

available to handle waste generated from a large number of these sites simultaneously, if required. Similar waste materials would be generated by all the developments.

Other developments in the area will be required to manage waste in compliance with national and local legislation, policies and plans which will mitigate against any potential cumulative effects associated with waste generation and waste management. As such the effect will be **short-term, imperceptible and neutral**.

8.7.2 OPERATIONAL PHASE

There will be no cumulative impacts from the operational phase of this development as there is no operational waste being generated.

8.8 INTERACTIONS

This section discusses interactions between this Section and other specialist environmental topics considered in this EIAR.

8.8.1 LAND, SOILS, GEOLOGY & HYDROGEOLOGY

During the construction phase, excavated soil and stones (c. 3,950m³) will be generated from the excavations required to facilitate site levelling and construction of new foundations. It is anticipated that the excavated material will need to be removed off-site. Adherence to the proposed mitigation measures and the requirements of the RWMP (appended), will ensure the effect is **long-term, imperceptible and neutral**.

8.8.2 POPULATION AND HUMAN HEALTH

The potential impacts on human beings are in relation to incorrect management of waste during construction phase, which could result in littering and presence of vermin – with associated potential for negative impacts on human health and residential amenity. A carefully planned approach to waste management and adherence to the project specific RWMP (appended), and the proposed mitigation measures, will ensure appropriate management of waste and avoid any negative impacts on the local population. The effects should be **long-term, imperceptible and neutral**.

8.9 REFERENCES

1. Waste Management Act 1996 (No. 10 of 1996) as amended.
2. BS 5906:2005 Waste Management in Buildings – Code of Practice.
3. Council Decision 2003/33/EC, establishing criteria and procedures for the acceptance of waste at landfills pursuant to Article 16 of and Annex II to Directive 1999/31/EC.
4. Department of Communications, Climate Action and Environment (DCCA), Waste Action Plan for the Circular Economy - Ireland's National Waste Policy 2020-2025 (2020).
5. Department of Environment and Local Government (DELG) (1998). Waste Management – Changing Our Ways, A Policy Statement.
6. Department of Environment, Communities and Local Government (DECLG) (2012). A Resource Opportunity - Waste Management Policy in Ireland.
7. Fingal County Council (FCC) (Segregation Storage, Presentation and of Household and Commercial Waste) Bye-Laws (2020).
8. FCC, Fingal County Development Plan 2017 – 2023 (2017).
9. FCC, Draft Fingal County Development Plan 2023 – 2029 (2022).
10. Department of Environment, Heritage and Local Government (DEHLG) (2020). Sustainable Urban Housing: Design Standards for New Apartments, Guidelines for Planning Authorities.
11. Environmental Protection Agency (EPA) 'Best Practice Guidelines for the Preparation of Resource Management Plans for Construction & Demolition Projects' (2021)
12. Department of Environment, Heritage and Local Government (DEHLG) (2006). Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects.
13. Eastern Midlands Regional Waste Management Plan 2015-2021 (2015).
14. Environmental Protection Agency (EPA). National Waste Database Reports 1998-2019.
15. EPA (2015). Waste Classification-List of Waste & Determining if Waste is Hazardous or Non-Hazardous.
16. EPA and Galway-Mayo Institute of Technology (GMIT) (2015). EPA Research Report 146-A Review of Design and Construction Waste Management Practices in Selected Case Studies-Lessons Learned.
17. FÁS and the Construction Industry Federation (CIF) (2002). Construction and Demolition Waste Management-a handbook for Contractors and Site Managers.
18. Forum for the Construction Industry-Recycling of Construction and Demolition Waste.
19. Litter Pollution Act 1997 (S.I. No. 12 of 1997) as amended.
20. Planning and Development Act 2000 (S.I. No. 30 of 2000) as amended.
21. Protection of the Environment Act 2003, (No. 27 of 2003) as amended.
22. European Commission, Environmental Impact Assessment of Projects: Guidance on the preparation of the Environmental Impact Assessment Report (2017).
23. Environmental Protection Agency (EPA) 'Guidelines on the information to be contained in Environmental Impact Assessment Reports' (2022)

9 ARCHAEOLOGY

The archaeological assessment is included as Appendix 9 to this ER.

ER APPENDIX 3

Appendix 3.1

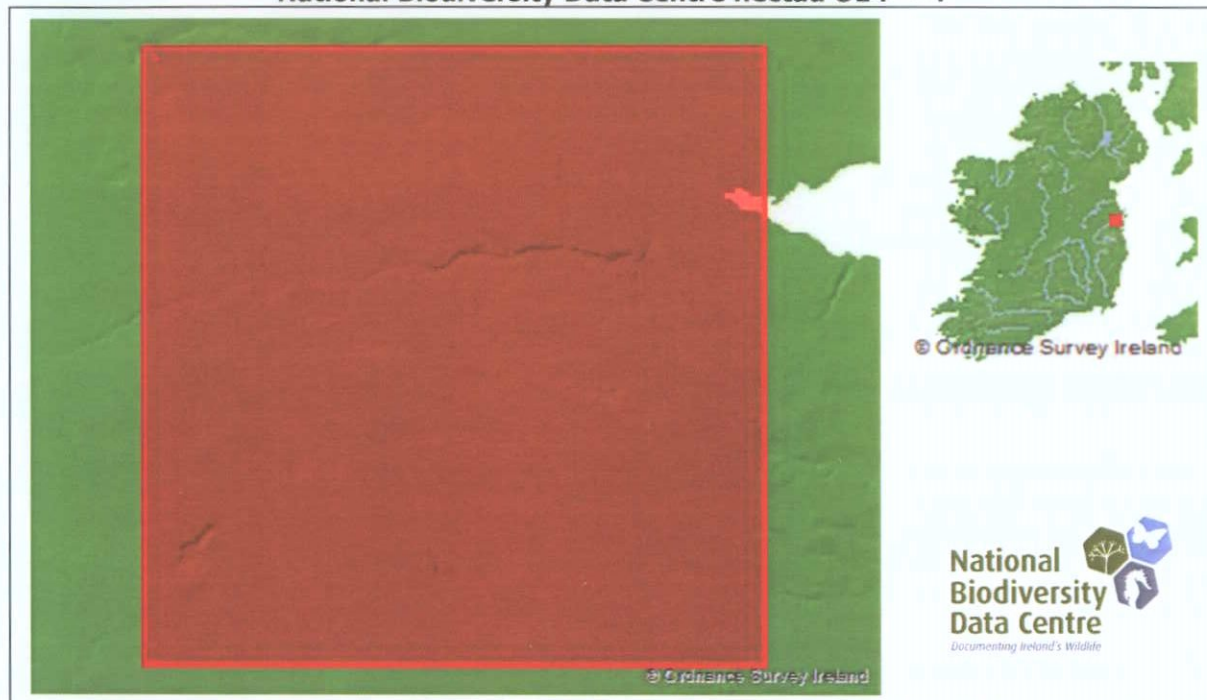
Natura 2000 Sites, Natural Heritage Areas and proposed Natural Heritage Areas within 15km of the proposed development site (arranged by distance from proposed sites).

Site Code	Site Name	Distance	Site Type
002103	Royal Canal pNHA	3.63	pNHA
000128	Liffey Valley pNHA	5.02	pNHA
000178	Santry Demesne pNHA	5.08	pNHA
001398	Rye Water Valley/Carton SAC	8.67	SAC
001208	Feltrim Hill pNHA	8.97	pNHA
002104	Grand Canal pNHA	9.31	pNHA
000206	North Dublin Bay pNHA	9.38	pNHA
004024	South Dublin Bay and River Tolka Estuary SPA	9.51	SPA
000205	Malahide Estuary SAC	9.65	SAC
000205	Malahide Estuary pNHA	9.65	pNHA
004025	Malahide Estuary SPA	9.74	SPA
000206	North Dublin Bay SAC	11.83	SAC
004006	North Bull Island SPA	11.83	SPA
001763	Sluice River Marsh pNHA	11.84	pNHA
000210	South Dublin Bay SAC	12.19	SAC
000210	South Dublin Bay pNHA	12.19	pNHA
000201	Dolphins, Dublin Docks pNHA	12.35	pNHA
000199	Baldoyle Bay SAC	12.48	SAC
004016	Baldoyle Bay SPA	12.48	SPA
000199	Baldoyle Bay pNHA	12.48	pNHA
001398	Rye Water Valley/Carton pNHA	12.48	pNHA
000208	Rogerstown Estuary pNHA	12.49	pNHA
000208	Rogerstown Estuary SAC	12.50	SAC
004015	Rogerstown Estuary SPA	13.16	SPA
000991	Dodder Valley pNHA	14.34	pNHA
001205	Boosterstown Marsh pNHA	14.77	pNHA

Appendix 3.2

The National Biodiversity Centre 10km hectads O14 & O04 displayed below, contains the proposed development on the Liffey.

National Biodiversity Data Centre hectad O14^{19,20}.



National Biodiversity Data Centre hectad O04^{21,22}.

¹⁹ National Biodiversity Data Centre records. Accessed: 9th August 2022.

²⁰ Image: NBDC Maps database

²¹ National Biodiversity Data Centre records. Accessed: 9th August 2022.

²² Image: NBDC Maps database



Invasive species records for the 014 & 004 hectads¹⁹ relevant to the proposed development site.

* Species subject to restrictions (Third Schedule) under Regulation 49 of the European Communities (Birds and Natural Habitats) Regulations, 2011

No invasive species recorded during ecological site visit on 3rd February 2022.

Common name	Scientific name	Record count
American mink*	<i>Mustela vison</i>	4
Arthurdendyus triangulatus	<i>Arthurdendyus triangulatus</i>	2
Australoplana sanguinea	<i>Australoplana sanguinea</i>	2
Brown rat* (Offshore Islands Only)	<i>Rattus norvegicus</i>	5
Butterfly-bush	<i>Buddleja davidii</i>	13
Canadian Fleabane	<i>Conyza canadensis</i>	1
Cherry Laurel	<i>Prunus laurocerasus</i>	7
Common cord-grass*	<i>Spartina anglica</i>	1
Eastern Grey squirrel*	<i>Sciurus carolinensis</i>	19
European Rabbit	<i>Oryctolagus cuniculus</i>	32
Evergreen Oak	<i>Quercus ilex</i>	1
Giant hogweed*	<i>Heracleum mantegazzianum</i>	6
Harlequin Ladybird*	<i>Harmonia axyridis</i>	1
Himalayan Honeysuckle	<i>Leycesteria formosa</i>	3
House Mouse	<i>Mus musculus</i>	1

Common name	Scientific name	Record count
Japanese knotweed*	<i>Fallopia japonica</i>	6
Jenkins' Spire Snail	<i>Potamopyrgus antipodarum</i>	14
Red-eared Terrapin	<i>Trachemys scripta</i>	1
Ruddy duck*	<i>Oxyura jamaicensis</i>	1
Russian-vine	<i>Fallopia baldschuanica</i>	2
Sika Deer	<i>Cervus nippon</i>	1
Sycamore	<i>Acer pseudoplatanus</i>	18
Three-cornered leek*	<i>Allium triquetrum</i>	2
Wild Parsnip	<i>Pastinaca sativa</i>	1

Rare and/or protected species known to occur within the O14 & O04 hectads¹⁹ containing the proposed development site (arranged by taxonomic group)

Taxonomic group	Common name	Scientific name	Designation	Record count
amphibian	Common Frog	<i>Rana temporaria</i>	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex V Protected Species: Wildlife Acts	18
amphibian	Smooth Newt	<i>Lissotriton vulgaris</i>	Protected Species: Wildlife Acts	4
bird	Barn Owl	<i>Tyto alba</i>	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List	8
bird	Barn Swallow	<i>Hirundo rustica</i>	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	34
bird	Bar-tailed Godwit	<i>Limosa lapponica</i>	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex I Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	3
bird	Black-headed Gull	<i>Larus ridibundus</i>	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List	20

Taxonomic group	Common name	Scientific name	Designation	Record count
bird	Black-tailed Godwit	<i>Limosa limosa</i>	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	6
bird	Brent Goose	<i>Branta bernicla</i>	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	3
bird	Common Coot	<i>Fulica atra</i>	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex III, Section II Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	13
bird	Common Goldeneye	<i>Bucephala clangula</i>	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section II Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	2
bird	Common Grasshopper Warbler	<i>Locustella naevia</i>	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	3
bird	Common Greenshank	<i>Tringa nebularia</i>	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	4
bird	Common Kestrel	<i>Falco tinnunculus</i>	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	25
bird	Common Kingfisher	<i>Alcedo atthis</i>	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex I Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	12

Taxonomic group	Common name	Scientific name	Designation	Record count
bird	Common Linnet	<i>Carduelis cannabina</i>	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	25
bird	Common Pheasant	<i>Phasianus colchicus</i>	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex III, Section I Bird Species	31
bird	Common Pochard	<i>Aythya ferina</i>	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex III, Section II Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	3
bird	Common Redshank	<i>Tringa totanus</i>	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List	10
bird	Common Sandpiper	<i>Actitis hypoleucos</i>	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	4
bird	Common Shelduck	<i>Tadorna tadorna</i>	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	11
bird	Common Snipe	<i>Gallinago gallinago</i>	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex III, Section III Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	8
bird	Common Starling	<i>Sturnus vulgaris</i>	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	50

Taxonomic group	Common name	Scientific name	Designation	Record count
bird	Common Swift	<i>Apus apus</i>	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	19
bird	Common Tern	<i>Sterna hirundo</i>	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex I Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	1
bird	Common Wood Pigeon	<i>Columba palumbus</i>	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex III, Section I Bird Species	57
bird	Corn Crake	<i>Crex crex</i>	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex I Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List	3
bird	Dunlin	<i>Calidris alpina</i>	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex I Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	5
bird	Eurasian Curlew	<i>Numenius arquata</i>	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section II Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List	11
bird	Eurasian Oystercatcher	<i>Haematopus ostralegus</i>	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	6
bird	Eurasian Teal	<i>Anas crecca</i>	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex III, Section II Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	6

Taxonomic group	Common name	Scientific name	Designation	Record count
bird	Eurasian Tree Sparrow	<i>Passer montanus</i>	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	25
bird	Eurasian Wigeon	<i>Anas penelope</i>	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex III, Section II Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	2
bird	Eurasian Woodcock	<i>Scolopax rusticola</i>	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex III, Section III Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	5
bird	European Golden Plover	<i>Pluvialis apricaria</i>	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex I Bird Species Protected Species: EU Birds Directive >> Annex II, Section II Bird Species Protected Species: EU Birds Directive >> Annex III, Section III Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List	8
bird	Great Black-backed Gull	<i>Larus marinus</i>	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	6
bird	Great Cormorant	<i>Phalacrocorax carbo</i>	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	6
bird	Great Crested Grebe	<i>Podiceps cristatus</i>	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	2

Taxonomic group	Common name	Scientific name	Designation	Record count
bird	Greater Scaup	<i>Aythya marila</i>	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section II Bird Species Protected Species: EU Birds Directive >> Annex III, Section III Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	2
bird	Grey Partridge	<i>Perdix perdix</i>	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex III, Section I Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List	3
bird	Grey Plover	<i>Pluvialis squatarola</i>	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	2
bird	Hen Harrier	<i>Circus cyaneus</i>	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex I Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	1
bird	Herring Gull	<i>Larus argentatus</i>	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List	12
bird	House Martin	<i>Delichon urbicum</i>	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	28
bird	House Sparrow	<i>Passer domesticus</i>	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	49
bird	Lesser Black-backed Gull	<i>Larus fuscus</i>	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	8

Taxonomic group	Common name	Scientific name	Designation	Record count
bird	Little Egret	<i>Egretta garzetta</i>	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex I Bird Species	11
bird	Little Grebe	<i>Tachybaptus ruficollis</i>	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	14
bird	Little Gull	<i>Larus minutus</i>	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex I Bird Species	2
bird	Mallard	<i>Anas platyrhynchos</i>	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex III, Section I Bird Species	26
bird	Mediterranean Gull	<i>Larus melanocephalus</i>	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex I Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	1
bird	Mew Gull	<i>Larus canus</i>	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	9
bird	Mute Swan	<i>Cygnus olor</i>	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	31
bird	Northern Goshawk	<i>Accipiter gentilis</i>	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	1
bird	Northern Lapwing	<i>Vanellus vanellus</i>	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section II Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List	25
bird	Northern Wheatear	<i>Oenanthe oenanthe</i>	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	3

Taxonomic group	Common name	Scientific name	Designation	Record count
bird	Peregrine Falcon	<i>Falco peregrinus</i>	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex I Bird Species	9
bird	Pink-footed Goose	<i>Anser brachyrhynchus</i>	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section II Bird Species	1
bird	Red Kite	<i>Milvus milvus</i>	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	2
bird	Red Knot	<i>Calidris canutus</i>	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List	4
bird	Red-breasted Merganser	<i>Mergus serrator</i>	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section II Bird Species	2
bird	Rock Pigeon	<i>Columba livia</i>	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section I Bird Species	26
bird	Ruddy Duck	<i>Oxyura jamaicensis</i>	Invasive Species: Invasive Species Invasive Species: Invasive Species >> High Impact Invasive Species Invasive Species: Invasive Species >> EU Regulation No. 1143/2014 Invasive Species: Invasive Species >> Regulation S.I. 477 (Ireland)	1
bird	Ruff	<i>Philomachus pugnax</i>	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex I Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	4
bird	Sand Martin	<i>Riparia riparia</i>	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	6
bird	Short-eared Owl	<i>Asio flammeus</i>	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex I Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	2

Taxonomic group	Common name	Scientific name	Designation	Record count
bird	Sky Lark	<i>Alauda arvensis</i>	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	17
bird	Slavonian Grebe	<i>Podiceps auritus</i>	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	1
bird	Snowy Owl	<i>Bubo scandiaca</i>	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex I Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	1
bird	Spotted Flycatcher	<i>Muscicapa striata</i>	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	10
bird	Stock Pigeon	<i>Columba oenas</i>	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	25
bird	Tufted Duck	<i>Aythya fuligula</i>	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex III, Section II Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	11
bird	Twite	<i>Carduelis flavirostris</i>	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List	1
bird	Velvet Scoter	<i>Melanitta fusca</i>	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section II Bird Species	2
bird	Water Rail	<i>Rallus aquaticus</i>	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	2

Taxonomic group	Common name	Scientific name	Designation	Record count
bird	White-tailed Eagle	<i>Haliaeetus albicilla</i>	Protected Species: Wildlife Acts	1
bird	Whooper Swan	<i>Cygnus cygnus</i>	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex I Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	3
bird	Wood Lark	<i>Lullula arborea</i>	Protected Species: Wildlife Acts	1
bird	Yellowhammer	<i>Emberiza citrinella</i>	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List	35
bird	Merlin	<i>Falco columbarius</i>	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex I Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List	2
bony fish (Actinopterygii)	European Eel	<i>Anguilla anguilla</i>	Threatened Species: OSPAR Convention Threatened Species: Critically Endangered	2
flatworm (Turbellaria)	Australoplanina sanguinea	<i>Australoplanina sanguinea</i>	Invasive Species: Invasive Species Invasive Species: Invasive Species >> Medium Impact Invasive Species	2
Flatworm (Turbellaria)	Arthurdendylus triangulatus	<i>Arthurdendylus triangulatus</i>	Invasive Species: Invasive Species Invasive Species: Invasive Species >> High Impact Invasive Species	2
flowering plant	Blue Fleabane	<i>Erigeron acer</i>	Threatened Species: Endangered	1
flowering plant	Butterfly-bush	<i>Buddleja davidii</i>	Invasive Species: Invasive Species Invasive Species: Invasive Species >> Medium Impact Invasive Species	13
flowering plant	Canadian Fleabane	<i>Conyza canadensis</i>	Invasive Species: Invasive Species Invasive Species: Invasive Species >> Medium Impact Invasive Species	1
flowering plant	Cherry Laurel	<i>Prunus laurocerasus</i>	Invasive Species: Invasive Species Invasive Species: Invasive Species >> High Impact Invasive Species	7

Taxonomic group	Common name	Scientific name	Designation	Record count
flowering plant	Common Cord-grass	<i>Spartina anglica</i>	Invasive Species: Invasive Species Invasive Species: Invasive Species >> High Impact Invasive Species Invasive Species: Invasive Species >> Regulation S.I. 477 (Ireland)	1
flowering plant	Evergreen Oak	<i>Quercus ilex</i>	Invasive Species: Invasive Species Invasive Species: Invasive Species >> Medium Impact Invasive Species	1
flowering plant	Giant Hogweed	<i>Heracleum mantegazzianum</i>	Invasive Species: Invasive Species Invasive Species: Invasive Species >> High Impact Invasive Species Invasive Species: Invasive Species >> Regulation S.I. 477 (Ireland)	6
flowering plant	Himalayan Honeysuckle	<i>Leycesteria formosa</i>	Invasive Species: Invasive Species Invasive Species: Invasive Species >> Medium Impact Invasive Species	3
flowering plant	Japanese Knotweed	<i>Fallopia japonica</i>	Invasive Species: Invasive Species Invasive Species: Invasive Species >> High Impact Invasive Species Invasive Species: Invasive Species >> Regulation S.I. 477 (Ireland)	6
flowering plant	Meadow Barley	<i>Hordeum secalinum</i>	Threatened Species: Endangered	7
flowering plant	Russian-vine	<i>Fallopia baldschuanica</i>	Invasive Species: Invasive Species Invasive Species: Invasive Species >> Medium Impact Invasive Species	2
flowering plant	Smooth Brome	<i>Bromus racemosus</i>	Threatened Species: Vulnerable	1
flowering plant	Sycamore	<i>Acer pseudoplatanus</i>	Invasive Species: Invasive Species Invasive Species: Invasive Species >> Medium Impact Invasive Species	18
flowering plant	Three-cornered Garlic	<i>Allium triquetrum</i>	Invasive Species: Invasive Species Invasive Species: Invasive Species >> Medium Impact Invasive Species Invasive Species: Invasive Species >> Regulation S.I. 477 (Ireland)	2
flowering plant	Wild Parsnip	<i>Pastinaca sativa</i>	Invasive Species: Invasive Species Invasive Species: Invasive Species >> Medium Impact Invasive Species	1
insect beetle (Coleoptera)	Bagous	<i>Hydronomus alismatis</i>	Threatened Species: Critically Endangered	1
insect beetle (Coleoptera)	Gyrinus urinator	<i>Gyrinus urinator</i>	Threatened Species: Near threatened	1
insect beetle (Coleoptera)	Nebrioporus	<i>Nebrioporus depressus</i>	Threatened Species: Data deficient	1

Taxonomic group	Common name	Scientific name	Designation	Record count
insect beetle (Coleoptera)	- Harlequin Ladybird	<i>Harmonia axyridis</i>	Invasive Species: Invasive Species Invasive Species: Invasive Species >> High Impact Invasive Species Invasive Species: Invasive Species >> Regulation S.I. 477 (Ireland)	1
insect butterfly	- Grayling	<i>Hipparchia semele</i>	Threatened Species: Near threatened	1
insect butterfly	- Marsh Fritillary	<i>Euphydryas aurinia</i>	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex II Threatened Species: Vulnerable	2
insect butterfly	- Wall	<i>Lasiommata megera</i>	Threatened Species: Endangered	2
insect hymenopteran	- Andrena	<i>Melandrena nigroaenea</i>	Threatened Species: Vulnerable	3
insect hymenopteran	- Bombus	<i>Bombus magnus</i>	Threatened Species: Data deficient	1
insect hymenopteran	- Large Red Tailed Bumble Bee	<i>Bombus Melanobombus lapidarius</i>	Threatened Species: Near threatened	24
insect hymenopteran	- Moss Carder-bee	<i>Bombus Thoracombus muscorum</i>	Threatened Species: Near threatened	5
insect hymenopteran	- Red-tailed Carder Bee	<i>Bombus Thoracombus ruderarius</i>	Threatened Species: Vulnerable	2
insect mayfly (Ephemeroptera)	- Ephemerella notata	<i>Ephemerella notata</i>	Threatened Species: Endangered	2
liverwort	Fairy Beads	<i>Microlejeunea ulicina</i>	Threatened Species: Least concern	1
liverwort	MacKay's Pouncewort	<i>Marchesinia mackaii</i>	Threatened Species: Least concern	1
liverwort	Minute Pouncewort	<i>Cololejeunea minutissima</i>	Threatened Species: Least concern	1
liverwort	Rock Pouncewort	<i>Cololejeunea calcarea</i>	Threatened Species: Least concern	1
liverwort	Rossetti's Pouncewort	<i>Cololejeunea rossettiana</i>	Threatened Species: Least concern	2

Taxonomic group	Common name	Scientific name	Designation	Record count
liverwort	Toothed Pouncewort	<i>Drepanolejeunea hamatifolia</i>	Threatened Species: Least concern	1
liverwort	Dilated Scalewort	<i>Frullania dilatata</i>	Threatened Species: Least concern	1
marine mammal	Common Seal	<i>Phoca vitulina</i>	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex II Protected Species: EU Habitats Directive >> Annex V Protected Species: Wildlife Acts	2
mollusc	Jenkins' Spire Snail	<i>Potamopyrgus antipodarum</i>	Invasive Species: Invasive Species Invasive Species: Invasive Species >> Medium Impact Invasive Species	14
mollusc	Lake Orb Mussel	<i>Musculium lacustre</i>	Threatened Species: Vulnerable	1
mollusc	Mauge's Shelled Slug	<i>Testacella Testacella mauei</i>	Threatened Species: Near threatened	1
mollusc	Moss Chrysalis Snail	<i>Pupilla Pupilla muscorum</i>	Threatened Species: Endangered	1
moss	Archangelic Thread-moss	<i>Bryum archangelicum</i>	Threatened Species: Least concern	1
moss	Bird's-claw Beard-moss	<i>Barbula unguiculata</i>	Threatened Species: Least concern	2
moss	Bryum dichotomum	<i>Bryum dichotomum</i>	Threatened Species: Least concern	2
moss	Common Cord-moss	<i>Funaria hygrometrica</i>	Threatened Species: Least concern	1
moss	Common Extinguisher-moss	<i>Encalypta vulgaris</i>	Threatened Species: Near threatened	2
moss	Common Feather-moss	<i>Eurhynchium praelongum</i>	Threatened Species: Least concern	1
moss	Common Pottia	<i>Tortula truncata</i>	Threatened Species: Least concern	1
moss	Crimson-tuber Thread-moss	<i>Bryum rubens</i>	Threatened Species: Least concern	1

Taxonomic group	Common name	Scientific name	Designation	Record count
moss	Field Forklet-moss	<i>Dicranella staphylina</i>	Threatened Species: Least concern	1
moss	Intermediate Screw-moss	<i>Syntrichia intermedia</i>	Threatened Species: Least concern	1
moss	Lateral Cryphaea	<i>Cryphaea heteromalla</i>	Threatened Species: Least concern	1
moss	Lesser Bird's-claw Beard-moss	<i>Barbula convoluta</i>	Threatened Species: Least concern	2
moss	Pea Bryum	<i>Bryum ruderale</i>	Threatened Species: Least concern	1
moss	Pill Bryum	<i>Bryum violaceum</i>	Threatened Species: Least concern	1
moss	Pink-fruited Thread-moss	<i>Pohlia melanodon</i>	Threatened Species: Least concern	1
moss	Pointed Spear-moss	<i>Calliergonella cuspidata</i>	Threatened Species: Least concern	2
moss	Raspberry Bryum	<i>Bryum klinggraeffii</i>	Threatened Species: Least concern	1
moss	Rigid Aloe-moss	<i>Aloina rigida</i>	Threatened Species: Regionally Extinct	1
moss	Rough-stalked Feather-moss	<i>Brachythecium rutabulum</i>	Threatened Species: Least concern	2
moss	Rusty Feather-moss	<i>Sciurohypnum plumosum</i>	Threatened Species: Least concern	1
moss	Sausage Beard-moss	<i>Didymodon tomaculosus</i>	Threatened Species: Vulnerable	2
moss	Schreber's Forklet-moss	<i>Dicranella schreberiana</i>	Threatened Species: Least concern	1
moss	Shaw's Bristle-moss	<i>Orthotrichum striatum</i>	Threatened Species: Least concern	1
moss	Silver-moss	<i>Bryum argenteum</i>	Threatened Species: Least concern	2

Taxonomic group	Common name	Scientific name	Designation	Record count
moss	Small Hairy Screw-moss	<i>Syntrichia laevipila</i>	Threatened Species: Least concern	2
moss	Swartz's Feather-moss	<i>Oxyrrhynchium hians</i>	Threatened Species: Least concern	1
moss	Variable Forklet-moss	<i>Dicranella varia</i>	Threatened Species: Least concern	1
moss	Anomalous Bristle-moss	<i>Orthotrichum anomalum</i>	Threatened Species: Least concern	1
moss	Capillary Thread-moss	<i>Bryum capillare</i>	Threatened Species: Least concern	1
moss	Common Tamarisk-moss	<i>Thuidium tamariscinum</i>	Threatened Species: Least concern	1
moss	Cylindric Beard-moss	<i>Didymodon insulanus</i>	Threatened Species: Least concern	1
moss	Fallacious Beard-moss	<i>Didymodon fallax</i>	Threatened Species: Least concern	1
moss	Fern-leaved Hook-moss	<i>Cratoneuron filicinum</i>	Threatened Species: Least concern	1
moss	Flat Neckera	<i>Neckera complanata</i>	Threatened Species: Least concern	1
moss	Great Plait-moss	<i>Hypnum lacunosum</i> var. <i>lacunosum</i>	Threatened Species: Least concern	1
moss	Grey-cushioned Grimmia	<i>Grimmia pulvinata</i>	Threatened Species: Least concern	1
moss	Lyell's Bristle-moss	<i>Orthotrichum lyellii</i>	Threatened Species: Least concern	1
moss	Neat Feather-moss	<i>Scleropodium purum</i>	Threatened Species: Least concern	1
moss	Redshank	<i>Ceratodon purpureus</i>	Threatened Species: Least concern	1

Taxonomic group	Common name	Scientific name	Designation	Record count
moss	Rigid Beard-moss	<i>Didymodon rigidulus</i>	Threatened Species: Least concern	1
moss	Silky Wall Feather-moss	<i>Homalothecium sericeum</i>	Threatened Species: Least concern	1
moss	Springy Turf-moss	<i>Rhytidiadelphus squarrosus</i>	Threatened Species: Least concern	1
moss	Supine Plait-moss	<i>Hypnum cupressiforme</i> var. <i>resupinatum</i>	Threatened Species: Least concern	1
moss	Wall Screw-moss	<i>Tortula muralis</i>	Threatened Species: Least concern	1
moss	White-tipped Bristle-moss	<i>Orthotrichum diaphanum</i>	Threatened Species: Least concern	1
moss	Zygodon viridissimus var. viridissimus	<i>Zygodon viridissimus</i> var. <i>viridissimus</i>	Threatened Species: Least concern	1
reptile	Red-eared Terrapin	<i>Trachemys scripta</i>	Invasive Species: Invasive Species Invasive Species: Invasive Species >> Medium Impact Invasive Species Invasive Species: Invasive Species >> EU Regulation No. 1143/2014	1
terrestrial mammal	American Mink	<i>Mustela vison</i>	Invasive Species: Invasive Species Invasive Species: Invasive Species >> High Impact Invasive Species Invasive Species: Invasive Species >> Regulation S.I. 477 (Ireland)	4
terrestrial mammal	Brown Long-eared Bat	<i>Plecotus auritus</i>	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex IV Protected Species: Wildlife Acts	4
terrestrial mammal	Brown Rat	<i>Rattus norvegicus</i>	Invasive Species: Invasive Species Invasive Species: Invasive Species >> High Impact Invasive Species Invasive Species: Invasive Species >> Regulation S.I. 477 (Ireland)	5
terrestrial mammal	Daubenton's Bat	<i>Myotis daubentonii</i>	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex IV Protected Species: Wildlife Acts	25

Taxonomic group	Common name	Scientific name	Designation	Record count
terrestrial mammal	Eastern Grey Squirrel	<i>Sciurus carolinensis</i>	Invasive Species: Invasive Species Invasive Species: Invasive Species >> High Impact Invasive Species Invasive Species: Invasive Species >> EU Regulation No. 1143/2014 Invasive Species: Invasive Species >> Regulation S.I. 477 (Ireland)	19
terrestrial mammal	Eurasian Badger	<i>Meles meles</i>	Protected Species: Wildlife Acts	24
terrestrial mammal	Eurasian Pygmy Shrew	<i>Sorex minutus</i>	Protected Species: Wildlife Acts	4
terrestrial mammal	Eurasian Red Squirrel	<i>Sciurus vulgaris</i>	Protected Species: Wildlife Acts	1
terrestrial mammal	European Otter	<i>Lutra lutra</i>	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex II Protected Species: EU Habitats Directive >> Annex IV Protected Species: Wildlife Acts	20
terrestrial mammal	European Rabbit	<i>Oryctolagus cuniculus</i>	Invasive Species: Invasive Species Invasive Species: Invasive Species >> Medium Impact Invasive Species	32
terrestrial mammal	Irish Hare	<i>Lepus timidus subsp. hibernicus</i>	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex II Protected Species: EU Habitats Directive >> Annex IV Protected Species: Wildlife Acts	114
terrestrial mammal	Irish Stoat	<i>Mustela erminea subsp. hibernica</i>	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex II Protected Species: EU Habitats Directive >> Annex IV Protected Species: Wildlife Acts	4
terrestrial mammal	Lesser Noctule	<i>Nyctalus leisleri</i>	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex IV Protected Species: Wildlife Acts	40
terrestrial mammal	Natterer's Bat	<i>Myotis nattereri</i>	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex IV Protected Species: Wildlife Acts	9
terrestrial mammal	Pine Marten	<i>Martes martes</i>	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex V Protected Species: Wildlife Acts	5
terrestrial mammal	Pipistrelle	<i>Pipistrellus pipistrellus sensu lato</i>	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex IV Protected Species: Wildlife Acts	37
terrestrial mammal	Soprano Pipistrelle	<i>Pipistrellus pygmaeus</i>	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex IV Protected Species: Wildlife Acts	26

Taxonomic group	Common name	Scientific name	Designation	Record count
terrestrial mammal	West European Hedgehog	<i>Erinaceus europaeus</i>	Protected Species: Wildlife Acts	74
terrestrial mammal	House Mouse	<i>Mus musculus</i>	Invasive Species: Invasive Species Invasive Species: Invasive Species >> High Impact Invasive Species	1
terrestrial mammal	Red Deer	<i>Cervus elaphus</i>	Protected Species: Wildlife Acts	1
terrestrial mammal	Sika Deer	<i>Cervus nippon</i>	Invasive Species: Invasive Species Invasive Species: Invasive Species >> High Impact Invasive Species Invasive Species: Invasive Species >> Regulation S.I. 477 (Ireland) Protected Species: Wildlife Acts	1
terrestrial mammal	Whiskered Bat	<i>Myotis mystacinus</i>	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex IV Protected Species: Wildlife Acts	1

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 PLANNING DEPARTMENT
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 ADDITIONAL INFORMATION
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Appendix 3.3

Habitat characteristics and descriptions from the ecological site visit to the proposed development site referred to in Section 3.2 as well as Figure 3.5 of this assessment. These habitat types were identified and categorised following the Fossitt (2000)²³ classification system for Ireland. Given the extent of the site, lack of habitat diversity and dominance of two habitat types (agricultural grassland and buildings and artificial surfaces), these habitat types are given a brief text description, followed by a table listing all plants found in those habitats and supported by the habitat maps replicated below.

Habitat types within the project boundary of the site

Agricultural Grassland (GA1)

Dominant habitat type in the area where the field margins are maintained to be wide with hedgerows (WL1). Fields which have not been recently sown or harvested are overgrown and left fallow with significant scrub encroachment from the field boundary.

Scientific name	Common name
<i>Lolium perenne</i>	Perennial Ryegrass
<i>Urtica dioica</i>	Nettle
<i>Epilobium hirsutum</i>	Willowherb
<i>Arrhenatherum elatius</i>	False Oat Grass
<i>Potentilla spp.</i>	Cinquefoil
<i>Cornus spp.</i>	Dogwood
<i>Fraxinus excelsior</i>	Ash
<i>Rubus fruticosus</i>	Bramble
<i>Geranium robertianum</i>	Herb Robert
<i>Carex spp.</i>	Willow

Scrub (WS1)

Area of scrub to the north of the proposed location of the GIS substation where bramble is the dominant species.

Scientific name	Common name
<i>Rubus fruticosus</i>	Brambles
<i>Lolium perenne</i>	Perennial Ryegrass
<i>Buddleja davidii</i>	Butterfly Bush

Hedgerows (WL1)

The majority of hedgerows around the site all have similar composition and are thin and sparse. The hedgerow to the north of the site is more mature and of a higher ecological value. The dominant species in the hedgerows are hawthorn and bramble.

Scientific name	Common name
<i>Rubus fruticosus</i>	Brambles
<i>Hedera helix</i>	Ivy
<i>Crataegus spp.</i>	Hawthorn
<i>Fraxinus excelsior</i>	Ash
<i>Acer pseudoplatanus</i>	Sycamore
<i>Pinus sylvestris</i>	Scots Pine
<i>Heracleum mantegazzianum</i>	Hogweed
<i>Epilobium hirsutum</i>	Willowherb
<i>Urtica dioica</i>	Nettle
<i>Buddleja davidii</i>	Butterfly Bush

²³ Fossitt, J.A., 2000. *A guide to habitats in Ireland*. Heritage.

Scientific name	Common name
<i>Asplenium scolopendrium</i>	Hart's Tongue Fern

Treeline (WL2)

The treelines within the proposed site are mature and in bad condition overall. The treelines are dominated by cypress.

Scientific name	Common name
<i>Cupressus sempervirens</i>	Cypress
<i>Hedera helix</i>	Ivy
<i>Sambucus nigra</i>	Elder

Buildings and Artificial Surfaces (BL3)

The proposed grid connection route lies along an existing roadway and with hedgerows (WL1) found along sections of the proposed route. An area of residential buildings in the northwest of the proposed location of the GIS substation and is surrounded by an area of scrub (WS1) and hedgerow (WL1).

Spoil and Bare Ground (ED2)

Strip of spoil and bare ground in the north of the proposed location of the GIS substation contained within an area of agricultural grassland (GA1).

Habitat types outside of the proposed development site

Habitat types surrounding the proposed development site were viewed at the landscape scale using satellite imagery due to the expanse of the site. The majority of the habitat is surrounded by agricultural grassland (GA1), accompanied by hedgerows (WL1) with areas of buildings and artificial surfaces (BL3). The habitat types in the surrounding area are typical of areas such as Kilshane whose main habitats such as agricultural grassland (GA1) and buildings and artificial surfaces (BL3) are not of ecological importance and any impact from proposed works to be done on habitats are negligible to the ecology of the area.



Figure 6 Habitat map of the proposed development site as of February 2022; using Fossitt coding for habitats

Appendix 3.4 Planning database²⁴ search of projects within 200m of the proposed development site over the last 5 years

Table 1 Local planning applications within the receiving environment of the proposed development

Project Code	Status	Overview	Grant Date	Project Area (sq m)	Characteristics of the potential interactions between the projects; sources and pathways	Is there a risk of in-combination effects
F05A/1547/E1	Grant Extension of Duration of Perm.	Permission for a retail warehouse scheme measuring 13,973 sqm gross on a 5.4 hectare site to the west of the Ratoath Road, in the townland of Bay, County Dublin. The development includes for the following: 1 no. DIY unit measuring 6,000 sqm gross (including 1 no. outdoor garden centre of 846 sqm); 10 no. retail warehouse units totalling 7,973 sqm gross; 718 no. surface car parking spaces; 1 no. free standing flood lit sign at the proposed site entrance with an overall height of 8.15 metres; 2 no. ESB sub-stations (22 sqm each). All associated site development and landscape works. The proposal has a height of 9.25 metres. Access to the proposal is provided via an approved access road previously permitted under planning permission ref; F04A/1802. An EIS will be submitted to the Council with the application.	N/A	369,410	This project will have a temporary construction phase and the operational phase will have localised effects that will be in keeping with the context and character of the surrounding environment. It is also subject to applicable EIA and AA requirements. Considering the above, and the predicted absence of significant effects due to the subject proposal, it is not considered that there is any potential for significant in-combination effects to occur.	No
F05A/1610/E1	Grant Extension of Duration of Perm.	Planning permission on a 10.5 hectare site at Cruiserath and Hollywoodrath, Mulhuddart, North Blanchardstown, Dublin 15. The site is bounded to the west by Church Road and is located to the east of the Tyrrelstown district centre. The proposed development, with a total gross floor area of 20,320 sqm, comprises the construction of a retail warehouse park with a gross floor area of 20,000 sqm to include 9 single storey double height retail units (including a garden centre) and a single storey drive-thru restaurant with a gross floor area of 320 sqm. The size of the proposed retail warehouse units range from 6,000 sqm. (Unit 1 including garden centre) to 1,000 sqm (units 3, 4, 6 and 7).	N/A	310,281	This project will have a temporary construction phase and the operational phase will have localised effects that will be in keeping with the context and character of the surrounding environment. It is also subject to applicable EIA and AA requirements. Considering the above, and the predicted absence of significant effects due to the subject proposal, it is not considered that there is any potential for significant in-combination effects to occur.	No

²⁴ <https://data-housinggov.ie/opendata.arcgis.com/datasets/planning-application-sites-2010-onwards/>; for Kilshane Energy - accessed 5th September 2022

Project Code	Status	Overview	Grant Date	Project Area (sq m)	Characteristics of the potential interactions between the projects; sources and pathways	Is there a risk of in-combination effects
		The maximum height of the proposed development is approximately 12 metres. The proposed development will be accessed by the extension of an internal access road, to include 3 roundabout junctions, off the existing roundabout on Church Road. Part of this internal access road was permitted under a previous planning application (reg. ref. F04A/0536). A second access will be developed by the extension of the internal access road to a roundabout junction on the proposed N2/N3 Link Road. The proposed development also includes 2 bus set down areas on the internal access road, cycleways and a new pedestrian access from Church Road. The entire development is to be served by 1,104 surface car parking spaces and includes the reconfiguration of part of the permitted car park serving the hotel as permitted under reg. ref. F04A/1756 and subsequently amended under F05A/0523. The proposed development includes all site development works including landscaping and boundary treatment, bicycle parking, an ESB substation, associated signage and service yards. This application is accompanied by an Environmental Impact Statement.				
FW16A/0148	Grant Permission	Permission for alterations to the residential scheme permitted under Register Reference FW14A/0108 and Register Reference FW16A/0099. On a site at Hollywoodrath, Hollystown, Dublin 15. The site is located on the southern side of the junction of the Ratoath Road and the R121 (Church Road), and to the north of the M2/N3 link road. The proposed alterations will consist of (i) a phased construction of the permitted crèche over two phases (ii) a change in house types of 4 no. permitted residential units in the scheme to be provided as follows: Replacement of 3 no. House Type A4 and 1 no. House Type A5 with 4 no. House Type B5 (iii) amendments to Condition 5 (ii) of Register Reference FW14A/0108 to maintain ESB pylon in current	2017/01/18	284,289	This project will have a temporary construction phase and the operational phase will have localised effects that will be in keeping with the context and character of the surrounding environment. It is also subject to applicable EIA and AA requirements. Considering the above, and the predicted absence of significant effects due to the subject proposal, it is not considered that there is any potential for significant in-combination effects to occur.	No