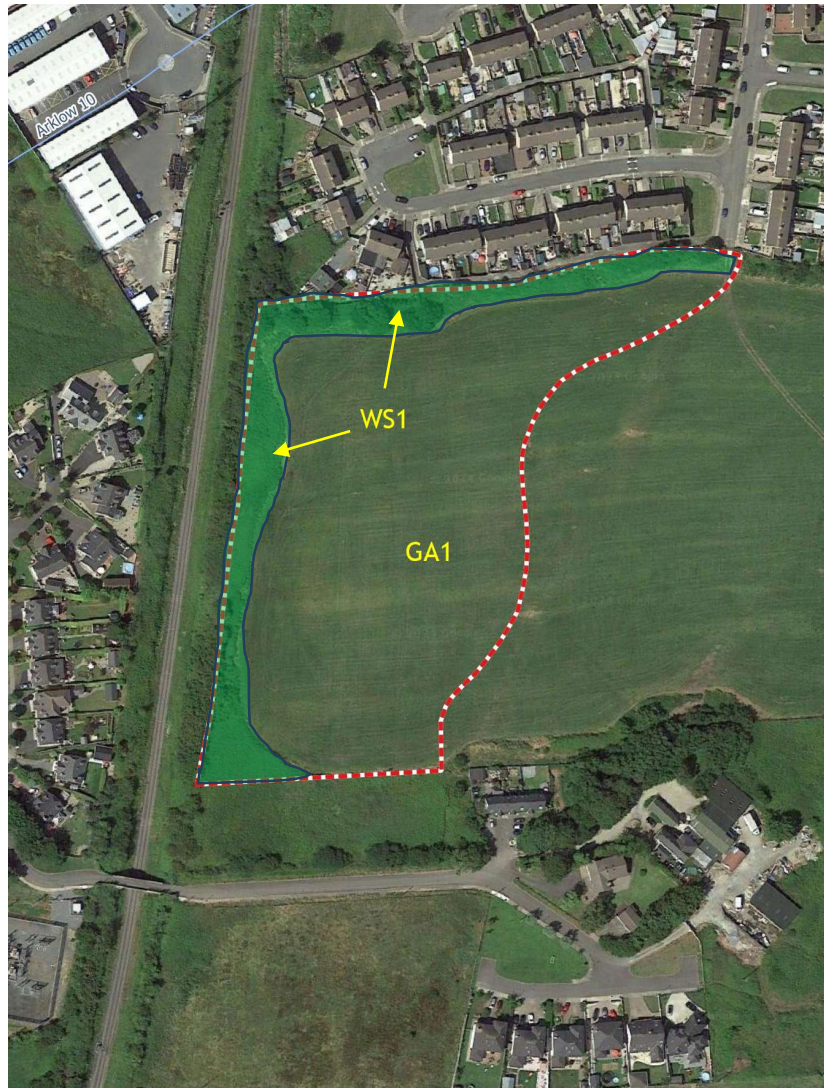


Figure 6. Habitat map based on recent aerial photography.

4.1. FAUNA

4.1.1. Mammals

Otters

There are no otter habitats in the study area and no potential for otters on the site.

Badgers

There are no badger setts in the study area and no potential for badgers on the site. The field boundaries were surveyed and no setts were recorded.

Bats

There are no records of bats from the NBDC database for the 1km square in which the site is located T2472. There is low potential for bat habitats or bat commuting on site. The areas of scrub are low and patchy and of relatively low value to foraging bats. The corridor of the railway forms a green corridor with the rear gardens of residence on the eastern side of the line which will not be affected by the proposed development which will have rear gardens backing onto the railway area.

4.1.2. Birds

All birds are protected under the Wildlife Acts. A list of breeding bird species recorded during fieldwork in August 2023 is presented in Table 2 below.

Table 2 Birds recorded during fieldwork in August 2023.

Birds	Scientific name	BWI Status	Habitat Type
Magpie	<i>Pica pica</i>	Green	Anywhere in lowland areas
Woodpigeon	<i>Columba palumbus</i>	Green	Gardens, woods, hedges
Wren	<i>Troglodytes troglodytes</i>	Green	Gardens, woods, hedges

5. ASSESSMENT OF IMPACTS

5.1. SITE EVALUATION

Due cognisance of features of the landscape which are of major importance for wild flora and fauna, such as those with a “stepping stone” and ecological corridors function, as referenced in Article 10 of the Habitats Directive were considered in this assessment.

Following a detailed literature review, desktop assessment and field survey the footprint of the proposed development site can be categorised into the following habitat types:

- Improved grassland (GA1)
- Scrub (WS1)

The ecological value of the site was assessed following the guidelines set out in the Institute of Ecology and Environmental Management’s Guidelines for Ecological Impact Assessment (2019) and according to the Natura Scheme for evaluating ecological sites (after Nairn & Fossitt, 2004). Judgements on the evaluation were made using geographic frames of reference, *e.g.* European, National, Regional or Local.

There were no rare or protected species recorded on the site and there were no records of invasive species.

The habitats under the footprint of the proposed development are of low local ecological value.

There is no connectivity with any European sites. Given the nature and scale of the proposed works, in a greenfield area, adverse effects on any European sites are highly unlikely and significant adverse effects have been ruled out in AA Screening.

5.2. IMPACT ASSESSMENT

5.2.1. Direct Impacts

Habitats

The housing development will be sited on which is currently classed as improved grassland and scrub. The scrub areas to the north are predominantly comprised of Blackthorn which has spread from the boundary of the railway line. Willow is also frequent and this is typical of field boundaries that are not managed as is the case in the line of the railway. The Scrub is of low local value and as a result there will be a minor local insignificant loss of improved grassland and scrub.

There were no invasive species recorded in the Proposed Development area.

Should best practice guidelines for the prevention of invasive species spread be adhered to, no potential for the spread or introduction of high impact invasive species are foreseen as a result of this Scheme.

Fauna

Otters

There will be no direct or indirect effects on otters.

Badgers

There will be no direct or indirect effects on badgers.

Bats

There will be no direct or indirect effects on commuting bats.

Birds

There are no predicted direct or indirect effects on birds.

5.2.2. Cumulative Impacts

Cumulative impacts or in combination effects are changes in the environment that result from numerous human-induced, small-scale alterations. Cumulative impacts can be thought of as occurring through two main pathways: first, through persistent additions or losses of the same materials or

resource, and second, through the compounding effects as a result of the coming together of two or more effects.

A review of the National Planning Application Database was undertaken. The database was then queried for developments granted planning permission within 500m of the Proposed Development within the last three years, these are presented in the Table below.

Table 3 Planning applications granted permission in the vicinity of the Proposed Development.

Planning Ref.	Description of development	Comments
201069	to construct a revised two storey extension to the rear and side of our home including associated site works previously granted under PRR 151034	No potential for in-combination effects given that the proposed development will have no significant effects on Biodiversity.
201210	demolition of existing 498m2 commercial unit and removal of existing temporary car wash, construction of 32 housing units that shall consist of 8 one bedroom apartments and 8 two bed duplex apartments identified as Blocks 1 & 2 and 16 three bedroom houses identified as block 3, 4, 5, 6 and 7 with connection to existing services	No potential for in-combination effects given that the proposed development will have no significant effects on Biodiversity.
201283	alterations and additions to an existing dormer detached dwelling house, comprising the construction of a new single-storey extension with a new kitchen, family and dining area to the rear (south) elevation including the provision of new & modified window openings to the existing west & east side elevations and new rooflights to west & east facing roof, together with a new entrance porch canopy to the side entrance (east) side elevation all connecting into existing services and including all associated site works	No potential for in-combination effects given that the proposed development will have no significant effects on Biodiversity.
20291	alterations and additions to an existing two-storey semi-detached dwelling comprising the demolition of the existing single-storey extension to the rear south elevation & the construction of a new single-storey kitchen extension in lieu, together with the construction of a new single-storey bedroom & bathroom extension to the west - side gable end all connecting into existing services and including all associated site works	No potential for in-combination effects given that the proposed development will have no significant effects on Biodiversity.
2052	alterations to an existing single storey detached dwelling. The proposed works will comprise the construction of a new single storey utility and living room extension to the west side elevation at ground floor level together with the part conversion of the existing attic space to form a new master bedroom with walk in wardrobe and ensuite facility including a new dormer window and velux rooflight to the front south elevation and a new dormer window to the rear north elevation together with the provision of velux rooflights to both side east and west elevations at attic floor all connecting into existing services	No potential for in-combination effects given that the proposed development will have no significant effects on Biodiversity.
20550	constructing a side extension of 14.56 sq meters to the existing dormer bungalow, with alterations to the existing dormer bungalow and associated site works	No potential for in-combination effects given that the proposed development will have no significant effects on Biodiversity.
20577	1 no. free standing totem sign and 2 no. low level wall mounted signs	No potential for in-combination effects given that the proposed development will have no significant effects on Biodiversity.
20649	single storey domestic extension to the side and bay window with porch roof	No potential for in-combination effects given that the proposed

Planning Ref.	Description of development	Comments
		development will have no significant effects on Biodiversity.
20679	building two bedrooms over my existing kitchen at the back of my house	No potential for in-combination effects given that the proposed development will have no significant effects on Biodiversity.
20752	alterations & additions to an existing two-storey detached dwelling comprising the demolition of the existing single-storey conservatory to the rear and the construction of a new single-storey (12m ² floor area) home office extension including modifications to an existing window opening and a new window opening all to the south side elevation at ground floor level together with the construction of a new single-storey (68m ² floor area) kitchen, dining, family room with WC & wet room to the west rear elevation and a new window opening to the north side elevation all at ground floor level and connecting into existing services and including all associated site works	No potential for in-combination effects given that the proposed development will have no significant effects on Biodiversity.
211498	(1) Permission for a single-storey extension (circa 44 sq.m.) to south side of dwelling consisting of extension to existing living room. (2) Retention permission for existing window at 1st floor level in the rear gable facing east. (3) All associated site works	No potential for in-combination effects given that the proposed development will have no significant effects on Biodiversity.
211521	the provision of two number Velux rooflights to the east side facing roof elevation to the existing single-storey detached dwelling, including the associated internal lightwell directing into the entrance hall at ground floor level only	No potential for in-combination effects given that the proposed development will have no significant effects on Biodiversity.
21243	renovate & extend our dwelling by the removal of existing garage, construction of study, bathroom, bedroom & sun room and to include associated site works to existing services to the rear and side of our home	No potential for in-combination effects given that the proposed development will have no significant effects on Biodiversity.
21391	renovate & construct a single storey extension to the rear of our home, permission is also sought to construct a double garage to the rear of our garden, all to include associated site works	No potential for in-combination effects given that the proposed development will have no significant effects on Biodiversity.
21415	a new entrance porch and first floor dormer window to the front of the house	No potential for in-combination effects given that the proposed development will have no significant effects on Biodiversity.
21461	construct side extension of 18.9sqm to existing dormer bungalow of 122sqm and alterations to existing dormer bungalow associated site works	No potential for in-combination effects given that the proposed development will have no significant effects on Biodiversity.
216	alterations to existing entrance to allow for disabled access for wheelchair. Gross floor space: 4.2m ² extension	No potential for in-combination effects given that the proposed development will have no significant effects on Biodiversity.
221014	dwelling house and associated site works	No potential for in-combination effects given that the proposed

Planning Ref.	Description of development	Comments
		development will have no significant effects on Biodiversity.
22315	for the construction of a first-floor dormer extension to the existing house and all ancillary site works	No potential for in-combination effects given that the proposed development will have no significant effects on Biodiversity.
22357	constructing extension 36.1sqm metres to the rear and the side of existing detached house of 123.8sqm metres and to construct shed of 8.75sqm metres to the rear of new extension and alterations to existing detached house and associated site works	No potential for in-combination effects given that the proposed development will have no significant effects on Biodiversity.
22388	erection of a single storey dwelling, create a new site entrance, connect into existing mains public services, together with all associated site work, on the land in existing garden area beside existing bungalow	No potential for in-combination effects given that the proposed development will have no significant effects on Biodiversity.
22410	change of use from retail to retail with ancillary off licence use	No potential for in-combination effects given that the proposed development will have no significant effects on Biodiversity.
24325 (New Application)	a 7-year permission for a Large-Scale Residential Development. The proposed development will consist of the following: Construction of 476 no. residential units, Communal open space associated with the proposed apartment/duplex units will be provided in the form of landscaped areas located in the vicinity of the apartment units. Public open space in the form of 13 no. local parks. All internal residential access roads and cyclist/ pedestrian paths serving the proposed development. Provision of 930 no. car parking spaces across the development site and 400 no. bicycle parking spaces for residents of the proposed apartments/duplex units. 37 no. visitor bicycle parking spaces are provided throughout the development site. Provision of a new public park facilitating active and passive open spaces to the south of the site, including linear parks, walkways and play areas for structured and natural play, and an area for a playing pitch. Construction of a three-storey mixed use building which will consist of 2 no. Retail units at ground floor level, a community centre and office space at first floor level and the previously mentioned 2 no. two bed-bedroom apartment and 2 no. three bedroom at second floor level. 48 no. car parking spaces & 20 bicycle parking spaces are also proposed for this building. Construction of a two storey Childcare Facility. Temporary upgrade works to the existing Railway bridge to facilitate vehicular access to the proposed development. Construction of part of the Port Access Road, with a temporary junction at its Junction/connection with the proposed northern arterial route/link road including pedestrian and cycle paths, and traffic calming measures. The provision of vehicular access, internal roads, pedestrian and cycle paths to the Community and Education lands. All associated site development works, services provision, infrastructural and drainage works, surface water attenuation & natural attenuation systems, connection to public services and utilities, provision of ESB substations, bin stores, bicycle stores, car parking, public lighting, landscaping, open spaces, and boundary treatment works	No potential for in-combination effects given that the proposed development will have no significant effects on Biodiversity.
246497	Outline planning permission to demolish existing open shed and to erect a terrace of four number two storey dwellings with entrance off 'Cré Na Mara' housing estate which will require minor alterations to	No potential for in-combination effects given that the proposed development will have no

Planning Ref.	Description of development	Comments
	road layout, including electrified entrance gate, boundary walls and ancillary works at Knockenrahan Upper, Arklow, County Wicklow.	significant effects on Biodiversity.
24285 (New Application)	Construction of 3No. detached houses with new access entrance and connection to existing services	No potential for in-combination effects given that the proposed development will have no significant effects on Biodiversity.
311011	Demolition of existing commercial unit and construction of 32 housing units.	No potential for in-combination effects given that the proposed development will have no significant effects on Biodiversity.
313951	House, new site entrance and all associated site works	No potential for in-combination effects given that the proposed development will have no significant effects on Biodiversity.

There are no predicted in-combination effects given that the proposed development will have no significant effects on local Biodiversity or on any European site.

6. CONCLUSIONS

There are no significant impacts predicted from the proposed development on habitats, flora, fauna or biodiversity.

7. REFERENCES

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Appendix 1 TII Evaluation of Habitats

<p>Ecological valuation: Examples</p> <p>International Importance:</p> <ul style="list-style-type: none"> <input type="checkbox"/> 'European Site' including Special Area of Conservation (SAC), Site of Community Importance (SCI), Special Protection Area (SPA) or proposed Special Area of Conservation. <input type="checkbox"/> Proposed Special Protection Area (pSPA). <input type="checkbox"/> Site that fulfills the criteria for designation as a 'European Site' (see Annex III of the Habitats Directive, as amended). <input type="checkbox"/> Features essential to maintaining the coherence of the Natura 2000 Network.⁴ <input type="checkbox"/> Site containing 'best examples' of the habitat types listed in Annex I of the Habitats Directive. <input type="checkbox"/> Resident or regularly occurring populations (assessed to be important at the national level)⁵ of the following: <ul style="list-style-type: none"> <input type="checkbox"/> Species of bird, listed in Annex I and/or referred to in Article 4(2) of the Birds Directive; and/or <input type="checkbox"/> Species of animal and plants listed in Annex II and/or IV of the Habitats Directive. <input type="checkbox"/> Ramsar Site (Convention on Wetlands of International Importance Especially Waterfowl Habitat 1971). <input type="checkbox"/> World Heritage Site (Convention for the Protection of World Cultural & Natural Heritage, 1972). <input type="checkbox"/> Biosphere Reserve (UNESCO Man & The Biosphere Programme). <input type="checkbox"/> Site hosting significant species populations under the Bonn Convention (Convention on the Conservation of Migratory Species of Wild Animals, 1979). <input type="checkbox"/> Site hosting significant populations under the Berne Convention (Convention on the Conservation of European Wildlife and Natural Habitats, 1979). <input type="checkbox"/> Biogenetic Reserve under the Council of Europe. <input type="checkbox"/> European Diploma Site under the Council of Europe. <input type="checkbox"/> Salmonid water designated pursuant to the European Communities (Quality of Salmonid Waters) Regulations, 1988, (S.I. No. 293 of 1988).⁶ <p>National Importance:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Site designated or proposed as a Natural Heritage Area (NHA). <input type="checkbox"/> Statutory Nature Reserve. <input type="checkbox"/> Refuge for Fauna and Flora protected under the Wildlife Acts. <input type="checkbox"/> National Park. <input type="checkbox"/> Undesignated site fulfilling the criteria for designation as a Natural Heritage Area (NHA); Statutory Nature Reserve; Refuge for Fauna and Flora protected under the Wildlife Act; and/or a National Park. <input type="checkbox"/> Resident or regularly occurring populations (assessed to be important at the national level)⁷ of the following: <ul style="list-style-type: none"> <input type="checkbox"/> Species protected under the Wildlife Acts; and/or <input type="checkbox"/> Species listed on the relevant Red Data list. <input type="checkbox"/> Site containing 'viable areas'⁸ of the habitat types listed in Annex I of the Habitats Directive.

<p>County Importance:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Area of Special Amenity.⁹ <input type="checkbox"/> Area subject to a Tree Preservation Order. <input type="checkbox"/> Area of High Amenity, or equivalent, designated under the County Development Plan. <input type="checkbox"/> Resident or regularly occurring populations (assessed to be important at the County level)¹⁰ of the following: <ul style="list-style-type: none"> <input type="checkbox"/> Species of bird, listed in Annex I and/or referred to in Article 4(2) of the Birds Directive; <input type="checkbox"/> Species of animal and plants listed in Annex II and/or IV of the Habitats Directive; <input type="checkbox"/> Species protected under the Wildlife Acts; and/or <input type="checkbox"/> Species listed on the relevant Red Data list. <input type="checkbox"/> Site containing area or areas of the habitat types listed in Annex I of the Habitats Directive that do not fulfil the criteria for valuation as of International or National importance. <input type="checkbox"/> County important populations of species, or viable areas of semi-natural habitats or natural heritage features identified in the National or Local BAP,¹¹ if this has been prepared. <input type="checkbox"/> Sites containing semi-natural habitat types with high biodiversity in a county context and a high degree of naturalness, or populations of species that are uncommon within the county. <input type="checkbox"/> Sites containing habitats and species that are rare or are undergoing a decline in quality or extent at a national level. <p>Local Importance (higher value):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Locally important populations of priority species or habitats or natural heritage features identified in the Local BAP, if this has been prepared; <input type="checkbox"/> Resident or regularly occurring populations (assessed to be important at the Local level)¹² of the following: <ul style="list-style-type: none"> <input type="checkbox"/> Species of bird, listed in Annex I and/or referred to in Article 4(2) of the Birds Directive; <input type="checkbox"/> Species of animal and plants listed in Annex II and/or IV of the Habitats Directive; <input type="checkbox"/> Species protected under the Wildlife Acts; and/or <input type="checkbox"/> Species listed on the relevant Red Data list. <input type="checkbox"/> Sites containing semi-natural habitat types with high biodiversity in a local context and a high degree of naturalness, or populations of species that are uncommon in the locality; <input type="checkbox"/> Sites or features containing common or lower value habitats, including naturalised species that are nevertheless essential in maintaining links and ecological corridors between features of higher ecological value. <p>Local Importance (lower value):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Sites containing small areas of semi-natural habitat that are of some local importance for wildlife; <input type="checkbox"/> Sites or features containing non-native species that are of some importance in maintaining habitat links.
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Appendix 2 Site Photos



Photo 1. The grassland is improved and species poor.



Photo 2. The northwestern boundary of the site at rear of existing housing.