FLYNN FURNEY
ENVIRONMENTAL CONSULTANTS

Ecology Report

Fair Green Playground Development,
Athboy, Co. Meath

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Contents

1 Introduction

Meath County Council proposes to undertake the following development in the Townland of Townparks, Athboy, County Meath. The proposed development will consist of:

- A new Playground which is accessible to pedestrians via the existing entrances and footpaths along the Fair Green in Athboy.
- 1.2m high safetop weldmesh fencing, galvanised and powder coated green, will be installed to the perimeter of the play area
- 5 no small/semi mature trees to be relocated within the park – no mature trees to be removed
- All associated site works

The site was visited by Flynn Furney Environmental Consultants in September and November 2024. This survey was carried out to investigate whether any Annex I habitats (EU Habitats Directive), Annex II species (EU Habitats Directive), Annex I Bird Species (EU Birds Directive), 'stepping stones/Ecological Corridors' (as covered under Annex 10 of the EU Habitats Directive), Annex IV species, species protected under the Wildlife Act, invasive alien species or locally important habitats are likely to be impacted upon by the proposed works.

This assessment aimed to:

- Establish baseline ecological data for the proposed development sites;
- Determine the ecological value of the identified ecological features;
- Assess the impact of the proposed development on key ecological features of value; and
- Recommend mitigation measures to avoid, reduce, remedy or compensate impacts.

2 Legislation and Policy Context

2.1 European Council Directives

The following international legislation is relevant to the proposed development: - Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (as amended); hereafter "the Habitats Directive"; and Directive 2009/147/EEC; hereafter "the Birds Directive".

2.2 Irish Legislation

The following National legislation is relevant to the proposed development:

Wildlife Act, 1976 and Wildlife (Amendment) Act (2000) (as amended). Hereafter collectively referred to

as the "Wildlife Acts". The Wildlife Acts are the principal pieces of legislation at the national level for the protection of wildlife and for the control of activities that may harm wildlife. All bird species, 22 other animal species or groups of species and 86 species of flora are protected under these pieces of legislation

Flora (Protection) Order, 2022. This lists species of plant protected under Section 21 of the Wildlife Act, 1976.

The Planning and Development (Amendment) Act 2000 (as amended). This piece of legislation is the basis for Irish land use planning. Under the legislation, development plans (usually implemented at the local authority level) must include mandatory objectives for the conservation of natural heritage and for the conservation of European Sites.

European Communities (EC) (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477/2011 (as amended); hereafter the "Birds and Habitats Regulations". This legislation transposes the Habitats and Birds Directives into Irish law. It also contains regulations (49 and 50) that deal with invasive species (those included within the Third Schedule).

3 Methodology

3.1 Desk Study

Prior to the main fieldwork contributing to this assessment, a desktop survey of available information sources was carried out. These included:

- The NPWS Protected Species Database and Online Mapping
- Spatial information relevant to the planning process including land zoning and planning applications from the Department of Housing, Local Government and Heritage web map portal[1];
- Data on waterbodies, available for download and interrogation from the Environmental Protection Agency (EPA) web map service[2]
- Information on the location, nature and design of the proposed development supplied by the applicant's design team;
- Review of previous, and current planning applications for the subject site and local to the site via Meath County Councils Planning portal and Myplan.ie
- Desk research included a review of records available through the National Biodiversity Data Centre mapping system. These included rare and protected species. Records were requested for all species appearing within 2km of the study area

[1] https://dahg.maps.arcgis.com/apps/webappviewer/index.html?id=8f7060450de3485fa1c1085536d477ba
[2] https://gis.epa.ie/EPAMaps/

- Data on significant Irish grasslands from the Irish Semi-Natural Grassland Surveys (ISGS) 2007 – 2012
- Data contained in the National Survey of Native Woodland (NSNW) and Ancient woodlands inventory (2011 – 2012).

3.2 Field Surveys

A site walkover survey was carried out in September and November 2024. Habitats were identified, mapped, and classified and dominant plant species were noted in accordance with the guidelines given by the JNCC (2007) and The Heritage Council (2010). Habitats were classified as per Fossitt (2000). Plant nomenclature follows the BSBI's List of Accepted Plant Names (BSBI, 2007).

Fauna surveys were carried out during a multidisciplinary walkover survey for the detection of field signs such as tracks, markings, feeding signs, and droppings, as well as by direct observation following NRA (2009).

Following Collins (2023), signs of bats and bat roosting potential surveys were carried out. An inspection of the external areas, including man-made structures and trees within and surrounding the subject lands, was conducted. Bat activity was evidenced by signs including dead specimens, Bat droppings, Urine splashes, Fur-oil staining, Squeaking noises, Feeding remains (moth wings), Bat-fly (Nycteribiid) pupal cases, and Odour.

Bat habitat surveys and bird and mammal surveys followed guidance as per NRA/TII guidance documents. Assessment of ecological impact followed CIEEM (2018), NRA (2009) and EPA (2022).

4 Description of Proposed Development

The proposed development will consist of:

- A new Playground which is accessible to pedestrians via the existing entrances and footpaths along the Fair Green in Athboy.
- 1.2m high safetop weldmesh fencing, galvanised and powder coated green, will be installed to the perimeter of the play area
- 5 no small/semi mature trees to be relocated within the park – no mature trees to be removed
- All associated site works.

Figure 1 – Proposed playground and site location.

4.1.1 Surface Water

No watercourses are crossed by the proposed works sites. The Athboy River runs 140m southwest of the proposed works site. The Athboy River is part of the River Boyne and River Blackwater SAC/SPA. An EPA biological quality station is located 60 upstream of the site of the proposed work and was Last surveyed in 2006. this station was assigned a Q-value score of four. The Athboy River was described by EPA (2024) 'The macroinvertebrate fauna indicated that two of the seven stations surveyed on the Athboy River were in a satisfactory ecological condition in 2020, Kilskeer (0050) and Johnsbrook (0070). These sites improved from moderate ecological condition in the last survey period. The paucity of sensitive macroinvertebrate taxa and dominance of pollution tolerant taxa indicated moderate ecological conditions persist near Dogstown (0020), which also had high percentage cover of algae. Enriched conditions were again evident on the Athboy at all sites downstream of the Bridge near Clonleason House (0100, 0300, 0400 and 0500).'

4.1.2 Groundwater

Groundwater vulnerability is a term used to represent the natural ground characteristics that determine

the ease with which infiltrating water and potential contaminants may reach groundwater in a vertical or subvertical direction. The scheme's area has a high groundwater vulnerability. No works at depths greater than 1m are planned.

5 Ecology Survey

5.1 Designated Sites

Sites designated for the conservation of nature in Ireland include:

- Special Areas of Conservation (SACs) and:
- Special Protection Areas (SPAs).
- Natural Heritage Areas (NHAs)
- proposed Natural Heritage Areas (pNHAs)

SPAs and SACs form the *Natura 2000* network of sites. SPA's and SAC's are prime wildlife conservation areas in the country, considered to be important on a European as well as Irish level. SPA's and SAC's are designated under the EU Habitats Directive, transposed into Irish law by the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011), as amended.

Natural Heritage Area (NHA) is the basic designation for wildlife in Ireland. These are areas considered important for their habitats or species of plants and animals. They first entered into European Law under the 1976 Wildlife Act, then were transposed into Irish law with the 1997 Natural Habitats Regulations (S.I. No. 94 of 1997) finally gaining full statutory recognition in Ireland with the passing of the Wildlife (Amendment) Act 2000.

pNHA sites were published on a non-statutory basis in 1995, but have not since been statutorily proposed or designated. These sites are designated as being of significance for species and habitats. While not afforded the same protection as sites protected under the Habitats Directive, they are subject to protection through the following mechanisms:

- Agri-environmental farm planning schemes such as GLAS (Formally the Rural Environment Protection Scheme)
- Forest Service requirement for NPWS approval before they will pay afforestation grants on pNHA lands
- Recognition of the ecological value of pNHAs by Planning and Licencing Authorities.

Table 1: All designated sites

Site Name and Code	Distance	Designation	Possible Linkages to works areas
River Boyne and River Blackwater SAC 002299	140m	SAC	None
River Boyne and River Blackwater SPA 004232	140m	SPA	None
Girley Bog SAC 002203	5.2km	SAC	None
Jamestown Bog NHA	5.9km	pNHA	None
Lough Shesk	8.8km	pNHA	None

5.1.1 Invasive Species Records

The Habitats Regulations, contain a number of provisions relating to Invasive Non-Native Species *(INNS)*, covering several sections and subsections of the Acts. It is prohibited, without a licence, to plant or otherwise cause to grow in a wild state, in any place in the State, any species of flora, or the flowers, roots, seeds or spores of invasive flora listed on the Third Schedule.

Articles 49 and 50 of the aforementioned Acts set out the legal implications associated with alien invasive species and Schedule 3 *(the Third Schedule)* of the regulations lists non-native species subject to the restrictions of Articles 49 and 50, which make it an offence to plant, disperse, allow dispersal or cause the spread of invasive species.

No Third Schedule invasive species were found during the site survey.

5.1.2 Habitat Assessment

The proposed works area is located within the amenity parkland of the Fair Green, which conforms to Amenity Grasslands (GA1) with Treelines (WL2) of oak (*Quercus sp*.), horse chestnut (*Aesculus hippocastanum*), beech (Fagus sylvatica) and rowan (*Sorbus aucuparia*) around the perimeters of the park. Areas of Ornamental/non-native shrubs (WS3) are also found around the entrances to Fair Green Park. The dominant habitat type in the area surrounding the Fair Green is Buildings and Artificial Surfaces (BL3), which includes private dwellings, commercial buildings, pathways and roads. No habitats of higher than low local importance are found within or adjacent to the site of works.

5.2 Avifauna

A dedicated bird survey was not carried out, however, during the survey all birds seen and heard were typical urban species. No birds protected under the EU Birds Directive (2009/147/EC) or the Habitats Directive (Council Directive 92/43/EEC) were observed on site. No highly suitable habitat was noted.

5.3 Mammals

Otters *Lutra lutra* and Pine Martens *Martes martes*, along with their breeding and resting places, are protected under the provisions of the Wildlife Act, 1976, as amended by the Wildlife *(Amendment)* Act, 2000. Otters have additional protection because of their inclusion in Annex II and Annex IV of the Habitats Directive. Pine Martens have additional protection under Annex V of the European Communities (Birds and Natural Habitats) Regulations, 2011 (as amended)., which is transposed into Irish law in the European Communities *(Natural Habitats)* Regulations *(S.I. 94 of 1997)*, as amended.

Historical record checks of the NBDC database found several records of Otter or Pine Marten near the site of works, the most recent data from 2014. No evidence of Otter or Pine Marten activity was observed during ground surveys of the Ward or its surroundings.

Badgers (*Meles meles*) and their refugia are protected under the Wildlife Act, 1976 (as amended) and by European legislation. Historical record checks on the NBDC did not identify any records of Badger within 2km of any of the works areas. No Badger setts or evidence of Badger activity were found during this survey.

Both the Red Squirrel (*Sciurus vulgaris*) and the Pine Marten (*Martes martes*) are protected under the Irish Wildlife Act (1976) Wildlife (Amendment) Act (2000), and the Bern Convention Appendix III. No records of Red Squirrel were found on the NDBC database. No signs of either species were found within or surrounding the study area.

5.4 Bats

All Irish bat species are protected under the Wildlife Act (1976) and Wildlife Amendment Act (2000). Also, European Communities (Birds and Natural Habitats) Regulations, 2011 (as amended seeks to protect rare species, including bats, and their habitats and requires that appropriate monitoring of populations be undertaken. Across Europe, they are further protected under the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention 1982), which, in relation to bats, exists to conserve all species and their habitats. The Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention 1979, enacted 1983) was instigated to protect migrant species across all European boundaries. The Irish government has ratified both of these conventions. All bats are listed in Annex IV of the Habitats Directive and the greater horseshoe bat and lesser horseshoe bat are further

listed under Annex II.

Historical record checks of publicly available information via the NDBC did not identify any records of bat species within 2km of the works areas. An assessment of the sites suitable for bat roosting and foraging was carried out based on Collins (2023). The site was found to have low suitability for roosting and low suitability for foraging. Several of the large trees around the site were found to contain holes that may be used by a small number of bats. Forgaining potential is limited on the site due to artificial lighting.

Colins (2023) defines these as follows:

Low Roosting Potential[3]: A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions[4] and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation). A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential. A tree of sufficient size and age to contain Potential Roosting Features (PRFs) but with none seen from the ground or features seen with only very limited roosting potential.

Low Foraging Potential: Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or un-vegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitats. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub[5].

In addition, no suitable roosting sites or features were identified.

5.5 Cumulative Impacts

The objective of this requirement is to capture significant effects potentially arising from the cumulation or other interaction of non-significant effects from multiple plans and projects upon the local ecology, including designated sites. Consequently, the assessment of potential in-combination effects is not a pair-wise assessment, rather, it considers the totality of the effects arising from all plans and projects affecting the local ecology. The following data sources were considered as part of this assessment, including:

- Meath County Council's Planning Database
- Myplan.ie

[3] All potential roosting sites recorded are associated with mature trees surrounding the site of works. None of which will be removed or altered as a result of this development.
[4] For example in terms of temperature, humidity, height above ground level, light levels or levels of disturbance
[5] While the River Ward is likely to provide ample opportunities for bats. Where it crosses the works area high levels of anthropogenic disturbance and street lighting.

A search of the Meath County Council registers was carried out. Nearby projects were considered for any in-combination or cumulative impacts. The author has concluded that no cumulative or in-combination impacts are predicted.

6 Summary of Ecological Features, Impacts and Reductive Measures

Table 4 below provides a summary of all ecological features found within the survey areas and if they are likely to be KER's of the possible impacts associated with this project.

Table 4: Ecological evaluation of ecological resources within and surrounding the subject lands.

Habitat/Species	Highest Ecological Valuation Level	Key Ecological Receptor?	Rationale
Designated Sites			
European sites River Boyne and River Blackwater SAC River Boyne and River Blackwater SPA	International	No	The proposed development is located outside this SAC and SPA and there is no potential for direct effects. No surface water features are present within or adjacent to the development site that could provide hydrological connectivity between the subject site and this SAC or SPA. Works occur in areas with high levels of anthropogenic disturbance, including urban roadways and amenity grasslands, which could not be key ex-situ habitat areas for SCI species of this SPA. An appropriate assessment screening report completed by the present authors concluded the following (FFEC, 2024): *"It is the conclusion of this report that the proposed development would not have a significant effect on European Designated Sites and progression to a Stage II Appropriate Assessment is not required.*
pNHAs and Nationally Designated Sites: Jamestown Bog	National	No	The potential for direct and indirect effect can be ruled out the intervening distance between the development site and theses designated sites and the absence of a source-pathway-receptor chain for a

NHA Lough Shesk			likely significant effect.
Habitats & Flora			
Buildings and artificial (BL3)	Low Local Importance	No	Highly modified habitat type of low local (ecological) value.
Amenity Grasslands (GA1)	Low Local Importance	No	Highly modified habitat type of low local (ecological) value. Some immuture trees in the park will be lifted and planted elsewhere in the park.
Treelines (WL2	High local importance	No	Mature trees provide a range of ecosystem services. All are to be retained.
Invasive Species	-	No	None were recorded within the works area.
Fauna			
Bats	None recorded	No	Low suitability in adjacent retained trees for bats Low suitability for foraging bats locally
Otter	None recorded	Yes	None recorded. No impacts are predicted.
Other terrestrial mammals	None recorded	No	None recorded. No impacts are predicted.
Birds	High Local Importance	No	As currently proposed, this scheme will not result in the loss or alteration of any habitat features important for birds.
Cumulative Impacts			
Cumulative impacts	Several projects were reviewed. No cumulative or in-combination impacts or effects were found as a result of any of these projects in conjunction with this proposed project.		

7 Conclusion

No potential impacts on the local ecology, including habitats and designated sites, are predicted. The entire works area is an existing area of amenity grassland of negligible ecological value. Works will not directly impact any habitats or species. No sensitive receptors adjacent to the works that could be impacted by disturbance or displacement were noted.

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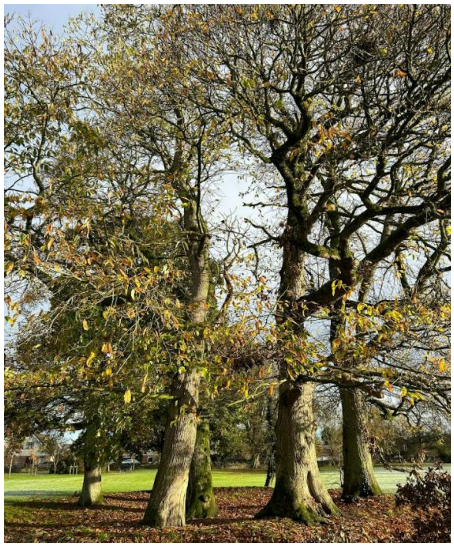
Appendix A: Site Photos

Amenity grassland at the proposed works location

Treelines and amenity areas in the Park



Mature Oak trees within the Park

Location of the 5 immature trees to be removed and relocated within the park