# K2 Data Centre Amendments Ecological Impact Assessment





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On behalf of: K2 Strategic Infrastructure Ireland Limited

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#### 1. INTRODUCTION

Moore Group was commissioned by K2 Strategic Infrastructure Ireland Limited to undertake a Habitat Survey and EcIA in respect of the proposed amendments to the permitted development (Planning register reference SD18A/030) of a Data Centre at Kingswood Drive and Kingswood Road, within the Citywest Business Campus, Naas Road, Dublin 24, referred to as the 'Proposed Development'.

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

This report was compiled by Ger O'Donohoe M.Sc. of Moore Group providing information on habitats in the study area. Ger is the principal ecologist with Moore Group and has over 27 years' experience in ecological impact assessment. He graduated from GMIT in 1993 with a B.Sc. in Applied Freshwater & Marine Biology and subsequently worked in environmental consultancy while completing an M.Sc. in Environmental Sciences, graduating from Trinity College, Dublin in 1999. (He also has over 15 years' experience of carrying out bat surveys and has completed the Bat Conservation Ireland, Bat Detector Workshop which is the standard training for the carrying out of bat surveys in Ireland and follows the Bat Conservation Ireland 'Bat Survey Guidelines' (Aughney et al., 2008). In addition, Ger is an active member of the Galway Bat Group and Bat Conservation Ireland, which monitors bat populations in Ireland, and facilitates the education of bat communities to the public.)

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

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

- Other habitats of ecological value in a national to local context, including rocky habitats in the general area;
- Stepping stones and ecological corridors encapsulated by Article 10 of the Habitats Directive.

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

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

As such, a report for the purposes of Appropriate Assessment Screening was undertaken by Moore Group for the Proposed Development in support of the application to South Dublin County Council.

The site location is presented in Figure 1 below.



Figure 1. Showing the site location Citywest Business Campus, Dublin 24.



Figure 2. Showing the Proposed Development boundary in red.

#### 2. ASSESSMENT METHODOLOGY

### 2.1. POLICY & LEGISLATION

# 2.1.1. EU Habitats Directive

The "Habitats Directive" (Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Flora and Fauna) is the main legislative instrument for the protection and conservation of biodiversity within the European Union and lists certain habitats and species that must be protected within wildlife conservation areas, considered to be important at a European as well as at a national level. A "Special Conservation Area" or SAC is a designation under the Habitats Directive. The Habitats Directive sets out the protocol for the protection and management of SACs.

The Directive sets out key elements of the system of protection including the requirement for "Appropriate Assessment" of plans and projects. The requirements for an Appropriate Assessment are set out in the EU Habitats Directive. Articles 6(3) and 6(4) of the Directive.

#### 2.1.2. EU Birds Directive

The "Birds Directive" (Council Directive 79/409/EEC as amended by Directive 2009/147/EC) provides for a network of sites in all member states to protect birds at their breeding, feeding, roosting and wintering areas. This directive identifies species that are rare, in danger of extinction or vulnerable to changes in habitat and which need protection (Annex I species). Appendix I indicates Annex I bird species as listed on the Birds Directive. A "Special Protection Area" or SPA, is a designation under The Birds Directive.

Special Areas of Conservation and Special Protection Areas form a pan-European network of protected sites known as Natura 2000 sites and any plan or project that has the potential to impact upon a Natura 2000 site requires appropriate assessment.

#### 2.1.3. Wildlife Acts 1976 - 2012

The primary domestic legislation providing for the protection of wildlife in general, and the control of some activities adversely impacting upon wildlife is the Wildlife Act of 1976. The aims of the wildlife act according to the National Parks and Wildlife Service are "... to provide for the protection and conservation of wild fauna and flora, to conserve a representative sample of important ecosystems, to provide for the development and protection of game resources and to regulate their exploitation, and to provide the services necessary to accomplish such aims." All bird species are protected under the act. The Wildlife (Amendment) Act of 2000 amended the original Act to improve the effectiveness of the Act to achieve its aims.

#### 2.2. SURVEY METHODOLOGY

#### 2.2.1. Desk Study

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

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

- The following mapping and Geographical Information Systems (GIS) data sources, as required:
  - National Parks & Wildlife (NPWS) protected site boundary data;
  - Ordnance Survey of Ireland (OSI) mapping and aerial photography;
  - OSI/ Environmental Protection Agency (EPA) rivers and streams, and catchments;

- Open Street Maps;
- Digital Elevation Model over Europe (EU-DEM);
- Google Earth and Bing aerial photography 1995-2022;
- Online data available on Natura 2000 sites as held by the National Parks and Wildlife Service (NPWS) from www.npws.ie including:
  - Natura 2000 Standard Data Form;
  - Conservation Objectives;
  - Site Synopses;
- National Biodiversity Data Centre records;
  - Online database of rare, threatened and protected species;
  - Publicly accessible biodiversity datasets.
- Status of EU Protected Habitats in Ireland. (National Parks & Wildlife Service, 2019); and
- Relevant Development Plans in neighbouring areas:
  - South Dublin County Development Plan 2016-2022

#### 2.2.2. Field Study

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

Habitats were surveyed on the 4 May 2022 by conducting a study area walkover covering the main ecological areas identified in the desktop assessment. The survey date is at the beginning of the optimal botanical survey period but adequate given the light suburban nature of the survey area. A photographic record was made of features of interest.

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

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

A Bat Survey was undertaken by NM Ecology Ltd. and is presented as separate report as part of the planning application. The pertinent findings of the report are included in this assessment of Biodiversity.

#### 2.2.3. Site Evaluation and Impact Assessment

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

- Guidelines for Ecological Impact Assessment in the UK And Ireland Terrestrial, Freshwater,
   Coastal and Marine September 2018 Version 1.1 Updated September 2019 (CIEEM, 2019);
- EPA Guidelines on Information to be contained in an EIAR (EPA, 2022);
- Best Practice Guidance for Habitat Survey and Mapping (Heritage Council, 2011);
- Ecological Surveying Techniques for Protected Flora & Fauna (NRA, 2008);
- Guidelines for Assessment of Ecological Impacts of National Road Schemes (NRA, 2009);
- Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities (DEHLG, December 2009, Rev 2010);
- Assessment of plans and projects significantly affecting Natura 2000 sites (EC, 2002);
- Guidance document on Article 6(4) of the Habitats Directive 92/43/EEC (EC, 2007).

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

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

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

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

#### 3. PROPOSED DEVELOPMENT DESCRIPTION

The proposed development comprises amendments to the development permitted under Reg. Ref.: SD18A/0301. The proposed amendments comprise the following (as per site notice description):

- Alterations to the permitted two storey data centre building including internal reconfiguration,
  alterations to finished floor levels, alterations to the building footprint to provide for the
  relocation of an internal staircore to the south of the building, and the replacement of the
  enclosed first floor level with an open screened roof mounted plant space (resulting in a
  reduction of 4,091 sq.m in the gross floor area (GFA) of the building).
- Associated alterations to the façade of the data centre building, including alterations to fenestration, cladding, step-out in the southern façade to accommodate a staircore, and a reduction in the eastern building parapet height of c. 2 metres.
- The provision of a canopy over the loading docks on the east facade.
- Alterations to the permitted generator compound, generators, and flues, including a reduction
  in the number of generators (5 no. now proposed), and provision of MV rooms within the
  generator compound.
- Provision of an ESB substation compound in the northeastern portion of the site, comprising a
  single storey substation building (with a GFA of c. 125 sq.m), 2 no. transformers, client control
  building (with a GFA of c. 47 sq.m), and associated access arrangements within a 2.6 metre
  high security fence. The ESB substation compound will be accessed from Kingswood Drive.
- Omission of the permitted sprinkler tank, pump room and 10kV Substation, reconfiguration
  of the permitted car parking, and revisions to permitted boundary treatments.
- Associated alterations to landscaping, access and internal road arrangements, services, lighting, and layout, and all associated and ancillary works.

Figure 3 shows the overall layout of the proposed development.

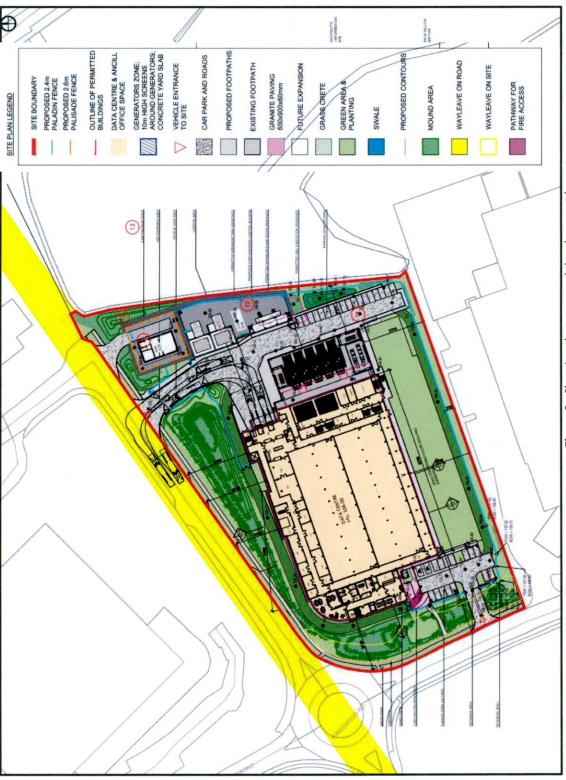


Figure 3. Showing the proposed development layout.

#### 4. EXISTING ENVIRONMENT

#### 4.1. DESIGNATED CONSERVATION AREAS

The Department of Housing, Planning and Local Government (previously DoEHLG)'s Guidance on Appropriate Assessment (2009) recommends an assessment of European sites within a Zone of Influence (ZoI) of 15km. However, this distance is a guidance only and a zone of influence of a Project is the geographical area over which it could affect the receiving environment in a way that could have significant effects on the Qualifying Interests of a European site. In accordance with the OPR Practice Note, PNO1, the ZoI should be established on a case-by-case basis using the Source- Pathway-Receptor framework and not by arbitrary distances (such as 15km).

The Zone of Influence may be determined by connectivity to the Proposed Development in terms of:

- Nature, scale, timing and duration of works and possible impacts, nature and size of excavations, storage of materials, flat/sloping sites;
- Distance and nature of pathways (dilution and dispersion; intervening 'buffer' lands, roads etc.); and
- Sensitivity and location of ecological features.

The potential for source pathway receptor connectivity is firstly identified through GIS interrogation and detailed information is then provided on sites with connectivity. European sites that are located within a potential Zone of Influence of the Proposed Development are presented in Figure 4 below. Spatial boundary data on the Natura 2000 network was extracted from the NPWS website (www.npws.ie) on 2 June 2022. This data was interrogated using GIS analysis to provide mapping, distances, locations and pathways to all sites of conservation concern including pNHAs, NHA and European sites.

The nearest European site to the Proposed Development is the Glenasmole Valley SAC (Site Code 001209), approximately 4.8km to the southeast. There is no connectivity to this site, as it lies in a separate catchment to the proposed development. The Wicklow Mountains SAC (Site Code 002122) is situated 6.6km to the south, and also lies in a separate catchment. The Proposed Development is located within the hydrological catchment of the River Camac, a tributary of the River Liffey, within an established light industrial area of the southwest suburbs of Dublin. A review of aerial photography, Ordnance Survey Ireland (OSI) mapping and OSI Geographical Information System (GIS) data for rivers and streams indicates that there are no notable surface water features onsite and no direct hydrological pathways to offsite surface water bodies. This was confirmed during fieldwork on habitat assessment on 4 May 2022.

Surface water from the proposed development site will discharge to the existing 525mm diameter pipe located in the centre of the existing Citywest Business Park Estate Road which runs along the eastern boundary of the site. The 525mm diameter pipe flows in a easterly direction from the north east corner of the site before out falling to the Kingswood Stream to the east of the site.

There is no direct hydrological connection from the site to the Camac River or Kingswood Stream. The Kingswood Stream ultimately outfalls to the Liffey Estuary, which is hydrologically connected to the South Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA. There is, therefore, an indirect very distant pathway from the proposed development to these designated European sites.

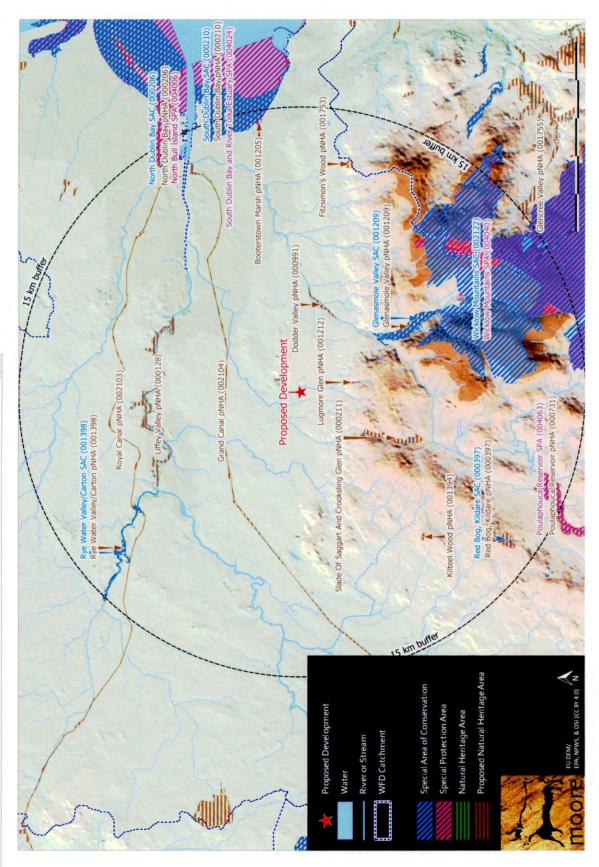


Figure 4. Showing European sites and NHAS/pNHAs within the wider Potential Zone of Influence of the Proposed Development.

#### 4.2. HABITAT DESCRIPTIONS

The site can be divided roughly into three habitats, grassland to the west, recolonising ground to the centre and scrub to the east, see the Habitat map in Figure 5 below. There are no records of rare plants in the 1km squares in which the Proposed Development site is located (O0528).

#### GA1 Rank grassland

The greater part of the site consists of open grassland that has been left grown out and has become rank (GA1). Interesting floral species are confined to the verges with typical species of improved grassland such as Creeping buttercup (*Ranunculus acris*), Dandelion (*Taraxacum* Spp.) with occasional Germander speedwell (*Veronica chamaedrys*), Common Mouse-ear (*Cerastium fontanum ssp. vulgare*), Creeping Cinquefoil (Potentilla reptans), Cocks foot (*Dactylis glomerata*), Bent (*Agrostis* spp.), Perennial Ryegrass (*Lolium perenne*) and Meadow grass (*Poa* spp.). Ribwort plantain (*Plantago lanceolata*), and Bush Vetch (*Vicia sepium*) were occasional.

#### ED3 Recolonising bare ground

The entrance to the site was formerly disturbed ground, which is recolonising with typical ruderal species including, Dandelion, Ribwort plantain, Coltsfoot (*Tussilago farfara*), Herb-robert (*Germanium robertanium*), Broad-leaved Dock (*Rumex obtusifolius*), Thistles (*Cirsium* spp.), Ragwort, (*Senecio jacobaea*), Nettle (Urtica dioica), Thistles (*Cirsium* spp.) and occasional Curled dock (*Rumex crispus*).

#### WS1 Scrub

The area to the east of the site has been colonised by Birch (*Betula* spp.), Alder (*Alnus glutinosa*), Elder (*Sambucus nigra*), Hawthorn (*Crataegus monogyna*), Field Maple (*Acer campestre*), Cherry (*Prunus* spp.), Guelder rose (*Viburnum opulus*), Osier willow (*Salix viminalis*) and Snowberry (*Symphoricarpus albus*) which is considered invasive but not a Third Schedule species. The area is succeeding to Immature woodland (WS2).

The understorey and verges are colonised with taller herbs such as Hogweed (Heracleum sphondylium) and Rosebay willowherb (Chamerion angustifolium) along with small patches of Garlic mustard (Alliaria petiolata) and Nettle, thistles and Bramble scrub. The same species of grassland mentioned above also occur with more abundant Bush Vetch and occasional Honeysuckle (Lonicera periclymenum). Small damper patches have Common sedge (Carex nigra) and Reed Canary-grass (Phalaris arundinaceae).



Figure 5. Habitat map based on recent aerial photography.

# 4.1. FAUNA

## 4.1.1. Mammals

# **Otters**

There are no suitable habitats for otters on site.

## **Badgers**

There is one historical record from the NDBC database for the area of the Roadstone Sports Club Pitch & Putt and Badger activity was noted in the adjacent field to the east in 2014 but not on the subject

site during surveys carried out by Mary Tubridy & Assoc. in 2018 (AA Screening Report for the subject site available from SDCC Planning Portal). The adjacent eastern field is currently under development.

The field boundaries were surveyed and showed no usage by badgers. Burrows observed were by rabbits.

#### **Bats**

A bat survey was completed by NM Ecology Ltd. and the report is presented as a separate report to the application. As stated in the bat report, only a single bat was recorded, a Leisler's bat foraging in open air above the site. Considering that the site contains some habitats suitable for bats (hedgerows, treelines, scrub), it is notable that widespread bat species such as common pipistrelle or soprano pipistrelle were not recorded. This suggests that the site and surrounding area have low suitability for foraging bats. The report concludes that the site is of negligible to bats.

#### 4.1.2. Birds

All birds are protected under the Wildlife Acts. A list of breeding bird species recorded during fieldwork in May 2022 is presented in Table 1 below.

Table 1. Birds recorded during fieldwork in March 2022.

Birds	Scientific name	BWI Status	Habitat Type
Hooded crow	Corvus cornix	Green	Farmland, parks
Woodpigeon	Columba palumbus	Green	Gardens, woods, hedges
Blackbird	Turdus merula	Green	Woods, gardens, hedgerows
Goldfinch	Carduelis carduelis	Green	Hedgerows, parks, gardens

#### 5. ASSESSMENT OF IMPACTS

#### 5.1. SITE EVALUATION

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

The ecological value of the site was assessed following the guidelines set out in the Institute of Ecology and Environmental Management's Guidelines for Ecological Impact Assessment (2019) and according

to the Natura Scheme for evaluating ecological sites (after Nairn & Fossitt, 2004). Judgements on the evaluation were made using geographic frames of reference, e.g. European, National, Regional or Local.

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

- GA1 Rank grassland
- ED3 Recolonising bare ground
- WS1 Scrub

There were no rare or protected floral species recorded on the site and there were no records of Third Schedule invasive species seen during the habitat survey.

The scrub habitats under the footprint of the Proposed Development are of relatively high local ecological value.

There is no direct connectivity with any European sites and significant adverse effects have been ruled out in AA Screening. Indirect effects are highly unlikely given the tentative and long distance pathway in surface water via the Kingswood Stream and River Liffey.

#### 5.2. IMPACT ASSESSMENT

## 5.2.1. Direct Impacts

# **Habitats**

There will be a *permanent* change of use of c. 0.5 Ha of improved grassland which is considered *neutral* and *not significant* given the relatively low local ecological value of the grassland land and the availability of surrounding grassland in the general area.

There will be a *permanent* loss of c. 0.5 Ha of Scrub in the eastern section of the site. The loss would be *neutral* and *not significant* in the context of the mixed species composition and immaturity of the trees.

#### <u>Fauna</u>

Otters

There will be no direct or indirect impact on otters.

#### **Badgers**

There will be no direct or indirect impact on badgers.

#### Bats

There will be no impacts on roosting bats and the potential effect on commuting bats due to loss of the scrub is considered *not significant* given the availability of treelines, hedgerows and linear commuting features in the wider area. In addition, the bat survey report prepared by NM Ecology (which is included with the planning documentation) concludes that there is negligible bat value at the site.

#### **Birds**

Potential impacts on birds can be avoided by cutting vegetation outside the bird nesting season March 1 to August 31.

#### 5.2.2. Indirect Impacts

Given the lack of direct connectivity with the Camac River and the large distance, there will be no indirect impacts on any European sites in Dublin Bay.

Indirect effects are highly unlikely given the tentative and long distance pathway in surface water via the Kingswood Stream and River Liffey.

The design of the stormwater drainage network for the proposed development has taken cognisance of the requirements set out by the SDCC Drainage Division, which requires all new developments to incorporate the principles of Sustainable Urban Drainage Systems (SuDS). The proposed SuDS method of water disposal at the site will ensure that no negative impacts to stormwater leaving the site will arise due to the attenuation measures planned, with the proposal improving the water environment at the location.

## 5.2.3. Cumulative Impacts

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

A review of the National Planning Application Database was undertaken. The first stage of this review confirmed that there were no data gaps in the area where the Proposed Development is located. The database was then queried for developments granted planning permission within 500m of the Proposed Development within the last three years, these are presented in Table 2 below.

Table 2. Planning applications granted permission in the vicinity of the Proposed Development.

Planning Ref.	Description of development	Comments
SD20A/0125	1 x 50 KWp solar photovoltaic (PV) system on main office building. There will be a total of 156 PV panels on the main office roof and will occupy an area of 257sq.m.	No potential for incombination effects given the scale and location of the project.
SD20A/0219	Residential development consisting of 99 dwellings comprised of 84 two storey houses, 15 apartments and duplex units accommodated in 2 three storey blocks, also providing for all associated site development and infrastructural works, car and bicycle parking, ESB substation, open spaces and landscaping, bin and bicycle storage; access to the development via a new vehicular entrance on the western boundary of the site, off the existing access road to the Luas park & ride facility on a site area of 3.14ha	No potential for incombination effects given the scale and location of the project.
SD21A/0039	Installation of 2 x 3 meter high extract flues from proposed laboratories; construction of a covered boat storage compound within a secured parking area formed with a new 3 metre high security fence with access gates to the rear (north-west) side of the site, internal alteration within the existing building and all associated site works.	No potential for in- combination effects given the scale and location of the project.
SD21A/0043	6 floodlighting poles with varying pole top luminaire assemblies (4 poles will be 18.29m high and 2 poles are 12.19m high) located around existing grass pitches and all associated site works.	No potential for in- combination effects given the scale and location of the project.
SD21A/0012	Deepening of part (c. 43ha.) of the existing and permitted quarry (An Bord Pleanala refs. 301177 & QD0026) to a quarry floor level of -10mOD using conventional blasting techniques; use of mobile processing plant; product stockpiles; final restoration scheme and all ancillary works within a planning application area of 49.4ha and within the overall landholding of 241.6ha and will be accompanied by an Environmental Impact Assessment Report (EIAR).	No potential for incombination effects given the scale and location of the project.
SD21A/0199	10-year planning permission for Phase 2 development (Unit 4); the construction of 1 industrial/warehousing unit of approximately 14,730sq.m gross floor area (including ancillary offices and operational facilities) and up to approximately 17m in height, with rear service yard; 155 car parking spaces; 72 cycle parking spaces; water services infrastructure and sustainable urban drainage system features; 2 entrances and internal road network,; pedestrian/cycle entrance to the south-east at Citywest Avenue; public lighting; landscaping, planting and boundary treatments throughout the development; external sprinkler tank and pumphouse; and all other necessary site and infrastructural works to facilitate the development on the site	No potential for incombination effects given the scale and location of the project.
SD21A/0150	Construction of 4 warehouse/industrial units in 3 buildings of c.13,611sq.m total gross floor area (including ancillary offices and operational facilities) and up to 15m in height, with rear service yards; 155 car parking spaces; 72 cycle parking spaces; water services infrastructure and sustainable urban drainage system features, including relocation and resizing of a pump station permitted under SD15A/0391; amendments to the proposed tree pits along the green-link permitted under SD15A/0391; public lighting, landscaping, planting and boundary treatments throughout the development; all other necessary site and infrastructural works to facilitate the development.	No potential for incombination effects given the scale and location of the project.

Planning Ref.	Description of development	Comments
SD21A/0147	Change of use of an existing single storey detached store (floor space - 154sq.m) to a research and development gas innovation workshop and store.	No potential for in- combination effects given the scale and location of the project.
Retention/change of use for existing development and shed/outbuilding; the development was originally built for residential purposes but is currently being used as a childcare facility.		No potential for in- combination effects given the scale and location of the project.

The listed developments have been granted permission in most cases with conditions relating to sustainable development by the consenting authority in compliance with the relevant Local Authority Development Plan and in compliance with the Local Authority requirement with regard to the Planning Acts. The development cannot have received planning permission without having met the consenting authority requirement in this regard.

There are no predicted in-combination effects given that there are no predicted significant impacts from the development.

#### 6. CONCLUSIONS

The predicted effects from the proposed development are 'not significant' on habitats, flora, fauna or biodiversity.

There are no predicted effects on any European sites and it is considered that the proposed development does not trigger EIA with regard to Biodiversity.

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

#### 7. REFERENCES

CIEEM (2019) Guidelines for Ecological Impact Assessment in the UK And Ireland Terrestrial, Freshwater, Coastal and Marine September 2018 Version 1.1 - Updated September 2019.

Department of the Environment, Heritage and Local Government (2010) Guidance on Appropriate Assessment of Plans and Projects in Ireland (as amended February 2010).

EPA (2022) EPA Draft Guidelines on Information to be contained in an EIAR; EPA, May 2022.

European Commission (2000) Managing Natura 2000 sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC.

European Commission (2001) Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43EEC. European Commission, Brussels.

European Commission (2007) Guidance document on Article 6(4) of the 'Habitats Directive '92/43/EEC: Clarification of the concepts of: alternative solutions, imperative reasons of overriding public interests, compensatory measures, overall coherence and opinion of the Commission. European Commission, Brussels.

European Commission (2018) Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitat's Directive 92/43/EEC.

Fossitt, J. (2000) A Guide to Habitats in Ireland. The Heritage Council.

Nairn, R. and J. Fossitt (2004) The Ecological Impacts of Roads, and an Approach to their Assessment for National Road Schemes. In: J. Davenport and J.L Davenport (eds) The Effects of Human Transport on Ecosystems: Cars and Planes, Boats and Trains, 98-114. Dublin. Royal Irish Academy.

NPWS (2019) The Status of EU Protected Habitats and Species in Ireland. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht.

NPWS (2020) National Parks and Wildlife Service Metadata available online at https://www.npws.ie/maps-and-data

NRA (2008) Ecological Surveying Techniques for Protected Flora & Fauna. Available at: http://www.nra.ie/Environment/

NRA (2009) Guidelines for Assessment of Ecological Impacts of National Road Schemes. Dublin: National Roads Authority. Available at: http://www.nra.ie/Environment/

Parnell, J. and T. Curtis (2012) Webb's An Irish Flora. Cork University Press.

Smith, G.F., O'Donoghue, P., O'Hora, K. and E. Delaney (2011) Best Practice Guidance for Habitat Survey and Mapping. The Heritage Council.

# Appendix 1

# **TII Evaluation of Habitats**

Ecological valuation: Examples			
International Importance:			
0	'European Site' including Special Area of Conservation (SAC), Site of Community Importance (SCI), Special Protection Area (SPA) or proposed Special Area of Conservation.		
	Proposed Special Protection Area (pSPA).		
	Site that fulfills the criteria for designation as a 'European Site' (see Annex III of the Habitats Directive, as amended).		
	Features essential to maintaining the coherence of the Natura 2000 Network. <sup>4</sup>		
	Site containing 'best examples' of the habitat types listed in Annex I of the Habitats Directive.		
	Resident or regularly occurring populations (assessed to be important at the national level) <sup>5</sup> of the following:		
	Species of bird, listed in Annex I and/or referred to in Article 4(2) of the Birds Directive; and/or		
	☐ Species of animal and plants listed in Annex II and/or IV of the Habitats Directive.		
	Ramsar Site (Convention on Wetlands of International Importance Especially Waterfowl Habitat 1971).		
	World Heritage Site (Convention for the Protection of World Cultural & Natural Heritage, 1972).		
	Biosphere Reserve (UNESCO Man & The Biosphere Programme).		
	Site hosting significant species populations under the Bonn Convention (Convention on the Conservation of Migratory Species of Wild Animals, 1979).		
	Site hosting significant populations under the Berne Convention (Convention on the Conservation of European Wildlife and Natural Habitats, 1979).		
	Biogenetic Reserve under the Council of Europe.		
	European Diploma Site under the Council of Europe.		
	Salmonid water designated pursuant to the European Communities (Quality of Salmonid Waters) Regulations, 1988, (S.I. No. 293 of 1988). <sup>6</sup>		
Nation	al Importance:		
	Site designated or proposed as a Natural Heritage Area (NHA).		
	Statutory Nature Reserve.		
	Refuge for Fauna and Flora protected under the Wildlife Acts.		
	National Park.		
	Undesignated site fulfilling the criteria for designation as a Natural Heritage Area (NHA); Statutory Nature Reserve; Refuge for Fauna and Flora protected under the Wildlife Act; and/or a National Park.		
	Resident or regularly occurring populations (assessed to be important at the national level) <sup>7</sup> of the following:		
	☐ Species protected under the Wildlife Acts; and/or		
	☐ Species listed on the relevant Red Data list.		
	Site containing 'viable areas' of the habitat types listed in Annex I of the Habitats Directive.		

Count	y Importance:
	Area of Special Amenity.9
	Area subject to a Tree Preservation Order.
	Area of High Amenity, or equivalent, designated under the County Development Plan.
	Resident or regularly occurring populations (assessed to be important at the County level) <sup>10</sup> of the following:
	☐ Species of bird, listed in Annex I and/or referred to in Article 4(2) of the Birds Directive;
	☐ Species of animal and plants listed in Annex II and/or IV of the Habitats Directive;
	☐ Species protected under the Wildlife Acts; and/or
	☐ Species listed on the relevant Red Data list.
	Site containing area or areas of the habitat types listed in Annex I of the Habitats Directive that do not fulfil the criteria for valuation as of International or National importance.
	County important populations of species, or viable areas of semi-natural habitats or natural heritage features identified in the National or Local BAP,11 if this has been prepared.
	Sites containing semi-natural habitat types with high biodiversity in a county context and a high degree of naturalness, or populations of species that are uncommon within the county.
	Sites containing habitats and species that are rare or are undergoing a decline in quality or extent at a national level.
Local	Importance (higher value):
	Locally important populations of priority species or habitats or natural heritage features identified in the Local BAP, if this has been prepared;
	Resident or regularly occurring populations (assessed to be important at the Local level) <sup>12</sup> of the following:
	☐ Species of bird, listed in Annex I and/or referred to in Article 4(2) of the Birds Directive;
	☐ Species of animal and plants listed in Annex II and/or IV of the Habitats Directive;
	☐ Species protected under the Wildlife Acts; and/or
	☐ Species listed on the relevant Red Data list.
	Sites containing semi-natural habitat types with high biodiversity in a local context and a high degree of naturalness, or populations of species that are uncommon in the locality;
	Sites or features containing common or lower value habitats, including naturalised species that are nevertheless essential in maintaining links and ecological corridors between features of higher ecological value.
Local	Importance (lower value):
0	Sites containing small areas of semi-natural habitat that are of some local importance for wildlife;
	Sites or features containing non-native species that are of some importance in maintaining habitat links.

# Appendix 2

# **Site Photos**



Photo 1. The entrance to the site with disturbed ground and adjacent grassland.



Photo 2. Tall herbs and scrub area to the east of the site.



Photo 3. Example of scrub succeeding to immature woodland.



**Photo 4.** The existing site opposite showing landscaping of similar proposed species.