

Ecological Constraints Report

Dun a Rí Forest Park Natural Play Area



Date: September 2023

Issued To: The Paul Hogarth Company

Prepared By: Flynn Furney Environmental Consultants

Note

Works, plans, methodologies, materials, and infrastructural requirements are based on the client's brief, draft plans, and drawings provided to Flynn Furney Environmental Consultants as of August 2023.

Statement of Authority

This Constraints Report has been carried out by suitably qualified and experienced professionals of Flynn Furney Environmental Consultants.

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1 Introduction

Flynn Furney Environmental Consultants have been commissioned by The Paul Hogarth Company to carry out an ecological constraints identification exercise on an area of woodland where a natural play area is proposed. The proposed site of works is in the 565 acre Dun a Rí Forest Park located just outside Kingscourt in County Cavan. The area of proposed works is located at the end of the main site access route off the R179, adjacent to the upper car parking facilities.

The ecological constraints exercise is informed by a complete walkover survey of the proposed development site in order to identify key ecological features. These include habitats within the survey corridor, key species therein and a consideration of possible effects thereon. It should be noted that this scoping process is not an impact assessment. Rather, its purpose is to identify the key areas for consideration and also to assess the requirements for future survey work and the level of detail indicated for these.

2 Desk Study

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

- The National Biodiversity Data Centre Online Database
- The National Biodiversity Network Online Atlas
- The NPWS Protected Species Database and Online Mapping
- The Environmental Protection Agency Database

Designated sites were identified using the current boundary shapefiles downloaded from the NWPS website. Records of species from within the relevant Km squares were also obtained. Habitat mapping also reviewed included the Irish Semi-Natural Grassland Surveys (ISGS), the National Survey of Native Woodland (NSNW) and Ancient Woodland Inventory.

3 Field Study

Field work for this survey was carried out on the 14th of September 2023. The primary purpose of this survey was to:

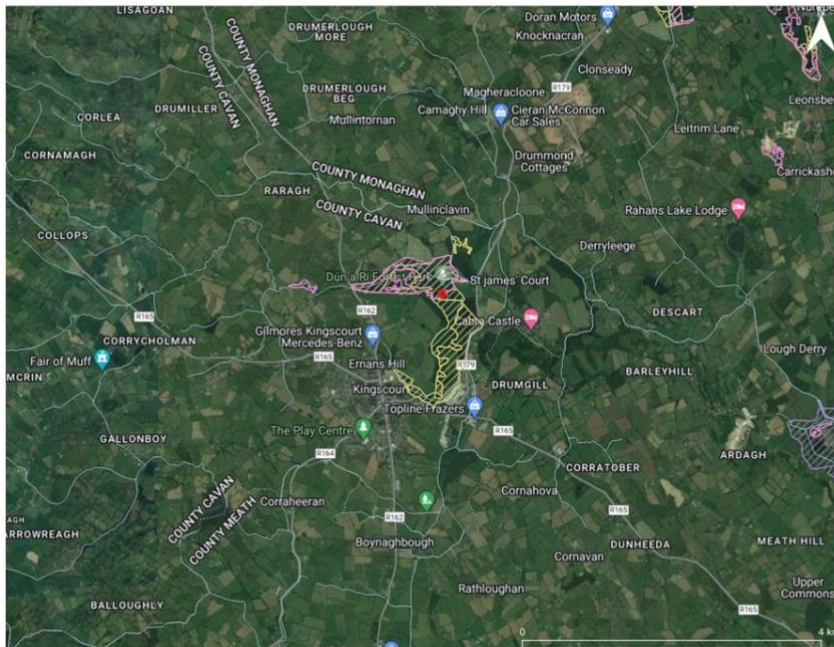
- Identify any possible rare and vulnerable habitat types along the proposed route
- Assess for the presence of protected species of flora and fauna
- Identify ecological and environmental constraints to the construction of the natural play area
- Identify further ecological surveys work that will be required for this project

The walkover survey considered a broad survey corridor to ensure all other important features that could be impacted by the development were considered (e.g. significant treelines and hedgerows, mammal paths and other watercourses). This fieldwork provided guidance for further, more detailed surveys including further mammal surveys, habitat surveys and floral surveys.

4 Results

4.1 Designated Sites

The closest designated site to the area of the proposed development is Ballyhoe Lough pNHA (4.9km away). There is a stream (Drumsallagh) 160m away from the area of the proposed development and this stream is hydrologically connected (approx. 7.2km) to Ballyhoe Lough pNHA. There is a considerable distance from the area of the proposed development to the site so it is unlikely that this designated site would be impacted by the development. Dundalk Bay SAC and Dundalk SAC are also hydrologically connected to the site through the Drumsallagh stream (56km away) so it is very unlikely that this site will be impacted by the development.



**Dun a Rí
Designated Sites and
Important Habitats**

Legend

- Site Outline
- pNHA
- NHA
- SAC
- SPA
- Important Woodlands (NSNW)
- Important Woodlands (Ancient Woodlands)
- Watercourses

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Disclaimer: This map has been prepared in accordance with the scope of services described in the contract or agreement between Flynn Furney Environmental Consultants and the Client. Any findings only apply to the aforementioned circumstances and no greater reliance should be assumed or drawn by the Client.

4.2 Flora

4.2.1 Habitats

The three main habitats identified at the site of the proposed development are outlined below in Table 4.1. These habitats are not protected under the EU Habitats Directive.

Table 4.1 Habitats Identified on and surrounding the site of proposed Natural Play Area

General Habitat Types
(Mixed) Broadleaved Woodland WD1
(Mixed) Conifer Woodland WD3
Treeline WL2

4.2.1.1 (Mixed) Broadleaved Woodland WD2

This habitat is predominantly mature beech (*Fagus*) trees however hazel (*Corylus avellana*), holly (*Ilex aquifolium*), sycamore (*Acer pseudoplatanus*), ash (*Fraxinus excelsior*), rowan (*Sorbus subg. Sorbus*), alder (*Alnus*) and Caucasian spruce (*Picea orientalis*) were also less frequently present. The Ash in this section of woodland showed significant signs of ash dieback. Birch (*Betula*) and oak (Sessile) saplings were present in some areas of the (mixed) broadleaved woodland. Bramble was frequent along with ivy (*Hedera helix*), soft-shield fern (*Polystichum setiferum*), broad-buckler fern (*Dryopteris dilatata*) and male fern (*Dryopteris filix-mas*). Cherry laurel (*Prunus laurocerasus*) was present in one section of the woodland.

Groundflora within this habitat was a mixture of herb robert (*Geranium robertianum*), ivy (*Hedera helix*), honeysuckle (*Lonicera periclymenum*), white clover (*Trifolium repens*), wood speedwell (*Veronica montana*), remote sedge (*Ajuga reptans*), broadleaf enchanters nightshade (*Circaea lutetiana*), willowherb (*Epilobium parviflorum*), large-leaved avens (*Geum macrophyllum*), hedge woundwort (*Stachys sylvatica*), Lords and Ladies (*Arum maculatum*), Meadowsweet (*Filipendula ulmaria*), Dandelion (*Taraxacum officinale*) and Dog violet (*Viola riviniana*). The woodland was also rich in bryophytes and fungi such as Yellow brittlestem (*Psathyrella ammophila*) and Jelly baby mushroom (*Leotia lubrica*) were also frequently present throughout the woodland.



Figure 4.1 (Mixed) broadleaved woodland

4.2.1.2 (Mixed) Conifer Woodland WD3

The conifer plantation surrounding the site was dominated by species such as Sitka spruce (*Picea sitchensis*) with species like Caucasian spruce (*Picea orientalis*). In some sections of this woodland beech (*Fagus*) and ash (*Fraxinus excelsior*) were present but the coverage of broadleaved species was below 25%. The majority of ground flora in this habitat was similar to the ground flora in the (mixed) broadleaved woodland however, the ground flora was most abundant on the borders of the habitat.



Figure 4.2 (Mixed) Conifer Woodland

4.2.1.3 Treelines WL2

Treelines in the area surrounding the site of the proposed development consisted of oak (*Sessile* spp.), beech (*Fagus*) and ash (*Fraxinus excelsior*).

4.2.1.4 Important Woodland Habitat

It is noted that the area which the development is proposed falls within important woodland habitats from the Ancient Woodland Inventory and the National Survey of Native Woodland. Dun a Rí has important ancient mixed woodland, mixed broadleaf conifer woodland and oak-ash-hazel woodland. However, field surveys showed that this area within Dun a Rí Forest Park did not conform to ancient woodland or indeed oak-ash-hazel woodland.

4.3 Fauna

4.3.1 Mammals

According to NBDC (2023) badgers (*Meles meles*) setts have been recorded within 1km of the site of the proposed development but no evidence of badger setts, latrines or prints were found in the area of the proposed development or in the surrounding areas.

Multiple red squirrels (*Sciurus vulgaris*) were observed in beech trees the (mixed) broadleaved woodland during the walkover survey. Red squirrels are protected under the Wildlife (Amendment) Act 2000 therefore a drey survey should be completed to estimate the

4.3.2 Birds

Bird species heard during the walkover survey included Goldcrest *Regulus regulus*, Wren *Troglodytidae*, Robin *Erithacus rubecula*, Jay *Garrulus glandarius* and Great tit *Parus major*. No species listed on Annex II of the Habitats Directive were found to be occurring on the site however all native bird species are protected under Irish legislation. According to BWI (2023), Goldcrests have Amber Conservation Status and depend mainly on conifer plantations. However, the main habitat within the footprint of the proposed development is (mixed) broadleaved woodland so no habitat loss will occur to this species.

4.3.3 Bats

Mature broadleaved and mixed woodlands often provide roosting habitats for bats. According to the NBDC (2023), Nathusius' pipistrelle was recorded within 5km of the site and Lesser Noctule bat was recorded within 1km of the site. The (mixed) broadleaved woodland within the site offers roosting and foraging habitats. Therefore a bat roost potential survey should be conducted.

4.3.4 Amphibians and Reptiles

While a common frog was observed within the footprint of the proposed development area in (mixed) broadleaved woodland, it is likely they rely on wetter areas including lakes and ponds elsewhere in the Forest Park and will not be significantly impacted by the proposed development.

4.3.5 Invertebrates

The Marsh Fritillary butterfly (*Euphydryis aurinia*) is Ireland's only Habitats Directive Annex II insect species. In Ireland, the species relies solely on Devil's-Bit Scabious as its larval food plant. This is a plant of damp ground and often occurs in stands (mosaics) within areas of damp and wet grassland. No larval webs were found during the ecology surveys of the site. No stands of Devil's-Bit Scabious were recorded within or surrounding the proposed works site. Therefore, there are no necessary actions in relation to invertebrates.

4.3.6 Invasive Species

Cherry Laurel (*Prunus laurocerasus*) was present in one section of the area of the proposed development. This species is not on the third Schedule list but it is listed as medium impact invasive.

4.4 Summary of Ecological Constraints Identified

Four ecological constraints were identified for the site of the proposed development (outlined below).

Table 4.2 Ecological constraints for Dun a Rí Forest Park Natural Play Area

Ecological Constraint	Recommendations Made Y/N
Important Woodland Habitat (Ancient Woodland Inventory)	Yes
Important Woodland Habitat (National Survey of Native Woodlands)	Yes
Mammals - Red Squirrel (<i>Sciurus vulgaris</i>)	Yes
Bats	Yes
Birds	Yes
Invasive Species - Cherry laurel (<i>Prunus laurocerasus</i>)	Yes

5 Recommendations

No actions are required in relation to designated sites, amphibians and reptiles or invertebrates.

However, the following recommendations are made in relation to habitats, mammals:

- This site falls within important woodland habitat in the ancient Woodland Inventory and the National Survey of Native Woodlands. Both of these surveys identified Dun a Rí as having important ancient mixed woodland, mixed broadleaf conifer woodland and oak-ash-hazel woodland. The area of the proposed development does not conform to ancient woodland or oak-ash-hazel woodland. Although the woodland does not fall into these categories, all mature trees within the development area should not be felled.
- Due to the multiple observation of red squirrels a drey survey should be carried out to estimate the population density of red squirrels in the area. Additional native tree planting (hazel/oak) is recommended around the site to enhance food sources for the red squirrel population.
- Due to the presence of Goldcrest (Amber Conservation Status), a bird survey should be carried out to assess the presence of Goldcrests in the mixed woodlands within the development area, with particular focus on the conifers.
- Due to the recordings of bats close to the site of the proposed development along with the moderate suitability for roosting and foraging in the woodland, a bat roost habitat assessment survey should be carried out.

- Although Cherry Laurel is not on the Third Schedule, it can act invasively. An invasive species management plan should ideally be created to manage the Cherry laurel within the area of the proposed development. This is merely a recommendation and is not a requirement for the development.
- It is recommended that mature trees within the area of the proposed development are not felled. This is in order to retain as much woodland cover as possible.

6 References

BEC Consultants, 2008. *National Survey of Native Woodland*. [Online].

BWI, 2023. *Goldcrest*. [Online]

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Appendix



Dun a Rí Habitat Map

Legend

- Watercourses
- Site Outline
- (Mixed) Conifer Woodland WD3
- Treeline WL2
- (Mixed) Broadleaved Woodland WD1



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Figure 0.1 Dun a Rí Habitat Map