

Appropriate Assessment – Stage 1: Screening Report

**Proposed Large-scale Residential
Development
at
Ardshanavooly, Killarney, Co. Kerry**

**On behalf of
Wrightwood Development Ltd.**





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Wrightwood Development Ltd.
Ardshanavooly, Killarney, Co. Kerry

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1.2 Statement of Authority

This report was prepared by Ms. Alannah Warren, Environmental Consultant. Alannah has over one years' experience working in the environmental consultancy sector. As part of her role, Alannah is involved in the preparation of environmental assessments and reports, including Ecological Impact Assessments ('EclAs') and Appropriate Assessments ('AAs'). She regularly undertakes field survey work, data analysis, and report writing, and is continuing to develop her expertise in habitat classification and protected species surveys. Her experience to date has given her a strong foundation in the processes and regulatory requirements that inform environmental assessments.

This report was reviewed and approved by Ms. Kathryn Broderick, Principal Consultant - Ecologist. Kathryn has over eight years' experience working in the ecological consultancy sector. As part of her role, Kathryn is required to undertake habitat surveys and appraisals, as well as specialist surveys for protected species, in support of EclAs and AAs. Kathryn has also completed a diploma in Environmental Law and Planning, which had a focus on Environmental Impact Assessment ('EIA') and AA's, which has provided her with a comprehensive understanding of the legal context and requirements of these types of assessments.

1.3 Regulatory Context

The following guidance documents were adhered to for the preparation of this AA report:

- OPR Practice Note PN01, *Appropriate Assessment for Screening for Development Management*, The Office of the Planning Regulator [2];
- *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 92/43/EEC*, European Commission [3];
- *Guidelines for Ecological Impact Assessment in the UK and Ireland*, Chartered Institute of Ecology and Environmental Management [4];
- *Managing Natura 2000 Sites: The Provision of Article 6 of the Habitats Directive 92/43/EEC*, European Commission [5];
- *Appropriate Assessment of Plans and Projects in Ireland, Guidance for Planning Authorities*, DoEGLH [6]; and,
- *Appropriate Assessment under Article 6 of the Habitats Directive; Guidance for Planning Authorities. Circular NPW 1/10 and PSSP 2/10*, DoEGLH [7].

This AA was prepared in accordance with and in compliance with the following legislation:

The Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Flora and Fauna, better known as "The Habitats Directive". This provides the framework for legal protection for habitats and species of European importance. Articles 3 to 9 provide the legislative means to protect habitats and species of community interest through the establishment and conservation of an EU-wide network of sites known as Natura 2000. The Habitats Directive was transposed into Irish law by the Planning and Development Act 2000 (as amended) and the European Communities (Birds and Natural Habitats) Regulations (S.I. 477 / 2011) (as amended) [8].

For completeness, the Planning and Development Act 2000 (as amended) states "*European site*" means:

- A candidate site of Community Importance ('cSCI');
- A site of Community Importance ('SCI');

- A Special Area of Conservation ('SAC');
- A candidate Special Area of Conservation ('cSAC'); or,
- A Special Protection Area ('SPA').

These are Special Areas of Conservation ('SACs') designated under the Habitats Directive and Special Protection Areas ('SPAs') designated under the Conservation of Wild Birds Directive (79/409/EEC as amended 2009/149/EC) (better known as "The Birds Directive").

Article 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to affect European sites (Annex 1.1). Article 6(3) establishes the requirement for Appropriate Assessment.

"Any plan or project not directly connected with or necessary to the management of the [Natura 2000] site but likely to have a significant effect thereon, either individually or in combination with other plans and projects, shall be subjected to appropriate assessment of its implications for the site in view of the site's conservation objectives. In light of the conclusions of the assessment of the implication for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public".

The Habitats Directive promotes a hierarchy of avoidance, mitigation, and compensatory measures. First, the project should aim to avoid any negative impacts on European sites by identifying possible impacts early in the planning stage and designing the project in order to avoid such impacts. Second, mitigation measures should be applied, if necessary, during the AA process to the point where no adverse impacts on the site(s) remain. If the project is still likely to result in adverse effects, and no further practicable mitigation is possible, it must be rejected unless it follows the process established under Article 6(4). If the project is required for imperative reasons of overriding public interest (IROPI test) under Article 6(4) of the Habitats Directive, then compensation measures are required for any remaining adverse effects.

1.4 Stages of Appropriate Assessment

There are four distinct stages to undertaking an AA as outlined in current European Union ('EU') and Department of Environment, Heritage and Local Government ('DoEHLG') guidance:

Stage 1: Screening

This process identifies the potential impacts of a plan or project on a Natura site, either alone or in combination with other plans and projects and considers whether these impacts are likely to be significant. If potentially significant impacts are identified, the plan or project cannot be screened out and must proceed to Stage 2.

Stage 2: Appropriate Assessment

Where potentially significant impacts are identified, an assessment of the potential mitigation of those impacts is required; this stage considers the appropriateness of those mitigation measures in the context of maintaining the integrity of the Natura 2000 sites. If potential significant impacts cannot be eliminated with appropriate mitigation measures, the assessment must proceed to Stage 3.

Stage 3: Assessment of Alternative Solutions

This process examines alternative ways to achieve the objectives of the plan or project that avoid adverse impacts on the integrity of the Natura 2000 site if mitigation measures are deemed insufficient.

Stage 4: Imperative Reasons of Overriding Public Interest ('IROPI')

Assessment where no alternative solution exists for a plan or project and where adverse impacts remain. This includes an assessment of compensatory measures, which, in the case of projects or plans, can be considered necessary for IROPI.

2 SCREENING FOR APPROPRIATE ASSESSMENT

Screening determines whether Appropriate Assessment is necessary by examining:

1. Whether a plan or project can be excluded from AA requirements because it is directly connected with, or necessary to, the management of a European site; and,
2. Whether the project will have a potentially significant effect on a European site, either alone or in combination with other projects or plans, in view of the site's conservation objectives.

Screening involves the following:

- i) Description of a plan or project;
- ii) Identification of relevant European sites and compilation of information on their qualifying interests and conservation objectives;
- iii) Assessment of likely effects – direct, indirect, and cumulative – undertaken on the basis of available information as a desk study, field survey or primary research as necessary; and,
- iv) Screening Statement with conclusions.

2.1 Methodology

2.1.1 Determining Zone of Influence

The starting point for this assessment was to determine the Zone of Influence. The Zone of Influence ('Zoi') comprises the area in which the Proposed Development may potentially affect the conservation objectives (or qualifying interests) of a European site.

Guidance in Appropriate Assessment of plans and projects in Ireland notes that a distance of 15km is recommended for the identification of relevant European sites [6]. However, guidance from the National Parks and Wildlife Service ('NPWS') recommends that the distance should be evaluated on a case-by-case basis with reference to the nature, size and location of the project, the sensitivities of the ecological receptors, and the potential for in-combination effects (cumulative) [7]. For some projects, the distance could be greater than 15km, and in some cases, less than 100m.

The definition of the zone of influence for the proposed works includes evaluating the following:

- Identification of the European sites that are situated within, in close vicinity or downstream within the zone of influence of the Proposed Development;
- Identification of the designated habitats and species and Conservation Objectives for the identified European sites;
- Identification of the environmental conditions that stabilise and increase the qualifying interests of the European sites towards favourable conservation status;
- Identification of the threats / impacts – actual or potential that could negatively impact the conservation objectives for the European sites;
- Identifying the activities of the proposed works that could give rise to significant adverse impacts; and,
- Identification of other plans or projects for which in-combination impacts would likely have significant adverse effects.

2.1.2 Source-Pathway-Receptor Model

European sites are only at risk from significant effects where a source-pathway-receptor link exists between a Proposed Development and European sites. This can take the form of a direct impact (e.g. where the Proposed Development is located within / in close vicinity to the boundary of a European site), or an indirect impact where impacts outside of the European site but affect ecological receptors within (e.g. impacts to water quality which can affect estuarine habitats at a distance from the impact source).

The likely effects of the Proposed Development on any European site have been assessed using a source-pathway-receptor model. A source-pathway-receptor model is a standard tool used in environmental assessment [9, 10]. The model comprises:

- A source: any potential impacts from the Proposed Development, e.g. the runoff of sediment / construction pollution.
- A pathway: the means or route by which a source can affect the ecological receptor.
- A receptor: the qualifying interests and / or special conservation interests of the European sites.

In order to establish the Zone of Influence of the Proposed Development works, the likely key environmental impacts / changes associated with the Proposed Development were determined, having regard to the project characteristics set out in Section 3.3 of this report. The Zone of Influence for various potential impact pathways is discussed in Section 4.1.

2.1.3 Desk-Based Studies

A desk-based review of information sources was completed, which included the following sources of information:

- Review of aerial maps of the Site and surrounding area;
- The National Parks and Wildlife Service ('NPWS') website was consulted with regard to the most up-to-date details on conservation objectives for the European sites relevant to this assessment [11];
- The National Biodiversity Data Centre ('NBDC') website was consulted with regard to species distributions [12];
- The Environmental Protection Agency ('EPA') Maps website was consulted to obtain details about watercourses in the vicinity of the Site [13];
- The Kerry County Council Planning Portal to obtain details about existing / proposed developments in the vicinity of the Site [14]; and,
- The Department of Housing, Local Government and Heritage's planning portal – the National Planning Application Database was reviewed to obtain details about existing / proposed developments in the vicinity of the Site [15].

2.1.4 Field Survey

A Site walkover was undertaken on 14th November 2024 by two suitably qualified and experienced MOR Environmental Ecologists to assess the extent and the quality of habitats present on the Site and to identify any potential ecological receptors associated with the European sites.

The habitat survey was undertaken for the Site utilising the Heritage Council's – '*A Guide to Habitats in Ireland*' [16]. This is the standard habitat classification system used in Ireland and includes both a desk-based and field-based assessment. All the surveys were conducted in line with the Heritage Council's '*Best Practice Guidance for Habitat Survey & Mapping*.'

[17]. The assessments were extended to also identify the potential for these habitats to support other features of nature conservation importance, such as species afforded legal protection under either Irish or European legislation.

2.1.5 Protected Species Surveys

The Site was assessed for its potential to support important assemblages of birds of rare or notable species which have been designated as conservation interest species for European sites within 15km of the Site.

Following the desk-based assessment and the initial habitat assessment, it was deemed necessary to undertake:

- Winter bird vantage point ('VP') and transect surveys during the 2024/2025 winter bird season; and,
- Breeding bird point count transect surveys during the 2025 breeding bird season.

2.1.5.1 Wintering Bird Surveys

During the Site walkover, the Site was assessed for its potential to support wintering bird. Winter bird transect surveys were undertaken at the Site to determine whether or not the Site is utilised by wintering bird species. Typically, the wintering bird season encompasses mid-September to mid-March.

VP and transect surveys were undertaken by a suitably qualified and experienced MOR Environmental Ecologist on 2nd and 21st January and 7th February 2025.

The surveys utilised methods described in:

- Scottish Natural Heritage ('SNH') bird survey methods [18]; and,
- Bird Monitoring Methods [19].

2.1.5.2 Breeding Bird Surveys

Breeding bird transect surveys were undertaken at the Site to determine whether or not the Site is utilised by breeding bird species. Furthermore, the Site was assessed for its potential to provide suitable nesting habitat for breeding birds or to support important assemblages of birds of rare or notable species.

Breeding bird surveys were undertaken during the 2025 breeding bird season. These surveys were conducted on 11th April, 2nd May and 11th June 2025.

The breeding bird surveys employed a point count methodology. Multiple pre-determined count points were selected to ensure comprehensive visual coverage of the entirety of the Site, with the surveyor remaining at each fixed location for a standardised period to record all species seen or heard. Throughout the survey period, every bird utilising the Site was identified, and its location was mapped. The count points were located on the same transect route that was utilised for the winter bird surveys to ensure all habitats with breeding bird potential were surveyed.

Birds were classified as non-breeding, possibly breeding and confirmed breeding based on the behaviours exhibited. The criteria for each classification are described below:

- Non-breeding – Birds that were flying over the Site, birds that were foraging and not calling, birds that were loafing;
- Possible Breeding – Birds observed in suitable nesting habitat and displaying either territorial and/or courtship behaviours, nest building behaviours or observed visiting a possible nest; and,

- Confirmed Breeding – Birds observed either on the nest or carrying faecal sac or food, sighting of a nest with eggs / chicks, used nests, eggshells or recently fledged young.

2.1.5.3 Survey Limitations

The fieldwork on-site was undertaken outside of the optimal season for botanical, mammal and breeding bird surveys. However, given the nature and size of the habitats on-site and its location within an urban / residential setting, it is not considered that this survey limitation will alter the findings of this assessment. Therefore, no further surveys are considered necessary as part of the AA.

2.1.6 Consultation

Consultation was undertaken with Kerry County Council as part of the LRD process, including a pre-planning meeting on 18th October 2024. All comments and opinions received from Kerry County Council were considered as part of this assessment.

3 DESCRIPTION OF THE PROPOSED DEVELOPMENT

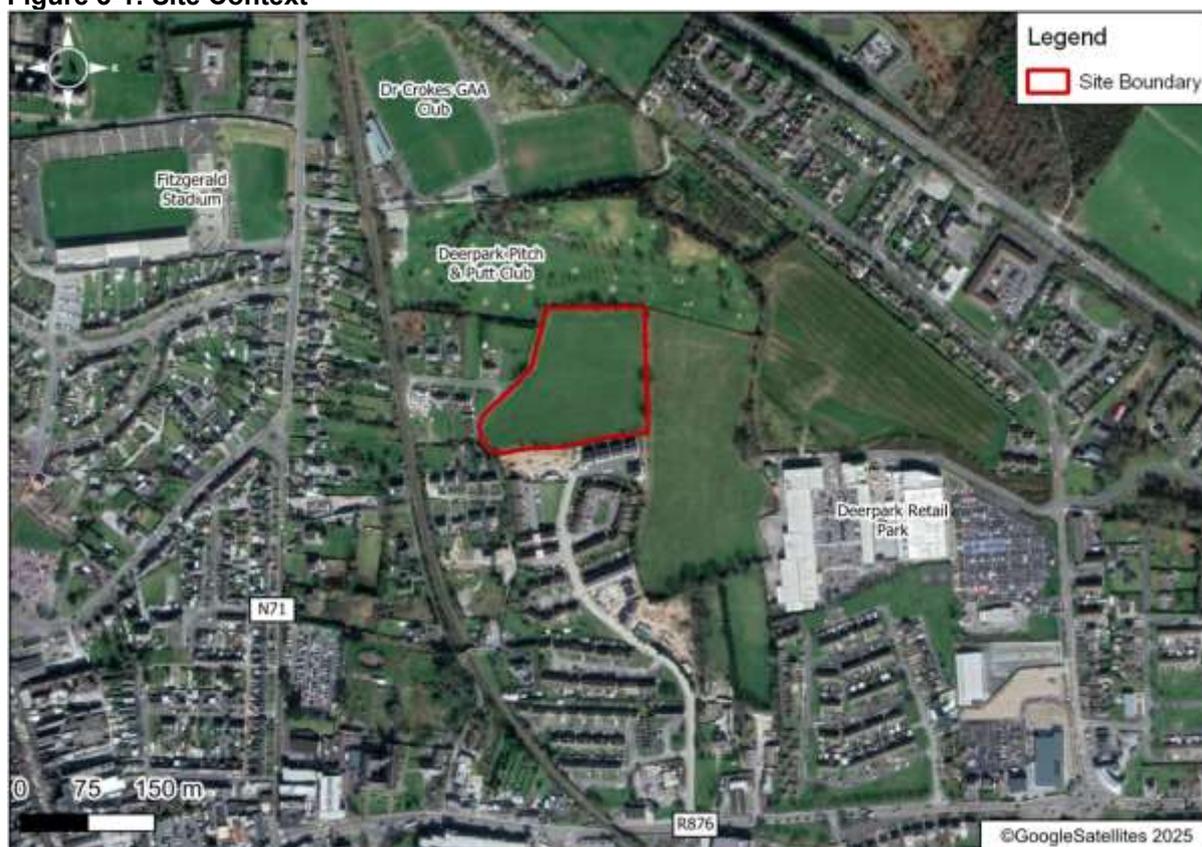
3.1 Site Context and Description

The Site is located on the outskirts of Killarney town. The Site is accessed via the local road 'Dennehy's Bohereen', via the regional road R875 that connects to the national road N22 ('Killarney Bypass'). The N22 is the main road connecting County Kerry and County Cork. The Site is currently zoned as "New / proposed residential" under the Kerry County Development Plan ('KCDP') [1].

The Site is a greenfield site comprised entirely of agricultural grassland. The Site is bordered to the west by existing residential properties, followed by the Iarnród Eireann Railway (South Kerry Line: Mallow-Cobh) and further residential properties. The Site is bordered to the east by agricultural grassland, followed by the Deerpark Shopping Centre and residential properties. The Site is bordered to the south by existing residential properties.

The Deerpark Pitch & Putt Club is located to the north of the Site, followed by Dr. Crokes GAA Club, further residential properties and the National Road N22. The surrounding area is a mix of private residential properties, commercial properties and sports venues such as Fitzgerald Stadium and the local GAA club. Refer to Figure 3-1 for context.

Figure 3-1: Site Context



3.2 Watercourses within the Vicinity of the Site

The Site is situated within the Laune-Maine-Dingle Bay WFD Catchment [Catchment_ID: 22] and the Laune_SC_010 subcatchment [Subcatchment_ID: 22_14] [13].

As per EPA Maps, there are no hydrological features of note within 1km of the Site. There are two hydrological features within 1.5km of the Site, which are presented below.

1. Deenagh_020

The Deenagh_020 is located ca. 1km west of the Site, at its closest point. The river flows in a southwesterly direction and drains into Lough Leane, ca. 2.4km downstream of the Site. Lough Leane forms part of the Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC and the Killarney National Park SPA.

Under the Water Framework Directive ('WFD') 2000/60/EC, as amended, the EPA classifies the status and the risk of not achieving good water quality status for all waterbodies in Ireland [13]. According to the WFD 2016-2021 monitoring events, the most up-to-date data at the time of writing this report, the water quality within the Deenagh_020 is considered to be 'good,' and the status of this river is considered 'at risk' [13].

2. Flesk (Kerry)_060

The Flesk (Kerry)_060 is located ca. 1.5km southeast of the Site, at its closest point. The river flows in a southwesterly direction and drains into Lough Leane, ca. 3.5km downstream of the Site. Both the Flesk (Kerry)_060 and Lough Leane form part of the Killarney National Park. Macgillycuddy's Reeks and Caragh River Catchment SAC and Lough Leane form part of the Killarney National Park SPA.

Under the WFD 2000/60/EC, as amended, the EPA classifies the status and the risk of not achieving good water quality status for all waterbodies in Ireland [13]. According to the WFD 2016-2021 monitoring events, the most up-to-date data at the time of writing this report, the water quality within the Flesk (Kerry)_060 is considered to be 'good,' and the status of this river is considered 'not at risk' [13].

The location of the key surface water features in the vicinity of the Site is illustrated in Figure 3-2 below.

Figure 3-2: Watercourses in the Vicinity of the Site



3.2.1 OPW Flood Maps

The Office of Public Works (‘OPW’) Flood Maps identify Drainage Districts, Arterial Drainage Schemes and Benefitted Areas [20]. Arterial Drainage Schemes were works that were carried out under the Arterial Drainage Act, 1945, to improve land for agriculture and to mitigate flooding. The benefitted land identifies land that was drained as part of the Drainage District with the aim of improving land for agriculture and mitigating flooding.

As per OPW Flood Maps, there are no Drainage Districts, Arterial Drainage Schemes or Benefitted Areas located within the vicinity of the Site.

3.2.2 Drainage Ditches

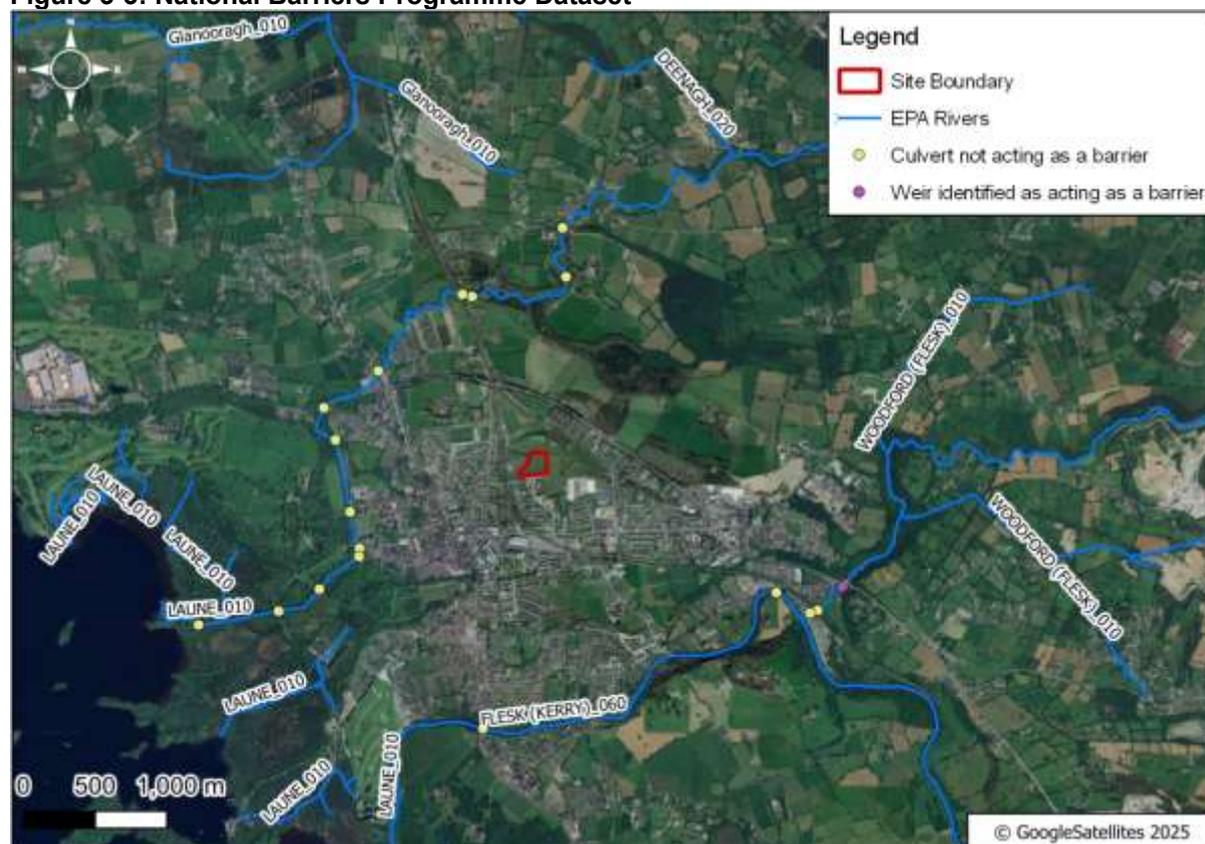
No drainage ditches were identified during the Site walkover.

3.2.3 National Barrier Programme

Irish rivers are heavily fragmented by weirs, dams, sluices, culverts, bridges and other artificial barriers. Therefore, the National Barriers Programme (‘NBP’) database was created as a national database of potential barriers to fish passage and includes assessing structures which can impact on both fish passage and hydromorphology [21].

As per the NBP Dataset, 13 barriers were identified along the Deenagh_020 watercourse. All of these barriers were identified as culverts and do not act as barriers. Five barriers were identified along the Flesk (Kerry)_060 watercourse. Four of these barriers were identified as culverts, and do not act as barriers. However, one weir located downstream of the Site was identified as a barrier and further assessment is required by Inland Fisheries Ireland (‘IFI’).

Figure 3-3: National Barriers Programme Dataset



3.3 Proposed Development

The Applicant intends to apply for permission for development at Ardshanavooly, Killarney, Co. Kerry. The development will consist of the following:

1. Construction of a 124 dwellings in a mix of duplex, maisonette and apartment typologies comprising 16 no. 1 bed apartments, 6 no. 2 bed apartments, 16 no. 1 bed duplex apartments, 16 no. 2 bed duplex maisonettes, 33 no. 2 bed duplex apartments, 33 no. 3 bed maisonettes and 4 no. 3 bed terrace houses, all in building heights ranging from 2 to 4 storeys.
2. A total of 143 no. surface car parking spaces, including 4 no. car-share parking spaces, 6 no. visitor spaces, and 5 no. assigned Part M/accessible spaces.
3. Bicycle parking comprising of 272 no spaces in total, comprising 118 no. spaces within the private open space of ground floor residential units and 102 no. spaces within secure sheltered structures and designated secure bicycle parking areas, and 52 no. short stay/visitor spaces.
4. 3,636 sq.m of public open space, including arrival pocket park, central pocket park and amenity landscape areas (including 117 sq.m of play), grass lawns, kickabout areas, picnic areas and seating areas;
5. 956 sq.m of communal external open space, including seating areas, nature trails, and amenity grass lawns.
6. Additional environmental open space of 1,790 sq.m, including landscape buffers, protection and enhancement of existing hedgerows and trees.
7. A new vehicular, pedestrian and cyclist access from the existing estate road adjoining the site to the south.
8. Infrastructure works to serve the Proposed Development to include the internal road and footpath network, ESB cabinets/substations/switchrooms, site and external building lighting, site drainage works, hard and soft landscaping, boundary treatments, communal bin stores, and all ancillary site services and development works above and below ground.

Vehicular access to the Proposed Development will be via one new entrance located in the Carraig Midhe estate to the south of the Site. The Proposed Development also includes a separate pedestrian entrance at the southeast corner of the Site via Corbally Road.

Please refer to the Proposed Site Layout Plan, Drawing No. 924-008K-02-L00-DR-RAE-AR-103, submitted with the planning application.

3.3.1 Drainage

An Engineering Assessment and Drainage Design Report was prepared by Teicniuil-Priory Consulting Engineers Ltd. and submitted as part of this planning application. Please refer to this report for full drainage details.

Surface Water Drainage

It is proposed that no surface water will be discharged from the Site to the existing public drainage network. It is proposed to treat all surface water on-site. Should any controlled surface water flow discharge from the Site be required, this will be limited to greenfield run-off rates.

Sustainable Urban Drainage Systems ('SuDS')

The Proposed Development has been assessed in relation to the SuDS Construction Industry Research and Information Association ('CIRIA') Manual C753 [22]. The aim of the proposed drainage system is to replicate the natural characteristics of rainfall run-off, minimising the environmental impact from rainfall events by reducing the run-off leaving the Site for small rainfall events.

Based on the existing site topography, proposed Site layout and nature of the Proposed Development, alternative SuDS measures have been proposed to treat the surface water runoff, to replicate the natural characteristics of the greenfield runoff and minimise the environmental impact. The proposed SuDS are listed below:

- Soakaways;
- Attenuation tanks / crates;
- Swales;
- Permeable paving;
- Bio-retention area
- Petrol / Oil Interceptor;
- Detention Basins; and,
- Tree pits.

For further information, refer to the Teicniuil-Priory Consulting Engineers Ltd. Engineering Assessment and Drainage Design Report submitted as part of this planning application. Refer to Teicniuil-Priory Consulting Engineers Ltd. Drawing 91-24-0-210 for the proposed SuDS layout.

Stormwater Drainage

Whole on-site infiltration is proposed, within the development, with no off-site discharge of stormwater to the public sewer.

Stormwater will be collected from the building roofs, via guttering, with discharge to rainwater down pipes – this above ground drainage to be designed to BS EN 12056-3:2000, *Gravity Drainage Systems Inside Buildings*. The receiving gullies are to be of the bottle type gullies (rather than P-trap Gullies); this facilitates ease of maintenance and provides of an initial removal of silt and organic deposits from the roof area.

Thereafter, the stormwater is to be conveyed via 100mm diameter PVCu pipes laid to a 1:60 gradient, bedded in suitable pea gravel, for a short run, linked to a larger 150mm diameter pipe via a saddle connection. This main drainage pipe will be connected either to an underground soakaway or a bioretention (rain garden) system, via a silt trap manhole, with a minimum 400mm silt trap base.

Stormwater from a portion of the road area will be conveyed via 'open channel' flow directly to individual tree pits. The stormwater from the remainder, larger portion of the road, is to be conveyed to a detention basin area, at the 'front' of the Site (south), via suitably sized PVC drainage pipes.

Carparking areas will discharge directly to the ground, via permeable paving, laid over a stone sub-base, with direct infiltration to the ground.

Foul Water

The proposed foul water drainage system is to be connected to the existing public mains system to the south of the Site. The final discharge pipe from the Development is sized at 225mm diameter, which had been sized for a peak flow of 4.89 L/s. This connects to an existing main sewer pipe 225mm in diameter, serving several small housing estates. The drainage pipe running around each block will be designed and sized to BS EN 12056-2:2000 – *Gravity Drainage Systems Inside Buildings*.

No stormwater run-off will enter the foul water system; all stormwater will be treated separately from the foul drainage system and will be designed and constructed to Irish Water Standards.

Uisce Éireann

A feasibility application has been submitted to Irish Water regarding the proposed foul water drainage. The foul water drainage system, which will be completely separated from the stormwater drainage system, will be designed and constructed to Irish Water Standards. It is proposed to treat all on-site surface water. A Confirmation of Feasibility has been received from Uisce Éireann. Based on this pre-connection enquiry, Uisce Éireann deemed this proposal “*Feasible, without infrastructure upgrade*”.

Water Supply

The proposed water supply system is to be connected to the existing Uisce Éireann water mains system to the south of the Site. It is proposed to provide a new 150mm (internal diameter) water connection to the public water main in the Saill Ardán estate with associated valves and metering requirements. Internally within the Proposed Development, a series of 100mm branches and loops, along with associated hydrants, valves and metering requirements, is proposed. Water distribution supply to each building will be sized to cater for the requirements of those particular uses. Metered connections will be made to the main in accordance with Uisce Éireann specifications and details.

All works will be in accordance with the Irish Water Code of Practice for Water Supply and the Water Infrastructure Standard Details Document Number: IW-CDS-5020-01.

3.3.2 Site Access

Vehicular access to the Proposed Development will be via the existing road system currently serving the small residential estates of Friary Downs and Saill Ardán to the south of the Site. This will lead to the main Park Road R876.

This access point will be used for construction traffic and will form the main access point that will be used upon completion of the Proposed Development. All construction traffic, including construction plant, cars, vans and trucks, will be provided with on-site parking.

3.3.3 External Lighting

As the Site is located within a residential and public area, public lighting will be positioned accordingly within this scheme. All lighting will face away from existing residential developments, and away from ecological corridors such as boundary / trees.

3.3.4 Landscaping

A Landscape Management Plan (‘LMP’) has been prepared by Gannon & Associates Landscape Architecture and should be read in conjunction with this AA. The LMP includes:

- Proposed Trees, Multi Stem Trees and Ornamental Shrubs;
- Native Boundary Woodland Mix;
- Ornamental Planting Mix,

- Rain Garden Mix,
- Amenity grassland areas;
- Native ecological habitat seed mix; and,
- Nature Play area; and,
- Seating & Relaxing Area.

Any trees shown on planning drawings to be retained will be protected for the duration of the construction activities on site and in accordance with BS 5837. Protective measures will include a protective fence erected beyond the branch spread of the trees, and no construction activities will take place within the protective barrier, except for perimeter fencing along the site boundaries.

3.4 Construction Procedures

During the Construction Phase, the methods of working will comply with all relevant legislation and best practice guidelines in reducing the environmental adverse effects of the works. Although Construction Phase adverse effects are generally of a short-term duration and are localised in nature, the adverse effects will be reduced as far as practicable through compliance with current construction industry guidelines.

A Construction Environmental Management Plan ('CEMP') will be prepared by the appointed contractor and will be submitted to the planning authority in advance of works commencing at the Site. The following guidance will be referred to and will be followed during the Construction Phase of the Proposed Development to prevent water pollution that may occur within the area:

- C532 – Control of Water Pollution from Construction Sites. Guidance for Consultants and Contractors [23]; and,
- C811 - Environmental Good Practice on Site (5th edition) [24];

The proposed works will aim to be completed in approximately 36 months from the grant of planning conditions. Working hours will generally be restricted to between 08:00 – 18:00 hours Monday to Friday inclusive and between 08:00 – 14:00 hours on Saturdays. Construction work will not be permitted on Sundays, public holidays or at night-time except where safety concerns necessitate it or if agreed in advance with the Planning Authority.

4 IDENTIFICATION OF EUROPEAN SITES

In accordance with the European Commission Methodological Guidance [25] a list of European sites that can be potentially affected by the Proposed Development has been compiled. Guidance for Planning Authorities prepared by the Department of Environment, Heritage and Local Government [6] states that defining the likely zone of impact for the screening and the approach used will depend on the nature, size, location and the likely significant effects of the project. The key variables determining whether or not a particular European site is likely to be negatively affected by a project are:

- The physical distance from the Site to the European site;
- The presence of impact pathways;
- The sensitivities of the ecological receptors; and,
- The potential for in-combination effects.

All SPAs and SACs within 15km have been considered to assess their ecological pathways and functional links. As acknowledged in the OPR guidelines [2], few projects have a zone of influence this large; however, the identification of European sites within 15km has become widely accepted as the starting point for the screening process. For this reason, all SPAs and SACs within 15km have been identified for consideration as part of the screening.

There are five European sites located within 15km of the Site - these are identified in Figure 4-1 and Table 4-1.

Figure 4-1: European sites within 15km of the Site

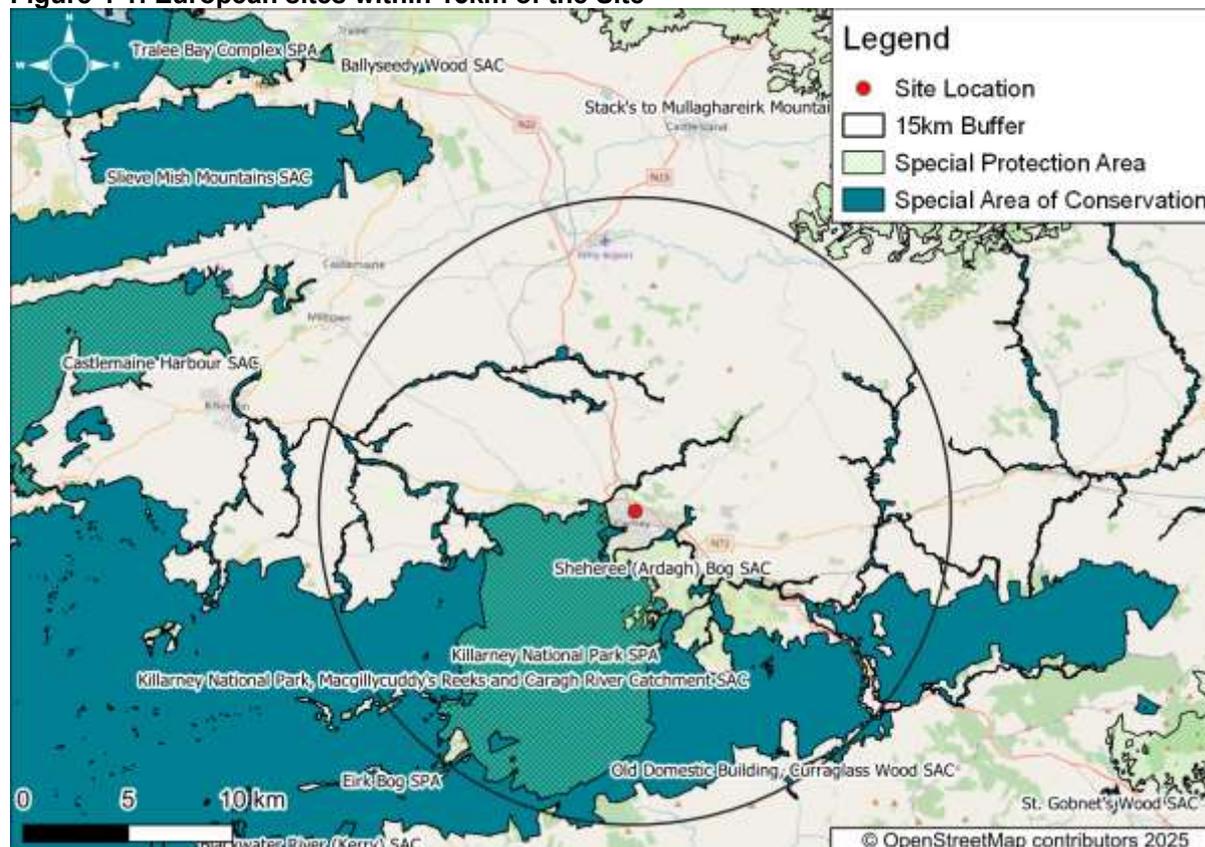


Table 4-1: European sites within 15km of the Site

Site Name	Code	Distance (km)	Direction from the Site
Special Areas of Conservation ('SAC')			
Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC	000365	0.75km	W/SW
Sheheree (Ardagh) Bog SAC	000382	2.7km	SE
Castlemaine Harbour SAC	000343	5.0km	NW/W
Old Domestic Building, Curraglass Wood SAC	002041	14.24km	SE
Special Protection Area ('SPA')			
Killarney National Park SPA	004038	0.75km	W/SW

4.1 Identification of European Sites within Zol

The Zol comprises the area in which the Proposed Development may potentially affect the conservation objectives (or qualifying interests) of a European site. The definition of Zol for the proposed works, as outlined in Section 2.1, is evaluated by multiple factors and discussed below. Please note that the extent of Zol differs for different environmental aspects, e.g. air, water, etc.

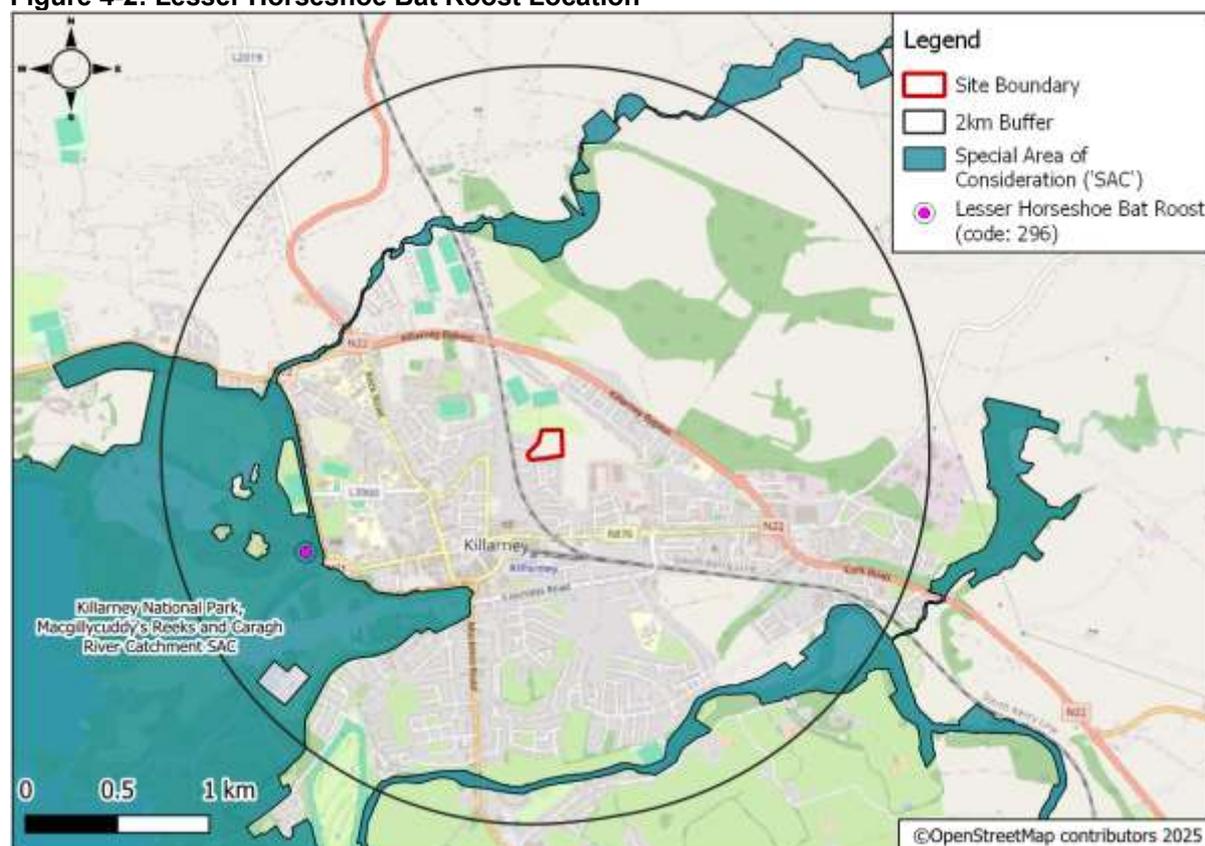
Habitat Loss / Degradation

The Site is not located within or adjacent to any European sites, and no designated habitats were identified within the Site. The Site is located within an area of agricultural land only.

Given the distance separating the Site from the Sheheree (Ardagh) Bog SAC, Castlemaine Harbour SAC, Old Domestic Building, Curraglass Wood SAC and Killarney National Park SPA and the lack of hydrological connection, it can be stated that there will be no direct impacts associated with designated habitat loss / degradation as a result of the Proposed Development on these sites.

However, the Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC, which is designated for lesser horseshoe bats, is located ca. 750m from the Site at its nearest point. The core sustenance zone (the area surrounding a communal bat roost within which habitat availability and quality will have a significant influence on the resilience and conservation status of the colony using the roost [29]) for lesser horseshoe bats is considered to be 2km. The Zol for all European sites which are designated for lesser horseshoe bats is therefore considered to be 2km. Given the presence of a known roost located within 2km of the Site, there is potential for disturbance to this species due to habitats degradation for which the Killarney National Park, MacGillycuddy's Reeks and Caragh River Catchment SAC is designated. Therefore, further consideration will be given to this European site and its designated species. See Figure 4-2 below.

Figure 4-2: Lesser Horseshoe Bat Roost Location



Water Quality Impairment

Potential water quality impacts would typically be associated with the release of sediment and other pollutants to surface water during the Construction Phase of the Proposed Development; therefore, the Zol would be considered to include the receiving waterbodies adjacent to and downstream of the Site during the Construction Phase within 5km.

As outlined in Section 3.2, there is no direct hydrological connection between the Site and any EPA watercourses or European site as listed in Table 4-1. Furthermore, there will be no direct discharges from the Proposed Development to any watercourse during the construction or operational phase of the Proposed Development. It should also be noted that the Proposed Development will be separated from all watercourses by the existing urban infrastructure, including residential properties, roads, and areas of hardstanding.

As outlined in section 3.3.1, it is proposed that no surface water will be discharged from the Site to the existing public drainage network. It is proposed to treat all surface water on-site. Should any controlled surface water flow discharge from the Site be required, this will be limited to greenfield run-off rates. Whole on-site infiltration is proposed, within the development, with no off-site discharge of stormwater to the public sewer. The proposed foul water drainage system is to be connected to the existing public mains system to the south of the Site.

In addition, all works will be confined to the Site, with localised construction works only, and there will be no direct discharges from the Proposed Development to any watercourse during the works, and all works will be carried out in accordance with best practice guidelines. All works will be carried out in accordance with best practice guidelines. Appropriate measures in relation to the storage of fuels and other materials and general Site maintenance will be implemented on the Site, including the refuelling of vehicles, the addition of hydraulic

oil/lubricants to vehicles, and the storage of hazardous construction materials, which shall take place in designated bunded areas. Pollution control kits will also be maintained on the Site, and all Site personnel will be trained in their use and made aware of their location.

During the Operational Phase of the Proposed Development, surface water and foul drainage will be directed through the existing public networks as outlined in Section 3. Please refer to the Drainage Impact Assessment prepared by Teicniuil-Priory Consulting Engineers Ltd. as part of this planning submission for full SUDS details.

Taking the above into account, it can be objectively concluded that the Proposed Development will not result in any likely significant effects on the European Sites and their designated habitats / species, without taking mitigation measures into account and as such, impacts associated with water quality impairment have been screened out from further consideration.

Air Quality Impairment

According to the Institute of Air Quality Management ('IAQM') Guidelines, potential adverse effects from dust arising from construction to ecological receptors occurs within 50m of a construction Site [26]. This is a temporary nuisance impact only.

The closest European sites are the Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC / Killarney National Park SPA, which are located ca. 750m from the Site at its closest point and therefore does not require a detailed dust assessment.

Therefore, it can be concluded that no impacts associated with dust will occur as a result of the Proposed Development, given the distance separating the Site from the European sites. It is not considered that the Proposed Development will result in any significant effect on any European sites as a result of construction dust.

Noise / Disturbance

Noise from the construction activity has the potential to cause disturbance to resting, foraging and commuting qualifying species of the European sites. As there will be no piling or in-river works required for the Proposed Development, there is no potential for underwater noise impacts beyond the immediate vicinity of the Site.

Individual species will provoke different behavioural responses to disturbances at different distances from the source of disturbance.

- Transport Infrastructure Ireland ('TII') (formally the National Roads Authority ('NRA')) has produced a series of best practice planning and construction guidelines for the treatment of certain protected mammal species (i.e. otter), which indicate that disturbance to terrestrial mammals would not extend beyond 150m [27]; and,
- Studies have noted that different types of disturbance stimuli are characterised by different avifaunal reactions; however, in general, a distance of 300m can be used to represent the maximum likely disturbance distance for waterfowl [28].

The Zol for noise / disturbance is therefore established as the Site with a 300m buffer. All identified European sites are located outside of this zone of influence.

However, further consideration was given to the Killarney National Park SPA as suitable habitats for designated species were identified within the Site and within close proximity of the Site. These species may be subject to the potential for disturbance / noise impacts as a result of the Proposed Development.

Invasive Species

No high-impact invasive species (including those that are regulated under the European Union (Invasive Alien Species) Regulations 2024 (S.I. No. 374/2024) [29]) were recorded within the

Site. However, a stand of butterfly bush was identified in the scrub habitat on the southern boundary of the Site.

Butterfly bush is classed as a medium-impact invasive species, but is not currently regulated under the EU (Invasive Alien Species) Regulations S.I. No 374/2024. No other invasive species were identified onsite.

4.2 Zol Conclusion

The Site is not located within or directly adjacent to any European sites; however, the boundaries of four are located within 15km from the Site.

Given the short duration of the construction works, lack of impact pathways and the distance separating the Site from the Castlemaine Harbour SAC and the Sheheree (Ardagh) Bog SPA, it is considered that the Proposed Development will not result in adverse effects to these European sites, and they have therefore been screened out from further consideration.

The following European sites listed in Table 4-2 have been screened in for further consideration to assess potential adverse effects resulting from the Proposed Development.

Table 4-2: European Sites within Zol

Site Name	Code	Distance at closest point and source-pathway-receptor link
Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC	000365	The Site is located 750m east / northeast of the Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC; see Figure 4-2. Given the close proximity of the Site to the SAC and the known Lesser Horseshoe roost, potential disturbance effects to designated species will be taken forward for further consideration.
Killarney National Park SPA	004038	The Site is located 750m east / northeast of the Killarney National Park SPA, see Figure 4-2. Given the close proximity of the Site to the SPA, the presence of suitable foraging habitats onsite and potential disturbance effects to designated species, this European site will be taken forward for further consideration.

The screening assessment for individual designated habitats and species for each of the screened in European sites and the potential for them to be adversely affected by the Proposed Development are presented in Section 6 below.

Further information on the screened in European sites is provided below.

4.3 Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC (Site Code: 000365)

The Killarney National Park Macgillicuddy's Reeks and Caragh River Catchment, spanning the Iveragh Peninsula and the Paps Mountains, is located primarily in County Kerry with a small portion in County Cork. It is Ireland's most mountainous region, featuring Carrauntoohil, the country's highest peak. The site's geology consists mainly of old red sandstone, with Carboniferous limestone and rhyolitic lavas in certain areas. Glacial processes have shaped its ridges and valleys, and its flora and fauna reflect strong oceanic influences.

Notable habitats in the park include extensive oak woodlands around Killarney lakes, which are home to rare species like the Killarney fern (*Trichomanes speciosum*) and slender naiad (*Najas flexilis*). The woodlands, including the only sizable Yew (*Taxus baccata*) woodland in Ireland, host unique Atlantic bryophyte communities. Wet and dry heath, blanket bogs and

upland grasslands also feature in the landscape. Important bog areas include Cumeragh River Bog, Ballygisheen, and Coomacheo/Caherbarnagh, each supporting diverse plant species.

The site includes lakes with species-rich environments like Lough Leane, Lough Caragh, and Muckcross Lake, alongside rivers such as the Caragh and Flesk, which support rare vegetation and invertebrates. Other habitats include juniper scrub, damp meadows, and Calaminarian grasslands. The park supports numerous rare plant and animal species, such as the lesser horseshoe bat (*Rhinolophus hipposideros*), red deer (*Cervus elaphus*), and Killarney shad (*Alosa fallax killarneyensis*). Rare fish species include the Atlantic salmon (*Salmo salar*) and Arctic char (*Salvelinus alpinus*).

However, the site faces threats from grazing, habitat degradation, Rhododendron (*Rhododendron ponticum*) invasion, and water pollution, though conservation efforts, including a Rhododendron removal program, are underway. The park has been designated as a World Biosphere Reserve due to its exceptional ecological value and rich biodiversity, which includes many rare species of plants, birds, mammals, fish, and invertebrates.

Table 4-2: Qualifying Annex I Habitats for the Killarney National Park, Macgillycuddy’s Reeks and Caragh River Catchment SAC

Qualifying Habitats (* denotes Priority Habitat)	Code	Site Specific Conservation Objective
Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>)	3110	To restore the favourable conservation condition
Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or <i>Isoeto-Nanojuncetea</i>	3130	To restore the favourable conservation condition
Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation	3260	To maintain the favourable conservation condition
Northern Atlantic wet heaths with <i>Erica tetralix</i>	4010	To restore the favourable conservation condition
European dry heaths	4030	To restore the favourable conservation condition
Alpine and Boreal heaths	4060	To restore the favourable conservation condition
<i>Juniperus communis</i> formations on heath or calcareous grasslands	5130	To maintain the favourable conservation condition
Calaminarian grasslands of the <i>Violetalia calaminariae</i>	6130	To maintain the favourable conservation condition
<i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils	6410	To restore the favourable conservation condition
Blanket bogs (* if active bog)	7130	To restore the favourable conservation condition
Depressions on peat substrates of the <i>Rhynchosporion</i>	7150	To restore the favourable conservation condition
Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles	91A0	To restore the favourable conservation condition

Qualifying Habitats (* denotes Priority Habitat)	Code	Site Specific Conservation Objective
Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, <i>Alnus incanae</i> , <i>Salix alba</i>)	91E0	To restore the favourable conservation condition
<i>Taxus baccata</i> woods of the British Isles	91J0	To restore the favourable conservation condition

Table 4-3: Qualifying Annex II Species for the Killarney National Park, Macgillycuddy’s Reeks and Caragh River Catchment SAC

Qualifying Species	Code	Site Specific Conservation Objective
<i>Geomalacus maculosus</i> (Kerry Slug)	1024	To maintain the favourable conservation condition
<i>Margaritifera margaritifera</i> (Freshwater Pearl Mussel)	1029	To restore the favourable conservation condition
<i>Euphydryas aurinia</i> (Marsh Fritillary)	1065	To restore the favourable conservation condition
<i>Petromyzon marinus</i> (Sea Lamprey)	1095	To maintain the favourable conservation condition
<i>Lampetra planeri</i> (Brook Lamprey)	1096	To maintain the favourable conservation condition
<i>Lampetra fluviatilis</i> (River Lamprey)	1099	To maintain the favourable conservation condition
<i>Salmo salar</i> (Salmon)	1106	To maintain the favourable conservation condition
<i>Rhinolophus hipposideros</i> (Lesser Horseshoe Bat)	1303	To maintain the favourable conservation condition
<i>Lutra lutra</i> (Otter)	1355	To maintain the favourable conservation condition
<i>Trichomanes speciosum</i> (Killarney Fern)	1421	To maintain the favourable conservation condition
<i>Naja flexilis</i> (Slender Naiad)	1833	To maintain the favourable conservation condition
<i>Alosa fallax killarneyensis</i> (Killarney Shad)	5046	To restore the favourable conservation condition

4.4 Killarney National Park SPA (Site Code: 004038)

Killarney National Park SPA, located near Killarney in County Kerry, encompasses a diverse range of habitats, including lakes, woodlands, blanket bog and wet heath. This site occupies a similar coverage to the Killarney National Park, Macgillycuddy’s Reeks and Caragh River Catchment SAC. The site features Lough Leane, Muckross Lake, and the Upper Lake, with Lough Leane classified as mesotrophic and the others as oligotrophic. The park is notable for its extensive native oak woodlands, including Derrycunihy Wood, one of the most natural Sessile Oak (*Quercus petraea*) woods in Ireland. The higher elevations are dominated by blanket bog and wet heath habitats.

The site is an important location for several bird species, including the Greenland White-fronted Goose (*Anser albifrons flavirostris*), which uses the park for wintering. The area also supports upland species such as Merlin (*Falco columbarius*), Peregrine Falcon (*Falco peregrinus*), Ring Ouzel (*Turdus torquatus*), and Red Grouse (*Lagopus scotica*). The woodlands are home to breeding birds like Redstart (*Phoenicurus phoenicurus*), Wood Warbler (*Phylloscopus sibilatrix*), and Garden Warbler (*Sylvia borin*). Lough Leane and the surrounding lakes host significant numbers of wintering waterfowl, including Mute Swan (*Cygnus olor*), Teal (*Anas crecca*), Mallard (*Anas platyrhynchos*), Pochard (*Aythya ferina*), Tufted Duck (*Aythya fuligula*) and others.

Killarney National Park is designated as a SPA for its bird populations and is also a Wildfowl Sanctuary. The site is of high ecological importance, supporting a diverse range of habitats and species.

Table 4-4: Qualifying Annex II Species for the Killarney National Park SPA

Species Name	Scientific Name	Code
Merlin	<i>Falco columbarius</i>	A098
Greenland White-fronted Goose	<i>Anser albifrons flavirostris</i>	A395

4.5 Conservation Objectives

European and national legislation places a collective obligation on Ireland and its citizens to maintain a favourable conservation status at candidate and designated Natura 2000 Sites. The Government and its agencies are responsible for the implementation and enforcement of regulations that will ensure the ecological integrity of these sites.

According to the EU Habitats Directive, favourable conservation status of a habitat is achieved when:

- Its natural range, and the area it covers within that range, is stable or increasing;
- The specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future; and,
- The conservation status of its typical species is favourable as defined below.

The favourable conservation status of a species is achieved when:

- Population data on the species concerned indicate that it is maintaining itself;
- The natural range of the species is neither being reduced nor likely to be reduced for the foreseeable future; and,
- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

Conservation objectives for all identified Natura 2000 SAC sites are as follows:

‘To maintain or restore the favourable conservation condition of the Annex I habitat(s) and the Annex II species for which the SAC has been selected.’

Conservation objectives for all identified Natura 2000 SPA sites are as follows:

‘To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.’

The full report for the conservation objectives for the Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC and Killarney National Park SPA¹ can be found on the NPWS website [12].

¹[Killarney National Park, Macgillicuddy's Reeks and Caragh River Catchment SAC | National Parks & Wildlife Service](#), [Killarney National Park SPA | National Parks & Wildlife Service](#)

5 STUDY RESULTS

Prior to conducting any field surveys, a desk-based review of information sources was completed. This baseline information provided valuable insight into the types of flora and fauna that may occur on the Site and allowed for the identification of features / habitats located off-site that may require further assessment.

5.1 Desk-Based Study Results

Table 5-1 provides a summary of records of legally protected or otherwise notable species protected under the Killarney National Park, Macgillycuddy’s Reeks and Caragh River Catchment SAC and the Killarney National Park SPA that occurred within 2km of the Site at the time of writing this report [12]. The NBDC records were checked on the 9th January 2026. The following NBDC 2km grids have been checked: V98U, V99K, V99Q, V99R, V99V and V99W [12].

Only species recorded within the past 10 years were included in Table 5-1. The parameter of 10 years was chosen to allow for habitat adaption and modification; it is considered that any records over 10 years old are not representative of the current distribution of species populations.

Table 5-1: NBDC Records for Species Designated for the Killarney National Park, Macgillycuddy within 2km of the Site

Common Name	Scientific Name	Date of Last Record *	Designation
Lesser Horseshoe Bat	<i>Rhinolophus hipposideros</i>	21/05/2021	Wildlife Acts 1976 / 2000 EU Habitats Directive Annex II & Annex IV

The NBDC held no records for designated bird species under the Killarney National Park SPA within 2km of the Site within the last 10 years [12].

5.2 Field-Based Study Results

5.2.1 Habitat Survey

The following section provides details of the field-based assessment that was undertaken for the Site on 14th November 2024. A description of the habitats and features of ecological significance is outlined below and illustrated in Figure 5-1.

Improved Agricultural Grassland (GA1)

The majority of the Site was comprised of improved agricultural grassland.

The grassland was comprised primarily of perennial ryegrass (*Lolium perenne*), with sorrel (*Rumex acetosa*), cow parsley (*Anthriscus sylvestris*), dandelion (*Taraxacum officinale*), herb Robert (*Geranium robertianum*), common ragwort (*Senecio jacobaea*) and stinging nettle (*Urtica dioica*).

Dense Bracken (HD1)

Areas of dense bracken were identified within the Site, primarily along the eastern boundary, with small sections recorded along the north-western boundary.

This habitat was comprised primarily of bracken (*Pteridium aquilinum*), Other species included hawthorn (*Crataegus monogyna*), gorse (*Ulex europaeus*), bramble (*Rubus fruticosus*) lesser stitchwort (*Stellaria graminea*) and bent grass (*Agrostis sp.*).

Scrub (WS1)

Scrub was recorded along the southern boundary of the Site.

Species identified included goat willow (*Salix caprea*), butterfly bush (*Buddleja davidii*), noble yarrow (*Achillea nobilis*), bracken, stinging nettle, hazel (*Corylus avellana*), field mustard (*Brassica rapa*), red clover (*Trifolium pratense*) and bush vetch (*Vicia sepium*).

Hedgerow / Treeline (WL1 / WL2)

A hedgerow / treeline comprised the northern and eastern perimeters of the Site. This habitat was heavily managed in places, most notably within the northwest, northeast and southeast corners of the habitat, with evidence of tree-felling and bracken removal.

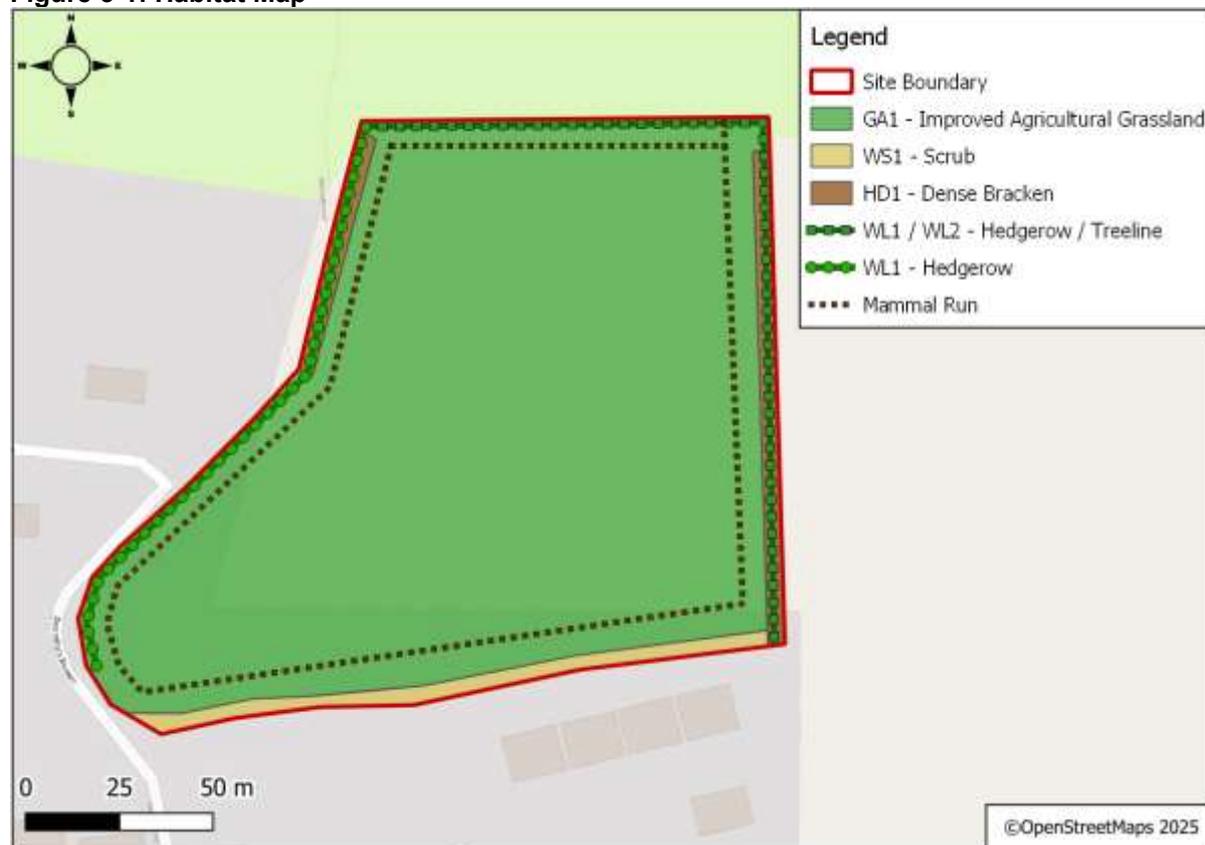
Species identified included sessile oak (*Quercus petraea*), silver birch (*Betula pendula*) and elder (*Sambucus nigra*).

The understory of the hedgerows / treelines comprised of raspberry (*Rubus idaeus*), bracken, bramble, common polypody (*Polypodium vulgare*), pennywort (*Centella asiatica*), honeysuckle (*Lonicera periclymenum*), holly (*Ilex aquifolium*), elder (*Sambucus nigra*) and foxglove (*Digitalis purpurea*).

A section of defunct hedgerow was identified along the western boundary. This habitat was classed as defunct due to large gaps that were present at the time of the survey. The habitat was also heavily managed with clear signs of vegetation removal.

Species identified here included sessile oak, ash (*Fraxinus excelsior*), elder, hawthorn, brambles, ivy (*Hedera helix*), black spleenwort (*Asplenium adiantum-nigrum*), cleavers (*Galium aparine*), stinging nettle and herb Robert.

Figure 5-1: Habitat Map



5.2.2 Wintering Bird Survey Results

Three wintering bird surveys were undertaken at the Site on 2nd and 21st January and 7th February 2025.

During the surveys, 28 bird species were recorded:

- 19 green-listed species – blackbird, blue tit, bullfinch, chaffinch, coal tit, dunnock, great tit, goldfinch, hooded crow, jackdaw, magpie, mistle thrush, pied wagtail, robin, rook, song thrush, stonechat, wren and woodpigeon;
- Five amber-listed species – goldcrest, greenfinch, herring gull, house sparrow and starling; and,
- Four red-listed species – kestrel, meadow pipit, redwing and snipe.

Of the species recorded, none were designated species under the Killarney National Park SPA. However, under the EU Birds Directive, snipe are classified as an Annex II (Section I) & Annex III (Section III) bird species

5.2.3 Breeding Bird Survey Results

Three breeding bird surveys were undertaken at the Site on 11th April, 2nd May and 11th June 2025.

Of the 24 species recorded:

- 17 Green-listed Birds of Conservation Concern Ireland ('BoCCI'), non-Annex I species were recorded – blackbird, blue tit, bullfinch, chaffinch, chiffchaff, dunnock, goldfinch, great tit, hooded crow, jackdaw, magpie, robin, rook, song thrush, stonechat, wren, woodpigeon;
- Six Amber-listed BoCCI, non-Annex I species were recorded – black-headed gull, goldcrest, greenfinch, house sparrow, linnets and willow warbler; and,
- One Red-listed BoCCI, Annex or non-Annex I species was recorded – meadow pipit.

During the surveys, one species was observed exhibiting behaviours that would be classified as '*Confirmed Breeding*' – stonechat. However, no active nests or signs of nest building were recorded within the Site boundary. 18 species were observed displaying territorial behaviours and were classified as '*Possible Breeding*' – blackbird, blue tit, chaffinch, chiffchaff, dunnock, goldcrest, goldfinch, greenfinch, great tit, hooded crow, house sparrow, linnets, robin, rook, song thrush, willow warbler, wood pigeon, wren. Five species were classified as non-breeding – black-headed gull, bullfinch, jackdaw, magpie and meadow pipit.

It should be noted that none of the species recorded were designated species of the Killarney National Park SPA. Furthermore, no Annex I bird species were recorded during the breeding bird surveys.

5.2.4 Invasive Species

Butterfly bush (*Buddleja davidii*) was identified within the scrub habitat on the Site. No other invasive species were noted during the Site walkover.

6 SCREENING AND ASSESSMENT OF POTENTIAL IMPACTS

Using professional experience, guidance and judgement, the following factors have been taken into account in identifying potential significant impacts on the identified European sites:

- Distance from any European site;
- Qualifying Interests;
- Special Conservation Interests;
- Conservation Objectives;
- The nature of the onsite habitats;
- The location of the Site; and,
- The scale of the Proposed Development.

Based on these factors, the following two potential significant impacts have been taken forward for further consideration:

Loss of, or disturbance to, habitats or species. The screening exercise did not identify any other factors that will result in any direct or indirect loss or disturbance to any of the Annex I habitats or Annex I or II species for which the European sites are designated.

6.1 Loss of, or Disturbance to, Habitats or Species During the Construction Phase

Based on the desk-based and field-based assessments, it is considered that the Proposed Development will not result in any loss of or disturbance to any Annex I habitats or Annex I or II species for which the Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC and Killarney National Park SPA are designated.

This conclusion is supported by the Site's location, the scale of the Proposed Development, absence of any direct impact pathways to any watercourse as outlined in section 3.2, and the presence of an intervening urban landscape separating the Site from these designated areas. Furthermore, no Annex I habitats associated with the SAC were identified within or within the vicinity of the Site. The habitats present onsite are considered suboptimal for designated species such as the European otter.

Although a lesser horseshoe bat roost exists within the 2km core sustenance zone, no suitable roosting features for bats were identified on-site. Furthermore, lesser horseshoe bats are known to roost in buildings during the summer, and no buildings were recorded on-site. In addition, the intervening land between the known roost and the Site is predominantly urban, with extensive lighting and busy roads. While some linear connectivity exists, multiple road crossings fragment this route, significantly reducing its suitability for foraging or commuting bats.

The Site walkover identified habitats that may be suitable for foraging bird species designated under the SPA. However, the Site is not considered significant for these species, given the abundance of more suitable habitats nearby. The intervening urban area, primarily Killarney town, makes it more likely that designated bird species will utilise habitats closer to the National Park, away from anthropogenic activity. No designated bird species or evidence of nesting were observed onsite, and no records exist for such species within 2km of the Site in the past 10 years. Additionally, as birds are highly mobile, they are considered likely to move away from the temporary disturbance that may be caused by the Construction Phase of the Proposed Development.

The bird surveys completed confirm that the Proposed Development will not have direct or indirect impacts on the designated species of the SPA. Additionally, based on the current site context of the Site, which is located within Killarney, within an area zoned as “new / proposed residential”, adjacent to the N22, R875 and the Iarnród Éireann Railway line and situated adjacent to an existing residential areas, there is no potential for the Proposed Development to result in any adverse effects on any species during the Construction or Operational Phase.

Therefore, taking into account the distance separating the Site from the Natura Sites, the localised nature of the works, and the nature of the Proposed Development, it can be concluded that the proposed works will not have any adverse effects on the Killarney National Park, Macgillycuddy’s Reeks and Caragh River Catchment SAC or Killarney National Park SPA or any of the species of interest.

6.2 Analysis of ‘In-Combination’ Effects

The Habitats Directive requires competent authorities to make an appropriate assessment of any plan or project which is likely to have a significant effect alone or in-combination with other plans and projects.

As described above, the proposed work alone is unlikely to have any direct or indirect adverse effects on any of the European sites located within 15km of the Site.

A review of the Kerry County Council Planning ePlan website did not identify any current or previous granted plans or projects in the immediate vicinity that are considered likely in-combination with the Proposed Development to result in significant impacts on European sites [14].

However, the following planning applications listed in Table 5-1 are currently being assessed by the council within the planning system, all of which are located in the vicinity of the Site.

Table 6-1: Planning Applications within the vicinity of the Site

Application Ref	Decision	Development Description	Appropriate Assessment
23/967	Granted – 27/10/2023	“Construct 249 no. Dwellings comprising of 2 no 5-bed houses, 6 no. 4-bed houses, 117 no. 3 bed houses, 18 no. 2-bed houses, 68 no. 2-bed apartments and 38 no. 1-bed apartments. All houses and apartments are contained in two storey buildings in height and comprise a mix of terrace and semi-detached typologies.house type f (4-bed semi-detached) and house type g (5 bed- semi-detached) include residential accommodation at attic/second level with associated rooflights. The apartments include balconies/ground floor terraces as private open space provision. The development includes public open space including play facilities, a new vehicular access from upper park road, all internal roads and footpaths including a number of homezones/shared surfaces, boundary treatment and hard and soft landscaping, drainage works for the new development and all associated and ancillary works. The	Stage 2 Appropriate Assessment was submitted and Planner’s Report concluded, “I agree with his conclusion that the proposed development, individually or in-combination with other plans and projects is not likely to have a significant effect on the European sites listed in view of the site’s conservation objectives.”

Application Ref	Decision	Development Description	Appropriate Assessment
		<i>proposed development also includes a new two-way cyclepath and a footpath along upper park road, with pedestrian crossings on upper park road, a two storey creche of c.417 sq.m gross floor space with associated open space and pv panels at roof level: 510 no. Surface car parking spaces (including accessible spaces) for the residential development and 19 no. Surface car parking spaces for the creche, 352 no. Bicycle parking spaces are provided in secure facilities for the maisonette units to the rear of each unit. A Natura Impact State has been prepared in respect of the proposed development.”</i>	
23/305	Granted – 22/05/2024	<i>“Construct 9 dwelling houses with all associated site works. An NIS has been submitted with this application”</i>	Stage 2 Appropriate Assessment was submitted, and states <i>“In light of the findings, it is considered view of the authors of this Appropriate Assessment Report that Kerry County Council can conclude that the project, with mitigation, is not likely, alone or in combination with other plans or projects, to have a significant effect on any European Sites given their Conservation Objectives and based on best scientific evidence and there is no reasonable scientific doubt as to that conclusion.”</i>
24/60295	Granted – 08/07/2024	<i>“The construction of a residential development of: 224 no. residential units with ancillary two storey crèche, landscaping, road improvements, pedestrian / cycleways, storm water upgrades and associated site development works. The proposed development makes provision for 76 houses comprising of 8 no. 2-storey 2-bedroom townhouses, 28 no. 2-storey 3-bedroom townhouses, 10 no. 2-storey 3-bedroom semi-detached units and 30 no. 2-storey 4-bedroom semi-detached units. The proposed development includes 148 no. apartments / duplexes to be provided as follows: Block 1 (4 no. 2-bedroom & 4 no. 3-bedroom over 3 storeys), Block 2 (2 no. 2-bedroom & 2 no. 3-bedroom over 3-storeys), Block 3 (4 no. 1-bedroom, 10 no. 2-bedroom and 6 no. 3-bedroom over 3-storeys), Block 4 (10 no. 1-</i>	Stage 2 Appropriate Assessment was submitted, Planner’s Report states <i>“See Biodiversity Assessment Report (Appendix 2) prepared by Eoin Kelleher – Environmental Assessment Unit, which contains an AA screening and Biodiversity Impact Assessment. I agree with his conclusion that the proposed development, individually or in-combination with other plans and projects is not likely to have a significant effect on the European sites listed in view of the site’s conservation objectives”</i>

Application Ref	Decision	Development Description	Appropriate Assessment
		<p><i>bedroom & 10 no. 2-bedroom over 3-storeys), Block J (32 no. 2-bedroom over 4 storeys), Block K (16 no. 1-bedroom apartments & 16 no. 2-bedroom apartments over 4 storeys) Block L (32 no. 2-bedroom apartments over 4 storeys). The proposed development will provide for a new vehicular access and pedestrian entrances onto Port Road, upgrades to Port Road comprising reduction in carriageway widths, provision of shared pedestrian/cycle path and uncontrolled pedestrian crossing, and a pedestrian connection to Millwood Estate. It is proposed to upgrade the stormwater network on St. Margaret's Road (approximately 140 metres north of the main development site) to support the development. Ancillary infrastructure development works will include relocation/undergrounding of ESB powerlines, wastewater infrastructure including foul pumping station, surface water attenuation, water utility services, public lighting, bin stores, bicycle stores, ESB substations, and all associated site development works. A Natura Impact Statement has been prepared in respect of the proposed development."</i></p>	

Due to the small scale and short timeframes of both the Proposed Development and the proposed projects listed in Table 5-1, it is considered unlikely to have any cumulative impacts on any European sites in the context of the existing infrastructure and associated activities taking place at the Site.

This statement is supported by:

- I. The distances separating the Site from European sites;
- II. The lack of hydrological connection;
- III. The urban setting of the local environment; and,
- IV. The small scale and localised nature of the proposed works.

Taking the above into account, it is concluded that there will not be any significant in-combination contribution by the Proposed Development to possible adverse effects on any European sites.

7 SCREENING CONCLUSIONS AND STATEMENT

The screening process has examined the details of the Proposed Development and has considered the potential for causing adverse effects on European sites and their qualifying features of interests within a 15km radius of the Site.

Four designated sites - the Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC, Sheheree (Ardagh) Bog SAC, Castlemaine Harbour SAC and Killarney National Park SPA - are located within a 15km radius of the Site.

However, given the scale and localised nature of the Proposed Development and the lack of direct impact pathways between the Site and European sites, as described in Section 4 and Section 6, it can be concluded that the Proposed Development will not result in any significant impacts either directly or indirectly on the conservation objectives or status of the listed European sites and will not result in the direct loss or disturbance of any Annex I habitats and / or Annex II species for which the European sites are designated. It can be stated that the Proposed Development will not cause:

- Any reduction in the area of the habitat or European site;
- Direct or indirect damage to the physical quality of the environment of any European site;
- Any serious or ongoing disturbance to species or habitats for which any European site is designated; or,
- Direct or indirect damage to the size, characteristics or reproductive ability of populations of any European site.

It has been objectively concluded, following an examination, analysis, and evaluation of the relevant information, that the Developments either alone, or in-combination with other plans, projects or land uses, have not had and will not have any direct or indirect significant effects on any European sites in light of the site's conservation objectives and best scientific knowledge, and no reasonable scientific doubt exists in relation to this conclusion.

Accordingly, the progression to Stage 2 of Appropriate Assessment process (i.e., preparation of a Natura Impact Statement) is not considered necessary.

8 REFERENCES

- [1] KCC, “Kerry County Development Plan 2022-2028,” Kerry County Council, 2022.
- [2] OPR, “Appropriate Assessment Screening for Development Management,” 2021.
- [3] EC, “Assessment of plans and projects in relation to Natura 2000 sites – Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC,” 2021.
- [4] CIEEM, “Guidelines for Ecological Impact Assessment in the UK and Ireland (Terrestrial, Freshwater, Coastal and Marine), Version 1.2,” 2022.
- [5] EC, “Managing Natura 2000 Sites: The Provision of Article 6 of the Habitats Directive 92/43/EEC,” European Commission, 2018.
- [6] DoEHLG, “Appropriate Assessment of Plans and Projects in Ireland, Guidance for Planning Authorities.,” Department of Environment, Heritage and Local Government, 2010.
- [7] DoEHLG, “Appropriate Assessment under Article 6 of the Habitats Directive; Guidance for Planning Authorities. Circular NPW 1/10 and PSSP 2/10,” Department of Environment, Heritage and Local Government, 2010.
- [8] Statutory Instruments, “S.I No. 477/2011 - European Communities (Bird and Natural Habitats) Regulations 2011,” European Commission, 2011.
- [9] L. M. Cooper, “Guidelines for Cumulative Effects Assessment in SEA of plans.,” Imperial College London., 2004.
- [10] OPW, “Arteria Drainage Maintenance categories, Source » Pathway » Receptor Chains for Appropriate Assessment,” OPW, Galway, 2012.
- [11] NPWS, “National Parks and Wildlife Service,” 2025. [Online]. Available: <https://www.npws.ie>.
- [12] NBDC, “National Biodiversity Live Maps,” 2025. [Online]. Available: <http://maps.biodiversityireland.ie/>.
- [13] EPA, “EPA Map Viewer,” 2025. [Online]. Available: <https://gis.epa.ie/EPAMaps/>.
- [14] KCC, “Kerry County Council Planning Portal,” 2025. [Online]. Available: <https://eplanning.ie/kerrycc/SearchExact>.
- [15] Department of Housing, Local Government and Heritage, “National Planning Application Database,” 2024. [Online]. Available: <https://housinggovie.maps.arcgis.com/apps/webappviewer/index.html?id=9cf2a09799d74d8e9316a3d3a4d3a8de>.

- [16] J. A. Fossitt, A Guide to Habitats in Ireland, Dublin: The Heritage Council, 2000.
- [17] G. Smith, P. O'Donoghue and K. & D. E. O'Hara, "Best Practice and Guidance for Habitat Surveying and Mapping," Heritage Council, 2011.
- [18] Scottish National Heritage, "Recommended bird survey methods to inform impact assessment of onshore wind farms.," 2014.
- [19] Gilbert, G.; Gibbons, D.W.; Evans, J., "Bird Monitoring Methods," Pelagic Publishing, Exeter, United Kingdom, 1998.
- [20] OPW, "Flood Maps," 2025. [Online]. Available: <http://www.floodinfo.ie/map/floodmaps/#>.
- [21] Inland Fisheries Ireland, "National Barriers Programme," 2025. [Online]. Available: <https://www.fisheriesireland.ie/what-we-do/research/national-barriers-programme>. [Accessed 14 04 2025].
- [22] Construction Industry Research and Information Association , "CIRIA SuDS Manual 2015," London, 2015.
- [23] CIRIA, "C532 – Control of Water Pollution from Construction, Guidance for Consultants and Contractors," 2011.
- [24] CIRIA, "C811 - Environmental Good Practice on Site (5th edition)," CIRIA, 2023.
- [25] European Commission, "Assessment of plans and projects significantly affecting Natura 2000 sites. Methodological guidance on the provisions of articles 6(3) and (4) of the Habitats Directive 92/43/EEC.," Luxembourg: Office for official publications of the European Communities , 2002.
- [26] J. Collins, "Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition)," The Bat Conservation Trust, London, 2023.
- [27] IAQM, "Guidelines on the assessment of dust from demolition and construction," 2014.
- [28] National Roads Authority, "Guidelines for the Treatment of Otters prior to the Constrcution of National Road Schemes," National Roads Authority, 2006.
- [29] N. H. K. S. J. Cutts, "Waterbird Disturbance Mitigation Toolkit Informing Estuarine Planning and Construction Projects," 2013.
- [30] Statutory Instruments, "S.I. No. 384/2024 - European Union (Invasive Alien Species) Regulations 2024," European Union, 2024.