Culmullin 220kV Substation

Ecological Impact Assessment (EcIA)(EcIA)

Energia Solar Holdings

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Quality information

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1. Introduction

AECOM was commissioned by Energia Solar Holdings to carry out an Ecological Impact Assessment (EcIA) for a 220 kilo Volt (kV) Air Insulated Switchgear (AIS) substation, at Woodtown, Co. Meath (hereafter referred to as the 'Proposed Development'). The Proposed Development is shown on drawing 60657534-ACM-DWG-500 Culmullin 220kV Substation Site Location in this report.

This EcIA Report details the results of the desk study and field survey completed to establish the baseline conditions at the Site. The predicted effects arising from the Proposed Development on identified ecological features – which includes all designated nature conservation sites, habitats, flora and fauna species and ecosystems – are described and, where necessary, appropriate and proportionate mitigation measures are prescribed.

The purpose of this Ecological Impact Assessment (EcIA) is to provide a detailed appraisal of the potential ecological impacts associated with the Proposed Development.

1.1 Description of the Proposed Development

The Proposed Development will comprise a new 220 AIS substation, named Culmullin 220kV Substation, looped into the existing Maynooth – Gorman 220kV overhead line (OHL) directly to the west. The Substation Site is located at Woodtown, Co. Meath. The substation and grid connection will be constructed by the Applicant to EirGrid specifications and ownership will be transferred to ESB/EirGrid following construction.

The Proposed Development comprises:

- A new 220kV substation compound (approximately 2.24ha) consisting of:
  - Outdoor AIS equipment rated for the system voltage of 220kV equipped with 4 number 220kV cable bays.
  - Two number single storey buildings including an EirGrid standard control building with ancillary services, and a customer Medium Voltage (MV) module.
  - Two 180 megavolt amperes (MVA) oil-filled step-down power transformers within bunded enclosures.
  - 14 lightning protection masts (25m in height).
  - A 2.6m tall palisade fence.
- Two new Line Cable Interface Mast (LCIMs), under existing OHL to facilitate the removal of a short section (approximately 60m) of the existing 220kV lines.
- Approximately 120m of new underground cables to connect the substation to the grid.
- Adjacent telecoms mast area (225m²) for substation communications between Maynooth and Gorman 220kV substations at either end of the existing 220kV OHL.
- Five passing bays on the L62051.

In addition to the above the Proposed Development will include the following:

- New site access off the L62051 and internal site access road.
- Car parking.
- Drainage infrastructure.
- All associated and ancillary site development works.

The redline boundary of the Proposed Development covers an approximate area of 7.3 hectares (ha), with the substation footprint covering approximately 2.24ha, access road and passing bay works footprint covering approximately 1.05ha.

1.2 Overview of the Site

The Substation Site and Access Road Site of the Proposed Development is located at Woodtown, Co. Meath (ITM Coordinates: 690076, 750194). The R154 (regional road) (Trim Road) is approximately 2.9km north, R125 is approximately 2.5km east, R156 is approximately 3.3km south and the L2207 local road is approximately 2.7km to the west.

The Passing Bay Site of the Proposed Development is located in Culmullin, Co. Meath (ITM Coordinates: 691508, 749959). It is located along the existing Culmullin Road (L62051).

The nearest residential settlements (towns and villages) to the Site are Summerhill, approximately 6km to the southwest, Trim approximately 12km to the northwest, Dunshaughlin, approximately 7km to the northeast, Dunboyne approximately 13.5km southeast.

The majority of the Substation Site and Access Road Site is within agricultural fields encompassed by hedgerows. The majority of the Passing Bay Site is located on existing paved road with small sections of grassy verges. The land immediately surrounding the Site is predominately agricultural, with boundary hedgerows and small pockets of woodland.

1.3 Legislation and Planning Context

This EcIA has been undertaken in the context of the following relevant legislative instruments and planning policies:

- Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (the 'Habitats Directive').
- Directive 2009/147/EC on the conservation of wild birds (the 'Birds Directive').
- Directive 2000/60/EC of the European Parliament and of the Council establishing a framework for Community action in the field of water policy ('Water Framework Directive' or 'WFD').
- Regulation 1143/2014 on the prevention and management of the introduction and spread of invasive alien species (the 'Invasive Species Regulations').
- Convention on Wetlands of International Importance ('Ramsar Convention').
- European Communities (Birds and Natural Habitats) Regulations 2011-2021 (the 'Habitats Regulations').
- Wildlife Act 1976 and Wildlife (Amendment) Act (2000) including all amendments (together known as the 'Wildlife Acts').
- Flora (Protection) Order 2015 S.I 356/2015 (the 'Flora Protection Order').
- The Planning and Development Act, 2000-2014.
- Flora (Protection) Order 2015 S.I 356/2015 (the 'Flora Protection Order').
- National Biodiversity Plan 2017-2021[1].
- County Meath Biodiversity Plan[2].
- Project Ireland 2040 National Planning Framework (NPF)[3].
- Meath County Development Plan 2021-2027[4].

Relevant local planning policies concerning nature conservation within the Meath County Development Plan 2021-2027[5] are summarised in Table 1.

Table 1 Summary of Relevant Policies within the County Meath Development Plan

Planning Policy	Purpose
HER POL 27	To protect, conserve, and enhance the County's biodiversity where appropriate.
HER POL 35	To ensure, where appropriate, the protection and conservation of areas, sites, species and ecological/networks of biodiversity value outside designated sites and to require an appropriate level of ecological assessment by suitably qualified professional(s) to accompany development proposals likely to impact on such areas or species.
HER POL 33	To have regard to the views and guidance of the National Parks and Wildlife Service in respect of proposed development where there is a possibility that such development may have an impact on a designated European or National site or a site proposed for such designation.
HER POL 34	To undertake appropriate surveys and collect data to provide an evidence-base to assist the Council in meeting its obligations under Article 6 of the Habitats Directives (92/43/EEC) as transposed into Irish Law, subject to available resources.
HER OBJ 35	To ensure that development does not have a significant adverse impact, incapable of satisfactory avoidance or mitigation, on plant, animal or bird species protected by law.

[1] Department of Culture, Heritage and the Gaeltacht (2017), National Biodiversity Action Plan 2017-2021 https://www.npws.ie/sites/default/files/publications/pdf/National%20Biodiversity%20Action%20Plan%20English.pdf
[2] Meath County Council, County Meath Biodiversity Action Plan 2015-2020 https://www.meath.ie/system/files/media/file-uploads/2019-06/County%20Meath%20Biodiversity%20Plan%202015-2020.pdf
[3] https://npf.ie/project-ireland-2040-national-planning-framework/
[4] Meath County Council, (2021), Meath County Development Plan 2021-2027 Meath Adopted County Development Plan | Meath County Council Online Consultation Portal
[5] Meath County Council, (2021), Meath County Development Plan 2021-2027 Meath Adopted County Development Plan | Meath County Council Online Consultation Portal

Planning Policy	Purpose
HER POL 36	To consult with the National Parks and Wildlife Service, and take account of any licensing requirements, when undertaking, approving or authorising development which is likely to affect plant, animal or bird species protected by law.
HER POL 37	To encourage the retention of hedgerows and other distinctive boundary treatments in rural areas and prevent loss and fragmentation, where practically possible. Where removal of a hedgerow, stone wall or other distinctive boundary treatment is avoidable, mitigation by provision of the same type of boundary will be required.
HER POL 38	To promote and encourage planting of native hedgerow species in new developments and as part of the Council's own landscaping works
HER POL 39	To recognise the archaeological importance of townland boundaries including hedgerows and promote their protection and retention.

The third National Biodiversity Plan (2017-2021)[6] was launched in 2017. This Plan includes 119 targeted actions for public authorities in relation to their obligations for biodiversity and outlines six main objectives to meet commitments under the Convention on Biological Diversity (CBD) and EU Biodiversity Strategy. These objectives include:

- Mainstream biodiversity into decision-making across all sectors.
- Strengthen the knowledge base for conservation, management and sustainable use of biodiversity.
- Increase awareness and appreciation of biodiversity and ecosystem services.
- Conserve and restore biodiversity and ecosystem services in the wider countryside.
- Conserve and restore biodiversity and ecosystem services in the marine environment.
- Expand and improve management of protected areas and species.
- Strengthen international governance for biodiversity and ecosystem services.

One particularly important policy change in the plan (Objective 1) relates to the 'mainstreaming' of biodiversity into decision-making across all sectors. Specifically, there is an action on all Public Authorities to "*move towards no net loss of biodiversity through strategies, planning, mitigation measures, appropriate offsetting and/or investment in Blue-Green infrastructure*". This and other relevant policies in the plan have informed the valuation of ecological features, assessment of potential impacts and development of mitigation in this report, as relevant.

The County Meath Biodiversity Action Plan (BAP)[7] contains a series of actions which detail biodiversity objectives and actions. The BAP aims to raise awareness of biodiversity value, and address threats to habitats and species.

2. Methods

2.1 Target Ecological Features

For the purposes of all desk study and field survey, protected and notable habitats and species which were target features of this EcIA comprise:

- All habitats on Annex I of the Habitats Directive.
- All species listed on Annex II and Annex IV of the Habitats Directive.
- All species of birds on Annex I of the Birds Directive.
- All species listed under the Wildlife Acts 1976 to 2021.
- Plant species listed on the Flora (Protection) Order, 2015.
- Species and habitats listed on the National Biodiversity Action Plan 2017 - 2021.
- Invasive non-native species of plants and animals listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477/2011) (as amended) (hereafter 'scheduled invasive species'), those of EU concern under the EU Invasive Alien Species Regulation, and those listed by the National Biodiversity Data Centre as High Risk in Ireland.

Other species or habitats that may be rare, scarce or otherwise notable were also included where deemed appropriate through available information and/or professional judgement.

[6] Department of Culture, Heritage and the Gaeltacht (2017), National Biodiversity Action Plan 2017-2021 https://www.npws.ie/sites/default/files/publications/pdf/National%20Biodiversity%20Action%20Plan%20English.pdf
[7] Meath County Council, County Meath Biodiversity Action Plan 2015-2020 https://www.meath.ie/system/files/media/file-uploads/2019-06/County%20Meath%20Biodiversity%20Plan%202015-2020.pdf

2.2 Consultation

2.2.1 Pre-Application Consultation Meeting with An Bord Pleanála

Pre-application meetings were held with An Bord Pleanála (ABP) on the 22 November 2021 and 27 April 2022. The objective of the meetings was to outline the proposal and to discuss any concerns or comments that ABP may have in relation to the proposal. Confirmation that the project was a strategic infrastructure development (SID) was a part of the pre application process.

2.2.2 Consultation with Statutory and Non Statutory Bodies

Letters and project descriptions were sent out to a list of statutory and non-statutory bodies that may have had an interest in the proposed development.

2.2.3 Information Drop to Nearby Residents

To inform local residents about the proposed Culmullin 220kV Substation, the Applicant distributed information and contact details to households within a radius of just over 1km of the proposed application site boundary. The information distributed to each household consisted of an information brochure on the proposed development. Residents were also given a letter inviting them to a drop-in public information event which was held on 10 November 2022.

In advance of the public information event, the Applicant also visited nearby residents to provide further information on 25 and 26 October 2022.

2.2.4 Public Information Event

The Applicant held a public information drop-in event in Moynalvey GFC Hall on 10 November 2022. Brochures and larger maps were available for attendees to take home. There were additional documents available to view, including photomontages and engineering drawings. The Energia project team were on hand to answer questions included electrical engineers, planning officers, project managers and community liaison officers.

2.2.5 Project Website

Energia Renewables launched a stand-alone project website for the Culmullin 220kV Substation www.culmullinsubstation.ie to keep members of the public informed about the Proposed Development.

2.3 Desk Study

A desk study was carried out to identify nature conservation designations, and records of protected and notable habitats and species potentially relevant to the Proposed Development.

The desk study areas were defined using a stratified approach based on the likely 'zone of influence' of the Proposed Development on different ecological features and an understanding of the maximum distances typically considered by statutory consultees. Accordingly, the desk study sought to identify:

- International nature conservation designations within 15km of the Proposed Development.
- National statutory conservation designations within 2km of the Proposed Development.
- Records of protected and notable habitats and species within 1km of the Proposed Development.

Internationally designated sites within the search area are shown in Figure 1 attached.

The desk study was carried out using the sources detailed in Table 2.

Table 2 Desk Study Data Sources

Data source	Accessed	Data obtained
National Parks and Wildlife Service (NPWS) webpages (https://www.npws.ie/protected-sites) and (https://www.npws.ie/maps-and-data/designated-site-data/download-boundary-data)	June 2023	International statutory designations within 15km. Other statutory designations within 2km.
Environment Protection Agency (EPA) webpage (https://gis.epa.ie/EPAMaps/)	June 2023	Information on watercourses.
Meath County Council website (https://www.meath.ie/)	June 2023	Policies relevant to nature conservation. County Meath Biodiversity Action Plan.

Data source	Accessed	Data obtained
National Biodiversity Data Centre (NBDC) website (https://www.biodiversityireland.ie/)	June 2023	Notable and protected species records within 1km (records older than 50 years have not been considered).
Aerial photography (www.google.com/maps)	June 2023	Habitats and connectivity relevant to interpretation of planning policy and potential protected/notable species constraints.
National Survey of Native Woodland (NSNW) and Ancient Woodland inventory (https://www.npws.ie/maps-and-data)	June 2023	Information on woodlands within 1km
Ecological Impact Assessment Woodtown Solar Farm[8]	June 2023	Ecological Impact Assessment carried out for the Woodtown Solar Farm. The surveys overlap with the Substation Site and the Access Road Site.

2.4 Field Survey

All field surveys were carried out by experienced AECOM ecologists and had regard for relevant guidance including, but not limited to, the National Road Authority's (NRA) (now known as Transport Infrastructure Ireland (TII)) *Ecological Surveying Techniques for Protected Flora and Fauna during the Planning of National Road Schemes*[9].

Field surveys within the Substation Site and lands within the solar farm site boundary were carried out on 06 July 2021. An updated field survey was carried on 06 January 2023 to survey the additional proposed Passing Bay Site. The Access Road Site was not surveyed further as sufficient data was available from field surveys carried out by Neo Environmental[10] for this assessment.

2.5 Extended Fossitt Habitat Survey

A habitat survey was carried out using the Heritage Council classification system[11] and following and Heritage Council methodology[12]. Notes were made for each habitat of dominant, typical and notable plant species, and any relevant ecological characteristics, and these reflect conditions at the time of survey.

The surveyors recorded and mapped all habitat types in the survey area and any relevant ecological features, including invasive non-native plants. The survey area encompassed all safely accessible parts of the Substation Site boundary and adjacent habitats to a minimum distance of 50m. It also encompassed the boundary of the Passing Bay Site. The survey area is as shown on Figures 2a and 2b attached.

2.5.1 Appraisal of Potential Suitability of Habitats to Support Protected and Notable Species

An appraisal was made of the potential suitability of the habitats present to support protected and notable species of plants or animals. Field signs, habitat features with potential to support protected species and any sightings or auditory evidence were recorded when encountered. No detailed surveys were carried out for any particular species, apart from undertaking a preliminary bat roost appraisal of all trees and carrying out a badger survey within the Site.

2.6 Badger Survey

Survey for badger (*Meles meles)* was carried out in suitable habitat within the survey area. The survey followed guidance in published literature[13]. Evidence searched for included setts, spoil heaps, bedding, guard hairs, latrines, footprints, trails, scratch marks and foraging activity. If any badger activity or evidence was recorded this was mapped with the aid of aerial photography and GPS, with accompanying field notes.

[8] Neo Environmental (2021). Technical Appendix 2: Ecological Impact Assessment. Woodtown Solar Farm.
[9] NRA (2009). Ecological Surveying Techniques for Protected Flora and Fauna during the Planning of National Road Schemes. National Roads Authority, Ireland.
[10] Neo Environmental (2021). Technical Appendix 2: Ecological Impact Assessment. Woodtown Solar Farm.
[11] Fossitt, J.A. (2000). A Guide to Habitats in Ireland, The Heritage Council
[12] Smith, G.F., O'Donoghue, P. and Delaney, E. (2011). Best Practice Guidance for Habitat Survey and Mapping. The Heritage Council, Kilkenny.
[13] Harris et al (1989). Surveying Badgers, The Mammal Society

2.7 Bat Roost Suitability

The bat roost suitability of all trees within the survey area was assessed following guidance published by the Bat Conservation Trust[14]. Potential Roost Features (PRF) were identified from the ground, and trees were classified as having Negligible, Low, Moderate or High bat roost suitability, according to the definitions provided in the survey guidance[15].

PRF searched for included suitable holes, cracks or splits in trees. Where such features existed, evidence of bat use searched for included droppings, staining, foraging remains, auditory evidence and sightings of live or dead bats.

2.8 Ecological Impact Assessment

2.8.1 Scope of Assessment

The Proposed Development is considered to be permanent and there is no expectation of a 'decommissioning' phase. This EcIA therefore considers only the construction and operation of the Proposed Development.

The field survey did not include searches for protected/notable fish, protected/notable aquatic invertebrates, otter (*Lutra lutra*) red squirrel (*Sciurus vulgaris),* smooth newt (*Lissotriton vulgaris*) and common lizard (*Zootoca vivipara*) because they are considered absent from the relevant area for the reasons given below. Given their likely absence these features are not considered further in this EcIA.

The following ecological features were excluded from the field survey and will not be referred to any further within this assessment:

- Protected/notable fish, protected/notable aquatic invertebrates, and otter - no suitable habitat is present within the zone of influence of the Proposed Development, the nearest watercourses are approximately 190m distant from the Substation Site (Arodstown Stream) and 150m distant from the Passing Bay Site (Moyleggan Stream).
- Red squirrel - no survey was carried out because red squirrel is assumed to be absent from the area[16].
- Smooth newt - there are no suitable waterbodies within the Site or with connectivity to the Site in the surrounding area (within 250m), the ditches within the Site were dry or shallow at the time of survey, in addition there are no existing records of smooth newt within 1km of the Site.
- Common lizard - there is insufficient suitable habitat to support a sustainable common lizard population and thus this species are unlikely to be affected by the Proposed Development.

2.8.2 Assessment Method

Assessment of ecological impacts in this EcIA broadly follows guidelines published by the Chartered Institute of Ecology and Environmental Management (CIEEM)[17]. The principal steps involved in the CIEEM approach can be summarised as:

- Baseline conditions are determined by obtaining data on potentially affected ecological features through targeted desk study and field survey (both at expected Proposed Development commencement and, for comparison, at a future point in the absence of the Proposed Development).
- The importance of ecological features identified in the baseline is evaluated in a geographic context, determining those that require more detailed assessment.
- The potential impacts of the Proposed Development that could affect ecological features are described, considering embedded mitigation, and accounting for best practice and legislative requirements.
- The likely effects on ecological features are assessed and if possible quantified.
- Measures are developed to mitigate (by avoidance or reduction), or if necessary, compensate for likely significant adverse effects, in conjunction with other design elements.
- The significance of residual effects (beneficial or adverse) is reported.
- Scope for ecological enhancement is considered.

The assessment employs the professional judgement of experienced ecologists as necessary.

[14] Collins (2016). Bat Surveys – Good Practice Guidelines (3rd Edition)
[15] Collins (2016). Bat Surveys – Good Practice Guidelines (3rd Edition)
[16] Meath County Council, County Meath Biodiversity Action Plan 2015-2020 https://www.meath.ie/system/files/media/file-uploads/2019-06/County%20Meath%20Biodiversity%20Plan%202015-2020.pdf
[17] Chartered Institute of Ecology and Environmental Management (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland

2.8.3 Assessing the Importance of Ecological Features

An ecological feature is a site, habitat, or species of nature conservation value. Only those that are 'important' and could be significantly affected by the project require detailed assessment: "*it is not necessary to carry out detailed assessment of ecological features that are sufficiently widespread, unthreatened and resilient to project impacts and will remain viable and sustainable*"[18].

Existing data and criteria are considered when determining the importance of ecological features. Where these are lacking, it is necessary to apply professional judgement. Factors considered include:

- Abundance/rarity, endemicity, mobility and distribution (particularly if this changing).
- Size/extent, viability, rate of decline and vulnerability.
- Typicalness, species-richness, structure and connectivity/fragmentation.
- Function/value to other features (e.g. habitats of notable species or buffers against impacts).
- Restoration potential.

Requirements to comply with legislation are stated during the assessment, but legislative protection and priority listing does not necessarily translate to importance. For example, a transitory roost of a single bat would not be afforded the same importance as a regularly occurring maternity roost (although legal obligations must still be met), and areas of priority habitat could be unfavourably small or in poor condition and not practically restorable.

The importance of ecological features is described within a geographic scale. Examples of types of features which might fall into each geographic class are given in the table below:

Table 3 Geographical Scale of Importance

Scale	Example Features (Subject to Professional Judgement)
International/European	Internationally designated site (or candidate/proposed international site). Sustainable internationally significant population or site supporting one.
National (Ireland)	Nationally designated site (or site considered worthy of such designation). Sustainable area of a national priority habitat or notable Annex I habitat which is a significant proportion of the national resource. Sustainable nationally significant population (e.g. 1% of national resource) or site supporting one.
Regional (*e.g.,* Natural Heritage Areas)	Sustainable area of a priority habitat which is a significant proportion of the regional resource. Sustainable regionally significant population (e.g. 1% of regional resource) or site supporting one.
County, or other Local Authority-wide Area	Sustainable area of priority habitat which is a significant proportion of the county resource. Sustainable county-significant population (*e.g.,* 1% of county resource) or site supporting one.
Local (*e.g.,* 10km radius)	Priority habitat not large enough for higher importance or degraded with low restoration potential. Habitat or population which appreciably enriches the local resource. Sustainable population of a notable species not considered of higher importance.
Site	Common, heavily managed or modified habitat, and common and widespread species, of low ecological value and not of value for features of higher importance.

2.8.4 Assessment of Impacts

Impacts may occur during the construction, operation and decommissioning phases of a development. They may be direct or indirect (also termed 'secondary'). Direct impacts are attributable to an action associated with a development. Indirect impacts are often produced away from a development or as a result of other initial impacts.

Under the CIEEM guidance[19] there is a distinction between impact and effect. An impact is an action on an ecological feature (*e.g.,* hedgerow removal. loss of a bat roost). An effect is the outcome of that impact on an ecological feature (*e.g.,* effect of hedgerow loss on breeding birds. effect of bat roost loss on the conservation status of the bat species).

Likely impacts/effects are characterised using those parameters below that are necessary to understand them:

- **Direction**: whether the impact/effect be beneficial or adverse.
- **Magnitude**: the 'size', 'amount' or 'intensity' of an impact/effect, quantified as far possible.

[18] Chartered Institute of Ecology and Environmental Management (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland
[19] Chartered Institute of Ecology and Environmental Management (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland

- **Extent**: the spatial or geographical area or distance over which the impact/effect occurs.
- **Duration**: the time over which an impact/effect is expected to last before recovery or replacement (if possible) of the feature. Where appropriate, ecological aspects such as lifecycles are considered. The duration of an effect may be longer than the duration of an activity or impact.
- **Timing/frequency**: timing is important since an impact/effect might not occur if it avoids critical seasons or life stages. Frequency considers activity repetition, which may have greater impact.
- **Reversibility**: whether the impact/effect is temporary or permanent. A temporary impact/effect is one from which recovery is possible or for which effective mitigation is possible and enforceable. A permanent impact/effect is one from which recovery is either not possible or cannot be achieved within a reasonable timescale (in the context of the feature being assessed).

Consideration is given to conservation objectives, whether processes within sites will be altered, effects on habitats and species population size/viability, and whether these will have an effect on conservation status. Conservation status includes the abundance and distribution of species, and the extent, structure and function, and typical supported species of habitats.

Consideration is given to cumulative effects, since effects acting in combination may have a cumulative effect exceeding that of the separate effects. Cumulative effects may arise from a combination of effects from the development itself (e.g., effects at the construction and operation stages), or the combined effects from different developments.

2.8.5 Assessment of Significance

An effect (positive or negative) is significant at a specified geographical level if it affects the ecological integrity of a site or ecosystem or the conservation status of a species or habitat at that geographical level. If not significant at the level it was considered important, an effect could be significant at a lower geographic level (for example, an effect on a national priority species may not be significant to the national population). These assessments are based on quantitative evidence where possible, and as necessary through the professional judgement of experienced ecologists.

Initially, the effect significance does not consider mitigation (avoidance or reduction) or compensation measures unless these are explicitly embedded into the design. The residual effect significance takes account of additional agreed and enforceable mitigation or compensation measures that are considered necessary, with the aim that, wherever possible, residual effects are not significant or are significant at a lower geographic level than the unmitigated effects.

CIEEM advise that where there is reasonable doubt and a conclusion of no significant effect cannot be robustly reached, this uncertainty should be acknowledged and a significant effect assumed, in line with the precautionary principle.

2.8.6 Mitigation Approach

Where impacts on relevant ecological features are predicted, the approach to mitigation engages the following hierarchy:

- Avoid features where possible.
- Minimise impact by design, method of working or other measures, for example by enhancing existing features.
- Compensate for significant residual impacts (e.g., by providing suitable habitats elsewhere).

This hierarchy requires the highest level to be applied where possible. Only where this cannot reasonably be adopted are lower levels considered. The rationale for the proposed level of mitigation is provided, with sufficient detail to show that the measures are feasible and would be provided.

Further to mitigation, Policy HER POL 27 within the Meath County Development Plan aims to “protect, conserve, and seek to enhance the County’s biodiversity.” This EcIA has therefore considered the potential to secure biodiversity enhancement.

2.9 Appropriate Assessment Screening and Natura Impact Statement

An Appropriate Assessment (AA) Screening and Natura Impact Statement [20] has been completed, the purpose of which was to determine, in view of best available scientific knowledge, whether the Proposed Development, either alone or in combination with other plans or projects, could have adverse effects on the integrity of European sites

[20] AECOM (2023). Energia Solar Culmullin Substation Natura Impact Statement

identified within the ZoI of the Proposed Development, in view of the sites' conservation objectives. Note that the designated sites assessed in the AA Screening and Natura Impact Statement have not been identified based on arbitrary distances, but individually assessed as potentially relevant in relation to potential effects from the Proposed Development based on the "*the nature size and location of the project*" as per guidance published by the Department of Environment, Heritage and Local Government[21].

2.10 Limitations

Information obtained through desk study is intended to supplement fieldwork and relies on people and organisations having submitted records for the desk study area. As such, a lack of records for particular habitats or species does not necessarily equate to their absence from the desk study search area. Likewise, the presence of records for particular habitats and species does not imply their continued occurrence or relevance in the context of the Proposed Development.

Where habitat boundaries coincide with discernible boundaries on recent aerial photographs (where available) the resolution is as determined by the accuracy of the aerial photographs. Otherwise, habitat mapping is as estimated in the field. Where areas of habitat are given, they are approximate and should be verified by measurement on site where required for design or construction.

There are no other significant limitations to this Ecological Impact Assessment.

3. Baseline Conditions

3.1 Nature Conservation Designations

Two Special Areas of Conservation (SAC) and one Special Protection Area (SPA) were identified within 15 km of the Proposed Development, as detailed in Table 4. The locations of these sites are shown on Figure 1 attached.

There are no Natural Heritage Areas (NHA) or proposed Natural Heritage Areas (pNHA) within 2km of the Proposed Development.

Table 4 Sites for Nature Conservation within 15 km of the Proposed Development

Site Name	Summary of Qualifying Interests	Relationship to the Proposed Development
River Boyne and River Blackwater SAC	Alkaline fens [7230] Alluvial forests with alder *Alnus glutinosa* and ash *Fraxinus excelsior* [91E0] River lamprey *Lampetra fluviatilis* [1099] Atlantic salmon *Salmo salar* [1106] Otter *Lutra lutra* [1355]	Approximately 9.4 km west of the Substation Site. Approximately 10.3 km west of the Passing Bay Site. There is potentially hydrological connectivity between the Proposed Development and this SAC via surface water systems.
River Boyne and River Blackwater SPA	Kingfisher *Alcedo atthis* [A229]	Approximately 9.4 km west of the Substation Site. Approximately 10.3 km west of the Passing Bay Site. There is potentially hydrological connectivity between the Proposed Development and this SPA via surface water systems.
Rye Water Valley/Carton SAC	Petrifying springs with tufa formation [7220] Narrow-mouth whorl snail *Vertigo angustior* [1014] Desmoulin's whorl snail *Vertigo moulinsiana* [1016]	Approximately 12.3 km southeast of the Substation Site. Approximately 11.2 km southeast of the Passing Bay Site. No pathways have been identified between the Site and SAC.

3.2 Woodlands

There are no ancient woodlands within 1km of the Proposed Development and there are no native woodland blocks within or immediately adjacent to the Proposed Development.

[21] DoEHLG (2010). Appropriate Assessment of plans and projects in Ireland. Guidance for Planning Authorities. Department of Environment, Heritage and Local Government: Ireland

3.3 Habitats

The results of the Phase 1 habitat survey are described below and are shown on Figures 2a and 2b attached to this report. Photographs of the Site are presented within Appendix A.

3.3.1 Arable Crops (BC1) and Improved Agricultural Grassland (GA1)

The Substation Site almost entirely comprises an arable crop field, Photographs 1 and 2, Appendix A. The Passing Bay Site comprises two small sections of improved agricultural grassland that are frequently grazed by livestock.

The Access Road Site also mainly comprises arable crops and agricultural fields grazed by livestock. The agricultural fields generally include perennial rye grass (*Lolium perenne*), Yorkshire-fog (*Holcus lanatus*), creeping buttercup (*Ranunculus repens*), crested dog's-tail (*Cynosurus cristatus*), and cock's-foot (*Dactylis glomerata*)[22].

3.3.2 Drainage Ditches (FW4)

At the time of survey in January 2023, the drainage ditches had shallow water present in the northern section of the Passing Bay Site along the grassy verges adjacent to the existing road.

These wet drainage ditches were typically 0.3 to 1 m wide with leaf litter present at the bottom. The water generally had a moderately fast, northwestern flow.

3.3.3 Dry Meadows and Grassy Verges (GS2)

There were several areas of grassy verges within the Passing Bay Site. The footprint of the passing bays mainly comprises the hardstanding pavement and grassy verges along the existing road.

These grassy verges are typically associated with ditches. They are dominated by grasses including perennial rye grass, Yorkshire-fog, meadow grasses (*Poa* spp.), false-oat grass (*Arrhenatherum elatius*), cock's-foot (*Dactylis glomerata*). They usually include patches of bare soil and occasionally herbaceous species such as herb-Robert (*Geranium robertianum),* common nettle (*Urtica dioica*), meadowsweet (*Filipendula ulmaria*), dandelion (*Taraxacum officinale* agg.), cleavers (*Galium aparine*), creeping buttercup, and daisy (*Bellis perennis*).

3.3.4 Hedgerow (WL1)

An overgrown intact species-rich hedgerow (Photograph 5) is located adjacent to the Substation Site to the southwest. It comprises oak (*Quercus* sp.), ash (*Fraxinus excelsior*), hawthorn (*Crataegus monogyna*), ivy (*Hedera helix*), dog rose (*Rosa canina*), hazel (*Corylus avellana*), blackthorn (*Prunus spinosa*), with thistle (*Cirsium* sp.), willowherb (*Epilobium* sp.), hogweed (*Heracleum sphondylium*), bush vetch (*Vicia sepium*), herb-Robert and hart's tongue fern (*Asplenium scolopendrium*). A dry ditch is located immediately adjacent to the hedgerow, species present include bittercress (*Cardamine* sp.), watercress (*Nasturtium officinale*) and horsetail (*Equisetum* sp.).

There are several hedgerows within the survey area for the Passing Bay Site. These hedgerows appear to be frequently cut and typically comprise beech (*Fagus sylvatica*), cherry laurel (*Prunus laurocerasus*) (non-scheduled, high-impact invasive species), blackthorn, hawthorn, and bramble (*Rubus fruticosus*). However, the only hedgerow within the Passing Bay Site boundary and footprint of Passing bay 2 as shown on the drawing 'Culmullin 220kV Substation Proposed Passing Bays on L62051 Overall Concept Plan' is a hedgerow dominated by the non-scheduled, high-impact invasive species cherry laurel.

3.3.5 Treeline (WL2)

A treeline with frequent gaps between trees (Photograph 3) is located adjacent to the Substation Site to the northwest. It comprises ash, hawthorn, blackthorn with broadleaved dock (*Rumex obtusifolius*) and rosebay willowherb (*Chamaenerion angustifolium).* A dry ditch (Photograph 4) is located adjacent to the treeline with creeping buttercup, meadow buttercup (*Ranunculus acris*) and thistle.

There are several treelines within the survey area for the Passing Bay Site. These treelines typically comprise mature trees that range between 10 to 18 m tall. They are typically dominated by beech, oak, and ash. Based on the drawing 'Culmullin 220kV Substation Proposed Passing Bays on L62051 Overall Concept Plan,' Passing bay 1 is adjacent to a treeline that ranges from 10 to 15 m tall and is dominated by beech and oak. Passing bay 5 is adjacent to a 15 m tall treeline dominated by mature beech with large gaps present between trees. There is also a short, frequently cut beech hedgerow below this treeline as well.

[22] Neo Environmental (2021). Technical Appendix 2: Ecological Impact Assessment. Woodtown Solar Farm.

3.3.6 Woodland (Mixed Broadleaved Woodland (WD1), Mixed Broadleaved / Conifer Woodland (WD2), and Mixed Conifer Woodland (WD3))

There are several small woodland parcels in the survey area for the Passing Bay Site. Two of these parcels are dominated by broadleaved species, four are an even mix of broadleaved and conifer species, and two parcels are dominated by conifer species.

The broadleaved woodlands are typically 18 m tall and comprise mature trees dominated by beech, maple (*Acer* spp.), and oak. The understory comprises bramble, ferns, ivy, and cherry laurel. The mixed broadleaved and conifer woodlands typically range between 15 and 20 m tall and are dominated by beech, oak, spruce (*Picea* spp.) and cedar (*Thuja* spp.), and Scot's pine (*Pinus sylvestris*). The understory is typically sparce with mainly bare soil and ivy present. There is occasional bramble and cherry laurel. The conifer woodlands range from 13 to 20 m tall and are typically dominated by spruce and cedar with bramble scrub below.

Although these woodlands are within the survey area, only three woodland parcels are adjacent to the footprint of the passing bays as per the drawing 'Culmullin 220kV Substation Proposed Passing Bays on L62051 Overall Concept Plan'. One mixed broadleaved woodland (WD1) parcel is adjacent to passing bay 2. One mixed broadleaved / conifer woodland (WD2) and one mixed conifer woodland (WD3) is adjacent to passing bay 4, however, no trees will be removed from these woodland parcels.

3.4 Protected and Notable Species

3.4.1 Protected and Notable Plant Species / Invasive Plant Species

No protected or notable plant species were recorded within the Site.

The non-scheduled, high impact invasive species cherry laurel is present throughout the survey area of the Passing Bay Site. It is located scattered throughout a woodland parcel, in a patch of woodland measuring approximately 10 x 5 m in area, and throughout two hedgerows. These locations are shown on Figure 3 attached.

Cherry laurel is only present in the hedgerow in passing bay 2 and passing bay 3. The other areas with cherry laurel are outside of the footprint of the passing bays.

3.4.2 Bats

No existing records of bat species were identified within 1km of the Site.

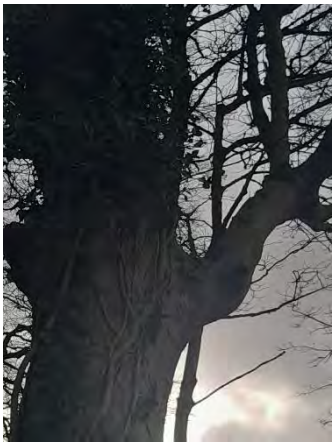
The hedgerows, treelines, and woodland features within and/or adjacent to the Site may support foraging and commuting bats.

Eight trees with Low bat roost suitability and one tree with Moderate bat roost suitability were identified within the survey area of the Passing Bay Site.[23] Furthermore, Neo Environmental identified a treeline north of the Access Road Site with mature oak and Scot's pine that has bat roosting potential.[24] These are displayed on Figure 3 attached to this report. The trees with bat roost suitability identified at the Passing Bay Site are described further in Table 5.

[23] Collins (2016). Bat Surveys – Good Practice Guidelines (3rd Edition)
[24] Neo Environmental (2021). Technical Appendix 2: Ecological Impact Assessment. Woodtown Solar Farm.

Table 5. Trees with Bat Roost Suitability

Tree Ref	Suitability	Feature Description	Photograph(s)
T01	Low	Beech tree with one large knothole facing southwest approximately 5 m high on the trunk of the tree. Another small knothole that may be closed on branch facing south approximately 8 m high.	 
T02	Low	Beech tree with two knotholes on branches approximately 9 m high on the tree facing south. Note that these holes may be closed, but it was difficult to assess this from the ground level.	 
T03	Low	Oak with two broken branches approximately 10 m high with potential small openings for bats.	 
T04	Low	Dying tree with small knotholes on branch facing north 6 m high. Also, there is a broken branch and lifting bark 8 m high.	 

Tree Ref	Suitability	Feature Description	Photograph(s)
T05	Low	Mature tree with knothole approximately 5 m high by the trunk facing southeast.	 
T06	Low	Beech tree with two knotholes 5.5 m high facing north and one knothole 9 m high on branch facing east.	 
T07	Low	Maple tree with one knothole on trunk facing north approximately 4 m high. Another knothole on a branch approximately 4 m high facing northwest and knothole facing east approximately 4.5 m high on tree trunk.	 
T08	Low	Mature tree with hole in branch facing down approximately 7 m high.	 

Tree Ref	Suitability	Feature Description	Photograph(s)
T09	Moderate	Mature tree, likely oak, with five knotholes along one tree branch closest to the road, two knotholes on trunk, multiple broken branches, and bat boxes present on other side of tree away from the road.	 

3.4.3 Badgers

There are six existing records of badger within 1km of the Site, with the latest being in 2016. Furthermore, three badger setts were identified by Neo Environmental in fields approximately 700m south of the Substation Site.

A mammal trail was identified by the treeline at the Substation Site, which was likely to be fox (*Vulpes vulpes*). No badger setts or evidence of badger was recorded during the survey. However, the habitats present within the Site could support foraging badger.

3.4.4 Breeding and Wintering Birds

The desk study identified the following relevant records of Red-Listed Birds of Conservation Concern (BoCC)[25]: barn owl (*Tyto alba*), grey partridge (*Perdix perdix*), grey wagtail (*Motacilla cinerea*), golden plover (*Pluvialis apricaria*), kestrel (*Falco tinnunculus*), meadow pipit (*Anthus pratensis*), redwing (*Turdus iliacus*), snipe (*Gallinago gallinago*), swift (*Apus apus*), woodcock (*Scolopax rusticola*) and yellowhammer (*Emberiza citrinella*) within 1km of the Site.

There are no habitats present within the Site which are suitable to support barn owl or kestrel. The linear habitats within the Site are highly likely to be used for nesting by a common assemblage of breeding birds. During winter the Site may also support a common and widespread wintering bird species.

3.4.5 Common Frog

The desk study identified existing records of common frog (*Rana temporaria*) within 1km of the Site.

There are two ditches within the Substation Site, both of which were dry during the survey, however they could have held water earlier in the year. The closest other potential waterbody is a watercourse located 190m west of the Substation Site boundary. There are also several ditches in the Passing Bay Site. However, the majority of these were dry, with the exception of one shallow wet ditch in the northernmost passing bay laydown area. The nearest watercourse to the Passing Bay Site is the Moyleggan Stream which is approximately 150m south.

The majority of the habitat present within the Site, i.e. the arable field, is sub-optimal terrestrial habitat, however the treeline and hedgerow do provide more suitable terrestrial habitat. The presence of common frog within the Site therefore cannot be ruled out.

3.4.6 Hedgehog

No existing records of hedgehog (*Erinaceus europaeus*) were identified within 1km of the Site.

No observations or evidence of hedgehog were recorded during field surveys; however they are nocturnal and field signs are less frequently observed than for other mammals. Suitable habitat for feeding, breeding, and hibernating hedgehogs is present within the Site, including treelines and hedgerows. Hedgehogs are protected under the Wildlife Acts.

[25] Gilbert, G., Stanbury, A. and Lewis, L. (2021). Birds of Conservation Concern in Ireland 4: 2020-2026. *Irish Birds* **43**, pp 1-22

3.4.7 Irish Hare

One record of Irish hare (*Lepus timidus hibernicus)* were identified within 1km of the Site in 1992.

Irish hare was not observed during field surveys. Given the absence of suitable habitat such as tussocky grassland within which hares could shelter, this species is considered likely to be absent from the Site.

3.4.8 Pine Marten

One existing record of pine marten (*Martes martes*) were found within 1km of the Site in 2012. In addition, when the surveyors were travelling to the Site on 06 July 2021 a pine marten was observed to the north of the Access Road Site, which is approximately 300m northeast of the Substation Site.

Habitat suitable to support this species is present within the surrounding area and this species may use the treelines/hedgerow within the Site.

3.4.9 Terrestrial Invertebrates

Existing records of marsh fritillary (*Euphydryas aurinia*), small blue (*Cupido minimus*) and wall butterfly (*Lasiommata megera*), were identified within 1km of the Site.

The habitats present within the Site are not suitable to support the above butterfly species as they favour grassland habitats, coastal grassland and dune (small blue/wall), damp grassland and/or marsh habitat (marsh fritillary).

Due to the limited ecological value of the habitats present, it is unlikely that any protected/notable terrestrial invertebrate species would be found within the Site.

3.4.10 Other Mammals

The Site may support Irish stoat (*Mustela erminea hibernica*) and pygmy shrew (*Sorex minutus*) which are both protected under the Wildlife Acts.

3.5 Future Baseline

3.5.1 Baseline at Time of Construction

The exact programme of works is yet to be finalised, but it is expected that:

- Application is made for Planning Permission in Q3 of 2023.
- Commence site enabling and construction works in Q4 of 2024 (subject to planning permission).
- Completion of construction and commissioning in Q4 of 2026.

Based on this, there is an expectation that in the interim period between field survey and construction there will be no substantial changes to the baseline conditions described in this document.

3.5.2 Baseline in the Absence of the Proposed Development

If construction of the Proposed Development did not take place, it is likely that the Substation Site and Access Road Site will continue to be used for agricultural purposes. The Site is not earmarked or designated as a future development area.

The Proposed Development footprint almost entirely covers the arable field and paved road which provides very limited ecological value and, should the field and paved road continue to be used for this purpose would continue to provide limited biodiversity value.

4. Impact Assessment

4.1 Features Excluded from Further Assessment

Relevant ecological features are those that are considered to be 'important' and have the potential to be affected by the Proposed Development[26]. In view of the baseline data obtained through desk study and field survey, the following features have been excluded from further assessment because there is considered to be no possible effect on them, through absence of the feature or clear absence of an impact pathway:

[26] Chartered Institute of Ecology and Environmental Management (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland

- European sites including River Boyne and River Blackwater SAC and SPA, and Rye Water Valley/Carton SAC – the Natura Impact Statement[27] concluded that the Proposed Development will not result in adverse effects on the integrity of any European site, either individually or in-combination with other plans or projects.
- Ancient and native woodlands – there are no ancient woodlands within 1km of the Site and no woodland within or immediately adjacent to the Site.
- Arable, agricultural fields, grassy verges along roads, drainage ditches, and hardstanding – these habitats are of very little ecological value.
- Irish hare – likely to be absent from the Site due to lack of suitable habitats.
- Terrestrial invertebrates – unlikely to be protected/notable species within the Site.

4.2 Importance of Ecological Features

Ecological features identified in the baseline conditions and not scoped out of detailed assessment, *i.e.,* those that are considered 'important' (following CIEEM guidance[28]), are set out in Table 6 below together with the rationale. Ecological importance has been assessed on a geographic scale following CIEEM guidance.

Table 6 Importance of Ecological Features

Ecological Feature	Importance	Rationale
Hedgerow (WL1)	Local	This habitat is present in the Site and surrounding area and is very common and widespread. No direct loss of the habitat is anticipated. However the hedgerow adjacent to the Substation Site and Access Road Site is species-rich and provides valuable connectivity to the surrounding area.
Treeline (WL2)	Local	This habitat is present in the Site and surrounding area and is very common and widespread. One tree at passing bay 3 will may be removed for the Proposed Development. It also provides some connectivity to the surrounding area.
Woodland (WD1, WD2 and WD3)	Local	This habitat is present adjacent to the Passing Bay Site. No direct loss of the habitat is anticipated. However, it provides connectivity to the surrounding area.
Invasive non-native species	Local	There are four areas within and/or adjacent to the Passing Bay Site with the non-scheduled, high-impact invasive species cherry laurel present.
Bats	Local	The linear features within the Site likely support foraging and commuting bats. These habitats will not be lost and there are similar habitats present within the surrounding area. There are nine trees with bat roost suitability (eight Low trees and one Moderate tree) at the Passing Bay Site. Therefore, the Site is likely to be of Local importance to bats.
Badger	Site	Badger are common and widespread within the area. No setts or evidence of badger was recorded within the Site. However, badger may use the Site for foraging purposes.
Birds (breeding and wintering)	Site	Suitable habitat for breeding and wintering bird is present on Site and common and widespread species are likely to occur. No specially protected breeding/wintering species are likely to be present. Given that the species present can reliably be expected to be abundant, with wide distributions that are adapted to arable environments, the breeding/wintering bird assemblage is likely to be of Site importance only.
Common frog	Local	No suitable habitats for breeding common frog were present during the Site survey, however there were two dry ditches adjacent to the Substation Site, dry ditches within the Passing Bay Site, and shallow wet ditches in the Passing Bay Site which may hold water during spring. There is also a watercourse located approximately 190 m from the Substation Site boundary and 150 m from the Passing Bay Site boundary. The presence of common frog within the Site cannot be ruled out due to the presence of suitable terrestrial habitat (treeline and hedgerow) within the Site and connectivity to potential breeding habitat. The Site is therefore likely to be of Local importance to common frog.
Hedgehog, pine marten and other mammals (Irish stoat and pygmy shrew)	Site	These species may use the treeline and hedgerow habitats within the Site. The remainder of the Site (arable and agricultural fields) is not optimal habitat for these species. These species are relatively widespread and common and are deemed to be important at a Site level only.

4.3 Embedded Mitigation

Embedded mitigation are those measures which have been incorporated into the design of a development and which aim to avoid or reduce adverse effects, including on ecological features. Embedded mitigation which is achieved through the design of a development can be considered at the impact assessment stage whereas mitigation measures which are not an integral part of the design ('specific mitigation') are considered following an

[27] AECOM (2023). Energia Solar Culmullin Substation Natura Impact Statement
[28] Chartered Institute of Ecology and Environmental Management (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland

initial assessment of the ecological impacts, giving rise to an assessment of residual effects which would occur following the implementation of mitigation.

4.4 Predicted Impacts and Effects

Predicted impacts and effects of construction and operation of the Proposed Development are provided in Table 7 below, alongside mitigation to be adopted. An assessment of the residual effects of the Proposed Development following implementation of mitigation is then provided.

Table 7 Predicted Impacts and Effects

Ecological Feature	Summary of Baseline	Importance (see Table 5 for rationale)	Construction Impacts and Effects	Operational Impacts and Effects	Specific Mitigation	Residual Effects
Hedgerow	A hedgerow is located to the south of the Substation Site and along the boundaries of the Access Road Site. There is one hedgerow that is almost entirely composed of the invasive non-native species cherry laurel that will likely be removed for the Passing Bay Site.	Local	*Loss of or physical damage to hedgerow* No hedgerows will not be lost as a result of the Proposed Development, with the exception of a hedgerow at the Passing Bay Site that is dominated by cherry laurel. All other hedgerows will be protected to ensure that there is no damage during construction activities.	None.	As outlined in the outline Construction Environmental Plan (oCEMP) that accompanies this planning application, a Construction and Environmental Management Plan (CEMP) and/or relevant Method Statement(s) must be produced by the appointed Contractor describing how damage to the hedgerow will be avoided. Such mitigation must be implemented in full. Replacement planting of any vegetation lost will occur. This will include planting native species of the local area. No non-native invasive species will be planted	Negligible
Treeline	A treeline is located to the northwest of the Substation Site and Access Road Site. There are also several treelines adjacent to the Passing Bay Site.	Local	*Loss of or physical damage to treeline* One tree at passing bay 3 may be removed for the Proposed Development. The other treelines will be retained and protected during construction.	None.	As outlined in the oCEMP that accompanies this application, a CEMP and/or relevant Method Statement(s) must be produced by the appointed Contractor describing how loss or damage to the treelines will be avoided. Such mitigation must be implemented in full. Root protection zones should be implemented. If required, replacement planting of the tree to be felled will occur.	Negligible
Woodland	There are several woodland parcels adjacent to the Passing Bay Site.	Local	*Loss of or physical damage to woodland* No woodlands will be lost as a result of the Proposed Development. These woodlands will be protected to ensure that there is no damage during construction activities.	None	As outlined in the oCEMP that accompanies this application, a CEMP and/or relevant Method Statement(s) must be produced by the appointed Contractor describing how damage to the woodlands will be avoided. Such mitigation must be implemented in full.	Negligible
Invasive non-native species	There are four areas with the non-scheduled, high-impact invasive species cherry laurel within the vicinity of the Passing Bay Site.		*Spread of non-native invasive species* There are four areas with the non-scheduled, high-impact invasive species cherry laurel present. One of these hedgerows with cherry laurel will likely need to be removed for the construction of the passing bays.	*Spread of non-native invasive species during construction phase* Cherry laurel could spread to other areas during the	Non-native invasive species (i.e. cherry laurel) within the Site will be avoided and fenced off where possible. If these areas with cherry laurel cannot be avoided and fenced off, this species should be managed and eradicated from the Site. An appropriate Method Statement outlining the specific management should be produced under ecologist guidance.	

Ecological Feature	Summary of Baseline	Importance (see Table 5 for rationale)	Construction Impacts and Effects	Operational Impacts and Effects	Specific Mitigation	Residual Effects
				construction phase if these areas are not avoided or not managed appropriately.		
Bats	Eight trees with Low bat roost suitability and one tree with Moderate bat roost suitability were identified within the survey area of the Passing Bay Site. Suitable habitat (hedgerow and treeline) for foraging and commuting bats was identified within the Substation and Access Road Sites immediately adjacent to the Proposed Development.	Local	*Loss/disturbance to roosting habitat* Felling of a tree with bat roost suitability could permanently remove a bat roost. One tree with Low bat roost suitability (Tree T05) is located near passing bay 3 and may need to be removed for the Proposed Development. However, it is not anticipated that any other trees with bat roost suitability will be removed. Inappropriately placed construction lighting has the potential to prevent roosting bats from using trees with bat roost suitability. *Loss/disturbance to foraging and commuting habitat* No loss of linear features is anticipated (except for a small ornamental hedge at the Passing Bay Site). The retained hedgerows and treelines will be protected during construction works. Inappropriately placed construction lighting has the potential to prevent the use of certain areas by foraging or commuting bats.	*Disturbance to roosting, foraging and commuting habitat* Operational light spill, if required, could permanently affect bats potentially roosting in trees with bat roost suitability and could also affect linear features which may be used by foraging and commuting bats.	Trees with bat roost suitability will be retained where feasible. However, if the tree with Low bat roost suitability at passing bay 3 (Tree T05) may need to be felled for the Proposed Development, a suitability experienced ecologist will advise on any requirements for further survey, the felling methodology (NRA guidelines[29]) for this tree, any licences that may be required from the NPWS, and further mitigation including installing bat boxes, which must be followed. Construction works must be restricted to the hours of daylight. Should artificial lighting be required for construction, this must be directional and illuminate the intended working area only, with light spill onto adjacent habitats managed with the use of cowls etc. Trees with bat roost suitability, treelines, hedgerows, and woodland must be protected from light spill. Any additional lighting required for the Proposed Development must be designed to prevent light spill onto the adjacent habitats or any trees with bat roost suitability.	Negligible
Badger	No confirmed evidence of badger within the Site, however they may use the Site for foraging purposes.	Site	*Loss of foraging habitat* The Proposed Development will result in the permanent loss of 3.29ha of arable field which may be used by badgers for foraging, although the presence of badger has not been confirmed within the Site. As there is alternative suitable habitat immediately outside the Site and in the wider area, the loss of this relatively small area of potential	None.	If construction works take place more than 18 months from the time of surveys informing this EcIA, pre-construction checks for the presence of badgers will be required. Should the presence of a badger sett be identified within the Proposed Development then appropriate mitigation will be implemented as described below and detailed within the oCEMP.	Negligible

[29] NRA (2008). Guidelines on the Treatment of Bats during the Construction of National Road Schemes. National Roads Authority.

Ecological Feature	Summary of Baseline	Importance (see Table 5 for rationale)	Construction Impacts and Effects	Operational Impacts and Effects	Specific Mitigation	Residual Effects
			foraging habitat is not considered to be a significant impact to badger. *Injury/death/disturbance* Where excavations are required as part of any works there is potential for badger to become trapped and injured or killed.		To prevent injury/death to badger during construction, excavations will be covered overnight to prevent animals from falling in and provided with a means of escape (means of escape includes battering of slopes sufficient to allow badger or other mammals to escape).	
Breeding and wintering birds	The Site provides suitable habitat for common and widespread breeding and wintering birds.	Site	*Habitat loss* 3.29ha of arable field will be lost to the Proposed Development. This will result in a loss of wintering bird habitat. The arable field is unlikely to be used by nesting birds, however birds nesting nearby may use it for feeding. The bird species present on Site can reliably be expected to be common and widespread, both locally and nationally, and a large area of suitable wintering habitat will remain both on Site and in the wider area. As such, the overall populations/conservation status of species likely to be present will not be affected. However, if vegetation clearance works take place within the bird nesting season, obstruction and/or destruction of active birds' nests may occur.	None.	Vegetation removal required to facilitate works for the Proposed Development will be carried out outside the bird nesting season (taken to be from March to August, inclusive) as feasible. Where there is no alternative but to clear vegetation in the bird breeding season, a suitably experienced ecologist will check for active bird nests prior to the clearance taking place. Where active nest(s) are found, the ecologist will establish exclusion zone(s) of appropriate size from which machinery, personnel and materials will be excluded until the nesting attempt(s) have finished. Note that it is difficult to locate all bird nests in extensive habitat, therefore checking for nests will be treated as a last resort, and vegetation clearance in the period September to February is preferred.	Negligible
Common frog	The habitats present within the Site may support common frog due to suitable drainage ditches and terrestrial habitat.	Local	*Habitat loss* There will be a loss of drainage ditches at the Passing Bay Site. However, this habitat was sub-optimal for common frog as the majority of the ditches were dry or only had shallow water present. *Injury/death /disturbance* Where excavations are required as part of any works there is potential for this species to become trapped and injured or killed.	None.	Standard measures to ensure that this species is not killed or injured to include: Excavations to be covered overnight to prevent animals from falling in, and a means of escape to be provided., standard pollution prevention measures to be implemented.	Negligible
Hedgehog, pine marten and other mammals (Irish stoat and pygmy shrew)	The habitats present within the Site may support these species.	Site	*Habitat loss* 3.29ha of arable field will be lost to the Proposed Development. This habitat is considered to be sub-optimal for these species, and the loss of this area will not result in a significant impact.	Disturbance to foraging and commuting habitat Operational light spill, if	Preparation of Method Statement to ensure these species are not killed/injured and habitats that may support these species are retained and protected during construction activities, as far as possible. To prevent injury/death to mammal species during construction, excavations will be covered overnight to	Negligible

Ecological Feature	Summary of Baseline	Importance (see Table 5 for rationale)	Construction Impacts and Effects	Operational Impacts and Effects	Specific Mitigation	Residual Effects
			Injury/death/disturbance Where excavations are required as part of any works there is potential for these species to become trapped and injured or killed. Inappropriately placed construction lighting has the potential to prevent the use of certain areas by foraging or commuting mammals.	required, could permanently affect linear features and woodland habitats which may be used by foraging and commuting mammals.	prevent animals from falling in and provided with a means of escape (means of escape includes battering of slopes sufficient to allow mammals to escape). Construction works must be restricted to the hours of daylight. Should artificial lighting be required for construction, this must be directional and illuminate the intended public area only, with light spill onto adjacent habitats managed with the use of cowls etc. Treelines, hedgerows, and woodlands must be protected from light spill. Any additional lighting required for the Proposed Development must be designed to prevent light spill onto the adjacent habitats.	

4.5 Cumulative Assessment

Cumulative effects can result from individually insignificant but collectively significant actions taking place over a period of time or concentrated in a location.

As concluded in the AA Screening and Natura Impact Statement for this Proposed Development other plans or projects do not have potential to have an in-combination effect on the integrity of any European sites.[30]

A desktop search of proposed and existing planning applications was undertaken of publicly available data from MyPlan.ie 'National Planning Application' database, MCC planning application portal and ABP online database.

An overview of the planning history search is included in Appendix B.

This assessment considers whether any of these existing/approved projects will likely have significant cumulative effects in combination with the Proposed Development. The assessment also considers whether all of the existing/approved projects taken together as a whole will likely have significant cumulative effects in combination with the Proposed Development. There are many projects listed on the planning databases considered, however, the focus for this assessment was on the proximity, scale and nature of those projects in relation to the Proposed Development and on those which could potentially exacerbate environmental effects and thus be of significance to the cumulative effects assessment. Particular attention was given to those projects which were designated as Strategic Infrastructure Developments (SID) in proximity to the proposed development given the larger scale and nature of these developments. Those projects where EIARs or NIS's accompanied the planning applications were also given due regard at review stage. Live or proposed projects which have not yet been permitted were not considered in this assessment.

Arising from this review, a number of existing and/or approved projects (as listed in Table 8) were identified which could have the potential for likely significant cumulative effects.

Table 8 List of Planned Projects Identified as Having a Potential Cumulative Effect of the Proposed Development

Reference	Address	Proposed Development	Planning Status	Distance from Site
221550	Woodland , Batterstown, Co. Meath	The development will consist of: 1. Installation of outdoor Air Insulated Switchgear (AIS) electrical apparatus, including an associated extension to the hardstand compound (approximately 4 hectares) to facilitate same. This includes: a. installation of an extension to both sides of the existing 400 kV busbar, with provision of an associated wing coupler at either end of the existing 400 kV busbar. b. additional apparatus and associated works to the two existing busbars to create what is known as sectionalising bays. c. relocation of existing transformer connections from existing busbar to adjacent location on new busbar. d. an associated single-story extension (approximately 80 m2) to the existing control building. 2. The erection of four new lightning masts and relocation of one existing mast (each approximately 45m high). 3. Two bays on opposite sides to the newly extended 400 kV busbars at the southern end of the substation, each bay to incorporate breakers, reactive compensation devices and cable sealing ends. These bays will facilitate the connection of the new 400 kV underground cable links from Dunstown and Belcamp substations respectively. 4. Renewal, alteration and/or removal of associated 400 / 220 kV electrical apparatus and equipment. 5. All ancillary site development works including site preparation works, site clearance and levelling; provision of hardstanding, internal access tracks and temporary construction compound; associated underground cabling and earthgrid; associated extended surface water drainage network including a soakaway; associated palisade fencing and gates (approximately 2.65m high); lighting poles and landscaping as required to facilitate the development. Planning Permission is sought for a period of 10 years. Significant further information/revised plans submitted on this application	Conditional Grant 25/05/2023	c.5km southeast
22837 23136	Creemore & Belshamstown, Batterstown, Co. Meath	The proposed development constitutes a new battery energy storage facility & synchronous condenser, with associated change of use on lands currently in agricultural use. The proposed development will comprise of rechargeable battery units with grid forming inverters contained within 253 no. 40 foot containers on site. (An associated Strategic Infrastructure Development planning application will be made to An Bord Pleanala in relation to a 220 kV Gas Insulated	Conditional Grant 7/12/2022 Conditional grant 16/05/2023	c.4.6km southeast

[30] AECOM (2023). Energia Solar Culmullin Substation Natura Impact Statement

Reference	Address	Proposed Development	Planning Status	Distance from Site
		Substation and associated development on the adjoining lands to the east of the proposed development site, located at Creemore & Woodland, in Co. Meath, in accordance with Section 182A of the Planning and Development Act 2000, as amended). In addition, the proposed development includes a synchronous condenser within a c.983 sqm building (ranging in height from c. 11 to 13 m), with associated compound & plant; oil separator & collection pit; transformers; circuit breakers; underground cabling ducts & cable. The proposed development includes underground cable which will connect the new battery energy storage facility to the adjoining proposed 220 kV Gas Insulated Substation (the subject of the associated Strategic Infrastructure Development planning application as reference above). The proposed development will also include a battery storage control building (c. 400 sqm, 6.86 m in height); security gates & boundary treatments; hard & soft landscaping; well; bollards; plant & water storage tank; wastewater treatment system; SuDs; attenuation pond; installation of earthen berms; piped infrastructure & ducting; culverts; street lighting; lighting masts & CCTV columns; car parking; stoned access roads & the upgrading of the existing vehicular access to the R154; changes in level & all associated site development & excavation works above & below ground. Planning Permission is sought for a period of 10 years. Significant further information/revised plans submitted on this application Permission for development at a c. 14.14 ha site, located at Creemore and Belshamstown, in Batterstown, Co. Meath, as permitted under MCC Reg. Ref. 22837 (which permitted a new battery energy facility and synchronous condenser.). The proposed development will consist of amendments to the previously permitted development (MCC Reg. Ref. 22837) including amendments to the previously approved internal access road layout; amendments to the previously approved attenuation pond to the south of the site and associated piped infrastructure, ducting and drainage arrangements. In addition, a previously permitted earthen berm to the centre of the site is to be omitted. No changes are proposed to the permitted vehicular access to the R154. Any associated amendments to changes in level and all associated site development, hard and soft landscaping and excavation works above and below ground are also included. Planning permission is sought for a period of 10 years		
MCC 21985 ABP-312723-22	On lands including Derryclare, Cloneymeath, Ballygortagh and Moynalvy, Summerhill, Co. Meath.	A Solar PV Energy Development with a total site area of 108.68ha, to include solar panels mounted on steel support structures, associated cabling and ducting, 27 no. MV Power Stations, 3 No. Client Substations, 3 No. temporary construction compounds, access tracks, boundary security fencing and security gates, CCTV, landscaping and ancillary works. Solar energy plant and ancillary equipment. Associated site development works. Significant Further information/Revised plans submitted on this application. NIS submitted with FI.	MCC Conditional Grant 17/01/2022 ABP Conditional Grant 27/01/2023	c.5.0km west
212214 ABP-314058-22	On lands including Culmullin, Woodtown, Arodstown & Summerhill, Co Meath	For a solar PV Energy Development with a total site area of 206ha, to include solar panels mounted on steel support structures, associated cabling and ducting, 54 No. MV Power Stations, 2 No. Client Substations, 4 No. Temporary Construction Compounds, access tracks, boundary security fencing and security gates, CCTV, landscaping and ancillary works, accessed via two existing accesses along the L62051. The application is accompanied by a Natura Impact Statement (NIS).	MCC Conditional Grant 15/06/2022 ABP Decision Pending	c.800m southwest
MCC 21546 ABP-311760-21	Clonymeath, Summerhill, Co Meath.	Permission for Solar Photovoltaic (PV) development within the townland of Clonymeath, Summerhill, Co Meath. Planning permission is sought for the construction and operation of a solar PV farm consisting of solar arrays on ground mounted steel frames, with a maximum overall height of 3 metres, over an area of 91.9 ha and ancillary equipment including up to 30 no. medium voltage power stations, 1 no. modular Battery Energy Storage Compound (comprising up to 5 no. battery containers) and all other associated site development works and services, including, internal solar PV farm, underground electrical cabling and ducting, 2 no. temporary construction compounds, security fencing, CCTV camera stands, replacement of an existing site entrance with a new gated site entrance via the L2210 local road, provision of new internal access tracks including the upgrading and installation of span bridge structures, site drainage and landscaping, as required to facilitate the development. Planning permission is sought for a period of 10 years	MCC Conditional Grant 29/09/2021 ABP Conditional Grant 24/05/2022	c.4.80km west

Reference	Address	Proposed Development	Planning Status	Distance from Site
		with an operational life of 35 years from the date of commissioning. The application is accompanied by a Natura Impact Statement (NIS). Significant Further information/Revised plans submitted on this application. Solar PV development. NIS lodged at application stage.		
RA170766	Knockstown & Clarkstown, Summerhill, Co. Meath	The development will consist of the following: Photovoltaic solar farm on a site of 23.6 hectares (58 acres) with an export capacity of approximately 8MW, comprising photovoltaic panels on ground mounted frames; 4 no. inverter stations; 1 no. interface substation; ducting and underground electrical cabling; perimeter fencing; pole mounted CCTV cameras; screen planting/landscaping; closing up of existing vehicular entrance and creation of a new vehicular entrance on the local road (L6215); new internal access track from the new vehicular entrance to connect with existing internal farm tracks, and all ancillary works necessary to facilitate the development. Significant further information/revised plans submitted on this application.	MCC Conditional Grant 1/6/2018	c. 4.70km southwest

In addition to the projects listed in Table 8 a number of consented solar developments within the wider surrounding areas have been considered, these are summarised in Table 9.

Table 9 Additional Solar Projects Considered in the Cumulative Assessment

Site	Potential MW MEC	Planning Reference	Planning Status	Description	Distance from Site (km)
Paddock	70	21180 ABP-311066-21	Approved by Meath CC and ABP	The development will consist of permission for a Solar PV Energy Development with a total site area of 82.5ha, to include solar panels mounted on steel support structures, associated cabling and ducting, 21 No. MV Power Stations, 7No. Battery Storage Containers, 1 No. Temporary Construction Compound, access tracks, hardstanding area, boundary security fencing and security gates, CCTV, landscaping and ancillary works.	13.6
Fieldstown	70	F21A/0042	Planning approved by Fingal CC	Permission for a Solar PV Energy Development with a total site area of c 105 ha, to include solar panels mounted on steel supports, associated cabling and ducting, 1 no. client substation, 33 no. MV Power Stations, 8 No. Battery Storage Containers, 1 no. Temporary Construction Compound, access tracks, boundary security fencing and security gates, CCTV, landscaping and ancillary site works.	20.4
Ballaghaweary	18	211436	Planning approved by Meath CC	A Solar PV Energy Development with a total site area of 34.4ha. to include solar panels mounted on steel support structures, associated cabling and ducting, 7 No. MV Power Stations, 1 No. Client Substation, 1 No Temporary Construction Compound, access tracks, hardstanding area, boundary security fencing and security gates, CCTV, landscaping and ancillary works. Significant further information/revised plans submitted on this application.	18.7

Due to the intervening distance between the Proposed Development and the Arodstown, the distance from the Arodstown to the downstream European sites, and with implementation of industry-standard good practice pollution prevention measures, there will be no adverse effect on the integrity of the River Boyne and River Blackwater SAC. Similarly, there will be no adverse effects on species of interest of the River Boyne and River Blackwater SPA, the kingfisher, due to the distance from the Site to the habitat.

An Ecological Impact Assessment and Natura Impact Statement has been prepared for the Woodtown Solar Farm development (Planning Reference 212214), which is adjacent to the Proposed Development site. The Ecological Impact Assessment and Natura Impact Statement for this development also includes measures to prevent pollution from entering watercourses. Furthermore, other ecological mitigation measures have been included for Woodtown Solar Farm, including buffers from potentially sensitive ecological receptors, retention of trees, and hedgerow planting. Therefore, given the mitigation measures included in the Ecological Impact Assessment and Natura Impact Statement for both the Proposed Development and for the Woodtown Solar

Farm, no in-combination effect on any European site, including the River Boyne and River Blackwater SAC and SPA is predicted from these developments.

Furthermore, the remaining planning applications described in Appendix B and Table 3 either have no possible pathway to result in the predicted impacts described in Section 4.4, such as waterborne pollution, are located at a large distance from the Proposed Development, and/or have included mitigation measures, such as habitat retention and replacement, in an Ecological Impact Assessment and/or Natura Impact Statement. Therefore, given the nature of the developments assessed and mitigation measures to be implemented, no in-combination effects are predicted.

4.6 Enhancement and Monitoring Proposals

4.6.1 Enhancement Measures

Enhancement of the treeline and hedgerow with native species by the Substation Site (that are appropriate to the locality) of local provenance could be carried out. Non-native species should not be included. Enhancement could also include strengthening the treeline which has substantial gaps to provide a more beneficial linear habitat, increasing connectivity to the wider area.

The provision of bat boxes within the Proposed Development Site could be considered as enhancement. These would have to be of appropriate specification for the species likely to be present and suitably located, specifically not within areas which may be lit as a result of the Proposed Development.

Bird nest boxes could also be installed as inexpensive, simple but valuable enhancement.

4.6.2 Monitoring

No specific ecological monitoring is recommended.

Pre-construction surveys may be required, especially if survey data becomes more than 18 months old.

5. Summary and Conclusions

In summary, the Proposed Development is anticipated to result in **negligible** (not significant) effects on ecological features following the implementation of mitigation. Beneficial effects are achievable via the improvement of habitats, planting of native species within the Site and installation of bat and bird boxes.

Summary of required mitigation:

- Careful design of the Proposed Development to avoid loss or damage to the hedgerow and treeline.
- As outlined in the oCEMP included with this planning application, a CEMP and/or relevant Method Statement(s) to be produced, detailing:
  - General environmental management measures, including in relation to pollution prevention, and the roles and responsibilities of Site personnel. The CEMP will include, as a minimum, Construction Method Statement(s), Pollution Prevention Plan (PPP) and Species Protection Plan (SPP).
  - All Site personnel involved in the construction and operation of the Proposed Development will be made aware of the ecological features present and the mitigation measures and working procedures which must be adopted. This will be achieved as part of the Site induction process through the delivery of a toolbox talk. In addition, as required, briefings will be provided to all Site personnel in advance of works which are considered to present an increased risk of impacting upon ecological features.
- Root protection zones will be clearly demarcated around retained trees and hedgerow. No machinery will enter these areas, nor will any material be stored within them.
- Construction works must be restricted to daylight hours. Should construction take place and artificial lighting be required outside the hours of 08:00 to 18:00, lighting must be directional and illuminate the works area only, with light spill onto adjacent habitats managed with the use of cowls etc.
- Trees with bat roost suitability will be retained where possible. If not possible (particularly for Tree T05 at passing bay 3) a suitability experienced ecologist will provide guidance on requirements for further survey, felling procedures, and any licence and mitigation requirements.
- Any lighting will be designed to prevent light spill onto notable features such as trees with bat roost suitability, hedgerows, treelines, and woodland.
- Any vegetation clearance required must be replaced with habitats of similar species composition.

- Non-native invasive species will be avoided and fenced off where possible. If areas with non-native invasive species cannot be avoided and fenced off, an appropriate Method Statement outlining the specific management will be produced under ecologist guidance.
- Excavations to be covered and provided with a means of escape overnight (means of escape includes battering of slopes sufficient to allow otter/badger or other mammals to escape).
- Preparation and implementation of a method statement for common frog, hedgehog, pine marten and other notable mammals to ensure that these species are not harmed during construction activities.
- Vegetation clearance to be undertaken in the period September to February, inclusive, to avoid the breeding bird season (taken to be March to August, inclusive) where possible. Where vegetation clearance must take place in the bird breeding season a suitably experienced ecologist will check for active bird nests prior to the clearance taking place.
- Pre-construction surveys for badger, if more than 18 months elapse between the surveys described in this assessment and commencement of works.

Figures

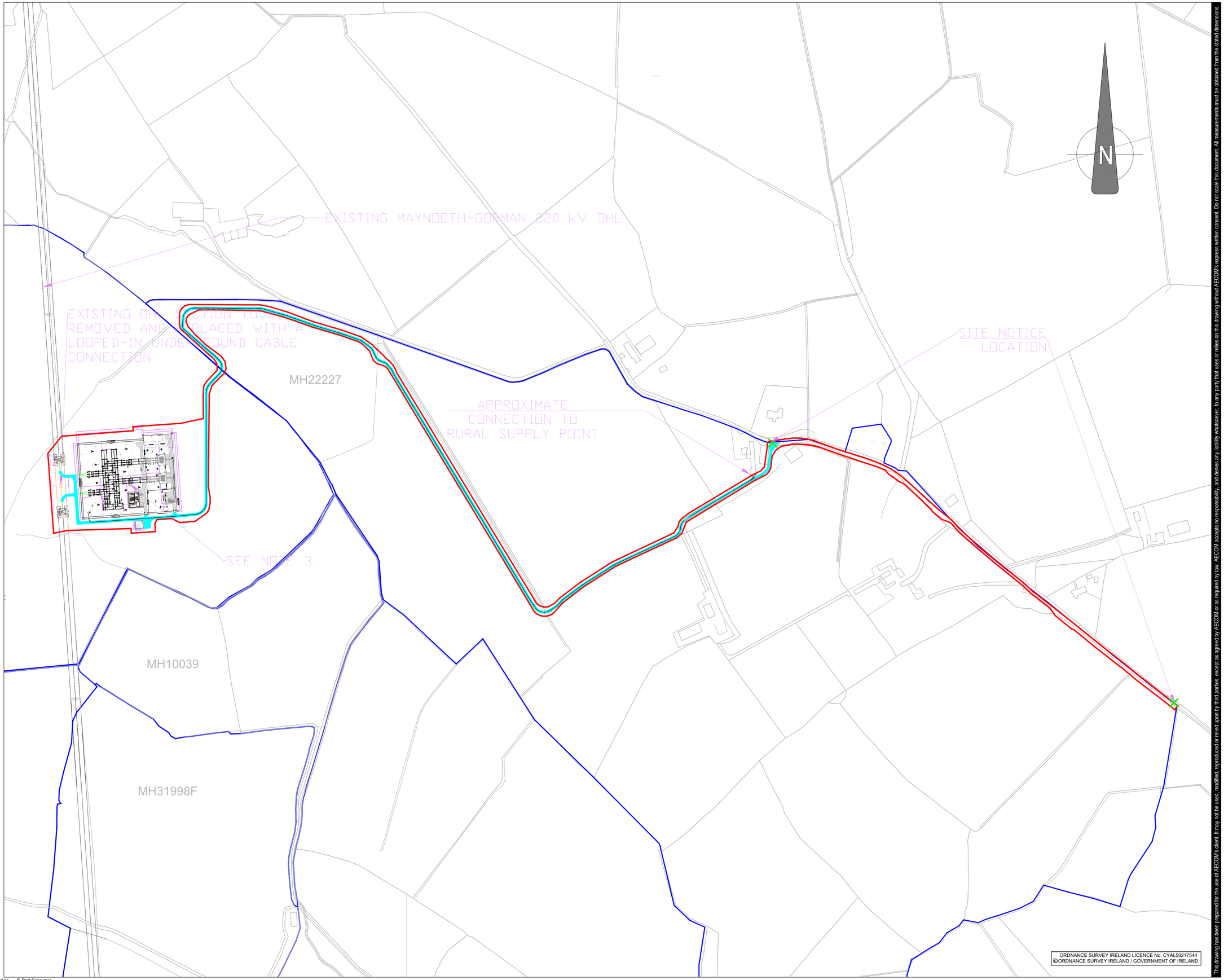
Drawing 60657534-ACM-DWG-500 Culmullin 220kV Substation Site Location

Figure 1 – Designated sites

Figure 2a – Habitats

Figure 2b – Habitats Passing Bay Site

Figure 3 – Ecological constraints



AECOM

PROJECT

CULMULLIN 220 kV SUBSTATION

CLIENT

ENERGIA SOLAR HOLDINGS LTD.

energia

CONSULTANT

AECOM
Adelphi Plaza
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County Dublin
Ireland
T +353 (0)1 2383100
www.aecom.com

LEGEND

- EXISTING OHL TO REMAIN
- EXISTING OHL TO REMOVE
- PROPOSED NEW UGC
- PROPOSED SUBSTATION
- EXISTING LAND OWNERSHIP BOUNDARY
- PROPOSED DEVELOPMENT BOUNDARY
- PROPOSED ACCESS ROAD
- APPROXIMATE RURAL SUPPLY UGC ROUTE
- LOCATION OF SITE NOTICE

NOTES

1. DRAWINGS ARE FOR PLANNING ONLY AND SHOULD NOT BE USED FOR DETAILED DESIGN, EQUIPMENT DIMENSIONS MAY CHANGE ONCE EXACT SPECIFICATIONS ARE DETERMINED;
2. THE SUBSTATION IS BASED ON THE LATEST EIRGRID STANDARD (XDN-LAY-ELV-STND-F-001-R02 AS OF 13/02/2020);
3. SUBSTATION COMPOUND COORDINATES ARE 53°29'33.16"N, 6°38'33.31"W;
4. THIS DRAWING IS NOT TO BE SCALED, ALL DIMENSIONS ARE IN METERS.

ISSUE/REVISION

I/R	DATE	DESCRIPTION
P7	13/06/2023	UPDATE SITE NOTICES
P6	26/05/2023	CLIENT COMMENTS
P5	24/05/2023	BOUNDARY UPDATE
P4	11/11/2022	SITE NOTICE LOCATION ADDED
P3	09/11/2022	CLIENT COMMENTS
P2	10/10/2022	CLIENT COMMENTS
P1	19/09/2022	CLIENT COMMENTS
P0	27/05/2022	FIRST ISSUE FOR PLANNING

STATUS

FOR PLANNING

PROJECT NUMBER 60657534

SCALE 1:3000 @ A1

SHEET TITLE

CULMULLIN 220 kV SUBSTATION
SITE LOCATION

SHEET NUMBER 60657534-ACM-DWG-500

REV P7

PM Initials : Designer MB Checked KMCD Approved BW

Last saved by: BERNICE.CAHILL(2023-06-20) Last Plotted: 2023-06-20
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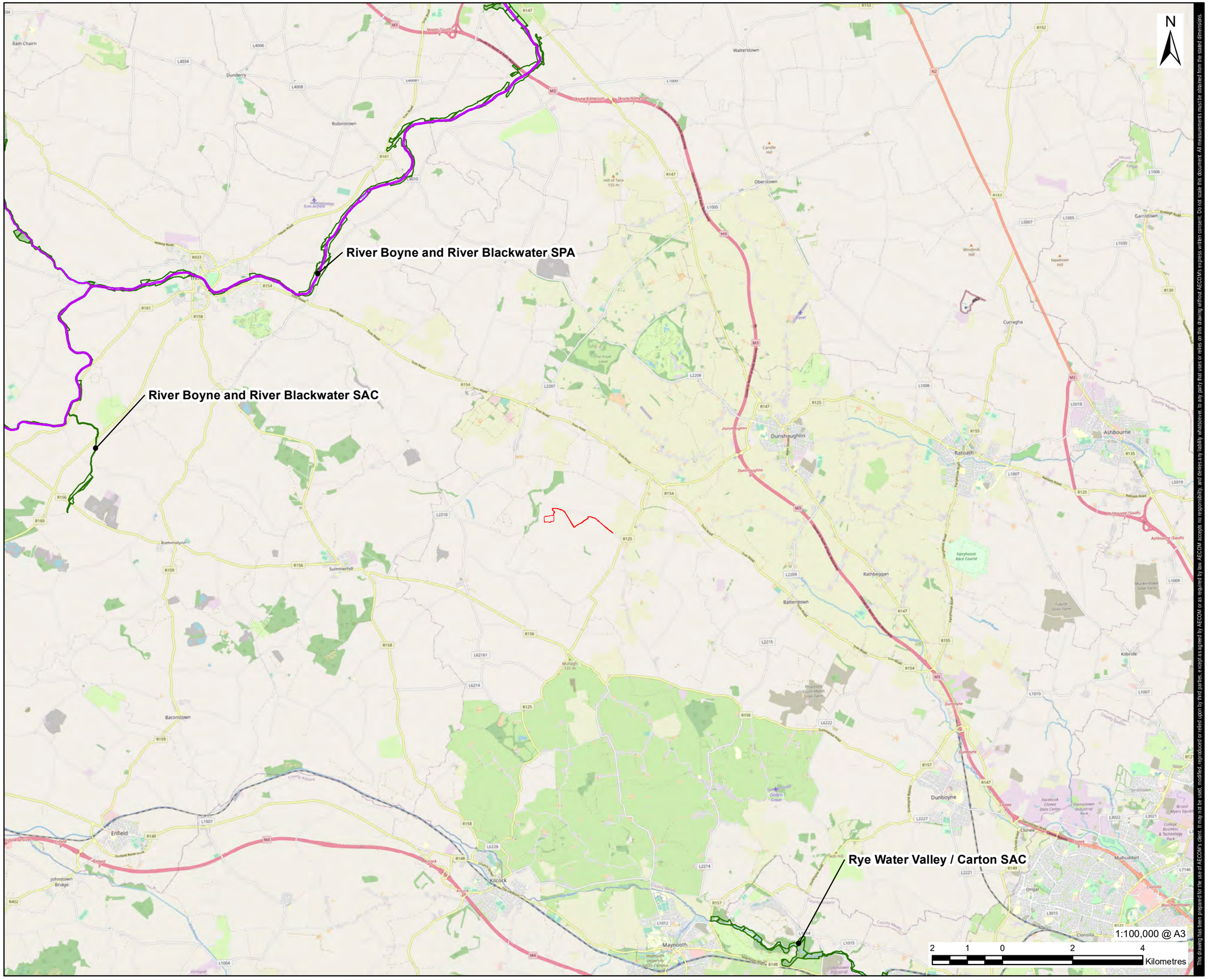
Revision: 0 Drawn: LC Checked: TS Approved: TM Date: 2023-06-08



AECOM

PROJECT

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LEGEND

- Site
- Special Areas of Conservation (SAC)
- Special Protection Areas (SPA)

NOTES

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ISSUE PURPOSE

FINAL

PROJECT NUMBER

60657534

FIGURE TITLE

Designated sites

FIGURE NUMBER

Figure 1

Revision: 0 Drawn: LC Checked: TS Approved: TM Date: 2023-06-08

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Culmullin

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LEGEND

- Site

Habitats (Fossitt)

- FW4 Drainage ditches
- WL1 Hedgerows
- WL2 Treelines
- BC1 Arable crops
- BL3 Buildings and artifical surfaces
- GA1 Improved agricultural grassland
- GA2 Amenity grassland (improved)
- GS2 Dry meadows and grassy verdges
- WD1 (Mixed) broadleaved woodland
- WD2 Mixed broadleaved/conifer woodland
- WD3 (Mixed) conifer woodland
- WD4 Conifer plantation
- WS1 Scrub

NOTES

1: Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

ISSUE PURPOSE

FINAL

PROJECT NUMBER

60657534

FIGURE TITLE

Habitats

FIGURE NUMBER

Figure 2a

Revision: 0 Drawn: LC Checked: TS Approved: TM Date: 2023-06-08

AECOM

PROJECT

Culmullin

CLIENT

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LEGEND

- Site

Habitats (Fossitt)

- FW4 Drainage ditches
- WL1 Hedgerows
- WL2 Treelines
- BC1 Arable crops
- BL3 Buildings and artifical surfaces
- GA1 Improved agricultural grassland
- GA2 Amenity grassland (improved)
- GS2 Dry meadows and grassy verdges
- WD1 (Mixed) broadleaved woodland
- WD2 Mixed broadleaved/conifer woodland
- WD3 (Mixed) conifer woodland
- WD4 Conifer plantation
- WS1 Scrub

NOTES

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ISSUE PURPOSE

FINAL

PROJECT NUMBER

60657534

FIGURE TITLE

Habitats (Passing Bay Site)

FIGURE NUMBER

Figure 2b

Revision: 0 Drawn: LC Checked: TS Approved: TM Date: 2023-06-08

AECOM

PROJECT

Culmullin

CLIENT

Energia

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www.aecom.com

LEGEND

- Site

Trees with bat roost suitability

- Low suitability
- Moderate suitability

Non-scheduled, high-impact invasive species

- Cherry laurel in a 10x5m area
- Cherry laurel hedging
- Cherry laurel scattered throughout woodland

NOTES

1: Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

ISSUE PURPOSE

FINAL

PROJECT NUMBER

60657534

FIGURE TITLE

Ecological constraints

FIGURE NUMBER

Figure 3

Appendix A Substation Site Photographs

Table B1. Substation Site Photographs

Photograph Number	Photograph
1	
2	

Photograph Number	Photograph
3	
4	

Photograph Number	Photograph
5	

Appendix B Cumulative Planning Search

A desktop search of proposed and existing planning applications was carried out on 8 September 2022 (and subsequently updated 6 June 2023). The search used publicly available data from the MyPlan.ie's 'National Planning Application' database, ABP database and Council Planning Portals.

The scope of the search was based within a 5 km radius from the approximate Centrepoint of the Proposed Development. A specified criteria informed the search and omitted any planning applications greater than five years old, refused, invalid and withdrawn applications. The criteria then focused on foreseeable developments to be considered in line with the Proposed Development. In respect of this, any small scale residential and extension type developments along with minor amendments, changes of use and small-scale farming / agricultural applications were omitted. Only reasonably foreseeable developments were considered.

The findings show the majority of planning applications for adjoining lands consist of mainly agriculture and rural dwelling related developments, however recent applications have shown a rise in renewable energy, recreational and tourism related development.

Table 10 Planning Search (5km Radius)

Planning Authority	Reference	Address	Proposed Development	Grant / Due Date	Distance from Subject Site
Meath CC	221508	Culmullin, Curraghtown, Cultromer , Gaulstown. Bogganstown, Cullendragh, Drumree, Co. Meath	a Solar PV Energy Development with a total site area of 171.34ha, to include solar panels mounted on steel support structures, associated cabling and ducting, 47 No. MV Power Stations, 3 No. Client Substations, 3 No. Temporary Construction Compounds, tracks, boundary security fencing and security gates, CCTV, landscaping and ancillary works, with a 40 year operational period. A Natura Impact Statement (NIS) had be submitted to the Planning Authority with the Application. Significant further information/revised plans submitted on this application	24/07/2023	c.2.5km east
Meath CC	23527	Drumree Road, Readsland, Dunshaughlin, Co. Meath	the construction of 62 no. residential units comprising: - 27no. 2-storey houses (10 no. 3-bed and 17 no. 4-bed) and 35 no. apartments (14 no. 1-bed, 16 no. 2-bed and 5 no. 3-bed units) in a part 5-storey part 4- storey apartment building situated adjacent to the R125 Dunshaughlin link Road, with balconies on all elevations. And all associated site development, landscape and boundary works, including: - a new 4-arm roundabout junction on the R125 Dunshaughlin Link Road, connecting with an extended Dun Rioga Avenue to the southeast of the existing Dun Rioga estate providing new vehicular, cycle and pedestrian access and egress from the west, without alteration to the existing estate entrances at the Drumree Road; 1. 8m high acoustic fence to the west of the proposed apartment block extending c.50m in length alongside the R125; 98 no. car parking spaces; 83 no. secure bicycle parking spaces; public open space of c. 3,660 sq.m. including new children's playground; private communal open space of c. 233 sq.m. serving the apartments; private and communal bin stores; 1no. ESB substation	11/07/2023	c.5km northeast
Meath CC	23236	Martinstown, Crossakiel, Co Meath A82 F2C4	(1) construct a new building to be used as office space, welfare facilites and storage, (2) install a new proprietary effluent treatment system and percolation area and (3) all associated site services	01/06/2023	c.3.9km northwest
Meath CC	221664	Woodridge Stables, Killeen, Dunsany, Co Meath	(a) construction of a lunging ring, loading ramp, wash down area and machinery shed (b) erection of solar/pv panels (c) provision of internal staff facilities into one bay of existing barn to be connected to existing 6-8 person wastewater treatment system and polishing filters (d) the provision of all associated site works to upgrade existing farm complex including proposed internal service roads, beech hedging, timber fencing, general	01/06/2023	c.5km northeast

Planning Authority	Reference	Address	Proposed Development	Grant / Due Date	Distance from Subject Site
			paddocks, nursery paddocks, all weather areas with individual horse shelters, external all weather sand arena, cross country area, hunter & pony all weather area, trailer and horse box parking area, vegetable garden and external hen & pig area		
Meath CC	221505	Drumlargan, Kilcock, Co. Meath	development will consist of (a) modification of the existing agricultural field entry from the public road to accommodate the proposed development; (b) construct new equestrian facilities including horse stables building, barn building, manure pit/dungsted and associated seepage tanks, horse walker unit, lunge arena, gallops, sand arena, fenced paddocks and surface water system; (c) construct a part single-storey, part two-storey detached dwelling house, detached domestic garage, wastewater treatement system and landscaping; and (d) associated site works. Significant further information/revised plans submitted on this application	25/05/2023	c.4.8km southwest
Meath CC	221550	Woodland , Batterstown, Co. Meath	The development will consist of: 1. Installation of outdoor Air Insulated Switchgear (AIS) electrical apparatus, including an associated extension to the hardstand compound (approximately 4 hectares) to facilitate same. This includes: a. installation of an extension to both sides of the existing 400 kV busbar, with provision of an associated wing coupler at either end of the existing 400 kV busbar. b. additional apparatus and associated works to the two existing busbars to create what is known as sectionalising bays. c. relocation of existing transformer connections from existing busbar to adjacent location on new busbar. d. an associated single-story extension (approximately 80 m2) to the existing control building. 2. The erection of four new lightning masts and relocation of one existing mast (each approximately 45m high). 3. Two bays on opposite sides to the newly extended 400 kV busbars at the southern end of the substation, each bay to incorporate breakers, reactive compensation devices and cable sealing ends. These bays will facilitate the connection of the new 400 kV underground cable links from Dunstown and Belcamp substations respectively. 4. Renewal, alteration and/or removal of associated 400 / 220 kV electrical apparatus and equipment. 5. All ancillary site development works including site preparation works, site clearance and levelling; provision of hardstanding, internal access tracks and temporary construction compound; associated underground cabling and earthgrid; associated extended surface water drainage network including a soakaway; associated palisade fencing and gates (approximately 2.65m high); lighting poles and landscaping as required to facilitate the development. Planning Permission is sought for a period of 10 years. Significant further information/revised plans submitted on this application	25/05/2023	c.5km southeast
Meath CC	221505	Drumlargan, Kilcock, Co. Meath	development will consist of (a) modification of the existing agricultural field entry from the public road to accommodate the proposed development; (b) construct new equestrian facilities including horse stables building, barn building, manure pit/dungsted and associated seepage tanks, horse walker unit, lunge arena, gallops, sand arena, fenced paddocks and surface water system; (c) construct a part single-storey, part two-storey detached dwelling house, detached domestic garage, wastewater treatement system and landscaping; and (d) associated site works. Significant further information/revised plans submitted on this application	25/05/2023	c.3.3km southwest

Planning Authority	Reference	Address	Proposed Development	Grant / Due Date	Distance from Subject Site
Meath CC	23136	Creemore & Belshamstown, Batterstown, Co. Meath	permission for development at a c. 14.14 ha site, located at Creemore and Belshamstown, in Batterstown, Co. Meath, as permitted under MCC Reg. Ref. 22837 (which permitted a new battery energy facility and synchronous condenser.). The proposed development will consist of amendments to the previously permitted development (MCC Reg. Ref. 22837) including amendments to the previously approved internal access road layout; amendments to the previously approved attenuation pond to the south of the site and associated piped infrastructure, ducting and drainage arrangements. In addition, a previously permitted earthen berm to the centre of the site is to be omitted. No changes are proposed to the permitted vehicular access to the R154. Any associated amendments to changes in level and all associated site development, hard and soft landcaping and excavation works above and below ground are also included. Planning permission is sought for a period of 10 years	16/05/2023	c.4.6km southeast
Meath CC	23263	Crumpstown or Marshallstown, Kilmessan, Co. Meath	an equestrian holiday centre, which will comprise four holiday cottages made up of conversion of two stable buildings each to a one-bedroom single storey dwelling, conversion of a shed to a two-bedroom single-storey dwelling, and refurbishment of a stone cottage to a two-bedroom single-storey dwelling, with a new sewage treatment system, three stable blocks containing four, six and nine horse cubicles respectively and associated site development works, outdoor riding arena, horse walker and associated site development works, access will be via the existing entrance serving the existing farmyard and dwelling	03/05/2023	c.4km northwest
An Bord Pleanála	ABP-312723-22	On lands including Derryclare, Cloneymeath, Ballygortagh and Moynalvy, Summerhill, Co. Meath.	Solar energy plant and ancillary equipment. Associated site development works. Significant Further information/Revised plans submitted on this application. NIS submitted with FI.	27/01/2023	c.5.0km west
Meath CC	221320	12 Loughmore Walk , Killeen Castle Demesne, Dunsany, Co. Meath	development comprising of alterations to design of 1 no. permitted 2 storey 5-bedroom C-type detached house & garage and associated site development and landscape works, with a site area of 0.28ha, at 12 Loughmore Walk, Killeen Castle Demesne, Dunsany, Co. Meath, being part of a previously permitted residential development of 22 houses at Loughmore Walk/The Burrows (Ref RA/191174). Alterations to include new rear extension, internal layout changes at ground and upper floors, attic conversion with new stairs, revisions to elevations of house and garage, new velux roof lights, extended garage with gym, new door and covered carport link to house, the vehicular access is as previously permitted via the existing internal roads & entrances to Killen Castle Demesne. All within the overall site of approx. 255 ha. (a protected structure)	20/01/2023	c.5km northeast
Meath CC	221209	Killeen Castle Demesne (a protected structure), Dunsany, Co Meath	the change of use for a temporary period of 4 years of 6 no. of the 22 no. courtyard dwellings (referred to as Hunters Yard) permitted under Reg Ref DA/802774 (as extended by Reg Ref RA/180960) from residential to ancillary hotel accommodation facilitating short term lettings in the form of 24 no. bedrooms (6 no. keys) in 6 no. 2 storey 4 bedroom units. To accommodate this temporary change of use, the following modifications are also required:- Amendments for all 6 no. units include: The replacement of permitted kitchen to facilitate 1 no. accessible double bedroom with ensuite and inclusion of a small kitchenette facitity in the permitted study's, Solar Panels omitted,	19/12/2022	c.5km northeast

Planning Authority	Reference	Address	Proposed Development	Grant / Due Date	Distance from Subject Site
			Chimneys omitted, Corner Lightbox/Lanterns omitted, Amendments for 4 no. units (House Type HYI, HYIH and HY3, HY3H) include: Omission of internal door, a Balcony column support added, Suite 1 walk in wardrobe replaces with ensuite bathroom, Walk in wardrobe with ensuite included for Suite 2 , Total 12 no. car parking spaces to be provided. Selected stone cladding removed from upper storey of House Type HYI, HYIH and HY3, HY3H, A minor change of Finished Floor Levels on site. The development also includes all associated landscape and site development works. There is no change to the building footprint or house design to those units permitted under Reg. Ref. DA/802774 (as extended by Reg Ref RA/180960). The design is in keeping with all other residential units proposed within the Killeen Castle Demesne. The vehicular access is as otherwise permitted via the existing internal road network and entrances to Killeen Castle Demesne		
Meath CC	22752	Augherskea, Drumree, Co Meath	the development consists of land recovery operation (being) reclamation of agricultural land and all associated site works comprising of the importation of natural materials of clay, silt, sand, gravel or stone and which comes within the meaning of inert waste, through deposition for the purposes of the improvement or development of land Class 5 of the waste management (Facility Permit and Registration) Regulations 2007-2008. A 5 year planning permission is requested and during the duration of this period 62,490 tons of inert soil and stone will be imported for the purpose of land reclamation. Entrance to the site will be via the existing farm road on adjoining site the subject of current Planning RA/170057 and WFP-MH17/0006/01	16/12/2022	c.2.4km northeast
Meath CC	221194	Teagasc Grange Research Facility, Derrypatrick Grange, Dunsany, Co. Meath C15 PW93	development will consist of the proposed green energy initiative development consisting of the alterations to an existing building unit consisting of the installation of Photovoltaic Panels on the existing roof structure, together with all associated site works	07/12/2022	c.3.5km north
Meath CC	22837	Creemore & Belshamstown, Batterstown, Co. Meath	the proposed development constitutes a new battery energy storage facility & synchronous condenser, with associated change of use on lands currently in agricultural use. The proposed development will comprise of rechargeable battery units with grid forming inverters contained within 253 no. 40 foot containers on site. (An associated Strategic Infrastructure Development planning application will be made to An Bord Pleanala in relation to a 220 kV Gas Insulated Substation and associated development on the adjoining lands to the east of the proposed development site, located at Creemore & Woodland, in Co. Meath, in accordance with Section 182A of the Planning and Development Act 2000, as amended). In addition, the proposed development includes a synchronous condenser within a c.983 sqm building (ranging in height from c. 11 to 13 m), with associated compound & plant; oil separator & collection pit; transformers; circuit breakers; underground cabling ducts & cable. The proposed development includes underground cable which will connect the new battery energy storage facility to the adjoining proposed 220 kV Gas Insulated Substation (the subject of the associated Strategic Infrastructure Development planning application as reference above). The proposed development will also include a battery storage control building (c. 400 sqm, 6.86 m in height); security gates & boundary treatments; hard & soft landscaping; well; bollards; plant & water storage tank; wastewater treatment system; SuDs; attenuation pond; installation of earthen berms; piped infrastructure & ducting; culverts; street lighting; lighting masts & CCTV columns; car parking; stoned access roads & the	07/12/2022	c.4.6km southeast

Planning Authority	Reference	Address	Proposed Development	Grant / Due Date	Distance from Subject Site
			upgrading of the existing vehicular access to the R154; changes in level & all associated site development & excavation works above & below ground. Planning Permission is sought for a period of 10 years. Significant further information/revised plans submitted on this application		
Meath CC	22629	Shanks Mare Public House, Collegeland and Arodstown, Summerhill, Co. Meath	the development consists of the erection of four 51.5 sqm. detached pods, each of which would be 3 metres tall and which would provide two bedrooms and a combined kitchen/ dining area, as well as bathroom accommodation, along with the use of these four structures for tourist accommodation purposes; The retention of an existing 54 sqm. timber log cabin which already occupies the site (whose removal is required under condition no. 4 of permission reg. RA/191557) and the use of this two-bedroom plus living area building for short-term residential occupation. The proposal also includes the decommissioning of a septic tank (which was permitted under reg. RA191557), the provision of a new soakaway, the installation of a mechanical aeration sewage treatment system and the construction of a 300 sqm. soil polishing filter, the closure of an existing entrance and upgrade works to an existing access which serves the adjacent Shanks Mare development and its use in connection with this proposal, a new turning circle for fire services and an extra parking area accommodating 11 new bays, which are in addition to the 21 spaces on the subject land. The application includes all site works, such as the removal of an existing stone wall, the raising of the land at Gate 1 by 300mm, the creation of a gravel surface, the provision of a wheelie-bin store and the removal of a gas tank. This development will be held in common ownership with the Shanks Mare development and will not be sold or leased separately. Included in this are all associated site works and services. Significant further information/revised plans submitted on this application	17/11/2022	c.2.9km northwest
An Bord Pleanála	ABP-314071-22	Boycetown, Dunsany, Co. Meath	Importation of materials for land reclamation and all associated site works. NIS and EIAR are included	15/11/2022	c.4.5km north
An Bord Pleanála	ABP-314058-22	On lands including Culmullin, Woodtown, Arodstown & Summerhill, Co Meath	Solar PV energy development and associated site works. NIS submitted to Planning Authority.	14/11/2022	c.800m southwest
Meath CC	22497	Knockmark, Drumree, Co Meath	The erection of a new dwelling and garage with associated site works	08/09/2022	c.3.7km northeast
Meath CC	22425	Derrypatrick , Drumree, Co. Meath	the development will consist of the following: (a) Construction of a new access road from existing farmyard to new farmyard (b) Construction of a new milking parlour, dairy, external milk silo & ancillary rooms, drafting & handling facilities, waiting yard, meal bin, water storage tank & underground slatted reception tank adjacent to existing circular overground slurry storage tank (c) Construction of agricultural livestock shed comprising of calving area, cubicles and underground slatted slurry reception tanks (d) Construction of calf rearing shed (e) Construction of 2 no. silage pits, maize pit & dungstead and all associated site works	15/07/2022	c.2.2km northwest

Planning Authority	Reference	Address	Proposed Development	Grant / Due Date	Distance from Subject Site
Meath CC	22425	Derrypatrick , Drumree, Co. Meath	The development will consist of the following: (a) Construction of a new access road from existing farmyard to new farmyard (b) Construction of a new milking parlour, dairy, external milk silo & ancillary rooms, drafting & handling facilities, waiting yard, meal bin, water storage tank & underground slatted reception tank adjacent to existing circular overground slurry storage tank (c) Construction of agricultural livestock shed comprising of calving area, cubicles and underground slatted slurry reception tanks (d) Construction of calf rearing shed (e) Construction of 2 no. silage pits, maize pit & dungstead and all associated site works	15/07/2022	c.1.8km northeast
Meath CC	22338	Plot 13, Loughmore Walk, Killeen Castle Demesne, Dunsany, Co. Meath	alterations and extension to previously approved two storey detached dwelling and detached garage and associated site development/landscaping works, with a site area of 0.29 Ha, being part of a previously permitted residential development of 22 houses at Loughmore Walk/The Burrows, (Reg. Ref.: RA/191174). The alterations will consist of A) omission of bay windows in living room (west elevation) and drawing room (south elevation) resulting in a reduction in floor area of 7.57sq/m, B) length of ground floor study and first floor bedroom 5 increased by 1.8 m at front (east elevation) resulting in additional floor area of 18 sq/m, C) increase in width and depth of detached garage (additional floor area of 8.7 sq/m) with covered area to rear (west) of garage and covered link between house and garage, D) additional windows and door on side (north) elevation, E) increase in width of bedroom no. 5window at front (east) elevation and F) increase in height of window of bedroom no. 5 window at front (east) elevation and F) increase in height of window of bedroom 2 at rear (west) elevation. The vehicular access is as previously permitted via the existing internal roads and entrances to Killeen Castle Demesne. All within the overall site of approx. 255Ha (a Protected Structure)	23/06/2022	c.5km northeast
Meath CC	212179	Boycetown, Dunsany, Co. Meath	The development will consist of the importation of natural materials of topsoil, soil or stone for the purposes of land reclamation for a beneficial agricultural afteruse (5.6 hectares), temporary Wheel Wash, Weighbridge, Office, access track, landscaping and all ancillary site development infrastructure. The project provides for the importation of topsoil, soil and stone to provide an access track and final landscaping under Article 27 as defined by the EPA for land reclamation and reinstatement purposes. The application is accompanied by an Environmental Impact Assessment Report (EIAR), Natura Impact Statement (NIS) and associated documents. The application relates to a reclamation development for the purpose of an activity requiring a Waste Permit to be issued by the Meath County Council. Significant further information/revised plans submitted on this application	17/06/2022	c.4.5km north
Meath CC	212214	On lands including Culmullin, Woodtown, Arodstown & Summerhill, Co Meath	For a solar PV Energy Development with a total site area of 206ha, to include solar panels mounted on steel support structures, associated cabling and ducting, 54 No. MV Power Stations, 2 No. Client Substations, 4 No. Temporary Construction Compounds, access tracks, boundary security fencing and security gates, CCTV, landscaping and ancillary works, accessed via two existing accesses along the L62051. The application is accompanied by a Natura Impact Statement (NIS).	15/06/2022	c. 800m southwest
An Bord Pleanála	ABP-311760-21	Clonymeath, Summerhill, Co Meath.	Solar PV development. NIS lodged at application stage.	24/05/2022	c.4.80km west

Planning Authority	Reference	Address	Proposed Development	Grant / Due Date	Distance from Subject Site
Meath CC	2250	Killeen Castle Demesne, Dunsany, Co Meath	alterations to 13 no. 2 storey detached house types (permitted Plot Nos. 62-74) and development for associated site development and landscape works of a previously permitted residential scheme under Reg Ref DA/802274 (as extended by Reg Ref RA/180960) comprising overall of 135 no. dwellings (comprising 83 no. detached dwellings, 49 no. courtyard house and 3 no. gate lodges). The development now proposed comprises alterations to 13 no. of the already permitted detached houses now proposed to comprise of 2 no. 4 bedroom 2 storey detached dwellings (House Type D) each with a detached single storey garage (c. 34sqm each) and on individual plots of between c0.24-c.0.25ha, 2 no. 4 bedroom 2 storey detached dwellings (House Type DC), each with an attached single storey garage/study (c.34sqm each) and on individual plots of between c 0.27-c 0.29ha, 6 no. 5 bedroom 2 storey detached dwellings (House Types A & C) each with a detached single storey garage(c 34sqm each) and on individual plots of between c 0.26-c.0.32ha, 3 no. 5 bedroom 2 storey detached dwellings (House Types AC & CC), each with an attached single storey garage/study (c 34sqm each) and on individual plots of between c 0.27-c. 0.35ha. Each unit is served by 2 no. carparking spaces (26 no. in total) and associated site development and landscape works to include; boundary treatments and adjustments to permitted plot boundaries at two no. house plots (permitted House Plot Nos. 62 and 74). The vehicular access is as otherwise permitted via the existing internal road network and entrances to Killeen Castle Demesne. All on a site of approximately c 3.63ha within the overall approx. 255ha Killeen Castle Demesne (a protected structure), Dunsany, Co Meath	29/04/2022	c.5km northeast
Meath CC	22264	Drumree, Co Meath	To construct a single storey dwelling house, detached garage, new wastewater treatment system and percolation area, new well, new entrance from public road and all associated site development works	21/04/2022	c.4.7km east
Meath CC	212144	Pelletstown, Drumree, Co Meath	A single storey detached dwelling and domestic garage, new domestic entrance onto public road, septic tank and percolation area, landscaping and all associated works	13/04/2022	c.5km northeast
Meath CC	212208	Knockmark, Drumree, Co. Meath	The development will consist of a) Demolition of existing agricultural sheds, b) Construction of a new farmyard entrance in place of existing roadside entrance, c) Construction of a stable & straw storage shed, d) Construction of a dungstead e) Construction of a machinery shed, f) Erection of a meal bin, g) Construction of a livestock shed & handling area with underground slatted slurry storage tanks and all associated site works	11/04/2022	c.4.4km east
Meath CC	22198	Branganstown, Kiltale, Co Meath	EXTENSION OF DURATION OF PLANNING PERMISSION REF TA/161305 - construction of 3 no. dormer/storey and a half style agri-tourism accommodation dwellings, accessed via existing private laneway, install proprietary waste water treatment systems and percolation areas and all associated site works. Significant further information/revised plans submitted on this application	11/04/2022	c.4.8km north
Meath CC	211844	Newtownrathganley, Kilcock, Co. Meath.	Construction of A) 2 no. new pig houses B) extension to 3 no. existing pig houses and C) 4 no. ancillary overground /underground storage tanks together with all ancillary structures and associated site works (to include an upgrading of the existing site entrance, the provision of an on-site wastewater treatment system and percolation area,	05/04/2022	c. 5.0km southwest

Planning Authority	Reference	Address	Proposed Development	Grant / Due Date	Distance from Subject Site
			and an on-site storm water attenuation swale), arising from the above development. The proposed works are to be completed in preference to, or in lieu of, any outstanding developments previously approved under planning ref DA101175, but not constructed to provide for and ensure higher environmental standards in line with BAT requirements, and improved animal welfare standards). The application relates to a development which is for the purposes of an activity requiring a Licence underpart IV of the Environmental Protection Agency (Licensing) Regulations 1994-2013. An Environmental Impact Statement Assessment Report (EIAR) and Natura Impact Statement (N.I.S) is submitted with this application.		
Meath CC	212117	Teagasc Grange Research Facilities , Grange, Dunsany, Co. Meath	The demolition of existing agricultural structures and construction of three new agricultural buildings consisting of a new slatted floor cattle feeding house, a new calf rearing unit and a new agricultural services store coupled with all associated site works	17/02/2022	c.3.1km north
Meath CC	212004	Tullaghmedan, Drumree, Dunsany, Co Meath	The removal of an existing telecommunications pole attached to a farm shed with a total height of 12 metres above ground level together with telecommunications equipment on it and replacement with a new 17.5 metres telecommunications structure carrying antennas, dishes, associated equipment, together with ground-based equipment cabinets, fencing and all associated site development works for wireless data and broadband services	31/01/2022	c.2.5km north
Meath CC	211982	Knockstown, Moynalvy, Summerhill, Co. Meath	A new two-storey detached dwelling and associated landscaping and site works including a new waste waterwastewater treatment system and percolation area and upgrading the existing site entrance onto the public road.	21/01/2022	c.3.2km southwest
Meath CC	21985	On lands including Derryclare, Cloneymeath, Ballygortagh and Moynalvy, Summerhill, Co. Meath	A Solar PV Energy Development with a total site area of 108.68ha, to include solar panels mounted on steel support structures, associated cabling and ducting, 27 no. MV Power Stations, 3 No. Client Substations, 3 No. temporary construction compounds, access tracks, boundary security fencing and security gates, CCTV, landscaping and ancillary works.	17/01/2022	c.5.0km west
Meath CC	211424	Clonymeath, Summerhill, Co. Meath	The development will consist of two storey dwelling, detached domestic garage, entrance and driveway. The development also includes the installation of new proprietary wastewater treatment system and polishing filter together with all associated site works.	16/12/2021	c.4.0km west
Meath CC	211220	Clonymeath, Summerhill, Co. Meath	Two storey dwelling, detached domestic garage, entrance and driveway. The development also includes the installation of new proprietary wastewater treatment system and polishing filter together with all associated site works.	11/11/2021	c.4.0km west
Meath CC	21546	Clonymeath, Summerhill, Co Meath	Permission for Solar Photovoltaic (PV) development within the townland of Clonymeath, Summerhill, Co Meath. Planning permission is sought for the construction and operation of a solar PV farm consisting of solar arrays on ground mounted steel frames, with a maximum overall height of 3 metres, over an area of 91.9 ha and ancillary equipment including up to 30 no. medium voltage power stations, 1 no. modular Battery Energy Storage Compound (comprising up to 5 no. battery containers) and all other associated site development works and services, including, internal solar PV farm, underground electrical cabling and ducting, 2 no. temporary construction compounds, security fencing,	29/09/2021	c.4.80km west

Planning Authority	Reference	Address	Proposed Development	Grant / Due Date	Distance from Subject Site
			CCTV camera stands, replacement of an existing site entrance with a new gated site entrance via the L2210 local road, provision of new internal access tracks including the upgrading and installation of span bridge structures, site drainage and landscaping, as required to facilitate the development. Planning permission is sought for a period of 10 years with an operational life of 35 years from the date of commissioning. The application is accompanied by a Natura Impact Statement (NIS). Significant Further information/Revised plans submitted on this application.		
Meath CC	RA201932	Leonardstown, Drumree, Co. Meath	Development will consist of a new two-storey detached dwelling house, a single-storey detached garage, proprietary wastewater treatment system and percolation area and all associated siteworks to include a new vehicular access from public road. Significant Further information /Revised plans submitted on this application.	05/07/2021	c.4.0km northeast
Meath CC	21141	Ballygortagh, Summerhill, Co. Meath	Storey and a half type dwelling house, detached garage, new wastewater treatment system and percolation area to proposed site, removal of existing septic tank and percolation area on site and to relocate adjoining dwelling house located to the west and all associated site development works. Significant further information/revised plans submitted on this application.	24/06/2021	c.4.0km southwest
Meath CC	RA201202	Kiltale Group Water Scheme , Pumping Station, Kiltale, Dunsany, Co. Meath C15 T923	The relocation of the existing entrance to the north eastern boundary of the site grounds. The development will include the construction of an in-situ concrete retaining wall along the site road boundary with palisade fence on top of the boundary wall with a land drain to its base with a petrol interceptor connected. Significant further information/revised plans submitted on this application.	14/04/2021	c.4.0km north
An Bord Pleanála	PL17.308034	Knockmark, Drumree, Co. Meath	Importation of uncontaminated soil and stones for the improvement of lands for agricultural purposes	02/03/2021	c.4.5km northeast
Meath CC	RA200607	Curraghtown, Drumree, Co. Meath	The development will consist of: 1. New dwelling and detached garage. 2. New domestic entrance. 3. Oakstown Wastewater Treatment system with Percolation area. 4. Landscaping & all associated site works.	17/12/2020	c.2.0km east
Meath CC	RA191754	Rathkilmore, Kilcock, Co. Meath	A new two storey dwelling with single storey living and lounge area to the west, associated domestic garage, open new vehicular entrance to site, new secondary wastewater treatment unit and polishing filter together with all associated site development works. Significant further information/revised plans submitted on this application.	27/11/2020	c.3.5km south
Meath CC	RA200497	Rathkilmore, Kilcock, Co Meath	A single storey dwelling & domestic garage. Permission is sought to upgrade existing agricultural entrance to facilitate shared domestic entrance and for the installation of a packaged wastewater treatment system and polishing filter and all associated site works.	24/11/2020	c.3.5km south
Meath CC	RA191502	Knockmark, Drumree, Co. Meath	The development will consist of the importation of uncontaminated soil and stones for the improvement of ground levels in rear garden to existing dwelling, in order to carry out landscaping works, gardens & lawns. Subsequent to planning a Certificate of Registration will be sought from Meath County Council Environment/Waste Section for the duration of	24/09/2020	c.4.5km northeast

Planning Authority	Reference	Address	Proposed Development	Grant / Due Date	Distance from Subject Site
			the infilling process. Significant further information/revised plans submitted on this application.		
Meath CC	RA191557	Shanks Mare Public House,, Collegeland & Arodstown,, Summerhill, Co. Meath	The development consists of retention of the partly-complete works for the conversion of the upper ground level of "Shanks Mare" Public house from a public house to four apartments for tourist accommodation (rental) purposes (291.46 sq.m.). Retention permission is also being sought for a covered patio (17.52 sq.m.) which has been constructed to the west of the existing building, along with elevational changes to this structure, which was permitted under permission Reg. No. 71/598. The application also includes future works for the completion of the conversion of the upper ground floor of Shanks Mare to living accommodation, comprising of two number two-bedroom apartments and two number one-bedroom apartments, along with the use of these units for tourist rental purposes. These works shall include the provision of private deck areas to the rear (north-facing) elevation of these dwellings and associated elevational changes. Permission is sought for the change of use of store area (63.54m2) to a function room at lower ground floor level. Under this arrangement the lower ground floor and the uppermost levels within this building will remain in use for public house and residential purposes, respectively. Permission is sought to remove three unauthorised features which occupy the site comprising a perimeter fence, a log cabin and existing signage. Permission is also sought for a new proprietary effluent treatment system and polishing filter to replace the existing septic tank (to be decommissioned) and the closure of an existing entrance and upgrade works to an existing access, together with all associated site works. Significant further information/revised plan submitted on this application.	14/09/2020	c.2.80km west
An Bord Pleanála	ABP-307458-20	Shanks Mare Public House,, Collegeland & Arodstown,, Summerhill, Co. Meath.	Retention of the partly-complete works for the conversion of the upper ground level of "Shanks Mare" Public house from a public house to four apartments for tourist accommodation (rental) purposes.	28/08/2020	c.2.80km west
An Bord Pleanála	PL17.307021	Roestown, Readsland & Knocks, Dunshaughlin, Co. Meath	Amendments to a permitted residential scheme (Reg. Ref. DA120987, An Bord Pleanala Reg. Ref. PL17.241988}, overall comprising of a 142 residential scheme, a creche and associated site services.	27/07/2020	c.5km east
Meath CC	RA200003	Arodstown , Summerhill, Co. Meath	A two-storey dwelling house, domestic garage, creation of new entrance, private well, domestic wastewater treatment plant and all ancillary site works.	03/04/2020	c.1.7km northwest
An Bord Pleanála	PL17.305208	Larchill Stud, Newtownrathganley & Phepotstown, Kilcock, Co. Meath	New entrance and access road from the L6215 and associated upgrade works of the L6215 from the proposed new entrance to the junction with the R125.an activity requiring an Industrial Pollution Prevention and Control Licence (Now replaced by an Industrial Emissions Licence).	20/12/2019	c.5km south
Meath CC	RA180853	Curraghdoo, Summerhill , Enfield, Co. Meath	A two-storey dwelling with detached domestic garage, a domestic effluent treatment system, a well, new site entrance and all associated site works.	17/04/2019	c.4.0km west
Meath CC	RA181075	Bogganstown , Drumree , Co. Meath	Single storey replacement dwelling with detached domestic garage, a domestic effluent treatment system, new site entrance and all associated site works. The existing single storey dwelling is to be used as a farm office.	07/02/2019	c.3.0km southeast

Planning Authority	Reference	Address	Proposed Development	Grant / Due Date	Distance from Subject Site
Meath CC	RA180994	Glen Road,, Moynalvy , Kilcock, Co. Meath	A two-storey dwelling, detached domestic garage, wastewater disposal system, domestic site entrance and all associated site works.	05/12/2018	c.2.0km southwest
Meath CC	RA180692	Merrywell, Drumree, Co. Meath	Construction of a two-storey dwelling with domestic garage, proprietary wastewater treatment system, percolation area, new entrance off public road and all associated site works.	15/11/2018	c.4.0km southeast
Meath CC	TA180245	Martinstown, Kiltale, Co. Meath	Single storey dwelling incorporating domestic garage to rear, upgrade of existing entrance to form new shared dual entrance, driveway, connection to main water and sewerage together with all associated site works.	01/11/2018	c.4.0km northwest
Meath CC	RA170766	Knockstown & Clarkstown, Summerhill, Co. Meath	The development will consist of the following: Photovoltaic solar farm on a site of 23.6 hectares (58 acres) with an export capacity of approximately 8MW, comprising photovoltaic panels on ground mounted frames; 4 no. inverter stations; 1 no. interface substation; ducting and underground electrical cabling; perimeter fencing; pole mounted CCTV cameras; screen planting/landscaping; closing up of existing vehicular entrance and creation of a new vehicular entrance on the local road (L6215); new internal access track from the new vehicular entrance to connect with existing internal farm tracks, and all ancillary works necessary to facilitate the development. Significant further information/revised plans submitted on this application.	01/06/2018	c. 4.70km southwest