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APPROPRIATE ASSESSMENT SCREENING REPORT

FOR

LARGE-SCALE RESIDENTIAL
DEVELOPMENT (LRD)

AT

LEYDEN'S WHOLESALERS &
DISTRIBUTORS, NO. 158A
RICHMOND ROAD, DUBLIN 3, D03
YK12

ON BEHALF OF

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1 INTRODUCTION

1.1 Background

Enviroguide Consulting was commissioned by Thornton O'Connor Planning Consultants acting on behalf of Malkey Limited to carry out an Appropriate Assessment (AA) Screening Report in relation to a Proposed Large-scale Residential Development (LRD) at a c. 0.55 hectare developable site at Leyden's Wholesalers & Distributors, No. 158A Richmond Road, Dublin 3, D03 YK12, hereafter referred to as the 'Site'. The purpose of this Report is to provide information for the relevant competent authority to carry out a Stage 1 AA Screening in respect of the Proposed Development.

1.2 Legislative Background

The Habitats Directive (92/43/EEC) seeks to conserve natural habitats and wild fauna and flora by the designation of Special Areas of Conservation (SACs) and the Birds Directive (2009/147/EC) seeks to protect birds of special importance by the designation of Special Protection Areas (SPAs). The Habitats Directive has been transposed into Irish law through the EC (Birds and Natural Habitats) Regulations 2011 (SI 477 of 2011).

SACs and SPAs are collectively known as Natura 2000 or European sites. It is the responsibility of each member state to designate SPAs and SACs. SACs are selected for the conservation of Annex I habitats (including priority types which are in danger of disappearance) and Annex II species (other than birds). SPAs are selected for the conservation of Annex I birds and other regularly occurring migratory birds and their habitats. The annexed habitats and species for which each site is selected correspond to the qualifying interests of the sites; from these the conservation objectives of the site are derived.

An AA is an assessment required prior to the grant of planning permission to determine whether a plan or project, based on best scientific knowledge, will have an adverse effect on the integrity of a European site, either alone or in combination with other plans and projects. It is required for any plan or project not directly connected with or necessary to the management of a site but likely to have a significant effect on it. Accordingly, a screening for AA determines whether a plan or project, either alone or in combination with other plans and projects, is likely to have significant effects on a European site, in view of its conservation objectives.

1.2.1 Legislative Context

An AA is required under Article 6 of the Habitats Directive where a project or plan may give rise to significant effects upon a European site. Paragraph 3 states that:

"6(3) Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site, in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications 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.”

These obligations in relation to Appropriate Assessment have been implemented in Ireland under Part XAB of the Planning and Development Act 2000, as amended (“the 2000 Act”), and in particular Section 177U and Section 177V thereof. The relevant provisions of Section 177U in relation to AA screening have been set out below:

“177U.— (1) A screening for appropriate assessment of a draft Land use plan or application for consent for proposed development shall be carried out by the competent authority to assess, in view of best scientific knowledge, if that Land use plan or proposed development, individually or in combination with another plan or project is likely to have a significant effect on the European site.

(2)...

(3)...

(4) The competent authority shall determine that an appropriate assessment of a draft Land use plan or a proposed development, as the case may be, is required if it cannot be excluded, on the basis of objective information, that the draft Land use plan or proposed development, individually or in combination with other plans or projects, will have a significant effect on a European site.

(5) The competent authority shall determine that an appropriate assessment of a draft Land use plan or a proposed development, as the case may be, is not required if it can be excluded, on the basis of objective information, that the draft Land use plan or proposed development, individually or in combination with other plans or projects, will have a significant effect on a European site.”

1.2.2 Stages of AA

The AA process is a four-stage process, with issues and tests at each stage. An important aspect of the process is that the outcome at each successive stage determines whether a further stage in the process is required (Figure 1).

Overview of Screening and Appropriate Assessment

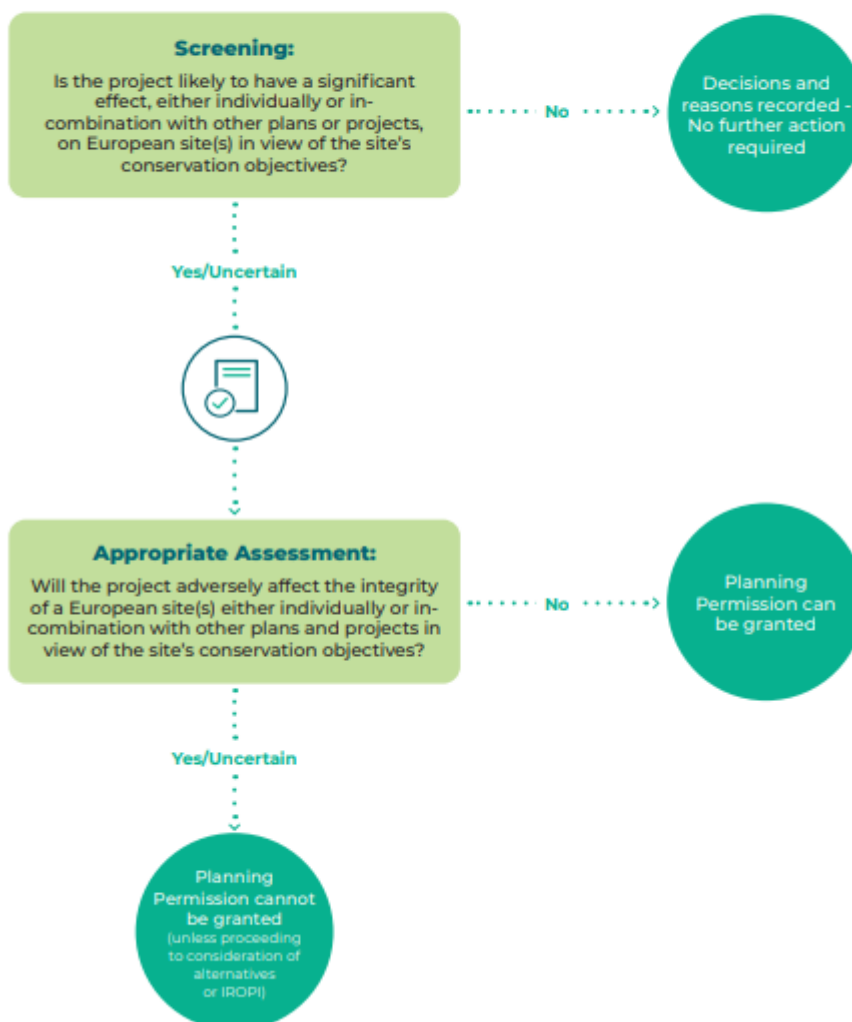


Figure 1. An Overview of the Appropriate Assessment Process (OPR, 2021).

The four stages of an AA, can be summarised as follows:

- **Stage 1: Screening.** The first stage of the AA process is to determine the likelihood of significant effects of the Proposed Development, this addresses:
 - whether a plan or project is directly connected to or necessary for the management of the Site, or
 - whether a plan or project, alone or in combination with other plans and projects, is likely to have significant effects on a European site in view of its conservation objectives.
- **Stage 2: NIS.** The second stage of the AA requires the competent authority to determine whether the project or plan (either alone or in combination with other projects or

plans) will have an adverse effect on the integrity of the European site, having regard to the conservation objectives of the site and its ecological structure and function. The developer must provide an NIS to the competent authority to inform the AA, which is a statement, for the purposes of Article 6 of the Habitats Directive, of the implications of a proposed development, on its own or in combination with other plans or projects, for one or more than one European site, in view of the conservation objectives of the site or sites. It must include a report of a scientific examination of evidence and data, carried out by competent persons to identify and classify any implications for one or more than one European site in view of the conservation objectives of the site or sites. The competent authority must consult with the public in relation to any plan or project that requires AA. If the competent authority determines that the plan or project would have an adverse effect on the integrity of any European site, it can only grant consent after proceeding through stages 3 and 4.

- *Stage 3: Assessment of alternative solutions.* If the outcome of Stage 2 is negative i.e., adverse impacts to the sites cannot be scientifically ruled out, despite mitigation, the plan or project should proceed to Stage 3 or be abandoned. This stage examines alternative solutions to the proposal.
- *Stage 4: Assessment where no alternative solutions exist and where adverse impacts remain.* The final stage is the main derogation process examining whether there are imperative reasons of overriding public interest (IROPI) for allowing a plan or project to adversely affect a European site, where no less damaging solution exists.

The Habitats Directive promotes a hierarchy of avoidance, mitigation, and compensatory measures. First the project should aim to avoid any negative effects on European sites by identifying possible effects early in the planning stage and designing the project in order to avoid such effects. Second, mitigation measures should be applied, if necessary, during the AA process to the point where no adverse effects on the site(s) remain. If the project is still likely to result in adverse effects, and no further practicable mitigation is possible, a refusal for planning permission may be recommended. In this case, the project will generally only be considered where no alternative solutions are identified and the project is required for IROPI, or, in the case of priority habitats, considerations of health or safety, or beneficial consequences of primary importance for the environment or to other imperative reasons of overriding public interest. Then compensation measures are required for any remaining adverse effects.

2 QUALITY ASSURANCE AND COMPETENCE

Synergy Environmental Ltd., T/A Enviroguide Consulting, is wholly Irish Owned multi-disciplinary consultancy specialising in the areas of the Environment, Waste Management and Planning. All Enviroguide consultants carry scientific or engineering qualifications and have a wealth of experience working within the Environmental Consultancy sectors, having undergone extensive training and continued professional development.

Enviroguide Consulting as a company remains fully briefed in European and Irish environmental policy and legislation. Enviroguide staff members are highly qualified in their field. Professional memberships include the Chartered Institution of Wastes Management (CIWM), the Irish Environmental Law Association and Chartered Institute of Ecology and Environmental Management (CIEEM).

All surveying and reporting have been carried out by qualified and experienced ecologists and environmental consultants. Experienced Ornithologist Brian McCloskey undertook the winter bird surveys at the Site. Enviroguide Senior Ecologist Liam Gaffney undertook the field surveys of the Site.

Liam Gaffney has a B.Sc. in Zoology (Hons) and a M.Sc. (Hons) in Wildlife Conservation and Management, from University College Dublin, and a wealth of experience in desktop research, literature scoping-review, and report writing, as well as practical field experience (Habitat surveys, Invasive species surveys, Wintering bird surveys, large mammals, fresh water macro-invertebrates etc.). Liam has extensive experience in compiling Biodiversity Chapters of EIARs, EclAs, AA screening and NIS reports, and in the overall assessment of potential impacts to ecological receptors from a range of developments. Liam is also a Qualifying member of CIEEM, the Chartered Institute of Ecology and Environmental Management.

Brian McCloskey is a Project Ecologist and experienced Ornithologist with 11 years of birding experience. Brian is a longstanding and active member of Bird Watch Ireland and has provided Ornithology survey work for ecological consultancies, e.g., Vantage points surveys of Gulls, Terns, Raptors, Waders and Wildfowl; hinterland surveys of the above as well as riverine species; and breeding waders and country birds. Brian is highly experienced with all survey methodologies and with surveying all species groups of Irish birds and migrants.

3 METHODOLOGY

3.1 Guidance

This AA Screening Report has been undertaken in accordance with the following guidance:

- *Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities.* (Department of Environment, Heritage and Local Government, 2010 revision).
- *Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities.* Circular NPW 1/10 & PSSP 2/10.
- *Communication from the Commission on the precautionary principle* (European Commission, 2000).
- *Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitat's Directive 92/43/EEC* (European Commission, 2019).
- *Assessment of plans and projects in relation to Natura 2000 sites – Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC* (European Commission, 2021).
- *Appropriate Assessment Screening for Development Management, OPR Practice Note PN01, Office of the Planning Regulator March 2021.*
- *Amendments to section 42 of the Planning and Development Act 2000, as amended and associated Planning and Development Regulations 2001.* Department of the Environment, Heritage and Local Government. (2021). Circular Letter: EUIPR 01/2021.

3.2 Screening Steps

Screening for AA involves the following steps:

- Establish whether the plan or project is directly connected with or necessary for the management of a European Site.
- Description of the plan or project and the description and characterisation of other projects or plans that in combination have the potential for having significant effects on the European Site.
- Identification of European Sites potentially affected.
- Identification and description of potential effects on the European Site.
- Assessment of the likely significance of the effects identified on the European Site; and
- Exclusion of sites where it can be objectively concluded that there will be no significant effects.

3.3 Desk Study

A desktop study was carried out to collate and review available information, datasets and

documentation sources relevant for the completion of the AA Screening. The desk-top study, completed in January 2023, relied on the following sources:

- Information on the network of European sites, relevant boundaries, QIs and conservation objectives, obtained from the National Parks and Wildlife Service (NPWS) at <https://www.npws.ie/protected-sites>;
- Information on the status of EU protected habitats and species in Ireland, obtained from the NPWS Article 17 reports (NPWS, 2019);
- Text summaries of the relevant European sites taken from the respective Site Synopses and Standard Data Forms for each site, available at www.npws.ie and <https://natura2000.eea.europa.eu/>;
- Information on the species of the European sites from the Conservation Objectives supporting documents available at www.npws.ie;
- Information on species records and distributions, obtained from the National Biodiversity Data Centre (NBDC) at <https://biodiversityireland.ie/>; <http://www.maps.biodiversityireland.ie/>;
- Information on waterbodies, catchment areas and hydrological connections obtained from the Environmental Protection Agency (EPA) at <https://gis.epa.ie/EPAMaps/>;
- Information on bedrock, groundwater, aquifers and their statuses, obtained from Geological Survey Ireland (GSI) at <https://www.gsi.ie/>;
- Satellite imagery and mapping obtained from various sources and dates including Google, Digital Globe, Bing and Ordnance Survey Ireland;
- Information on the extent, nature and location of the Proposed Development, provided by the applicant and their design team; and
- Information on the existence of permitted developments, or developments awaiting decision, in the vicinity of the Proposed Development from the National Planning Application Map Viewer (<https://myplan.ie/>) and Dublin City County Council (https://mapzone.dublincity.ie/MapZonePlanning/MapZone.aspx?map=PlanningApplication&search=Plan_Ref&tooltip=Plan_Ref).

For a complete list of the specific documents consulted as part of this assessment, see *Section 7 References*.

3.4 Field Study

3.4.1 Ecological surveys

The Site was visited by Enviroguide Consulting on the 6th of September 2022. The Site was surveyed for any potentially important ecological receptors and/or potential impact pathways linking the Proposed Development to European sites.

3.4.2 Winter Waterbird Surveys

It was noted that the Proposed Development lies along the northern bank of the River Tolka and ca.1.3km upstream of the South Dublin Bay and River Tolka Estuary SPA. Wintering waterfowl such as Light-bellied Brent Geese *Branta bernicla hrota* are known to utilise *ex-situ* inner-city grassland feeding grounds during the winter months. Based on the proximity of the Proposed Development to the Tolka estuary, and the potential for Light-bellied Brent Geese

to commute along the Tolka to and from feeding grounds, the potential for collision risks posed by the proposed buildings were assessed as a precautionary measure.

Winter waterbird flight-line surveys were carried out at the Site of the Proposed Development over the course of the 2021/2022 winter by Enviroguide Ornithologist Brian McCloskey. The objective of these surveys was to determine the composition, numbers, frequency and heights of species in passage over the Site of the Proposed Development, if any, in order to inform decisions on potential disturbance to flight-lines of birds commuting to/from roost sites and/or between feeding sites as a result of the construction of the proposed structures.

The flight-line surveys focused on those SCI species that are characterised as “poor” fliers and considered to be more at risk of collision (see Eirgrid, 2012, 2016 & 2020). The most at-risk groups (classified as ‘medium’ and ‘high’ collision risk species) include wader species; waterfowl such as geese, swan and duck species; and some raptor species. Gulls such as Herring Gull *Larus argentatus* are classed as ‘low’ collision risk species due to their superior manoeuvrability when flying (see Eirgrid, 2012, 2016 & 2020), and therefore, are not classified as ‘at-risk’ species in terms of in-flight collisions with structures.

A suite of 8 flight-line surveys was carried out at the Site between November 2021 and April 2022. The survey dates were as follows:

- 24th November 2021
- 10th December 2021
- 7th January 2022
- 21st January 2022
- 4th February 2022
- 18th February 2022
- 11th March 2022
- 5th April 2022

Each survey consisted of a 6-hour vantage point survey, either commencing at dawn or ending at dusk; to cover temporal variations in flight-line activity. The Site was observed from a suitable vantage point with surveyors using a binoculars and identification guides where necessary to identify all waterbirds in flight over the Site.

All surveys were undertaken using:

- Opticron 8x42 binoculars (or equivalent).
- Opticron 20x Telescope (or equivalent).
- Agreed survey methodology.
- A4 map of survey area.

The winter waterbird surveys were conducted at the appropriate time of year i.e., November-April. This period is sufficient for flight-line surveys of an urban site, as it covers the period that overwintering species including waterfowl & shorebirds are present in Ireland (NRA, 2009b). The full results of the winter waterbird surveys are provided in Appendix I of this Report.

3.5 Zone of Influence

The ‘zone of influence’ (ZOI) for a project is the area over which ecological receptors may be affected by changes as a result of the Proposed Development and associated activities. This

is likely to extend beyond the Site, for example where there are ecological or hydrological links beyond the Site boundaries (CIEEM, 2018).

In order to identify the European sites that potentially lie within the ZOI of the Proposed Development, a Source-Path-Receptor (S-P-R) method was adopted, as described in 'OPR Practice Note PN01 - Appropriate Assessment Screening for Development Management' (OPR, 2021), a practice note produced by the Office of the Planning Regulator, Dublin. This note was published to provide guidance on Screening for AA during the planning process, and although it focuses on the approach a planning authority should take in screening for AA, the methodology is also applicable to the preparation of Screening Reports such as this.

The guidance document published by the Department of Housing, Planning and Local Government (then DEHLG) 'Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities' (2009) recommends an arbitrary distance of 15km as the precautionary ZOI for a plan or project being assessed for likely significant effects on European sites, stating however that this should be evaluated on a case-by-case basis.

In truth, the ZOI of a project at the scale of the Proposed Development is unlikely to result in likely significant effects to European sites located 15km away. Therefore, in this case a 15km radius is used as an initial starting point for the collation of European sites for assessment, with these sites screened in or out based on the presence /absence and nature of any S-P-R linkages identified, as per the OPR 2021 guidance.

The potential for connectivity with European sites at distances greater than 15km from the Proposed Development was also considered in this initial assessment. In this case, there is no potential connectivity between the Site of the Proposed Development and European sites located at a distance greater than 15km from the Proposed Development based on the S-P-R model.

The methodology used to identify relevant European sites comprised the following:

- Use of up-to-date GIS spatial datasets for European designated sites and water catchments – downloaded from the NPWS website (www.npws.ie) and the EPA website (www.epa.ie) to identify European sites which could potentially be affected by the Proposed Development;
- The catchment data were used to establish or discount potential hydrological connectivity between the Site and any European sites;
- The details of all relevant European sites as identified in the preceding steps are shown in Table 2. The potential for pathways between European sites and the Proposed Development was assessed on a case-by-case basis using the S-P-R framework as per the OPR Practice Note PN01 (March 2021). Those European sites where a pathway has been identified are highlighted in green. Pathways considered included:
 - a. Direct pathways e.g., proximity to, or location within, a European site; water bodies; air (for both air emissions and noise impacts).
 - b. Indirect pathways e.g., disruption to migratory paths; 'Sightlines' where noisy or intrusive activities may result in disturbance to shy species.

- The site synopses and conservation objectives of these sites, as per the NPWS website (www.npws.ie), were consulted and reviewed at the time of preparing this report.

There is absolutely no reliance placed in this Screening Report on measures intended to avoid/reduce harmful effects on the European sites.

3.6 Assessment of Significant Effects

The potential for significant effects that may arise from the Proposed Development were considered through the use of key indicators (as per EC, 2021), namely:

- Habitat loss or alteration
- Habitat/species fragmentation
- Disturbance and/or displacement of species
- Changes in population density
- Changes in water quality and resource

In addition, information pertaining to the conservation objectives of the European Sites, the ecology of the designated habitats and species and known or perceived sensitivities of the habitats and species were considered.

4 FIELD SURVEY RESULTS

4.1 Winter Waterbird Surveys

A set of winter waterbird flight-line surveys were carried out between November 2021 and April 2022 with the aim of identifying what species fly over the Site of the Proposed Development; to assess the potential for flight-line obstructions and collision risk to SCI species listed for the relevant SPAs.

This assessment was primarily focused on those species considered to be “poor fliers” i.e., waterfowl and shorebirds, and most at risk of collisions or obstruction. Species fitting the above criteria that were recorded over the Site are listed below:

- Light-bellied Brent Goose
- Curlew *Numenius arquata*
- Grey Heron *Ardea cinerea*
- Mallard *Anas platyrhynchos*
- Little Egret *Egretta garzetta*

It is noted that Gull species were not recorded over the course of this flight-line assessment, as this species group are not considered to be at-risk of collisions with buildings, due to their superior manoeuvrability in flight, and general adaptation to inhabit city environments. As discussed previously, Gull species are not characterised as “poor” fliers as waterfowl species groups such as Geese are (Eirgrid, 2012; 2016 & 2020), and therefore, are not classified as ‘at-risk’ species in terms of in-flight collisions with structures.

4.1.1 Results of flight-line surveys

Two species listed as SCI's for nearby SPAs were recorded over the Site during the 2021/22 winter surveys: Curlew and Light-bellied Brent Geese. The remaining waterbird species are not listed as named SCIs for any European site, however, '[A999] Wetlands and waterbirds' is a QI for both North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA and thus covers these other waterbird species, namely: Grey Heron, Mallard and Little Egret.

Curlew were recorded over the Site during 6 hourly counts spread over 3 dates, with a peak count flock of 8 recorded flying overhead on 24th November 2021, flying due west at a height of approximately 100m. The average number of Curlew over the Site when present was 3.3 birds. Curlew flew over the site at heights of between 75 and 100m, with an average flight height of approx. 94m.

Several flocks of Light-bellied Brent Geese were recorded commuting at height over the Site and surrounding lands over the course of the winter surveys. Light-bellied Brent Geese were recorded during 14 hourly counts spread over 7 dates. A peak flock count of 125 geese were recorded overhead on the 11th of March, heading east at a height of approximately 150m. The average number of Light-bellied Brent Geese recorded over the Site when present was 27.7 birds. All Light-bellied Brent Geese were recorded flying at heights of between 70m and 200m, with the average flight height calculated as approx. 133m.

Light-bellied Brent Geese, a winter migrant to Ireland, are known to roost in Dublin Bay at Bull Island and commute to feed both along the Dublin Bay Coastline, and inland; to feed on a network of *ex-situ* grassland feeding grounds, largely comprised of playing pitches, golf-

courses and amenity parks (BirdWatch Ireland, 2017; Pers. Obs.). The Light-bellied Brent Geese recorded during these surveys were noted to be geese commuting inland to forage at *ex-situ* grassland sites. Curlew similarly are known to forage on inland grassland sites for earthworms during high tide.

With regard to the other species noted during the winter surveys i.e., Mallard, Grey Heron & Little egret, these species were recorded almost daily during the surveys. It is observed that these birds were using the River Tolka to the south of the Site as a feeding ground rather than using it as a commuting flightline, with birds flying over the Site and dropping down to the river.

Mallard were recorded over the Site during 10 hourly counts spread over 6 dates, with a peak count flock of 4 recorded on three occasions flying overhead. The average number of Mallard over the Site when present was 2.7 birds. Mallard flew over the site at heights of between 10 and 50m, with an average flight height of approx. 23.5m.

Little Egret was recorded over the Site on one occasion on the 24th November 2021, with a single bird flying overhead at a height of approx. 30m. Grey Heron were recorded over the Site during 4 hourly counts spread over 4 dates, all records of individual birds. This species flew over the site at heights of between 20 and 75m, with an average flight height of approx. 50m. The results of the flight-line surveys are provided in Table 1.

Table 1. Records of SCI Species made as part of flight-line surveys at the Site of the Proposed Development.

Date	Time	No. of Birds	Approx. Height (m)	Flight Direction
Light-bellied Brent Goose				
24/11/2021	09:05	16	120m	North-west
	10:25	11	120m	North-west
10/12/2022	11:10	83	150m	East
	13:10	10	150m	East
	16:10	14	130m	East
07/01/2022	10:30	16	150m	North-west
21/01/2022	08:30	32	70-100m	North-west
	11:30	1	70-100m	South-east

Date	Time	No. of Birds	Approx. Height (m)	Flight Direction
04/02/2022	08:00	12	150m	North-west
	10:00	1	150m	South-east
18/02/2022	11:40	18	150m	East
	16:40	44	150-200m	East
11/03/2022	13:25	5	100m	East
	15:25	125	150m	East
Curlew				
24/11/2021	08:05	8	100m	West
	09:25	2	100m	North-west
	10:25	5	100m	North-west
10/12/2022	11:10	2	100m	East
	13:10	1	75m	East
07/01/2022	14:30	2	75-100m	South-west
Mallard				
10/12/2021	11:10	4	25m	South
07/01/2022	15:30	1	50m	West
21/01/2022	13:30	2	30m	South
04/02/2022	09:00	2	30m	West

Date	Time	No. of Birds	Approx. Height (m)	Flight Direction
	11:00	3	20m	West
18/02/2022	15:40	2	10m	West
11/03/2022	12:25	2	25m	West
	13:25	4	10m	West
05/04/2022	08:05	3	20m	East
	11:05	4	15m	North-east
Little Egret				
24/11/2021	10:25	1	30m	West
Grey Heron				
24/11/2021	08:05	1	25m	North
21/01/2022	13:30	1	75m	South-east
04/02/2022	08:00	1	50m	South-east
18/02/2022	13:40	1	20m	West

4.1.2 Likelihood of Collision Impacts

The physical location of buildings and structures can influence the likelihood of bird collisions, with structures placed on or near areas regularly used by large numbers of feeding, breeding, or roosting birds, or on a local flight path, such as those located between important foraging and roosting areas, can present a higher risk of collision.

The Site itself is located near a river that is utilised by waterfowl species for foraging or to commute inland. However, it is not deemed to be located in close proximity or adjacent to any SPAs designated for wetland bird populations, with the closest SPA; the South Dublin Bay

and River Tolka Estuary SPA located ca.1.3km downstream. Due to the highly developed nature of the Site, there is no suitable *ex-situ* feeding/roosting/staging habitat for Light-bellied Brent Goose, or any other SCI species of wintering birds listed for the relevant European sites (Habitats present totally comprised of hardstanding).

Building Height

As can be seen based on the above results, Light-bellied Brent Goose and Curlew were recorded flying at average heights of approx. 133m (max height of 200m) and 94m (max height of 100m) respectively. These flight heights, and the directions of flight noted, are in keeping with the objectives of these birds, i.e., commuting across urban Dublin between their roosts along the coast and inland *ex-situ* feeding grounds located across the city.

Similarly, the other species recorded over the Site e.g., Mallard, Grey Heron & Little Egret, were recorded flying at average heights of approx. 23.5m (max height of 50m), 50m (max height of 75m) and 30m (max height of 30m) respectively. These birds were using the River Tolka to the south of the Site as a feeding ground rather than using it as a commuting flightline, with birds observed flying over the Site and dropping down to the river.

The Proposed Development entails building heights ranging from 1-10 storeys (maximum 35m) in height (See Figure 2) and as such, the risk of migrating birds colliding with the structure due to its height is deemed to be negligible [Migrating species tend to commute far above this with Swans and Geese flying up to 2500ft (ca.750m) during migration along Irish Coasts (Irish Aviation Authority, 2020)]. Birds that fly over the Site to commute across the city or in order to reach feeding grounds at various locations would fly lower than these migration heights, as can be seen in the results of the flight-line surveys. However, all birds were observed flying above the maximum height of the proposed buildings during the surveys, with the exception of Little Egret which was observed on one occasion at 30m height. However, this species is capable of flying at heights greater than this. Once the proposed structures are made of visible materials i.e., not entirely comprised of reflective materials such as glass, the birds flying in the vicinity of the Site will simply fly around or over them.

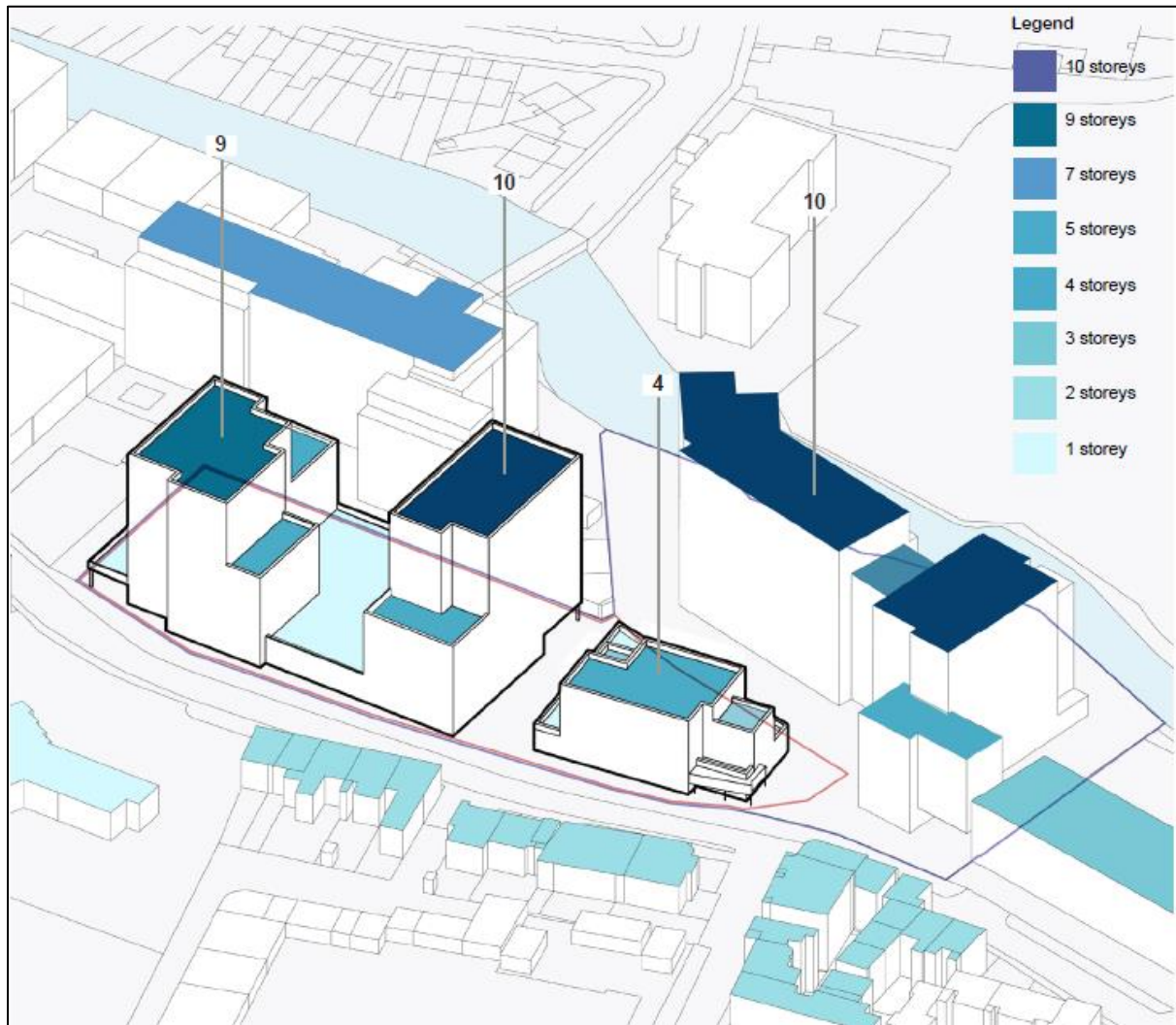


Figure 2. Proposed building heights at the Site of the Proposed Development (within the red outline)
(Adapted from RKD - Architectural & Urban Design Statement (Dated January 2023).

Building Appearance

The overall façades of the proposed structures are well broken up, with areas of glazing dispersed across a varied material composition (See Figure 3). The opaque materials proposed, such as coloured brick and stone, provide important visible cues as to the presence and extent of the proposed structures to any commuting/foraging bird species should they be in the vicinity of the Site. The overall visual heterogeneity of the building façades will be sufficient to further ensure that the risk of bird collisions as a result of the Proposed Development is negligible. These architectural design features are part of the overall design of the Proposed Development and are not included as specific mitigation measures to prevent collisions, however, they will contribute to the overall effect in this regard.



Figure 3. Example of the proposed building façades (viewed from Richmond Rd), with opaque materials comprising coloured brick and stone (Adapted from RKD - Architectural & Urban Design Statement (Dated January 2023)).

As such, based on the heights of the proposed structures, the physical appearance of these structures, and as supported by the results of focused flightline surveys, it is deemed that birds including SCI species do not have the potential to be impacted by the Proposed Development; through collisions or obstructions to flight-lines over the Site, and the risk is therefore deemed to be **negligible** in the absence of any mitigation.

5 STAGE 1 SCREENING

5.1 Management of European Sites

The Proposed Development is not directly connected with or necessary to the management of European sites in Co. Dublin or elsewhere. There are no European sites located either within or immediately adjacent to the Site of the Proposed Development.

5.2 Description of Proposed Development

5.2.1 Site Location

The Site of the Proposed Development measures a total of ca. 0.83Ha (development site area and road works area) and currently comprises warehouse and shed structures and associated vehicular yard.

The Site is bounded to the north-east by Richmond Road, to the west/south-west by No. 146A and Nos. 148-148A Richmond Road (pending application ABP Reg. Ref. TA29N.312352), to the south/ south-west by a residential and commercial development (Distillery Lofts) and to the east/south-east by No. 156-163 Richmond Road (derelict brick and stone building). The River Tolka lies ca.50m to the south of the Site and is separated by hardstanding. The general surroundings of the Site comprise of commercial and residential lands for the most part, with various areas of green space associated with sports clubs, religious orders, and educational institutions scattered throughout (See Figure 4).

5.2.2 Brief Project Description

Malkey Limited intend to apply for permission for development (Large-scale Residential Development (LRD)) at this c. 0.55 hectare site at the former Leydens Wholesalers & Distributors, No. 158A Richmond Road, Dublin 3, D03 YK12. The site is bounded to the north-east by Richmond Road, to the west/south-west by No. 146A and Nos. 148-148A Richmond Road (pending application ABP Reg. Ref. TA29N.312352), to the south/south-west by a residential and commercial development (Distillery Lofts) and to the east/south-east by the Former Distillery Warehouse (derelict brick and stone building). Improvement works to Richmond Road are also proposed including carriageway widening up to c. 6 metres in width, the addition of a c. 1.5 metre wide one-way cycle track/lane in both directions, the widening of the northern footpath on Richmond Road to a minimum of c. 1.8 metres and the widening of the southern footpath along the site frontage which varies from c. 2.2 metres to c. 7.87 metres, in addition to a new signal controlled pedestrian crossing facility, all on an area of c. 0.28 hectares. The development site area and road works area will provide a total application site area of c. 0.83 hectares.

The Proposed Development will principally consist of: a Large-scale Residential Development (LRD) comprising the demolition of existing industrial structures on site (c. 3,359 sq m) and the construction of a mixed-use development including artist studios (c. 749 sq m), a creche (c. 156 sq m), a retail unit (c. 335 sq m), and a gym (c. 262 sq m), and 133 No. residential units (65 No. one bed apartments and 68 No. two bed apartments). The development will be provided in 3 No. blocks ranging in height from part 1 No. to part 10 No. storeys as follows: Block A will be part 1 No. storey to part 4 No. storeys in height, Block B will be part 1 No. storeys to part 10 No. storeys in height (including podium) and Block C will be part 1 No.

storeys to part 9 No. storeys in height (including podium). The proposed development has a gross floor area of c. 14,590 sq m and a gross floor space of c. 13,715 sq m.

The development also proposes the construction of: a new c. 204 No. metre long flood wall along the western, southern and south-eastern boundaries of the proposed development with a top of wall level of c. 6.4 metres AOD to c. 7.15 metres AOD (typically c. 1.25 metres to c. 2.3 metres in height) if required; and new telecommunications infrastructure at roof level of Block B including shrouds, antennas and microwave link dishes (18 No. antennas enclosed in 9 No. shrouds and 6 No. transmission dishes, together with all associated equipment) if required. A flood wall and telecommunications infrastructure are also proposed in the adjoining Strategic Housing Development (SHD) application (pending decision ABP Reg. Ref. TA29N.312352) under the control of the Applicant. If that SHD application is granted and first implemented, no flood wall or telecommunications infrastructure will be required under this application for LRD permission (with soft landscaping provided instead of the flood wall). If the SHD application is refused permission or not first implemented, the proposed flood wall and telecommunications infrastructure in the LRD application will be constructed.

The proposed development also provides ancillary residential amenities and facilities; 25 No. car parking spaces including 13 No. electric vehicle parking spaces, 2 No. mobility impaired spaces and 3 No. car share spaces; 2 No. loading bays; bicycle parking spaces; motorcycle parking spaces; electric scooter storage; balconies and terraces facing all directions; public and communal open space; hard and soft landscaping; roof gardens; green roofs; boundary treatments; lighting; ESB substation; switchroom; meter room; comms rooms; generator; stores; plant; lift overruns; and all associated works above and below ground.

As detailed in the Statutory Notice, the development proposes the provision of a flood wall along the western, southern and south-eastern boundaries of the proposed development in the event that the flood wall proposed in the adjoining SHD (pending decision ABP Reg. Ref. TA29N.312352) is neither granted nor implemented before this application commences development. Both applications are under the control of the Applicant.

On the preferred basis that the flood wall is not required as part of the subject application as it will have already been provided as part of the Phase 1 SHD application, an approach favouring soft landscaping will be used between Phase 1 (SHD) and 2 (LRD). The soft-landscaping approach will comprise grass and shrub planting of between 40 to 100 centimetres, allowing for the creation of a vegetative buffer adjoining Block A. A gate will also be provided between the two phases at the end of the central courtyard of phase 2 between Buildings A and B, creating a physical link between Phases 1 and 2.

Except where referenced, all assessments carried out are based on the worst-case scenario, i.e. the provision of the flood wall as this is more invasive than the soft-landscaping option.

It is noted, however, that the inclusion or omission of the floodwall has little impact on the landscaping and biodiversity enhancement proposed at the Site, with some minor changes to the locations of proposed trees in the north-western corner of the Site should the flood wall be required. Please see Mitchells & Associates drawings: RIC0001-MA-XX-XX-DR-L-100 and RIC0001-MA-XX-XX-DR-L-103 for ground floor landscaping without, and with flood wall, respectively.

The proposed layout plans showing scenarios without and with the floodwall are provided in Figure 5 and Figure 6 of this report.

5.2.3 Construction Phase

According to the Preliminary Construction Environmental Management Plan (PCEMP) prepared by DBFL Consulting Engineers (DBFL, 2023a), the Construction Phase will comprise the following:

- Site Setup.
- Service terminations and identification of any services on the site by the utility providers.
- Provision of temporary power, lighting and water services.
- Set up of site accommodation and welfare facilities.
- Identification of the trees that are required to be removed and the removal of these along with scrub and vegetation, in accordance with the arboriculture report.
- Identification of trees to be retained and protection of same.
- Identification of any hazardous materials on site
- Designation of exclusion zones for the demolition/dismantling.
- Demolition and site clearance.
- Undertaking remaining site investigations / sampling.
- Earthworks, including cut and fill and disposal of excess material off site.
- Construction of new flood defence wall.
- Construction of superstructure, roofs and glazing / windows / facades.
- Internal fit out.
- External site works/ infrastructure.
- Construction of external / hardstanding areas.
- Landscaping.

The following details are taken from the PCEMP (DBFL, 2023a) and Infrastructure Design Report (DBFL, 2023b).

5.2.3.1 Demolition

Demolition works will be carried out by a suitably qualified demolition contractor, who will be required to submit a detailed method statement including the sequence of works, segregation and disposal process and outline all proposed health and safety measures. Demolition works require the provision of temporary fencing on site to define any exclusion zones or protected areas. The works will be separated from outside traffic and passing public. Protective screens will be used, where necessary, to ensure that no debris enters the grounds of the neighbouring proposed Richmond Road Phase 1 to the west and The Distillery to the east.

5.2.3.2 Construction Waste

Any waste generated during the Construction Phase will be subject to best practice in managing waste. No waste shall be deposited within the Site lands. All waste generated during the Construction Phase will be removed from the Site by an appropriately permitted waste collection operator and dispatched to an appropriately permitted waste recovery/disposal facility (as necessary).

The removal of soils from the Site will be subject to testing to confirm its composition and to determine the appropriate treatment facility. There is the potential for contaminated soils to be encountered during excavation works at the Site. Any such materials will be excavated, stored and disposed of as per best practise guidelines.

5.2.4 Operational Phase

The Operational Phase will comprise commercial and residential use and retail activities consistent with the neighbouring land use in the area.

5.2.4.1 Proposed Surface Water Management

Local Authority record drawings indicate surface water infrastructure in the vicinity of the Site, with a 1350mm diameter surface water sewer at the proposed entrance to the Site under Richmond Road. Within the Site, the existing surface water network comprises of a combination of gullies, concrete channels and 100mm - 225mm diameter uPVC surface water pipes, which collects surface water runoff from the existing site, and discharges unattenuated runoff to the public surface water sewer along Richmond Road.

To manage surface water runoff from the Proposed Development, it is proposed to discharge attenuated runoff from the Site to the existing public surface water sewer at the southeast corner of the Site along Richmond Road. Surface water storage will be provided within the Site to accommodate runoff from a 1% AEP event plus 20% climate change. A combination of SUDS (sustainable urban drainage) features and traditional drainage, such as gullies and pipes will be utilised to manage runoff from the Site.

Surface water runoff from the development will be attenuated to greenfield runoff (Qbar), in accordance with the recommendations of the 2005 Greater Dublin Strategic Drainage Study (GSDSDS). Surface water run-off from the surface water catchment will be controlled using a vortex flow control device (Hydrobrake or equivalent) on the surface water outlet from the catchment area.

A suite of SUDS measures will be included in the Proposed Development as per the recommendations of the GSDSDS. It is noted that SUDS measures are in no way included to mitigate potential impacts to downstream European sites. Surface water will be contained within the green/blue roof system and within an underground geo cellular attenuation system located in the south-eastern corner of the Site, under the proposed road. The green/blue roof area and the green/blue terrace areas will make up a total of 70% of the total roof/terrace area.

Footpath runoff in landscaped areas at ground level will be intercepted by the specified permeable paving or adjacent soft landscaping where impermeable paving is used. All surface water collected from roads will pass through an appropriate petrol interceptor and grease trap, complying with the provision of 2 treatment stages mentioned within requirements of the CIRIA document C697.

For severe (>1%AEP) storm events, an overland surface water strategy has been developed to ensure buildings are not flooded in the case of these storm events and appropriate free-board has been allowed for. It is intended that all surface water collected will pass through an appropriate petrol interceptor and grease trap.

5.2.4.2 Proposed Wastewater Management

There is an existing 900mm concrete foul sewer within Richmond Road. It is proposed to discharge foul flows from the Proposed Development to this existing sewer at the proposed Site entrance via an existing manhole at this location.

A pre-connection enquiry for the Proposed Development was issued to Irish Water and a copy of the Confirmation of Feasibility (COF) from Irish Water has been received. The design of the

foul water network was issued to Irish Water and a Statement of Design Acceptance was also received from same (See DBFL, 2023b for details).

5.3 Existing Environment

5.3.1 *Geology, Hydrology and Hydrogeology*

The Site is underlain by the Lucan Bedrock formation (LU) comprising dark limestone and shale (calp). The groundwater rock units underlying the area are classified as *Dinantian Upper Impure Limestones* (GSI, 2023). The sub-soil at the Site of the Proposed Development is classified as *Made Ground* (EPA, 2023).

Richmond Road and the surrounding area are located within the *Dublin* groundwater body, which has an overall Water Framework (WFD) status of *Good* and its risk of not achieving its status objectives under the WFD is under review according to the EPA (EPA, 2023). The Site of the Proposed Development is located on a Locally Important Aquifer - *Bedrock which is moderately productive only in local Zones (LI)*, with groundwater vulnerability in the area listed as *Low* (GSI, 2023).

The Site of the Proposed Development is located within the Liffey and Dublin Bay river catchment and the *River Tolka* sub catchment (Tolka_SC_020) and the *Tolka* (Tolka_060) sub basin. The *River Tolka* (EPA Code: 09T01) flows in a south-easterly ca.50m from the south-western boundary of the Site of the Proposed Development, and forms part of the Tolka Estuary Transitional Waterbody. This transitional waterbody has a WFD status of *Poor* and is *At risk* of not achieving its status objectives under the WFD (EPA, 2023). The River Tolka flows into the Tolka Estuary and Dublin Bay approximately 1.4km south-east of the Site of the Proposed Development. The Royal Canal is located ca.655m to the south of the Site where it passes Croke Park Stadium. The WFD status of the stretch of the Royal Canal (Code: IE_09_AWB_RCMLE) closest to the Site is *Good*, however, the risk of it not meeting its status objectives under the WFD is under review (EPA, 2023).

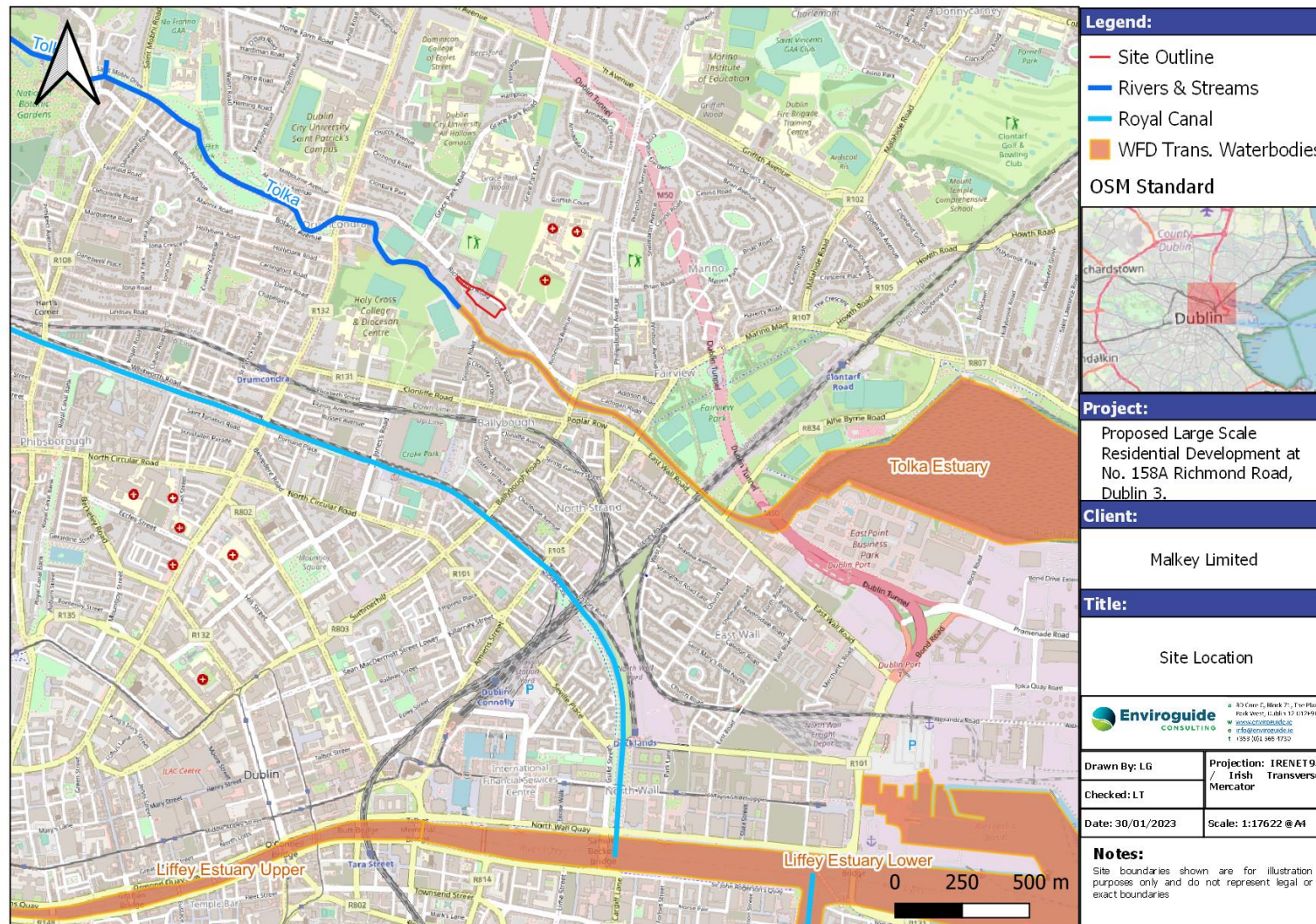


Figure 4. Site Location

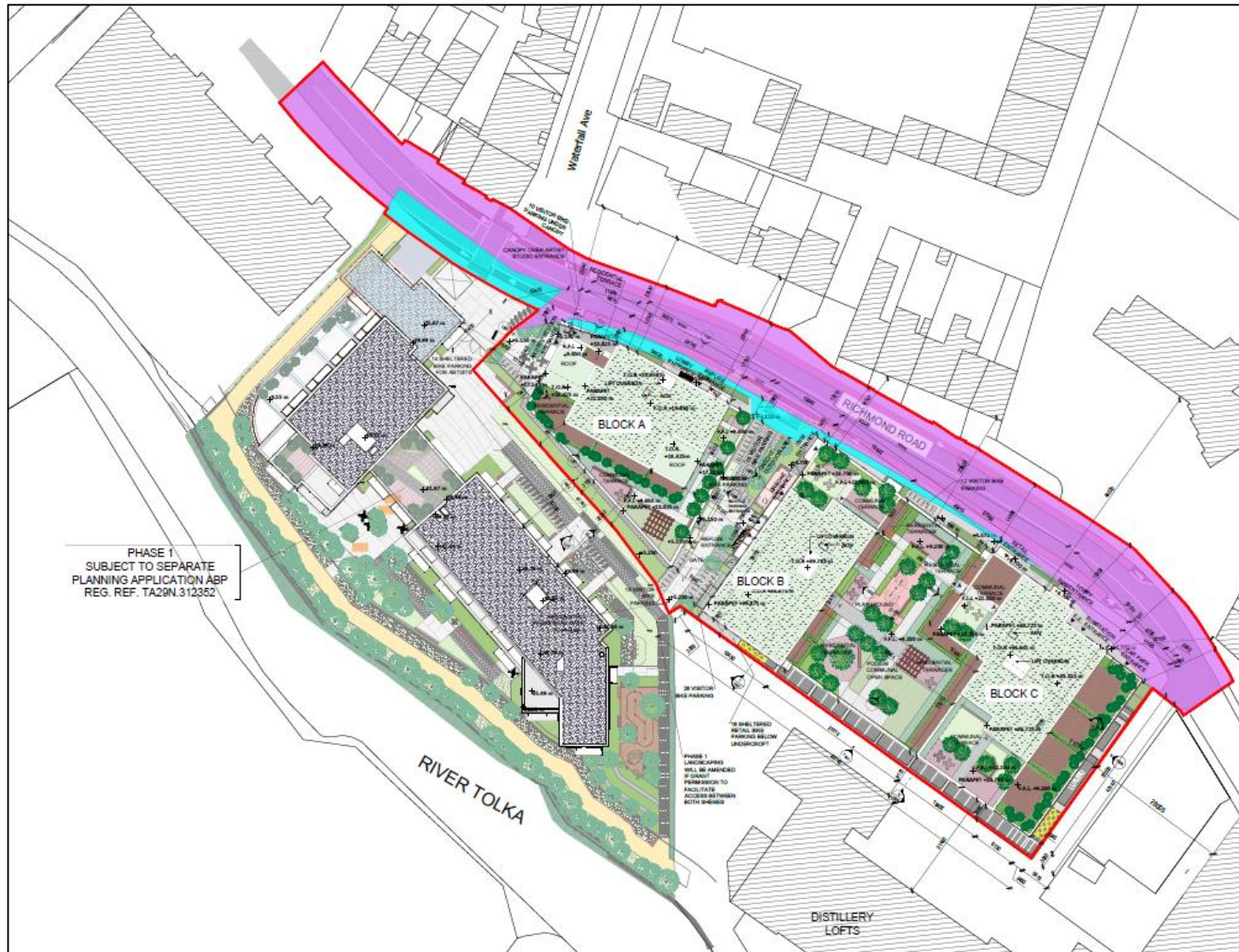


Figure 5. Proposed Site Layout (RKD Drwg: 22001-RKD-ZZ-00-DR-A-1002A, Rev: P5, Dated January 2023)

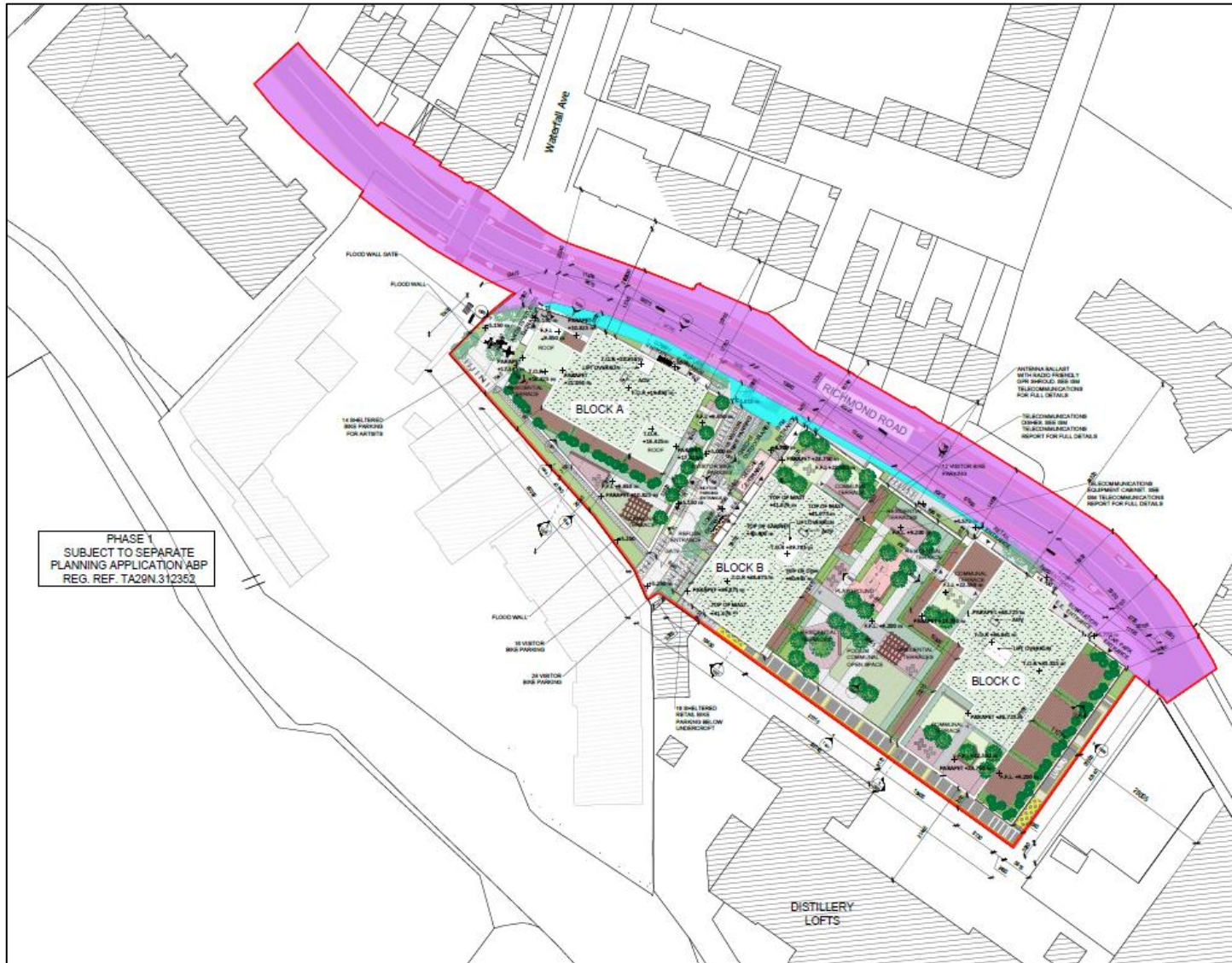


Figure 6. Proposed Site Layout if Phase 1 not approved (RKD Drwg: 22001-RKD-ZZ-00-DR-A-1002B, Rev: P5, Dated January 2023)

5.4 Identification of Relevant European Sites

The result of this preliminary screening concluded that there is a total of 9 SACs and 8 SPAs located within the 15km ZOI of the Proposed Development Site. The site name, corresponding code and QIs of each site are detailed in Table 2. The distances to each site listed are taken from the nearest possible point of the Proposed Development Site boundary to the nearest possible point of each European site.

Potential pathways for significant effects between the Site of the Proposed Development and five European sites within the ZOI were identified. The European sites linked to the Proposed Development include:

- South Dublin Bay SAC (000210)
- North Dublin Bay SAC (000206)
- South Dublin Bay and River Tolka Estuary SPA (004024)
- North Bull Island SPA (004006)
- Baldoyle Bay SPA (004016).

Table 2. European Sites within the precautionary ZOI of the Proposed Development and potential pathways between them. Those European sites for which a S-P-R link was identified are highlighted in green.

Site Name & Site Code	Qualifying Interests (*= priority habitats)	Distance to Site	Source- Pathway- Receptor
Special Areas of Conservation (SAC)			
000210 South Dublin Bay SAC	<ul style="list-style-type: none"> - [1140] Tidal Mudflats and Sandflats - [1210] Annual vegetation of drift lines - [1310] Salicornia and other annuals colonising mud and sand. - [2110] Embryonic shifting dunes 	3.9km	<p>Yes</p> <p>Hydrological connectivity via River Tolka:</p> <ul style="list-style-type: none"> (i) Possible inadvertent construction related surface water discharge to River Tolka. (ii) Foul water from the Operational phase of the Proposed Development which passes through Ringsend WwTP and ultimately discharges to Dublin Bay.
000206 North Dublin Bay SAC	<ul style="list-style-type: none"> - 1140] Tidal Mudflats and Sandflats - [1210] Annual Vegetation of Drift Lines - [1310] Salicornia Mud - [1330] Atlantic Salt Meadows - [1410] Mediterranean Salt Meadows - [2110] Embryonic Shifting Dunes - [2120] Marram Dunes (White Dunes) - [2130] Fixed Dunes (Grey Dunes) * 	4.3km	<p>The intervening distances between the Site and the SACs are sufficient to exclude the possibility of significant effects on the SACs arising from the emissions of noise, dust, pollutants and/or vibrations emitted from the Site during the Construction Phase; increased traffic volumes during the Construction Phase and associated emissions; and increased human presence at the Site during the Construction and Operational Phases.</p>

Site Name & Site Code	Qualifying Interests (*= priority habitats)	Distance to Site	Source- Pathway- Receptor
	<ul style="list-style-type: none"> - [2190] Humid Dune Slacks - [1395] Petalwort (<i>Petalophyllum ralfsii</i>) 		
000199 Baldoyle Bay SAC	<ul style="list-style-type: none"> - [1140] Tidal Mudflats and Sandflats - [1310] <i>Salicornia</i> Mud - [1330] Atlantic Salt Meadows - [1410] Mediterranean Salt Meadows 	8.3km	<p>No</p> <p>There are no impact pathways present between the Proposed Development and the habitats listed for these SACs.</p> <p>The SACs are located at considerable distances from the Proposed Development and are separated by the Howth Peninsula. No significant hydrological connectivity exists.</p> <p>The intervening distances between the Site and the SACs are sufficient to exclude the possibility of significant effects on the SACs arising from the emissions of noise, dust, pollutants and/or vibrations emitted from the Site during the Construction Phase; increased traffic volumes during the Construction Phase and associated emissions; and increased human presence at the Site during the Construction and Operational Phases.</p>
000205 Malahide Estuary SAC	<ul style="list-style-type: none"> - [1140] Mudflats and sandflats not covered by seawater at low tide - [1310] <i>Salicornia</i> and other annuals colonising mud and sand - [1330] Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) - [1410] Mediterranean salt meadows (<i>Juncetalia maritimi</i>) - [2120] Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) - [2130] Fixed coastal dunes with herbaceous vegetation (grey dunes) 	10.9km	
002193 Ireland's Eye SAC	<ul style="list-style-type: none"> - [1220] Perennial Vegetation of Stony Banks - [1230] Vegetated Sea Cliffs 	12.6km	
003000 Rockabill to Dalkey Island SAC	<ul style="list-style-type: none"> - [1170] Reefs - [1351] Harbour Porpoise (<i>Phocoena phocoena</i>) 	10.4km	<p>No</p> <p>There are no impact pathways present between the Proposed Development and this European Site.</p> <p>This site is located ca. 10.4km to the east of the Proposed Development, in the outer part of Dublin Bay. Any sediments/contaminants from the Proposed Development would not have the capacity to reach the SAC and cause significant impacts to either Reefs or Harbour Porpoise, due to the presence of a considerable marine buffer and the associated dilution and mixing potential therein.</p> <p>The distance of 10.4km between the Site and the SAC is sufficient to exclude the possibility of significant effects on the SAC arising from the emission of noise, dust, pollutants and/or vibrations emitted</p>

Site Name & Site Code	Qualifying Interests (*= priority habitats)	Distance to Site	Source- Pathway- Receptor
			<p>from the Site during the Construction and Operational Phases; increased traffic volumes during the Construction and Operational Phases and associated emissions; and increased human presence at the Site during the Construction and Operational Phases.</p>
<p>000202 Howth Head SAC</p>	<ul style="list-style-type: none"> - [1230] Vegetated Sea Cliffs - [4030] Dry Heath 	<p>9.9km North-east</p>	<p>No</p> <p>There are no impact pathways present between the Proposed Development and the habitats listed for this SAC.</p> <p>This site is located ca.9.9km to the north-east of the Proposed Development and is separated by the Dublin Bay. No significant hydrological connectivity exists.</p> <p>The distance of 9.9km between the Site and the SAC is sufficient to exclude the possibility of significant effects on the SAC arising from the emission of noise, dust, pollutants and/or vibrations emitted from the Site during the Construction and Operational Phases; increased traffic volumes during the Construction and Operational Phases and associated emissions; and increased human presence at the Site during the Construction and Operational Phases.</p>
<p>002122 Wicklow Mountains SAC</p>	<ul style="list-style-type: none"> - [3110] Oligotrophic Waters containing very few minerals. - [3130] Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or <i>Isoeto-Nanojuncetea</i> - [3160] Dystrophic Lakes - [4010] Wet Heath - [4030] Dry Heath - [4060] Alpine and Subalpine Heaths - [6130] Calaminarian Grassland - [6230] Species-rich <i>Nardus</i> Grassland* - [7130] Blanket Bogs (Active)* - [8110] Siliceous Scree - [8210] Calcareous Rocky Slopes 	<p>14.2km South</p>	<p>No</p> <p>There are no impact pathways present linking the Proposed Development and the habitats and populations of species listed for these SACs.</p> <p>These SACs are located in the Dublin and Wicklow mountains, a considerable distance to the south of the Proposed Development.</p> <p>The distances between the Site and these SACs are sufficient to exclude the possibility of significant effects on the SAC arising from the emission of noise, dust, pollutants and/or vibrations emitted from the Site during the Construction and Operational Phases; increased traffic volumes during the Construction and Operational Phases and associated</p>

Site Name & Site Code	Qualifying Interests (*= priority habitats)	Distance to Site	Source- Pathway- Receptor
	<ul style="list-style-type: none"> - [8220] Siliceous Rocky Slopes - [91A0] Old Oak Woodlands - [1355] Otter (<i>Lutra lutra</i>) 		emissions; and increased human presence at the Site during the Construction and Operational Phases.
001209 Glenasmole Valley SAC	<ul style="list-style-type: none"> - [6210] Orchid-rich Calcareous Grassland* - [6410] <i>Molinia</i> Meadows - [7220] Petrifying Springs* 	14.3km South-west	
Special Protected Area (SPA)			
004024 South Dublin Bay and River Tolka Estuary SPA	<ul style="list-style-type: none"> - [A046] Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) - [A130] Oystercatcher (<i>Haematopus ostralegus</i>) - [A137] Ringed Plover (<i>Charadrius hiaticula</i>) - [A141] Grey Plover (<i>Pluvialis squatarola</i>) - [A143] Knot (<i>Calidris canutus</i>) - [A144] Sanderling (<i>Calidris alba</i>) - [A149] Dunlin (<i>Calidris alpina</i>) - [A157] Bar-tailed Godwit (<i>Limosa lapponica</i>) - [A162] Redshank (<i>Tringa totanus</i>) - [A179] Black-headed Gull (<i>Chroicocephalus ridibundus</i>) - [A192] Roseate Tern (<i>Sterna dougallii</i>) - [A193] Common Tern (<i>Sterna hirundo</i>) - [A194] Arctic Tern (<i>Sterna paradisaea</i>) - [A999] Wetland and Waterbirds 	1.3km	<p>Yes</p> <p>Hydrological connectivity via River Tolka:</p> <ul style="list-style-type: none"> (i) Possible inadvertent construction related surface water discharge to River Tolka. (ii) Foul water from the Operational phase of the Proposed Development which passes through Ringsend WwTP and ultimately discharges to Dublin Bay. (iii) Potential collision risk/obstruction of flight paths involving certain SCI waterfowl species e.g., Light-bellied Brent Geese (<i>Branta bernicla hrota</i>) by Proposed buildings during Operational Phase. <p>The distances between the Site and these SPAs are sufficient to exclude the possibility of significant effects arising from the emission of noise, dust, pollutants and/or vibrations emitted from the Site during the Construction and Operational Phases; increased traffic volumes during the Construction and Operational Phases and associated emissions; and increased human presence at the Site during the Construction and Operational Phases.</p>
004006 North Bull Island SPA	<ul style="list-style-type: none"> - [A046] Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) - [A048] Shelduck (<i>Tadorna tadorna</i>) - [A052] Teal (<i>Anas crecca</i>) - [A054] Pintail (<i>Anas acuta</i>) - [A056] Shoveler (<i>Anas clypeata</i>) - [A130] Oystercatcher (<i>Haematopus ostralegus</i>) - [A140] Golden Plover (<i>Pluvialis apricaria</i>) 	4.3km	<p>The Site is made up of hardstanding and provides no <i>ex-situ</i> habitat for any of the waterbird/seabird species listed as SCIs for these SPAs.</p>

Site Name & Site Code	Qualifying Interests (*= priority habitats)	Distance to Site	Source- Pathway- Receptor
	<ul style="list-style-type: none"> - [A141] Grey Plover (<i>Pluvialis squatarola</i>) - [A143] Knot (<i>Calidris canutus</i>) - [A144] Sanderling (<i>Calidris alba</i>) - [A149] Dunlin (<i>Calidris alpina</i>) - [A156] Black-tailed Godwit (<i>Limosa limosa</i>) - [A157] Bar-tailed Godwit (<i>Limosa lapponica</i>) - [A160] Curlew (<i>Numenius arquata</i>) - [A162] Redshank (<i>Tringa totanus</i>) - [A169] Turnstone (<i>Arenaria interpres</i>) - [A179] Black-headed Gull (<i>Chroicocephalus ridibundus</i>) - [A999] Wetland and Water-birds 		
004016 Baldoyle Bay SPA	<ul style="list-style-type: none"> - [A046] Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) - [A048] Shelduck (<i>Tadorna tadorna</i>) - [A137] Ringed Plover (<i>Charadrius hiaticula</i>) - [A140] Golden Plover (<i>Pluvialis apricaria</i>) - [A141] Grey Plover (<i>Pluvialis squatarola</i>) - [A157] Bar-tailed Godwit (<i>Limosa lapponica</i>) - [A999] Wetland and Water-birds 	8.7km	<p>Yes</p> <p>(i) Potential collision risk/obstruction of flight paths involving certain SCI waterfowl species e.g., Light-bellied Brent Geese (<i>Branta bernicla hrota</i>) by Proposed buildings during Operational Phase.</p> <p>The SPA is located a considerable distance from the Proposed Development and is separated by the Howth Peninsula. No significant hydrological connectivity exists.</p> <p>The distances between the Site and this SPA is sufficient to exclude the possibility of significant effects arising from the emission of noise, dust, pollutants and/or vibrations emitted from the Site during the Construction and Operational Phases; increased traffic volumes during the Construction and Operational Phases and associated emissions; and increased human presence at the Site during the Construction and Operational Phases.</p> <p>The Site is made up of hardstanding and provides no <i>ex-situ</i> habitat for any of the</p>

Site Name & Site Code	Qualifying Interests (*= priority habitats)	Distance to Site	Source- Pathway- Receptor
			waterbird/seabird species listed as SCIs for this SPA.
004025 Malahide Estuary SPA	<ul style="list-style-type: none"> - [A005] Great Crested Grebe (<i>Podiceps cristatus</i>) - [A046] Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) - [A048] Shelduck (<i>Tadorna tadoma</i>) - [A054] Pintail (<i>Anas acuta</i>) - [A067] Goldeneye (<i>Bucephala clangula</i>) - [A069] Red-breasted Merganser (<i>Mergus serrator</i>) - [A130] Oystercatcher (<i>Haematopus ostralegus</i>) - [A140] Golden Plover (<i>Pluvialis apricaria</i>) - [A141] Grey Plover (<i>Pluvialis squatarola</i>) - [A143] Knot (<i>Calidris canutus</i>) - [A149] Dunlin (<i>Calidris alpina</i>) - [A156] Black-tailed Godwit (<i>Limosa limosa</i>) - [A157] Bar-tailed Godwit (<i>Limosa lapponica</i>) - [A162] Redshank (<i>Tringa totanus</i>) - [A999] Wetland and Waterbirds 	10.9km	<p>No</p> <p>There are no impact pathways present linking the Proposed Development and these SPAs.</p> <p>The SPAs are located a considerable distance from the Proposed Development and are separated by the Howth Peninsula. No significant hydrological connectivity exists.</p> <p>The distance between the Site and these SPAs is sufficient to exclude the possibility of significant effects arising from the emission of noise, dust, pollutants and/or vibrations emitted from the Site during the Construction and Operational Phases; increased traffic volumes during the Construction and Operational Phases and associated emissions; and increased human presence at the Site during the Construction and Operational Phases.</p>
004117 Ireland's Eye SPA	<ul style="list-style-type: none"> - [A017] Cormorant (<i>Phalacrocorax carbo</i>) - [A184] Herring Gull (<i>Larus argentatus</i>) - [A188] Kittiwake (<i>Rissa tridactyla</i>) - [A199] Guillemot (<i>Uria aalge</i>) - [A200] Razorbill (<i>Alca torda</i>) 	12.4km	<p>The Site provides no <i>ex-situ</i> habitat for SCI species listed for these SPAs.</p>
004113 Howth Head Coast SPA	<ul style="list-style-type: none"> - A188] Kittiwake (<i>Rissa tridactyla</i>) 	12.8km North-east	<p>No</p> <p>There are no impact pathways present linking the Proposed Development and the bird species (Kittiwake) listed for this SPA.</p> <p>This site is located ca.12.8km to the north-east of the Proposed Development and is separated by the Dublin Bay. No</p>

Site Name & Site Code	Qualifying Interests (*= priority habitats)	Distance to Site	Source- Pathway- Receptor
			<p>significant hydrological connectivity exists.</p> <p>The distance between the Site and this SPA is sufficient to exclude the possibility of significant effects arising from the emission of noise, dust, pollutants and/or vibrations emitted from the Site during the Construction and Operational Phases; increased traffic volumes during the Construction and Operational Phases and associated emissions; and increased human presence at the Site during the Construction and Operational Phases.</p> <p>The Site provides no <i>ex-situ</i> habitat for Kittiwake, a pelagic cliff dwelling bird and the only species listed as an SCI for this SPA.</p>
004172 Dalkey Islands SPA	<ul style="list-style-type: none"> - [A192] Roseate Tern (<i>Sterna dougallii</i>) - [A193] Common Tern (<i>Sterna hirundo</i>) - [A194] Arctic Tern (<i>Sterna paradisaea</i>) 	13.9km South-east	<p>No</p> <p>There are no impact pathways present linking the Proposed Development and populations of the Tern species listed for this SPA.</p> <p>This SPA is located a considerable distance to the south of the Proposed Development.</p> <p>The distance between the Site and this SPA is sufficient to exclude the possibility of significant effects arising from the emission of noise, dust, pollutants and/or vibrations emitted from the Site during the Construction and Operational Phases; increased traffic volumes during the Construction and Operational Phases and associated emissions; and increased human presence at the Site during the Construction and Operational Phases.</p> <p>The Tern species in question are strictly pelagic, except when breeding along the coast.</p>
004040 Wicklow Mountains SPA	<ul style="list-style-type: none"> - [A098] Merlin (<i>Falco columbarius</i>) - [A103] Peregrine (<i>Falco peregrinus</i>) 	14.5km South	<p>No</p> <p>There are no impact pathways present linking the Proposed Development and populations of bird species listed for this SPA.</p>

Site Name & Site Code	Qualifying Interests (*= priority habitats)	Distance to Site	Source- Pathway- Receptor
			<p>This SPA is located in the mountains situated a considerable distance to the south of the Proposed Development.</p> <p>The distance between the Site and this SPA is sufficient to exclude the possibility of significant effects arising from the emission of noise, dust, pollutants and/or vibrations emitted from the Site during the Construction and Operational Phases; increased traffic volumes during the Construction and Operational Phases and associated emissions; and increased human presence at the Site during the Construction and Operational Phases</p> <p>The Site provides no <i>ex-situ</i> habitat for Peregrine or Merlin.</p>

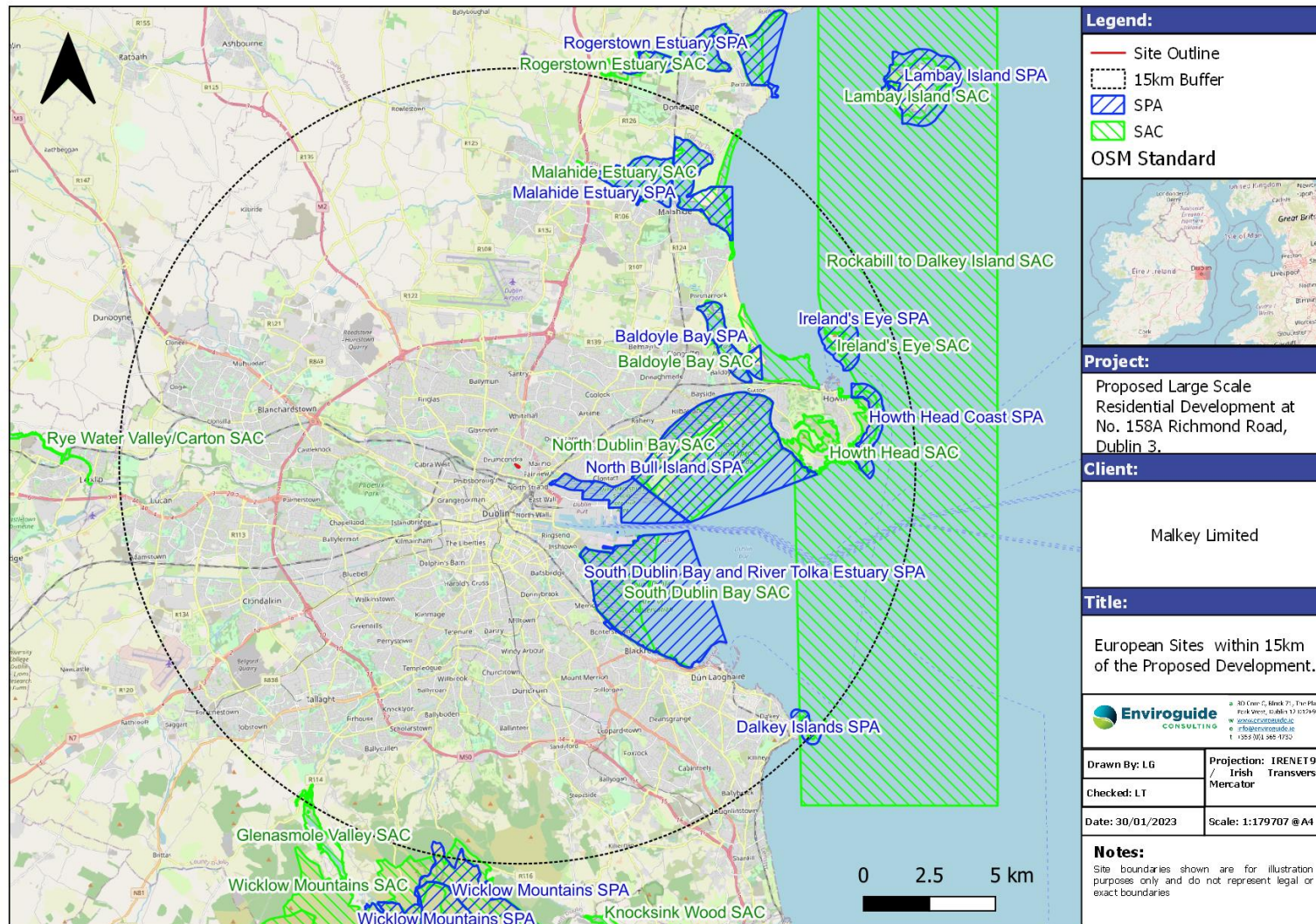


Figure 7. European sites within 15km of the Proposed Development.

5.5 Conservation Objectives

European sites will only be at risk from likely significant effects where a S-P-R link exists between the Proposed Development and the European site. As such, the remainder of this Screening report will focus on the European sites for which a S-P-R link of note was identified. Namely:

- South Dublin Bay SAC (000210)
- North Dublin Bay SAC (000206)
- South Dublin Bay and River Tolka Estuary SPA (004024)
- North Bull Island SPA (004006)
- Baldoyle Bay SPA (004016)

The overall aim of the Habitats Directive is to maintain or restore the favourable conservation status of habitats and species of community interest. These habitats and species are listed in the Habitats and Birds Directives and SACs and SPAs are designated to afford protection to the most vulnerable of them.

Site Specific Conservation Objectives (SSCO) have been compiled for the European sites listed above. SSCO aim to define favourable conservation conditions for habitats or species at a designated site.

The maintenance of habitats and species within European sites at favourable conservation conditions will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

The 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.
- The
- conservation status of its typical species is favourable.

The favourable conservation status of a species is achieved when:

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

5.6 Identification and Assessment of Likely Significant Effects

The following elements of the Proposed Development were assessed for their potential for likely significant effects on European sites.

Construction Phase (estimated duration: approx. 18 months)

- Uncontrolled releases of silt, sediments and/or other pollutants to air due to earth-works.
- Surface water run-off containing silt, sediments and/or other pollutants into the nearby Tolka River.
- Waste Generation during the construction phase comprising soils, construction and demolition wastes.
- Increased noise, dust and/or vibrations as a result of construction activity.
- Increased dust and air emissions from construction traffic.
- Increased lighting in the vicinity as a result of construction activity.

Operational Phase (estimated duration: indefinite)

- Foul water from the Proposed Development leading to increased loading on Ringsend wastewater treatment plant.
- Flooding events at the Site of the Proposed Development.
- Potential collision risk posed by proposed structures to SCI bird species.
- Increased lighting in the vicinity emitted from the Proposed Development.
- Increased human presence in the vicinity as a result of the Proposed Development.

5.6.1 Habitat Loss and Alteration

The project is not located within any European site and therefore there will be no direct loss or alteration of habitat as a result of the Proposed Development. The initial assessment of the quality and composition of the habitats present at the Site (hardstanding), along with the results of the Winter waterfowl/shorebird surveys conducted over the 2021/2022 winter, confirms that it is unsuitable as an *ex-situ* feeding/roosting resource for the SCI species listed for any SPAs.

5.6.2 Habitat/ Species Fragmentation

As there will be no direct habitat loss within any European sites or loss of any suitable *ex-situ* habitat, no habitat fragmentation will arise as a result of the Proposed Development.

5.6.3 Changes in Water Quality and Resource

5.6.3.1 Construction Phase Surface Water

The Construction Phase could lead to inadvertent emissions of contaminated surface water containing silt, cementitious materials and/or other pollutants from the Site, which could make their way to the River Tolka located ca.50m to the south. Although considered unlikely to occur, the potential for inadvertent surface water discharges to lead to likely significant effects on the Key indicator 'Changes in Water Quality and Resource' in downstream European sites cannot be fully ruled out, and as such, **this potential impact source warrants further assessment.**

5.6.3.2 Operational Foul Water & Ringsend WwTP

The Proposed Development will be served by separate foul water and surface water sewers during its Operational Phase. It is noted that there is a weak hydrological connection between the Site and European sites in Dublin Bay via this sewerage network, which will eventually be processed and treated at Ringsend WwTP prior to discharge to Dublin Bay.

The potential for foul water generated at the Site of the Proposed Development to reach Dublin Bay and result in significant effects to European sites is deemed negligible due to the following:

- The ongoing upgrade works to Ringsend WwTP which will increase the capacity of the facility from 1.6 million PE to 2.4 million PE (see section 5.7.3 below for more details). To provide context, the Proposed Development will generate 274 PE according to the project Engineering consultants DBFL.
- It is considered that significant effects on marine biodiversity and the European sites within Dublin Bay from the current operation of Ringsend WwTP are unlikely (see section 5.7.3 below for more details).
- The main area of dispersal of the treated effluent from Ringsend WwTP is in the Tolka Basin and around North Bull Island. South Dublin Bay is deemed largely unaffected by the effluent from the plant (Irish Water, 2018a).

It is therefore deemed that **there is no potential** for likely significant effects in the relevant Dublin Bay European sites to occur, as a result of foul waters generated at the Site during its operational lifetime.

5.6.3.3 *Operational Surface Water*

Once operational, surface water from the Site will be discharged to the existing public surface water sewer at the southeast corner of the Site along Richmond Road. Surface water storage will be provided within the Site to accommodate runoff from a 1% AEP event plus 20% climate change. A combination of SUDS (sustainable urban drainage) features and traditional drainage, such as gullies and pipes will be utilised to manage runoff from the Site. Surface water runoff from the development will be attenuated to greenfield runoff (Qbar), in accordance with the recommendations of the GDSDS. Surface water run-off from the surface water catchment will be controlled using a vortex flow control device (Hydrobrake or equivalent) on the surface water outlet from the catchment area (DBFL, 2023b).

The suite of SUDS measures will be included in the Proposed Development as per the recommendations of the Greater Dublin Strategic Drainage Study (GDSDS). It is noted that SUDS measures are in no way included to mitigate potential impacts to downstream European sites.

Even in the absence of SUDS measures, the potential for likely significant effects at European sites as a result of operational surface water run-off is deemed to be negligible, due to the following:

- Operational surface waters will discharge to existing storm sewer infrastructure located along Richmond Road and not directly to the River Tolka.
- The capacity for dilution and mixing that exists within the receiving stormwater infrastructure during periods of rainfall, and ultimately the River Tolka and Dublin Bay.
- Surface waters at the Site of the Proposed Development (what is a commercial-use site with vehicular yard) currently discharge unattenuated to the storm sewer along Richmond Rd. The Proposed Development will result in an improvement in the quality of surface water leaving the Site compared to the existing pre-development situation.

5.6.4 Disturbance and/or Displacement of Species

The Site supports no suitable *ex-situ* feeding/roosting habitat for the SCI species listed for any SPAs.

In a worst case scenario, where a significant pollution event were to occur during the Construction Phase of the Proposed Development, e.g., fuel spill reaching the Tolka, the potential for local displacement of SCI species in the South Dublin and River Tolka Estuary SPA due to a deterioration in water quality cannot be fully ruled out. As such, **this potential impact source warrants further assessment.**

5.6.4.1 Flight-line Obstruction and Collision Risk

As detailed in section 4.1.2, the potential for flight-line obstructions and collision risk to SCI species listed for the relevant SPAs in the absence of any mitigation is deemed to be **negligible**; based on the heights of the proposed structures, the physical appearance of these structures, and the results of focused flightline surveys. As such, the only potential impact pathway linking Baldoyle SPA to the Proposed Development (i.e., SCI collision/flight-line obstruction) is screened out and this SPA does not warrant further assessment as part of this AA Screening.

5.6.5 Changes in Population Density

Due to the uncertainty surrounding the potential for likely significant effects in terms of water quality in the South Dublin and River Tolka Estuary SPA, as discussed in section 5.6.3, the potential for changes in population densities of SCI species in such sites cannot be fully ruled out, and as such, **this warrants further assessment.**

5.7 Potential for In-combination Effects

5.7.1 Existing Granted Developments

A search of planning applications located within 1km of the Site of the Proposed Development was conducted using online planning resources such as the National Planning Application Database (NPAD) (MyPlan.ie) and Dublin City Council's Planning Application Map. This distance was deemed appropriate based on the location of the Site of the Proposed Development and the types of other developments present in the area.

Any planning applications listed as granted or decision pending from within the last five years were assessed for their potential to act in-combination with the Proposed Development and cause likely significant effects on the relevant European sites. Long-term developments granted outside of this time period were also considered where applicable.

It is noted that the majority of developments within the vicinity of the Site of the Proposed Development are applications granted more than 5 years ago and that have since been completed. **No developments** with the potential to result in likely significant in-combination effects to any European Site were identified. The larger, more recent applications are detailed below.

Table 3. Permitted developments and relevant developments awaiting decision located within the vicinity of the Proposed Development and an assessment of potential in-combination effects.

Planning Details	Distance from Site	Applicant Name	Summary of Development	Cumulative Impact Assessment
<p>Planning Ref: 2935/20</p> <p>An Bórd Pleanála Ref: ABP-308193-20</p> <p>ABP Decision: GRANT PERMISSION</p> <p>Decision Date: 08/04/2021</p> <p>Note: This decision has recently been quashed by the High court at Judicial Review stage. However, the scheme is still referenced as it is expected that a new application will be</p>	Ca. 360m south-west.	Pairc an Chrocaigh Cuideachta Faoi The-orainn Rathaiochta	Permission for a hotel development on Lands off Clonliffe Road (formerly part of the Holy Cross College Lands), Clonliffe Road, Drumcondra, Dublin 3. The subject site encompasses an area of 0.51 hectares. The development will consist of: the construction of a 8.55m - 24.05m (above ground level) part -2 to part -7 storey 8,485 sq.m. hotel building comprising: (i) a lobby, bar/restaurant, kitchen and staff facilities at ground floor level; (ii) ancillary meeting room facilities including a breakout area and office, at first floor level and a gym; (iii) 200 - bedrooms arranged over floors 1-6; and (iv) plant room, lift overrun, green roof and 19 no. photovoltaic panels enclosed by 3m screen at roof level. The hotel is served by 38 no. car parking spaces (including 2 no. universally accessible spaces), 2 no. motorcycle spaces and 28 no. bicycle spaces accessed via a new vehicular and pedestrian entrance from within the Clonliffe College lands to the northern boundary of the site which includes a turning circle for coaches. The development also includes the demolition of the existing boundary wall, repositioning of the gate piers and widening of the entrance on Clonliffe Road to facilitate two-way traffic, the creation of 2 no. pedestrian accesses off Clonliffe Road, and the construction of a replacement plinth boundary wall with railings along Clonliffe Road, landscaping, boundary treatments, street lighting, SuDS drainage,	<p>An AA Screening accompanied this planning application (NM Ecology, 2020) and confirmed no potential for significant effects on European sites.</p> <p>The Proposed Development will not have any in-combination effects involving this development.</p>

Planning Details	Distance from Site	Applicant Name	Summary of Development	Cumulative Impact Assessment
lodged in relation to those lands			<p>piped and other services, and all ancillary site development works necessary to facilitate the development (including the alteration of site levels and the upgrade of the proposed entrance from Clonliffe Road to include a pedestrian crossing and traffic lights). The development to be applied for is within the Holy Cross College landholding which includes a number of buildings on the Dublin City Council record of protected structures, including the following: the main College Building (1863); Holy Cross Church; the South Link Building; the Ambulatory; the Assembly Hall and the Red House, ref. 1901 and 1902 respectively, all at the Clonliffe College lands, Clonliffe Road, Drumcondra, Dublin 3</p>	
<p>Bórd Pleanála Ref: TA29N.312352.</p> <p>ABP Decision: Decision overdue from 22nd April 2022.</p>	<p>Adjacent to the west</p>	<p>Birkey Limited</p>	<p>Demolition of all existing structures on site and construction of 183 no. Build to Rent apartments and associated site works.</p>	<p>An AA Screening and NIS accompanied this planning application (Enviroguide, 2021) and confirmed no potential for significant effects on European Sites with mitigation also proposed.</p> <p>The Proposed Development will not have any significant in-combination effects on European sites involving this development.</p> <p>As it is proposed that the construction of both developments will take place concurrently, it can be expected that there will be combined noise pollution during the proposed works. However, this is not considered to represent a source of significant impacts for SCI species at Dublin Bay European sites; due to the minimum distance of 1.3km that</p>

Planning De- tails	Dis- tance from Site	Applicant Name	Summary of Development	Cumulative Impact Assessment
				<p>exists between the Site and these EU Sites [The <i>Waterbird Disturbance Mitigation Toolkit</i> (Cutts, Hemingway and Spencer, 2013) notes that noise generated at distances of over 500m are unlikely to cause disturbance impacts to waterbirds].</p> <p>As it is proposed that the construction of both developments will take place concurrently, there is the potential for combined inadvertent surface water inputs to the River Tolka. This is more of an issue of concern for the adjacent development (TA29N.312352) due to it being located directly alongside the Tolka and involving river bank works. The Proposed Development is at a remove of ca.50m from Tolka and is separated by established buildings and hard-standing, and as such, there is a lesser risk of significant surface water run-off to the Tolka.</p> <p>An NIS has been prepared for the adjacent development (TA29N.312352) which details the mitigation measures required to address construction phase surface waters. Likewise, an NIS is being prepared as part of this Proposed Development application and is provided under separate cover. This NIS includes measures to mitigate any potential surface water impacts arising during the construction works.</p>

5.7.2 Relevant Policies and Plans

In addition, the following Policies and Plans were reviewed and considered for possible in-combination effects with the Proposed Development.

- Dublin City Biodiversity Action Plan 2015 - 2020
- Dublin City Development Plan 2022-2028
- Dublin City Council Development Plan 2022-2028 Appropriate Assessment
- Dublin City Council Development Plan 2022-2028 Strategic Flood Risk Assessment
- Richmond Road Area Action Plan 2007

It is also noted that there is potential for proposed plans and projects within the Dublin City Development Plan 2022-2028 land area to have cumulative, negative impacts on conditions in Dublin Bay; via rivers, other surface water features, and foul waters treated at Ringsend WwTP and discharged into Dublin Bay (See section 5.7.3 below). However, the core strategy, policies and objectives of the Dublin City Development Plan have been developed to anticipate and avoid the need for developments that would be likely to significantly affect the integrity of any European site.

Furthermore, such developments are required to conform to the relevant regulatory provisions for the prevention of pollution, nuisance or other environmental effects likely to significantly affect the integrity of European sites. In addition, sustainable development including SUDS measures for all new developments; is inherent in the objectives of all development plans within the Greater Dublin Area, as per the Greater Dublin Regional Code of Practice for Drainage Works.

Upon examination of the above listed plans and projects within the general vicinity of the Proposed Development, and the above information regarding current Dublin drainage policy and requirements; it is concluded that there is **no possibility** for any significant cumulative impacts on European Sites.

5.7.3 Operation of Ringsend WwTP

This section addresses in more detail the general issue of potential cumulative impacts with Ringsend WwTP arising from the Operational Phase of the Proposed Development and other Developments, including future developments.

In summary, the impact of the Proposed Development and any future development has already been appropriately considered and assessed as part of the application process for the existing planning permissions pertaining to Ringsend WwTP.

The 2012 Ringsend WwTP application for planning permission (Ref. PL.29N.YA0010) was for a population equivalent of 2.4 million and was predicated on the findings of the 2005 GDSDS. The GDSDS set out the drainage requirements for the Greater Dublin Area (GDA) up to 2031. The GDSDS relied on the Regional Planning Guidelines (RPGs) and the National Spatial Strategy (NSS) in order to estimate the future projected population increases for the GDA. The studies indicated a predicted growth in population from 1.2 million in 2002 to just over 2 million in 2031 for the GDA region.

In June 2018 Irish Water applied for and subsequently received planning permission in 2019 for upgrade works to the Ringsend WwTP facility. The first phase of upgrade works to Ringsend WwTP was completed in December 2021, which increased the capacity of the plant by

400,000 P.E. These works, together with the future works permitted will ultimately increase the capacity of the facility from 1.6 million P.E. to 2.4 million P.E. by 2025 (Irish Water website: <https://www.water.ie/projects/local-projects/ringsend/>).

Therefore, both the initially permitted 2012 upgrade and the permitted 2019 revised upgrade (Ref. ABP-301798-18) for Ringsend Wastewater Treatment Plant take account of population growth up to 2.4 million population equivalents. Both applications were subject to EIA and therefore accompanied by an EIAR and accompanied by an AA Screening Report and NIS.

Notwithstanding the above, on an individual basis the Operational Phase of the Proposed Development will have an imperceptible effect on the habitats/species/qualifying interests listed within the relevant European sites specifically South Dublin Bay and River Tolka Estuary SPA (site code 004024), South Dublin Bay SAC (000210), North Bull Island SPA (004006), and North Dublin Bay SAC (000206), in terms of flows, relative to the total amount of waste water currently being received at Ringsend WwTP (the Proposed Development will generate 274 PE).

Under the heading of *"Potential impact – Discharge of treated effluent, impacts on water quality, effects on qualifying interests"*, the NIS (Irish Water, 2018b) for the Ringsend Wastewater Treatment Plant 2019 revised upgrade provides as follows:

*"In the operational phase, the proposed upgrade of the Ringsend WwTP Component will result in an increase in the plant capacity and also an improvement in the final effluent quality. This will result in a reduction in the licensed parameters discharged into the receiving water, with significantly reduced quantities in respect of ammonia and phosphorous."*¹

This NIS goes on to state as follows:

*"Overall no significant adverse effects on are foreseen and indeed, a slight positive effect is possible. Effects of discharge during the operational phase of the project from the upgrade project will therefore have imperceptible impact on habitats listed within these European sites."*²

In respect of this issue, the NIS concludes as follows:

*"Thus, there is no potential for in-combination impacts of any other plan and project with the Ringsend WwTP Component of the proposed Upgrade Project."*³

The EIAR for the ongoing upgrade at Ringsend WwTP (Irish Water, 2018a) also details the lack of any significant impacts to European sites observed as a result of the current storm-water overflow discharge levels at the WwTP. During storm events, once the capacities of the holding tanks are surpassed, the WwTP releases overflow via an outfall at Pigeon House Rd into the lower Liffey estuary.

The EIAR carried out in relation to said upgrade concluded that in the 'do nothing' scenario, i.e., wherein the upgrade is not carried out; the current existing levels of nutrient input to

¹ Section 4.5.1 at page 32

² Section 4.5.1 at page 33

³ Section 4.5.1 at page 34

Dublin Bay as a result of stormwater overflow from the WwTP, are not deemed to pose significant threats to the integrity of European sites located within or adjacent to Dublin Bay, or any of their Conservation Objectives regardless of said upgrade.

The EIAR report acknowledges that under the do-nothing scenario “*the areas in the Tolka Estuary and North Bull Island channel will continue to be affected by the cumulative nutrient loads from the river Liffey and Tolka and the effluent from the Ringsend WwTP*”, which could result in a decline in biodiversity and the deterioration of the biological status of Dublin Bay (Irish Water, 2018a). Nevertheless, these negative impacts of nutrient over-enrichment are considered “*unlikely*”. This is because historical data suggests that pollution in Dublin Bay has had little or no effect on the composition and richness of the benthic macroinvertebrate fauna. The EIAR notes that “*although a localised decline could occur, it is not envisaged to be to a scale that could pose a threat to the shellfish, fish, bird or marine mammal populations that occur in the area.*” Furthermore, the EIAR notes that significant impacts on waterbird populations foraging on invertebrates in Dublin Bay due to nutrient over-enrichment are “*unlikely*” to occur. What is important to note is that the do-nothing scenario predicts that nutrient and suspended solid loads from the WwTP will “*continue at the same levels and the impact of these loadings should maintain the same level of effects on marine biodiversity*” and that “*if the status quo is maintained there will be little or no change in the majority of the intertidal faunal assemblages found in Dublin Bay which would likely continue to be relatively diverse and rich across the bay.*”

Therefore, it can be concluded that likely significant effects on marine biodiversity and the European sites within Dublin Bay from the *current* operation of Ringsend WwTP are unlikely. Importantly, this conclusion is not dependent upon any future works to be undertaken at Ringsend. Thus, in the absence of any upgrading works, significant in-combination effects to European sites in this regard **are not deemed likely to arise**, and therefore likely significant effects involving foul waters produced by the Proposed Development also do not have the potential to occur.

It is therefore concluded that there is **no possibility for any significant cumulative impacts** to European sites involving the Proposed Development.

6 APPROPRIATE ASSESSMENT SCREENING CONCLUSION

The Proposed Development at Leyden's Wholesalers & Distributors, No. 158A Richmond Road, Dublin 3, D03 YK12 has been assessed for its potential to result in likely significant effects on European sites, with the following factors considered:

- The nature, size and location of the Proposed Development and possible impacts arising from the Construction and/or Operational Phase.
- The QIs and conservation objectives of the European sites.
- The potential for in-combination effects arising from other plans and projects.

The following table summarises the findings of this Screening Report in terms of the potential for likely significant effects to European sites for which a S-P-R impact pathway to the Proposed Development has been identified.

Table 4. Summary of the impact assessment of the Proposed Development on European sites that maintain a S-P-R pathway to same

Site	Habitat Loss / Alteration	Habitat or Species Frag-	Disturb-ance and/or Dis-placement	Changes in Popula-tion Den-sity	Changes in Water Quality and/or Re-	In-com-bina-tion ef-fects	Stage 2 AA Re-quired
SAC							
South Dublin Bay SAC [000210]	No	No	No	None	Possible Significant Ef-fects	None	YES
North Dublin Bay SAC [000206]	No	No	No	None	Possible Significant Ef-fects	None	YES
SPA							
South Dublin Bay and River Tolka Estuary SPA [004024]	No	No	Possible Significant Effects	Possible Significant Effects	Possible Significant Ef-fects	None	YES
North Bull Island SPA [004006]	No	No	No	None	Possible Signifi-cant Ef-fects	None	YES

In carrying out this AA screening, mitigation measures have not been taken into account. Standard best practice construction measures which could have the effect of mitigating any effects on any European sites have similarly not been taken into account.

In conclusion, upon the examination, analysis, and evaluation of the relevant information, and in applying the precautionary principle; it is concluded by the authors of this report that, on the basis of objective information, **the possibility may be excluded** that the Proposed Development will have any significant effect on the European sites listed below:

- Rockabill to Dalkey Island SAC [003000]

- Baldoyle Bay SAC [000199]
- Ireland's Eye SAC [002193]
- Howth Head SAC [000202]
- Malahide Estuary SAC [000205]
- Wicklow Mountains SAC [002122]
- Glenasmole Valley SAC [001209]
- Dalkey Islands SPA [004172]
- Wicklow Mountains SPA [004040]
- Baldoyle Bay SPA [004016]
- Howth Head Coast SPA [004113]
- Malahide Estuary SPA [004025]
- Ireland's Eye SPA [004117]

However, upon examination of the relevant information including in particular the nature of the potential impact pathways associated with the Proposed Development, **the possibility cannot be excluded** that the Proposed Development will have a likely significant effect on the European sites listed below:

- South Dublin Bay SAC [000210]
- North Dublin Bay SAC [000206]
- South Dublin Bay and River Tolka Estuary SPA [004024]
- North Bull Island SPA [004006]

As such, further assessment is required to establish whether any likely significant effects to the above four European sites may arise as a result of the Proposed Development. A NIS has been prepared and accompanies this application as a separate document.

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APPENDIX I – WINTER WATERBIRD SURVEY DATA (2021/22)

Site visit	Count	Date	Observer	Site Name	Start time	End time	Species	No.	Activity Code	Flight direction	Duration over site	Approx height	Wind	Cloud	Temp	Precip	Vis	Sunrise	Sunset	High tide 1	Low tide 1	Notes	
1	1	24/11/2021	BMcC	Richmond Rd	08:05	09:05	H.	1	FL	N	5s	25m		3	4	6	1	4	08:06	16:16	14:26	20:18	
1	2	24/11/2021	BMcC	Richmond Rd	09:05	09:25	CU	8	FL	W	10s	100m		3	4	7	1	4	08:06	16:16	14:26	20:18	
1	2	24/11/2021	BMcC	Richmond Rd	09:05	09:25	PB	16	FL	NW	12s	120m		3	4	7	1	4	08:06	16:16	14:26	20:18	RI flew NE over site @ 09:25
1	2	24/11/2021	BMcC	Richmond Rd	09:25	10:25	CU	2	FL	NW	10s	100m		3	4	7	3	4	08:06	16:16	14:26	20:18	
1	3	24/11/2021	BMcC	Richmond Rd	10:25	11:30	PB	11	FL	NW	15s	120m		3	4	7	1	4	08:06	16:16	14:26	20:18	
1	3	24/11/2021	BMcC	Richmond Rd	10:25	11:30	CU	5	FL	NW	11s	100m		3	4	7	1	4	08:06	16:16	14:26	20:18	
1	3	24/11/2021	BMcC	Richmond Rd	10:25	11:30	ET	1	FL	W	4s	30m		3	4	7	1	4	08:06	16:16	14:26	20:18	
1	4	24/11/2021	BMcC	Richmond Rd	11:30	12:30								3	4	7	4	3	08:06	16:16	14:26	20:18	
1	5	24/11/2021	BMcC	Richmond Rd	12:30	13:15								3	4	7	2	4	08:06	16:16	14:26	20:18	
1	6	24/11/2021	BMcC	Richmond Rd	13:15	14:05								3	4	7	2	4	08:06	16:16	14:26	20:18	
2	1	10/12/2021	BMcC	Richmond Rd	10:10	11:10								4	1	4	1	4	07:58	16:06	16:22	09:28	
2	2	10/12/2021	BMcC	Richmond Rd	11:10	12:10	CU	2	FL	E	10s	100m		4	1	4	1	4	07:58	16:06	16:22	09:28	
2	2	10/12/2021	BMcC	Richmond Rd	11:10	12:10	MA	4	FL	S	22s	25m		4	1	4	1	4	07:58	16:06	16:22	09:28	
2	2	10/12/2021	BMcC	Richmond Rd	11:10	12:10	PB	83	FL	E	14s	150m		4	1	4	1	4	07:58	16:06	16:22	09:28	
2	3	10/12/2021	BMcC	Richmond Rd	12:10	13:10	PB	10	FL	E	12s	150m		5	1	5	1	4	07:58	16:06	16:22	09:28	
2	4	10/12/2021	BMcC	Richmond Rd	13:10	14:10	CU	1	FL	E	10s	75m		5	1	6	1	4	07:58	16:06	16:22	09:28	
2	5	10/12/2021	BMcC	Richmond Rd	14:10	15:10								5	1	6	1	4	07:58	16:06	16:22	09:28	
2	6	10/12/2021	BMcC	Richmond Rd	15:10	16:10	PB	14	FL	E	11s	130m		5	1	6	1	4	07:58	16:06	16:22	09:28	
3	1	07/01/2022	BMcC	Richmond Rd	10:30	11:30	PB	16	FL	NW	15s	150m		4	4	3	3	2	08:37	16:24	15:00	20:50	
3	2	07/01/2022	BMcC	Richmond Rd	11:30	12:30								4	4	3	4	2	08:37	16:24	15:00	20:50	
3	3	07/01/2022	BMcC	Richmond Rd	12:30	13:30								4	4	2	4	2	08:37	16:24	15:00	20:50	
3	4	07/01/2022	BMcC	Richmond Rd	13:30	14:30								4	4	2	2	4	08:37	16:24	15:00	20:50	
3	5	07/01/2022	BMcC	Richmond Rd	14:30	15:30	CU	2	FL	SW	7s	75-100m		4	4	2	1	4	08:37	16:24	15:00	20:50	
3	6	07/01/2022	BMcC	Richmond Rd	15:30	16:30	MA	1	FL	W	5s	50m		4	2	2	1	4	08:37	16:24	15:00	20:50	
4	1	21/01/2022	BMcC	Richmond Rd	08:30	09:30	PB	32	FL	NW	15s	70-100m		3	4	6	1	4	08:24	16:47	13:42	19:31	
4	2	21/01/2022	BMcC	Richmond Rd	09:30	10:30								3	4	7	1	4	08:24	16:47	13:42	19:31	
4	3	21/01/2022	BMcC	Richmond Rd	10:30	11:30								3	4	7	1	4	08:24	16:47	13:42	19:31	
4	4	21/01/2022	BMcC	Richmond Rd	11:30	12:30	PB	1	FL	SE	12s	70-100m		3	4	7	1	4	08:24	16:47	13:42	19:31	
4	5	21/01/2022	BMcC	Richmond Rd	12:30	13:30								3	4	7	1	4	08:24	16:47	13:42	19:31	
4	6	21/01/2022	BMcC	Richmond Rd	13:30	14:30	MA	2	FL	S	7s	30m		3	4	7	1	4	08:24	16:47	13:42	19:31	
4	6	21/01/2022	BMcC	Richmond Rd	13:30	14:30	H.	1	FL	SE	10s	50-75m		3	4	7	1	4	08:24	16:47	13:42	19:31	
5	1	04/02/2022	BMcC	Richmond Rd	08:00	09:00	H.	1	FL	SE	12s	50m		4	4	3	1	4	08:02	17:13	13:49	19:36	
5	1	04/02/2022	BMcC	Richmond Rd	08:00	09:00	PB	12	FL	NW	10s	150m		4	4	3	1	4	08:02	17:13	13:49	19:36	
5	2	04/02/2022	BMcC	Richmond Rd	09:00	10:00	MA	2	FL	W	6s	30m		4	3	4	2	4	08:02	17:13	13:49	19:36	
5	3	04/02/2022	BMcC	Richmond Rd	10:00	11:00	PB	1	FL	SE	12s	150m		5	1	4	1	4	08:02	17:13	13:49	19:36	
5	4	04/02/2022	BMcC	Richmond Rd	11:00	12:00	MA	3	FL	W	5s	20m		5	1	5	1	4	08:02	17:13	13:49	19:36	
5	5	04/02/2022	BMcC	Richmond Rd	12:00	13:00								5	1	6	1	4	08:02	17:13	13:49	19:36	
5	6	04/02/2022	BMcC	Richmond Rd	13:00	15:00								5	1	6	1	4	08:02	17:13	13:49	19:36	
6	1	18/02/2022	BMcC	Richmond Rd	11:40	12:40	PB	18	FL	E	15s	150m		11	4	3	2	4	07:34	17:41	12:41	18:30	
6	2	18/02/2022	BMcC	Richmond Rd	12:40	13:40								9	3	4	2	4	07:34	17:41	12:41	18:30	
6	3	18/02/2022	BMcC	Richmond Rd	13:40	14:40	H.	1	FL	W	12s	20m		8	1	4	1	4	07:34	17:41	12:41	18:30	
6	4	18/02/2022	BMcC	Richmond Rd	14:40	15:40								8	4	6	4	4	07:34	17:41	12:41	18:30	
6	5	18/02/2022	BMcC	Richmond Rd	15:40	16:40	MA	2	FL	W	10s	10m		5	2	6	2	4	07:34	17:41	12:41	18:30	
6	6	18/02/2022	BMcC	Richmond Rd	16:40	17:40	PB	44	FL	E	10s	150-200m		6	1	5	1	4	07:34	17:41	12:41	18:30	
7	1	11/03/2022	BMcC	Richmond Rd	12:25	13:25	MA	2	FL	W	10s	25m		4	4	9	4	3	06:46	18:21	17:02	10:22	
7	2	11/03/2022	BMcC	Richmond Rd	13:25	14:25	MA	4	FL	W	6s	10m		3	4	11	4	3	06:46	18:21	17:02	10:22	
7	2	11/03/2022	BMcC	Richmond Rd	13:25	14:25	PB	5	FL	E	15s	100m		3	4	11	4	3	06:46	18:21	17:02	10:22	
7	3	11/03/2022	BMcC	Richmond Rd	14:25	15:25								3	4	11	1	4	06:46	18:21	17:02	10:22	
7	4	11/03/2022	BMcC	Richmond Rd	15:25	16:25	PB	125	FL	E	12s	150m		4	4	12	1	4	06:46	18:21	17:02	10:22	
7	5	11/03/2022	BMcC	Richmond Rd	16:25	17:25								4	4	12	1	4	06:46	18:21	17:02	10:22	
7	6	11/03/2022	BMcC	Richmond Rd	17:25	18:25								4	4	11	1	4	06:46	18:21	17:02	10:22	
8	1	05/04/2022	BMcC	Richmond Rd	07:05	08:05								5	4	9	1	4	06:46	20:07	15:03	08:28	
8	2	05/04/2022	BMcC	Richmond Rd	08:05	09:05	MA	3	FL	E	10s	20m		5	4	9	1	4	06:46	20:07	15:03	08:28	
8	3	05/04/2022	BMcC	Richmond Rd	09:05	10:05								6	4	10	1	4	06:46	20:07	15:03	08:28	
8	4	05/04/2022	BMcC	Richmond Rd	10:05	11:05								5	4	11	1	4	06:46	20:07	15:03	08:28	
8	5	05/04/2022	BMcC	Richmond Rd	11:05	12:05	MA	4	FL	NE	12s	15m		5	4	11	1	4	06:46	20:07	15:03	08:28	
8	6	05/04/2022	BMcC	Richmond Rd	12:05	13:05								6	4	12	1	4	06:46	20:07	15:03	08:28	

NOTE: HG, BH & CM recorded on all counts on each of the 8 site visits.

Mostly in flight over the Site but occasionally foraging on the ground and roof of the Site.