

**Kildare County Council**

# Draft Collinstown Strategic Employment Lands Masterplan

Screening for Appropriate Assessment Report

Reference:

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Job number

**Ove Arup & Partners Ireland Limited**  
50 Ringsend Road  
Dublin 4  
D04 T6X0  
Ireland  
[arup.com](http://arup.com)

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		<b>Name</b>	Lorraine Guerin	Hannah Sheridan
		<b>Signature</b>		Ailsa Doyle
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		<b>Name</b>	Lorraine Guerin	Ailsa Doyle
		<b>Signature</b>	<i>Lorraine Guerin</i>	<i>Ailsa Doyle</i>
				<b>Approved by</b>
				Ailsa Doyle
				<i>Ailsa Doyle</i>
		<b>Filename</b>		
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			<b>Prepared by</b>	<b>Checked by</b>
		<b>Name</b>		
		<b>Signature</b>		

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# 1. Introduction

## 1.1 Overview

This Screening for Appropriate Assessment (AA) report has been prepared by Ove Arup and Partners Ltd (Arup) on behalf of Kildare County Council (KCC) in connection with the draft Collinstown Strategic Employment Lands Masterplan (hereafter referred to as the ‘draft Masterplan’).

Article 6(3) of the Habitats Directive requires that any plan or project, which is not directly connected with, or necessary to the management of a European site, but would be likely to have a significant effect, either alone or in-combination with other plans or projects, should be subject to an Appropriate Assessment (AA).

## 1.2 Statement of Purpose

This Screening for AA Report has been prepared to provide information to the competent authority<sup>1</sup> regarding the potential for ‘Likely Significant Effects’ (LSE) of the draft Masterplan, on European sites within the Zone of Influence (ZoI) of the draft Masterplan.

## 1.3 Legislative Context

Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (the ‘Habitats Directive’) provides for the legal protection of over a thousand species, including mammals, reptiles, amphibians, fish invertebrates, and plants, and 230 characteristic habitat types, with Articles 3 to 9 providing protection to the EU wide network of sites known as the Natura 2000 site network. Natura 2000 is a network of protected sites comprising Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) (referred to as ‘European sites’ within this report). SACs are protected sites designated under the Habitats Directive, while SPAs are protected sites designated under Directive 2009/147/EC on the conservation of wild birds (the ‘Birds Directive’).

Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to affect European sites. Article 6(3) establishes the requirement for AA, while Article 6(4) sets out the Alternative Solutions, Imperative Reasons of Overriding Public Interest (IROPI) and compensatory measures where Likely Significant Effects (LSE) on European sites cannot be excluded.

The Habitats Directive has been transposed into Irish law by the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011) (as amended), and by Part XAB of the Planning and Development Act, 2000 (as amended). In the context of the draft Masterplan, the governing legislation is principally Part XAB of the Planning and Development Act, 2000 (as amended).

## 1.4 Relationship with the SEA Directive

The preparation of this Screening for AA Report has been conducted in parallel with the requirements of Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment (the ‘SEA Directive’), as transposed into Irish law by the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. No. 436/2004) and the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004. Article 3(2)(b) of the SEA Directive expressly links to AA, stating that “*Subject to paragraph 3, an environmental assessment shall be carried out for all plans and programmes, [...] (b) which, in view of the likely effect on sites, have been determined to require an assessment pursuant to Article 6 or 7 of Directive 92/43/EEC [the Habitats Directive]*”.

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<sup>1</sup> Section 177S(1) of the Planning and Development Act 2000 (as amended) states that “*A competent authority, in performing the functions conferred on it by or under this Part, shall take appropriate steps to avoid in a European site the deterioration of natural habitats and the habitats of species as well as the disturbance of the species for which the site has been designated, insofar as such disturbance could be significant in relation to the objectives of the Habitats Directive*”.

## 1.5 Statement of Competency

The statements of competencies for the contributing authors to this Screening for AA report are provided below:

Lorraine Guerin is a Senior Consultant at Arup. She holds a BSc (Hons) degree in Ecology from University College Cork, and a MSc in Environmental Management & Policy from Lund University, Sweden. Lorraine has over five years of experience in environmental consultancy, including the preparation and coordination of environmental assessment reports in relation to Environmental Impact Assessment (EIA) and AA. She has prepared and reviewed EIA and AA Screening Reports, and Environmental Impact Assessment Reports for a range of public and private projects.

Hannah Sheridan has a BSc (Hons) in Marine Science and an MSc in Marine Planning for Sustainable Development and is a Qualifying Member of CIEEM. Hannah has four years of experience working as an ecologist in public and private sectors and has prepared Screening for Appropriate Assessments, Natura Impact Statements/Reports and biodiversity chapters for EIARs across a number of projects and plans in the Republic of Ireland and Northern Ireland.

Sinead Whyte is an Associate Director with Arup and has over 25 years' experience as an Environmental Consultant. She holds a MSc in Experimental Physics and is Chartered for over 17 years with the Institute of Water and Environmental Management. She has been involved in environmental assessments of numerous developments including of infrastructure, mixed use and residential development projects.

## 1.6 Report Structure

This report is structured as follows:

- Section 2 provides an overview of the draft Masterplan
- Section 3 outlines the AA process and provides important definitions
- Section 4 outlines the guidance, data source and methodology used to inform the report
- Section 5 sets out the information required for the AA screening assessment, using the Source-Pathway-Receptor model
- Section 6 provides a summary and conclusion.

# 2. The Draft Masterplan

## 2.1 Overview

KCC has prepared the draft Masterplan for the Collinstown Strategic Employment Lands in Leixlip, Co. Kildare.

The draft Masterplan will inform future development, in that KCC will have regard to the provisions of the draft Masterplan when assessing development proposals in the subject and adjoining lands, through the development management process. It will ensure that development is carried out in a plan-led, sequential and integrated manner, linked to the delivery of key infrastructural requirements and service supports, including public transport provision along with road network and water services improvements. The draft Masterplan will, therefore, provide for the phasing of development to prevent piecemeal or haphazard development within the landbank, which could undermine its potential to contribute to the long-term economic development of both north-east Co. Kildare and the Dublin Metropolitan Area as a whole.

The stated primary **purpose** of the draft Masterplan is to provide a comprehensive design response which expands on the Vision for the Collinstown Strategic Employment Lands, as outlined in the Leixlip LAP, in order to advance the physical development of these strategic lands.

The stated **vision** of the draft Masterplan is to guide the development of a high-quality, attractive and sustainable business campus environment that is characterised by comprehensive pedestrian/cycle friendly infrastructure, which also facilitates the efficient functioning of business and enterprise activities within the zone; and that the implementation of best practice urban design principles within the campus will assist in the long-term economic viability and vibrance of the area.

The draft Masterplan seeks to achieve the following **aims**:

- Deliver high quality planning and design outcomes on the Collinstown lands in the creation of a well-connected, attractive and sustainable business campus that is of high architectural quality design, construction and finish, featuring a fully integrated, responsive and well-defined series of open spaces.
- Contribute to the successful implementation of the Metropolitan Area Strategic Plan (Chapter 5, RSES), in supporting the role and function of Dublin as a city of international scale.
- Assist in the implementation of the Kildare County Development Plan 2023-2029 and the Leixlip LAP with regard to their respective economic development objectives.
- Establish sustainable transport patterns within the site by maximising opportunities in terms of access and usage of high frequency and high-capacity public transportation investment projects such as DART+ West, the proposed new railway station at Collinstown, the rail- based Park and Ride facility and BusConnects.
- Maximise active travel opportunities by ensuring the development of a comprehensive and high-quality pedestrian and cyclist infrastructure within the Collinstown lands and provide for enhanced access to the Royal Canal Greenway.
- Seek to protect and enhance the overall green infrastructure network within the lands and provide for a comprehensive surface water management scheme which prioritises best practice nature-based drainage (NBS) solutions.
- Ensure that any development within the lands protects the integrity and carrying capacity of the nearby Junction 6 of the M4 Motorway, in keeping with the provisions of the *Spatial Planning and National Roads Guidelines for Planning Authorities* (DoECLG, 2012).

Envisaged **outcomes** are linked to the above-listed aims, as set out in Appendix A. The draft Masterplan also sets out **design principles and priorities** as listed in Appendix A. As noted in the delivery schedule of the draft Masterplan, development of the draft Masterplan area is expected to be carried out over a timeframe of 6+ years.



**Key**

• Road Improvement Objective		• Existing Building	
• Active Travel Route		• Primary building frontage	
• Train Station Location		• Civic Plaza	
• Park & Ride (options)		• Recreation/Amenity	
• Open Space/Amenity/Sports		• Existing vegetation retained	
• Equipped/Designated Play Space		• Landscape reinforcement	
• Business and Technology Use		• Railway Line	

Figure 4.1: Collinstown Masterplan Concept Plan

Figure 1 Collinstown Masterplan Concept Plan (extracted from draft Masterplan)



## 2.2 Policy Context

The preparation of a Masterplan for the subject lands is a specific objective of the *Leixlip Local Area Plan 2020-2023* (as extended to 2026) (the ‘Leixlip LAP’) and also an action of the *Kildare County Development Plan 2023-2029* (the ‘Development Plan’).

### 2.2.1 Kildare County Development Plan 2023-2029

The Development Plan identifies Leixlip as a ‘Self- sustaining Growth Town’, which are described as towns with “*a moderate level of jobs and services. Such settlements include sub-county market towns and commuter towns with good transport links and capacity for continued commensurate growth to become more self-sustaining*”. It also identifies an Economic Cluster within Co. Kildare, which includes Leixlip, and which corresponds to the Metropolitan Strategic Plan area within Kildare, as identified in the *Dublin Metropolitan Area Spatial Plan* in the *Regional Spatial and Economic Strategy* (RSES). The economic development hierarchy for the County explicitly identifies the Collinstown site as a strategic development area to strengthen the employment base for north Co. Kildare, and it includes a range of objectives seeking to promote economic development and promote sustainable mobility within the Collinstown lands. Action UD A2 of the Development Plan provides for the option of preparing a masterplan or urban design framework for Collinstown. Objective COL 1.1 of the Development Plan also relates to the requirement to prepare a masterplan for Collinstown.

A Habitats Directive AA Natura Impact Report (NIR) was prepared in respect of the Development Plan, including the provisions of the Development Plan relating to the development of the Collinstown lands, which concluded that “*the Plan itself, subject to it securing the mitigation detailed in this report, will not adversely affect the integrity of any European Site either alone or in combination with other plans or projects*”.

### 2.2.2 Leixlip Local Area Plan 2020-2023 (as extended to 2026)

The Leixlip LAP contains a range of provisions relating to the development of the Collinstown Strategic Employment Lands, including objective EDT1.1 which seeks ‘*to promote enterprise and employment development at Collinstown, focusing on the high tech, bio tech, research and development, ICT and manufacturing sectors*’ and objective COL 1.1:

*“To require the preparation of a masterplan (to be developed with relevant traffic/transport assessments) for Collinstown giving full consideration to the type and intensity of development relative to future transport options and in particular public transport provision (the potential for a rail station at Collinstown, park and ride facilities, bus network revisions and the principles and priorities set out in Section 12.6.3) and to work with the NTA in this regard. Individual applications for smaller sections of these lands will not be considered until such time as a single masterplan has been prepared and agreed in writing with the Planning Department of Kildare County Council.”*

Under the LAP, the entirety of the lands at Collinstown are zoned ‘*Q: Enterprise and Employment*’ to ‘*provide for and facilitate the provision of high-job generating uses*’ (Figure 2). Chapter 12 of the LAP includes specific reference to the development of the Collinstown site and sets out an overarching vision for the lands along with more detailed provisions relating to Design Principles and Priorities.

Objective GI1.1 of the LAP requires that development within Masterplan areas shall be subject to site specific ecological surveys as part of the planning consent process. Objective GI1.2 requires that all identified high value hedgerows be retained and integrated into the design of new developments, where appropriate.

The draft Masterplan has also been prepared in the context of other key policies, including the *Kildare 2024 – Economic Development Strategy*, the *National Planning Framework* (NPF) and the *Greater Dublin Area Transport Strategy 2022-2042*.

A Habitats Directive AA NIR was prepared in respect of the Leixlip LAP in 2019, including the provisions of the LAP related to the development of the Collinstown lands. It concluded that “*the Draft LAP will not have a significant adverse effect on the integrity of the Natura 2000 network either in isolation or in combination with other plans and projects acting in the same area*”.

Screening for AA was subsequently undertaken in respect of a proposed amendment (Amendment No. 1) to the LAP (as extended to 2026), which concluded that no further assessment would be required. A subsequent addendum to the Screening for AA Report in respect of changes to Amendment No. 1 concluded that “the 18 changes proposed by KCC to the Amendment consist of minor, non-material alterations which include, but are not limited to, textual changes/ clarifications, the removal of text, and the expansion on existing content in the LLAP” and “As the proposed alterations do not constitute material change, they do not change the conclusion made in the AA Screening Report of Amendment No.1 (Arup, 2023)”.

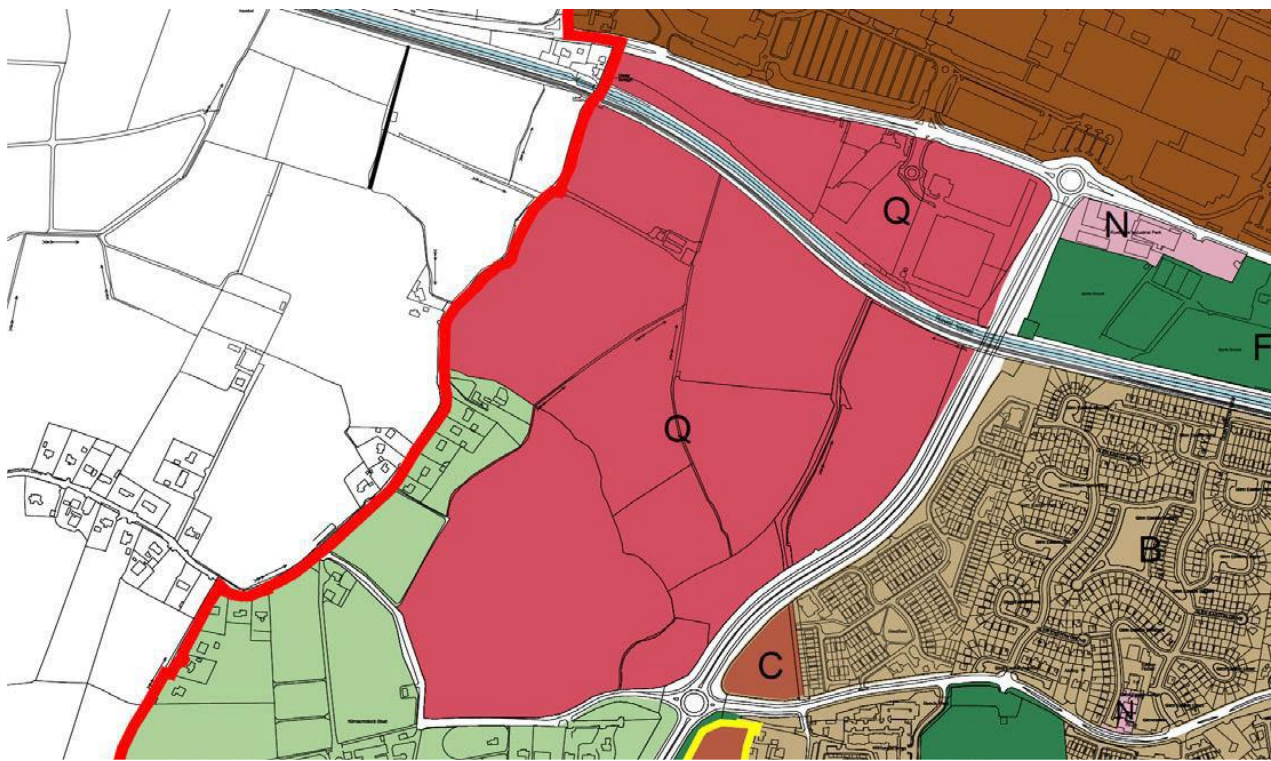


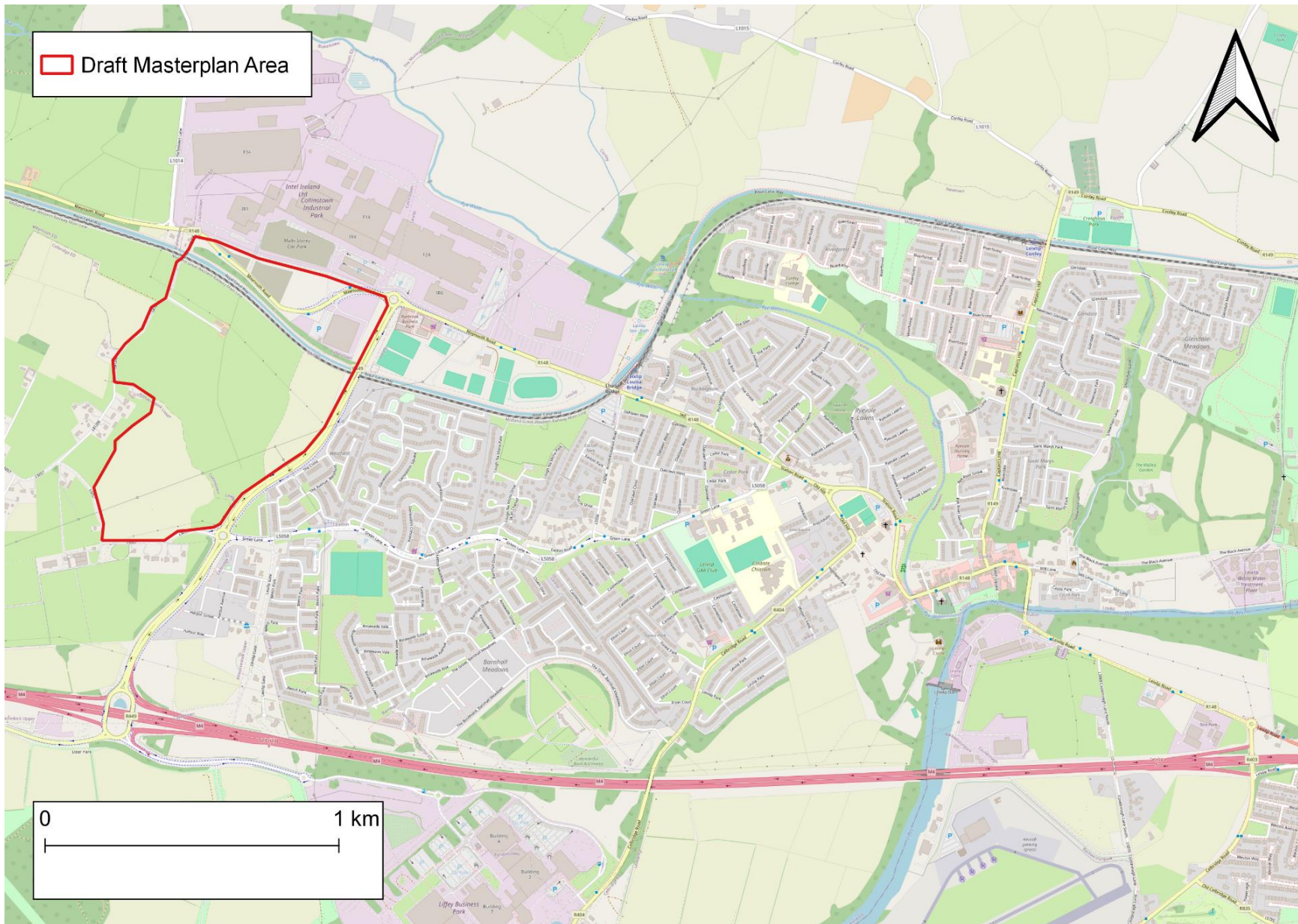
Figure 2 Extract from Leixlip LAP Land Use Zoning Objectives Map

### 2.3 Draft Masterplan Area

The Collinstown Strategic Employment Lands (Figure 3) are located in north-eastern Co. Kildare, 2.5 km south-west of Leixlip town centre, 4.4 km east of Maynooth town centre, 15 km west of Dublin city centre and close to the borders of Counties Meath and Dublin.

The Collinstown Strategic Employment land bank comprises 56.9 hectares that is located directly to the south of the Intel manufacturing facility. The lands are transected by the Royal Canal and the Dublin-Sligo railway line which currently form an impermeable barrier within the site. The lands to the north of the Canal are partially developed and currently accommodates a number of warehousing facilities and ‘spin-off’ logistical operations associated with Intel and are accessed from the R148 regional road which forms the northern boundary of the lands. The majority of the subject land bank is located south of the railway line and are agricultural in nature, featuring a generally flat topography.

The draft Masterplan notes that a green infrastructure mapping survey was carried out in 2015 to inform the preparation of the Leixlip LAP. This survey partially covered the Collinstown Strategic Employment Lands, and identified a mix of low, moderate and high value hedgerows at the site. A review of recent aerial imagery of the site indicates that the draft Masterplan area is predominantly greenfield and agricultural in nature, comprised of a mixture of pastoral and arable agricultural land traversed by a network of hedgerows/treelines.



**Figure 3 Draft Masterplan Area (© OpenStreetMaps)**



**Figure 4 Collinstown Strategic Employment Lands (© Google Earth, 2022) – extracted from draft Masterplan**

## 3. Appropriate Assessment Process

### 3.1 Appropriate Assessment Stages

The AA process involves a number of steps and tests that need to be applied in sequential order.

An important aspect of the process is that the outcome at each successive stage determines whether a further stage in the process is required. First of all, a plan or project must be screened to identify whether the potential for likely significant effects on a European site(s) exists. If that possibility cannot be excluded, an AA is to be undertaken prior to any consent being granted. Consent shall not be granted if it cannot be concluded that there will be no adverse effects on the integrity of any European site. Article 6(4) allows for consent to be granted in particular and exceptional circumstances, even if adverse effects may arise.

The AA Screening must include a final determination by the competent authority as to whether or not a proposed plan or project would adversely affect the integrity of a European site. In order to reach a final determination, the competent authority must undertake examination, analysis and evaluation, followed by findings, conclusions and a final determination.

### 3.2 Definitions

#### 3.2.1 European Site

‘European Site’, as defined in the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477/2011) (as amended), refers to:

- a. a candidate site of Community importance
- b. a site of Community importance
- c. a candidate Special Area of Conservation (cSAC)
- d. a Special Area of Conservation (SAC)
- e. a candidate Special Protection Area (cSPA); or
- f. a Special Protection Area (SPA).

European sites are part of the Natura 2000 network and are sometimes referred to as ‘Natura 2000 sites’. For the purposes of this report, these shall be collectively referred to as ‘European sites’.

SACs are sites of Community importance designated by a Member State pursuant to Article 4(4) of the Habitats Directive for the conservation of natural habitats (including priority types that are in danger of disappearance) and species, listed in Annex I and Annex II to the Habitats Directive, respectively.

SPAs are areas classified pursuant to Article 4(1) of 4(2) of the Birds Directive for the conservation of species of birds listed in Annex I to the Birds Directive and all migratory birds and their habitats.

The habitats and species, for which each site has been designated/classified, are referred to as the Qualifying Interests (QI) in the case of SACs, and Special Conservation Interests (SCI) in the case of SPAs.

#### 3.2.2 Conservation Objective

Conservation Objectives (COs) for the European sites are defined for the relevant QIs and SCIs. In its most general sense, a CO is the specification of the overall target for the species and/or habitat types for which a site is designated in order for it to contribute to the maintenance and restoration of favourable conservation status.

#### 3.2.3 Source-Pathway-Receptor Model

In the context of screening for AA, the Source-Pathway-Receptor (SPR) model is used to (i) identify all European Sites that might be affected by a plan or project, and (ii) assess the likelihood of significant effects.

As per the guidance from the Office of the Planning Regulator (OPR)<sup>2</sup>, a European Site will only be at risk of LSE where a SPR link exists between the plan or project and the Site in question. Source, pathway and receptor may be defined as follows:

- **Source:** The origin of a potential effect which may include characteristics of a plan or project that have the potential to result in effects (e.g., direct impacts such as loss of habitat)
- **Pathway:** Refers to the existence and characteristics of pathways that could link European Sites and their QIs/SCIs to impacts arising in the plan or project area. These include direct pathways, such as physical proximity, hydrological connections (i.e., water bodies) and air; and indirect pathways, such as disturbance of species
- **Receptor:** European Sites and respective QIs/SCIs, having regard to their COs, the ecological conditions underpinning their survival and their sensitivities (e.g., freshwater pearl mussel is sensitive to siltation).

### 3.2.4 Zone of Influence

A Zone of Influence (ZoI) within any assessment of projects and/or plans refers to the area over which ecological features may be affected by biophysical changes as a result of the proposed plan/project and associated activities.

## 4. Methodology

### 4.1 Guidance

In addition to the relevant legislation, as summarised in Section 1.4, and case law of the Irish and European courts, regard has been had to the following guidance in preparing this report:

- EC (EC) Directorate-General for Environment (DG-Env) (2022) *Guidance document on assessment of plans and projects in relation to Natura 2000 sites: A summary*<sup>3</sup>
- EC DG-Env (2021) *Commission Notice: Assessment of plans and projects in relation to Natura 2000 sites – Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC*<sup>4</sup>
- NPWS (2021) *Strict Protection of Animal Species: Guidance for Public Authorities on the Application of Articles 12 and 16 of the EU Habitats Directive to Development/Works Undertaken by or on Behalf of a Public Authority*<sup>5</sup>
- OPR (2021) *OPR Practice Note PN01: Appropriate Assessment Screening for Development Management*<sup>6</sup>;
- EC DG-Env (2019) *Managing Natura 2000 sites: The provisions of Article 6 of the ‘Habitats’ Directive 92/43/EEC*<sup>7</sup>

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<sup>2</sup> OPR (2021) *OPR Practice Note PN01: Appropriate Assessment Screening for Development Management*. Available at: <https://www.opr.ie/wp-content/uploads/2021/03/9729-Office-of-the-Planning-Regulator-Appropriate-Assessment-Screening-booklet-15.pdf>. Accessed 22 May 2024.

<sup>3</sup> Available at: <https://op.europa.eu/en/publication-detail/-/publication/a3a639e3-b943-11ec-b6f4-01aa75ed71a1/language-en/format-PDF/source-search>. Accessed 22 May 2024.

<sup>4</sup> Available at: <https://op.europa.eu/en/publication-detail/-/publication/99a99e59-3789-11ec-8daf-01aa75ed71a1/language-en/format-PDF/source-search>. Accessed 22 May 2024.

<sup>5</sup> Available at: <https://www.npws.ie/sites/default/files/files/article-12-guidance-final.pdf>. Accessed 22 May 2024.

<sup>6</sup> Available at: <https://www.opr.ie/wp-content/uploads/2021/03/9729-Office-of-the-Planning-Regulator-Appropriate-Assessment-Screening-booklet-15.pdf>. Accessed 22 May 2024.

<sup>7</sup> Available at: <https://op.europa.eu/en/publication-detail/-/publication/11e4ee91-2a8a-11e9-8d04-01aa75ed71a1>. Accessed 22 May 2024.

- Department of Environment, Heritage and Local Government (DEHLG) (2010) *Circular NPW 1/10 & PSSP 2/10: Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities*<sup>8</sup>
- DEHLG (2009) *Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities* [2010 Revision]<sup>9</sup>
- DEHLG (2008) *Circular Letter SEA 1/08 & NPWS 1/08: Appropriate Assessment of Land Use Plans*<sup>10</sup>
- EC (2007) *Guidance document on Article 6(4) of the ‘Habitats Directive’ 92/43/EEC: Clarification on the Concepts of Alternative Solutions, Imperative Reasons of Overriding Public Interest, Compensatory Measures, Overall Coherence, Opinion of the Commission*<sup>11</sup>; and
- EC (2000) *Communication from the Commission on the Precautionary Principle*<sup>12</sup>.

## 4.2 Data Sources

The following data sources were consulted in compiling the information set out in this report:

- NPWS (2024a) *Boundary data – Special Area of Conservation (SAC)* [Updated 15/05/2024]<sup>13</sup>
- NPWS (2024b) *Boundary data – Special Protection Area (SPA)* [Updated 11/01/2024]<sup>13</sup>
- KCC (2023) *Kildare County Development 2023-2029*<sup>14</sup>
- EPA (2020) *Ireland’s Environment: An Integrated Assessment 2020*<sup>15</sup>
- NPWS (2019a) *Article 17 Overview Report Volume 1*<sup>16</sup>
- NPWS (2019b) *Article 17 Habitats Conservation Assessments 2019 Volume 2*<sup>17</sup>
- NPWS (2019c) *Article 17 Species Conservation Assessments 2019 Volume 3*<sup>18</sup>
- NPWS (2019d) *Boundary data – Natural Heritage Area (NHA)* [Updated 28/06/2019]<sup>13</sup>
- NPWS (2015) *Boundary data – proposed Natural Heritage Area (pNHA)* [Updated 01/11/2015]<sup>13</sup>
- Environmental Protection Agency (EPA) Maps<sup>19</sup>
- NPWS Conservation Objectives<sup>20</sup>
- NPWS SAC and SPA Datasheets<sup>21</sup>; and
- NPWS Designations Viewer<sup>22</sup>.

<sup>8</sup> Available at: <https://www.npws.ie/sites/default/files/general/Circular%20NPW1-10%20%26%20PSSP2-10%20Final.pdf>. Accessed 22 May 2024.

<sup>9</sup> Available at: [https://www.npws.ie/sites/default/files/publications/pdf/NPWS\\_2009\\_AA\\_Guidance.pdf](https://www.npws.ie/sites/default/files/publications/pdf/NPWS_2009_AA_Guidance.pdf). Accessed 22 May 2024.

<sup>10</sup> Available at: <https://www.npws.ie/sites/default/files/general/circular-sea-01-08.pdf>. Accessed 22 May 2024.

<sup>11</sup> Available at: <https://kliimaministerium.ee/media/1349/download>. Accessed 22 May 2024.

<sup>12</sup> Available at: <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2000:0001:FIN:en:PDF>. Accessed 22 May 2024.

<sup>13</sup> Available at: <https://www.npws.ie/maps-and-data/designated-site-data/download-boundary-data>. Accessed 24 May 2024.

<sup>14</sup> Available at: <https://kildarecoco.ie/AllServices/Planning/DevelopmentPlans/KildareCountyDevelopmentPlan2023-2029/>. Accessed 22 May 2024.

<sup>15</sup> Available at: [https://www.epa.ie/publications/monitoring--assessment/assessment/state-of-the-environment/EPA\\_Irelands\\_Environment\\_2020.pdf](https://www.epa.ie/publications/monitoring--assessment/assessment/state-of-the-environment/EPA_Irelands_Environment_2020.pdf). Accessed 22 May 2024.

<sup>16</sup> Available at: [https://www.npws.ie/sites/default/files/publications/pdf/NPWS\\_2019\\_Vol1\\_Summary\\_Article17.pdf](https://www.npws.ie/sites/default/files/publications/pdf/NPWS_2019_Vol1_Summary_Article17.pdf). Accessed 22 May 2024.

<sup>17</sup> Available at: [https://www.npws.ie/sites/default/files/publications/pdf/NPWS\\_2019\\_Vol2\\_Habitats\\_Article17.pdf](https://www.npws.ie/sites/default/files/publications/pdf/NPWS_2019_Vol2_Habitats_Article17.pdf). Accessed 22 May 2024.

<sup>18</sup> Available at: [https://www.npws.ie/sites/default/files/publications/pdf/NPWS\\_2019\\_Vol3\\_Species\\_Article17.pdf](https://www.npws.ie/sites/default/files/publications/pdf/NPWS_2019_Vol3_Species_Article17.pdf). Accessed 22 May 2024.

<sup>19</sup> Available at: <https://gis.epa.ie/EPAMaps/>. Accessed 22 May 2024.

<sup>20</sup> Available at: [https://www.npws.ie/protected-sites/conservation-management-planning/conservation-objectives?qt-conservation\\_objectives=1](https://www.npws.ie/protected-sites/conservation-management-planning/conservation-objectives?qt-conservation_objectives=1). Accessed 22 May 2024.

<sup>21</sup> Available at: <https://www.npws.ie/maps-and-data/designated-site-data/sac-and-spa-datasheets-downloads>. Accessed 22 May 2024.

<sup>22</sup> Available at: <https://dahg.maps.arcgis.com/apps/webappviewer/index.html?id=8f7060450de3485fa1c1085536d477ba/>. Accessed 22 May 2024.

## 4.3 Methodology

In line with the relevant guidance and case law, this Screening for AA consists of the below steps:

1. **Impact Prediction:** Identify the aspects of the draft Masterplan likely to affect the COs of European sites. The SPR model has been used to identify the ZoI) This also includes transboundary considerations, where relevant.
2. **Assessment of Effects:** The proposed aims and outcomes of the draft Masterplan are assessed as to whether they are likely to result in likely significant effects upon the integrity of European sites. This requires understanding of relevant QIs/SCIs and associated COs.

### 4.3.1 Impact Prediction: Identifying the Zone of Influence

The ZoI is established using the SPR model and takes into consideration the scale of the elements of the draft Masterplan. There is no recommended ZoI, and guidance from the NPWS recommends that this should be evaluated on a case-by-case basis, using the SPR model, with reference to the nature, size and location of the plan or project, the sensitivities of the ecological receptors, and the potential for in-combination (cumulative) effects.

The identification of the European sites within the ZoI has been carried out utilising GIS datasets from NPWS of the European Sites network. The Sites have been determined through the identification of the potential sources of the impacts of the draft Masterplan and their pathways for effect to European Sites.

### 4.3.2 Assessment of Effects

Where a plan or project is likely to undermine the COs of a European Site, it must be considered as a likely significant effect upon that Site. The assessment of effects stages determines whether the potential impacts identified using the SPR model could result in a likely significant effect on a European Site, having regard to its COs. The potential effects of the draft Masterplan on European Sites are assessed against the COs of the relevant QIs and SCIs. Factors considered include type, extent, duration, intensity, timing and probability of effects, and the potential for in-combination effects, as well as the sensitivities of the QIs/SCIs concerned.

## 5. Screening Assessment

### 5.1 Identification of Potential Sources of Impacts

Potential sources of impacts arising from the implementation of the draft Masterplan have been identified primarily with regard to the identified aims and outcomes and design principles and priorities set out in the draft Masterplan, as listed and considered individually in Appendix A.

The draft Masterplan applies to a 56.9 ha area at Collinstown, Leixlip, in north-east Co. Kildare. The implementation of the draft Masterplan will result in the development of a business campus on a formerly predominantly greenfield site. For a detailed discussion of the potential impacts arising from the implementation of the draft Masterplan, refer to Appendix A. To summarise, the implementation of the draft Masterplan has to potential to give rise to the following impacts:

- Potential **construction phase** impacts associated with the development of the draft Masterplan area, including the range of uses referred to in the draft Masterplan (including office, light industrial, transport infrastructure, utilities, public realm, streetscape, recreational open space and retail, among others). Potential impacts associated with construction include vegetation clearance; removal of soils/subsoils; surface water run-off from construction areas; noise and vibration; emissions to air, including dust; and disturbance of wildlife (e.g., due to noise, vibration, lighting).



- Potential **operational phase** impacts associated with the operation of the business campus and supporting infrastructure, including consumption of potable water, emissions of wastewater to sewer, emissions of surface water run-off to the surface water drainage network, generation of municipal solid waste, disturbance of wildlife (e.g., due to noise, lighting) and potential impacts associated with the physical presence of new buildings/structures (e.g., collision risk).
- Potential **decommissioning phase** impacts associated with the decommissioning of buildings and infrastructure in the draft Masterplan area, including works of demolition/ deconstruction, surface water run-off from construction areas; noise and vibration; emissions to air, including dust; and disturbance of wildlife (e.g., due to noise, vibration, lighting).

## 5.2 Identification of Potential Pathways

Appendix B provides a map of the European sites discussed in this Section.

### 5.2.1 Hydrological Connectivity

The subject lands are traversed by the Royal Canal, providing a potential direct hydrological pathway to European sites downstream. The Royal Canal travels onwards from the subject area through Blanchardstown and north Dublin City before entering the River Liffey at North Wall Quay. The Royal Canal traverses the boundary of the Rye Water Valley/Carton SAC c. 1 km downstream of the draft Masterplan area, where the Rye Water passes underneath the canal via an aqueduct. It is understood that there is an overflow between the canal and the Rye Water at Louisa Bridge, creating a potential hydrological connection between the draft Masterplan area and the SAC at this location.

The only utilisation of this outflow is during a flood event following consistent adverse weather conditions, over a number of days. Construction related activity which would have the potential to impact water quality (i.e. pouring of cement or excavation works) would not be undertaken during such adverse weather conditions. The potential for the implementation of the masterplan to overlap with the utilisation of the overflow is therefore considered to be negligible. Thus, is not anticipated that hydrological connectivity would act as a viable pathway for effect.

The subject lands are served by the Leixlip Wastewater Treatment Plant (WwTP)<sup>23</sup>, which discharges effluent subject to tertiary treatment to the River Liffey immediately adjacent to the plant at Leixlip. The WwTP was recently subject to upgrade works to allow for future population growth and economic development in the area, and to ensure treated effluent complies with EPA standards, and that water quality in the Lower Liffey Valley meets regulatory standards<sup>24</sup>. The WwTP is currently operating within capacity (150,000 population equivalent). The subject area's connection to the WwTP creates a potential indirect hydrological pathway to European Sites downstream, particularly during the operational phase. The nearest hydrologically connected European site via this pathway, the South Dublin Bay and River Tolka Estuary SPA is c. 22 km downstream of the WwTP emission point, as the river flows.

Potable water supply will be via watermains connecting to the Leixlip Water Treatment Plant, which abstracts raw water from the River Liffey impoundment adjacent to the plant. Upgrade works by Uisce Éireann are ongoing at the plant.<sup>25</sup> This creates a potential indirect hydrological pathway to European Sites downstream, particularly during the operational phase. The nearest hydrologically connected European site via this pathway, the South Dublin Bay and River Tolka Estuary SPA is c. 24 km downstream, as the river flows.

In the event of an emission of pollutants to the Royal Canal or River Liffey as a direct or indirect result of the implementation of the draft Masterplan, given the significant distance to the nearest hydrologically connected European sites downstream and the degree of dilution and dispersion in the receiving waters, it is highly unlikely that such an event would have an effect on any such European site.

<sup>23</sup> Licence no. D0004-02

<sup>24</sup> Uisce Éireann (n.d.) *Leixlip Wastewater Treatment Plant Upgrade*. Available at: <https://www.water.ie/projects/local-projects/leixlip-wastewater-treatment-plant-upgrade/>. Accessed 24 May 2024.

<sup>25</sup> EPA (2023) *Site Visit Report*. Available at: [https://www.epa.ie/publications/compliance--enforcement/drinking-water/audit-reports/fingal/Leixlip-Audit-Report-\(Direction-Compliance\)-I21023.pdf](https://www.epa.ie/publications/compliance--enforcement/drinking-water/audit-reports/fingal/Leixlip-Audit-Report-(Direction-Compliance)-I21023.pdf). Accessed 24 May 2024.

Given the factors discussed above, including the distance between the draft Masterplan area and the nearest hydrologically connected European sites and the likelihood of potential pollutants being assimilated within the receiving watercourses, **it is not anticipated that hydrological connectivity would act as a viable pathway for effect.**

### 5.2.2 Aerial Connectivity

Prevailing winds in Ireland are most frequently from the south and west, blowing in a north and east direction. Therefore, emissions to air, including dust, potentially arising from the implementation of the draft Masterplan, would typically be dispersed in a similar direction. The nearest European site with potential aerial connectivity is the Rye Water Valley/Cartron SAC, which is situated c. 365 m north of the draft Masterplan area.

Having regard to the potential impacts of the draft Masterplan, the distance to the nearest European site, and the likelihood that any windblown material would be dispersed over a large area and deposited in micro amounts, **it is not anticipated that aerial connectivity will act as a viable pathway for effect.**

### 5.2.3 Functionally Linked Land

Functionally linked land refers to land occurring outside a European site that is considered to be critical to or necessary for the ecological, behavioural functions in a relevant season of a QI or SCI for which the site has been designated. These habitats are frequently used by the QI or SCI of the site to support their functionality and the integrity of the site.

The nearest European site to the draft Masterplan area is the Rye Water Valley/Cartron SAC, c. 365 m to the north, beyond an existing built-up area at Collinstown Industrial Park. Its QIs include the Annex II species, Narrow-mouthed Whorl Snail *Vertigo angustior* and Desmoulin's Whorl Snail *Vertigo moulinsiana*. *V. angustior* can occur in suitable micro-habitats in dune grassland, fen, marsh, salt marsh and flood plain. Outside of damp sand dune systems in the west of the country (its largest areas of occupancy), *V. angustior* is restricted to narrow bands of suitable habitat only a few metres wide. *V. moulinsiana* occurs on the stems of tall plants in wetland habitats with specific hydrogeological conditions. Given the absence of suitable habitat, it is considered that there is no functionally linked land for the QI species of the Rye Water Valley/Cartron SAC in the draft Masterplan area.

The nearest SPAs to the draft Masterplan area are situated  $\leq 19$  km away. These include:

- South Dublin Bay and River Tolka Estuary SPA (c. 19 km east, as the crow flies)
- Wicklow Mountains SPA (c. 21 km south-east, as the crow flies)
- Poulaphouca Reservoir SPA (c. 21 km south, as the crow flies); and
- North Bull Island SPA (c. 22 km east, as the crow flies).

Given the absence of suitable habitat and the significant distance to the nearest sites, it is considered that there is no functionally linked land in the draft Masterplan area for the SCI species of any European sites in the wider area.

Given the absence of suitable habitat – and in the case of SCIs of SPAs, the significant distances to the nearest sites – **it is not anticipated that functionally linked land would act as a viable pathway for effect.**

## 5.3 Identification of Potential Receptors

Given that Section 5.2 has established that viable pathways for effects do not exist between the draft Masterplan area and European sites, no potential receptors can be identified in this SPR assessment.

## 5.4 In-combination Effects

In the application of the SPR model, this report has found that no viable pathways exist for effects to arise on European sites as a result of the implementation of the draft Masterplan. It follows that the potential for likely significant effects to arise as a result of the draft Masterplan in combination with other plans or projects may be excluded.

## 6. Summary and Conclusion

### 6.1 Summary

This Screening for AA report has been prepared by Arup on behalf of KCC in connection with the draft Collinstown Strategic Employment Lands Masterplan (the 'draft Masterplan'). The purpose of the draft Masterplan is to provide a comprehensive design response which expands on the Vision for the Collinstown Strategic Employment Lands, as outlined in the Leixlip LAP, in order to advance the physical development of these strategic lands.

A Screening for AA has been carried out in line with Part XAB of the Planning and Development Act (as amended), following the SPR model. Having regard to the aims and outcomes and design principles and priorities of the draft Masterplan, potential **sources** of impacts associated with construction, operation and decommissioning of the proposed business campus and supporting infrastructure have been identified (Section 5.1; Appendix A).

In Section 5.2, potential pathways for effects on European sites were considered. Based on a number of factors, including distance to the nearest European sites, the lack of aerial connectivity and the absence of functionally linked link, no viable **pathways** were identified.

It follows that no **receptors** could be identified.

As a result, there is no risk of likely significant effects to any European site as a result of the implementation of the draft Masterplan.

### 6.2 Conclusion

Following an examination, analysis and evaluation of the best available information, and applying the precautionary principle, it can be concluded that the likelihood of significant effects on any European Site, whether arising from the draft Masterplan alone or in combination with other plans and/or projects, can be excluded, for the reasons set out in Section 5 above. In reaching this conclusion, the nature of the draft Masterplan and its potential relationship with all European Sites within the potential ZoI, and their COs, have been fully considered.

Therefore, it is the professional opinion of the authors that the draft Collinstown Strategic Employment Lands Masterplan does not require an AA.

# Appendix A

## Identification of Potential Sources of Impacts

## A.1 Potential Sources of Impacts and Effects of the Draft Masterplan

**Table 1 Potential Sources of Impacts and Effects of the Draft Masterplan – Aims and Outcomes**

Aims	Outcomes	Potential Source of Impacts
<p><i>“Deliver a well-connected, attractive and sustainable business campus that is of high architectural quality design, construction and finish, featuring a fully integrating, responsive and well-defined series of open spaces.”</i></p>	<p><i>“The Masterplan for the Collinstown Employment Lands will guide the development of a high-quality Business Campus with access to quality open space within and adjacent to the campus.”</i></p>	<p>Potential <b>construction phase</b> impacts associated with development of the Business Campus, including a range of uses and densities as indicated in the draft Masterplan and Table 13.1 (Land Use Zoning Matrix) of the Leixlip LAP. Potential impacts associated with construction include vegetation clearance; removal of soils/subsoils; surface water run-off from construction areas; noise and vibration; emissions to air, including dust; and disturbance of wildlife (e.g., due to noise, vibration, lighting).</p> <p>Potential <b>operational phase</b> impacts associated with the operation of the Business Campus, including consumption of potable water, emissions of wastewater to sewer, emissions of surface water run-off to the surface water drainage network, generation of municipal solid waste, localised disturbance of wildlife (e.g., due to noise, lighting) and potential impacts associated with the physical presence of buildings/structures (e.g., collision risk).</p> <p>Potential <b>decommissioning phase</b> impacts associated with the decommissioning of buildings and infrastructure on the Business Campus, including works of demolition/deconstruction, surface water run-off from construction areas; noise and vibration; emissions to air, including dust; and disturbance of wildlife (e.g., due to noise, vibration, lighting).</p>
<p><i>“Contribute to the successful implementation of the MASP in supporting the role and function of Dublin as a city of international scale.”</i></p>	<p><i>“The delivery of the Collinstown Masterplan will ensure that the Collinstown Business Campus will comply with RPO 5.6 of the Metropolitan Area Spatial Plan for the Dublin Metropolitan Area.”</i></p>	<p>RPO 5.6 of the MASP, ‘MASP Employment Lands’, states that <i>“The development of future employment lands in the Dublin Metropolitan Area shall follow a sequential approach, with a focus on the re-intensification of employment lands within the M50 and at selected strategic development areas and provision of appropriate employment densities in tandem with the provision of high quality public transport corridors.”</i></p> <p>The RSES, including the MASP and its provisions, has been subject to AA, which has concluded that <i>“the adoption and publication of the RSES [...] will not either individually or in combination with any other plan or project adversely affect the integrity of any European Site (as defined).”</i></p> <p>No potential impacts are anticipated arising from this aim/outcome.</p>

Aims	Outcomes	Potential Source of Impacts
<p><i>“Assist in the implementation of the Kildare County Development Plan 2023-2029 and the Leixlip LAP 2020-2023 (as extended) with regard to their respective economic development objectives.”</i></p>	<p><i>“The Collinstown Masterplan ensures the delivery of a Business Campus as identified in the Economic Development Strategy of the Kildare CDP 2023-2029 and Objective EDT1.1 of the Leixlip LAP which seeks to promote enterprise and employment development at Collinstown.”</i></p>	<p>Potential <b>construction phase</b>, <b>operational phase</b> and <b>decommissioning phase</b> impacts associated with the delivery of the Business Campus, as detailed above.</p>
<p><i>“Establish sustainable transport patterns within the site by maximizing opportunities in terms of access and usage of high frequency and high capacity public transportation investment projects such as DART+ West, the rail-based park and ride facility and Bus Connects.”</i></p>	<p><i>“The Masterplan facilitates the development of the Collinstown Rail Station and the rail-based Park and Ride facility on the Business Campus lands with access to Bus Connects linkages located adjacent to the Masterplan lands.”</i></p>	<p>Potential <b>construction phase</b> impacts associated with the development of transport infrastructure in the draft Masterplan area, providing links to existing transport infrastructure, and transport infrastructure projects previously planned or proposed in the draft Masterplan area. Potential impacts associated with construction include vegetation clearance; removal of soils/subsoils; surface water run-off from construction areas; noise and vibration; emissions to air, including dust; and disturbance of wildlife (e.g., due to noise, vibration, lighting).</p> <p>Potential <b>operational phase</b> impacts associated with the use and maintenance of transport infrastructure in the draft Masterplan area including vehicular emissions to air, emissions of surface water run-off to the surface water drainage network and localised disturbance of wildlife (e.g., due to traffic noise, lighting).</p> <p>Potential <b>decommissioning phase</b> impacts associated with the decommissioning of transport infrastructure in the draft Masterplan area including works of demolition, surface water run-off from construction areas; noise and vibration; emissions to air, including dust; and disturbance of wildlife (e.g., due to noise, vibration, lighting).</p> <p>It is noted that major transport infrastructure projects referred to are already planned or proposed under the scope of other plans or projects subject to AA, including the DART+ West project and the Collinstown Rail Station and Park and Ride projects.</p> <p>A Natura Impact Statement (NIS) prepared in respect of the Railway Order Application for the DART+ West project concluded that <i>“given the full and proper implementation of the mitigation prescribed in this NIS, the proposed development, either individually or in combination with other plans or projects, will not adversely affect the integrity of the Rye Water Valley/Cartron SAC, the South Dublin Bay and the River Tolka Estuary SPA, the North Bull Island SPA or any other European site”</i>.</p> <p>The new rail station at Collinstown and associated rail-based Park and Ride facility are provided for under the Development Plan that, as noted above, has been subject to AA; and the NTA’s <i>Transport Strategy for the Greater Dublin Area 2022-2042</i>. A NIS prepared in respect of the latter concluded that <i>“Having incorporated mitigation measures, it is concluded that the Draft Transport Strategy for the Greater Dublin Area is not foreseen to give rise to any significant adverse effects on the integrity of any designated European site, alone or in combination with other plans or projects”</i>.</p>

Aims	Outcomes	Potential Source of Impacts
<p><i>“Maximise active travel opportunities by ensuring the development of a comprehensive and high-quality pedestrian and cycle infrastructure within the Collinstown lands and providing for enhanced access to the Royal Canal Greenway.”</i></p>	<p><i>“The Collinstown Masterplan provides for the development of a network of pedestrian/cycle paths through the campus lands with direct linkages to the Royal Canal Greenway that traverses the site.”</i></p>	<p>Potential <b>construction phase</b>, <b>operational phase</b> and <b>decommissioning phase</b> impacts associated with the development of transport infrastructure in the draft Masterplan area, as detailed above. Additionally, the provision of enhanced access to the Royal Canal Greenway could potentially result in increased human disturbance of wildlife along this route.</p>
<p><i>“Seek to protect and enhance the overall green infrastructure network within the lands and provide for a comprehensive surface water management scheme which prioritises best practice nature-based drainage.”</i></p>	<p><i>“The delivery of the Collinstown Masterplan will secure the protection of the existing network of hedgerows on the lands and the use of nature-based drainage solutions.”</i></p>	<p>Potential <b>construction phase</b> and <b>operational phase</b> impacts associated with the construction and operation of a new surface water drainage network in the draft Masterplan area, including increased surface water run-off and emission of contaminated (e.g., sediment-laden) surface water to surface water bodies or the existing surface water drainage network in the receiving environment.</p>
<p><i>“Ensure that any development within the lands protects the integrity and carrying capacity of the nearby Junction 6 of the M4 Motorway, in keeping with the provisions of the Spatial Planning and National Roads Guidelines for Planning Authorities (DoECLG, 2012).”</i></p>	<p><i>“The preparation of the Masterplan will be developed in conjunction with relevant traffic/transport assessments.”</i></p>	<p>No potential impacts are anticipated arising from this aim/outcome.</p>

**Table 2 Potential Sources of Impacts and Effects of the Draft Masterplan – Design Principles and Priorities**

Principles	Potential Source of Impacts
<b>Key Urban Design Principles</b>	
<p><i>“To ensure the Business Campus conveys a positive message to its citizens, potential investors and visitors through use of quality design and landscaping.”</i></p>	<p>No potential impacts are anticipated arising from this aim/outcome.</p>
<p><i>“To provide for a new plaza style entrance leading from the north-east of the Business Campus to connect to a potential new train station to the north. The plaza would also act as a focal point in the Business Campus connecting Intel to the Collinstown Business Campus.”</i></p>	<p>Potential <b>construction phase</b> impacts associated with development of the plaza, including vegetation clearance; removal of soils/subsoils; surface water run-off from construction areas; noise and vibration; emissions to air, including dust; and disturbance of wildlife (e.g., due to noise, vibration, lighting).</p> <p>Potential <b>operational phase</b> impacts associated with the operation and use of the plaza, including emissions of surface water run-off to the surface water drainage network and localised disturbance of wildlife (e.g., due to noise, lighting).</p> <p>Potential <b>decommissioning phase</b> impacts associated with the decommissioning of the plaza, including works of demolition, surface water run-off from construction areas; noise and vibration; emissions to air, including dust; and disturbance of wildlife (e.g., due to noise, vibration, lighting).</p>

Principles	Potential Source of Impacts
<p><i>“To provide for landmark buildings at critical gateway locations. Landmark buildings should be distinct from their surroundings and be of high architectural merit with appropriate finishes and landscaping. It is envisaged that two landmark buildings at the northern and southern extremities of the Business Campus will act as gateways to the Business Campus. Care should be taken to ensure that the massing and scale of these buildings would be appropriate for their location.”</i></p>	<p>Potential <b>construction phase</b> impacts associated with development of landmark buildings, including vegetation clearance; removal of soils/subsoils; surface water run-off from construction areas; noise and vibration; emissions to air, including dust; and disturbance of wildlife (e.g., due to noise, vibration, lighting).</p> <p>Potential <b>operational phase</b> impacts associated with the operation of the buildings, including consumption of potable water, emissions of wastewater to sewer, emissions of surface water run-off to the surface water drainage network, generation of municipal solid waste, localised disturbance of wildlife (e.g., due to noise, lighting) and potential impacts associated with the physical presence of the buildings (e.g., collision risk).</p> <p>Potential <b>decommissioning phase</b> impacts associated with the decommissioning of the buildings, including works of demolition/ deconstruction, surface water run-off from construction areas; noise and vibration; emissions to air, including dust; and disturbance of wildlife (e.g., due to noise, vibration, lighting).</p>
<p><i>“To ensure that all new developments should be of such a scale that would not have a negative impact on neighbouring properties and residential properties to the western boundary.”</i></p>	<p>No potential impacts are anticipated arising from this aim/outcome.</p>
<p><i>“To ensure that in the consideration of the design and layout of buildings, that key design factors such as a good external profile, prominent reception, floorspace flexibility, energy efficiency and a safe vibrant location are allowed for and that proposed developments provide for environmentally sustainable design and building solutions with regard to energy efficiency, Combined Cooling Heat and Power (CCHP) and Sustainable Urban Drain- age Systems (SuDS).”</i></p>	<p>No potential impacts are anticipated arising from this aim/outcome.</p>
<p><i>“To ensure that building forms should reinforce the perception of the natural topography in order to minimise visual impacts and reduce the apparent height and that large volumes should be subdivided into modules or sub-parts to reduce perceived scale”</i></p>	<p>No potential impacts are anticipated arising from this aim/outcome.</p>
<p><i>“To ensure that the streetscape is characterised by high-quality buildings and treatments such as high quality, practical street furniture, paving, landscaping and lighting and provide for a full signage plan for each road/street with an agreed logo and design not only to provide wayfinding but also to establish the character of the area”</i></p>	<p>No potential impacts are anticipated arising from this aim/outcome.</p>
<p><i>“To create an attractive streetscape design that would enhance the public realm, provides for local public civic features as prominent components of the streetscape and ensure that site and buildings design shall accommodate pedestrian circulation onsite from parking areas to open space through dedicated pedestrian pathways with connectivity to adjoining buildings.”</i></p>	<p>Potential <b>construction phase</b> impacts associated with development of streetscape/public realm, including vegetation clearance; removal of soils/subsoils; surface water run-off from construction areas; noise and vibration; emissions to air, including dust; and disturbance of wildlife (e.g., due to noise, vibration, lighting).</p> <p>Potential <b>operational phase</b> impacts associated with the operation and use of streets and public realm, including emissions of surface water run-off to the surface water drainage network and localised disturbance of wildlife (e.g., due to noise, lighting).</p>



Principles	Potential Source of Impacts
	Potential <b>decommissioning phase</b> impacts associated with the decommissioning of streets/public realm areas, including works of demolition, surface water run-off from construction areas; noise and vibration; emissions to air, including dust; and disturbance of wildlife (e.g., due to noise, vibration, lighting).
<b>Access, Circulation and Permeability Principles</b>	
<i>“Provide main movement spine connecting all areas through the Campus development”</i>	Potential <b>construction phase, operational phase and decommissioning phase</b> impacts associated with the development of transport infrastructure and streetscape in the draft Masterplan area, as detailed above.
<i>“Incorporate accessible streets with a focus on the free movement of pedestrians and cyclists, including those with limited mobility”</i>	No potential impacts are anticipated arising from this aim/outcome.
<i>“Provide a legible and connected street environment that is easy to navigate, assisting the most casual of users in finding their way around”</i>	Potential <b>construction phase, operational phase and decommissioning phase</b> impacts associated with the development of the streetscape in the draft Masterplan area, as detailed above.
<i>“Provide safe and inclusive streets that passively manage vehicular behaviour and the needs of all users”</i>	Potential <b>construction phase, operational phase and decommissioning phase</b> impacts associated with the development of the streetscape in the draft Masterplan area, as detailed above.
<i>“Provide for the use of cost-effective materials and street furniture”</i>	No potential impacts are anticipated arising from this aim/outcome.
<b>Open Space and Landscaping</b>	
<i>“To provide new amenity and recreation uses and supporting services (such as local retail) for the enjoyment of the local community and Business Campus”</i>	Potential <b>construction phase, operational phase and decommissioning phase</b> impacts associated with the development of the Business Campus, including new amenity, recreational and retail uses, as detailed above.
<i>“To provide new multi-functional green infrastructure, as a key element of the larger urban structure of lands and their connection to surrounding areas”</i>	Potential <b>construction phase, operational phase and decommissioning phase</b> impacts associated with the development of the Business Campus, including new multi-functional green infrastructure spaces, as detailed above.
<i>“To ensure existing boundary and inland trees and hedgerows are retained where possible and ‘opened’ to facilitate access, permeability and visual connections”</i>	Potential <b>construction phase</b> impacts associated with the opening up of hedgerows/treelines, particularly vegetation clearance.
<i>“To ensure new roadways include a continuous line of street trees providing an element of separation between the plots and larger industrial units”</i>	No potential impacts are anticipated arising from this aim/outcome.

# Appendix B

## European Sites Discussed in this Report

## B.1 European Sites Discussed in this Report

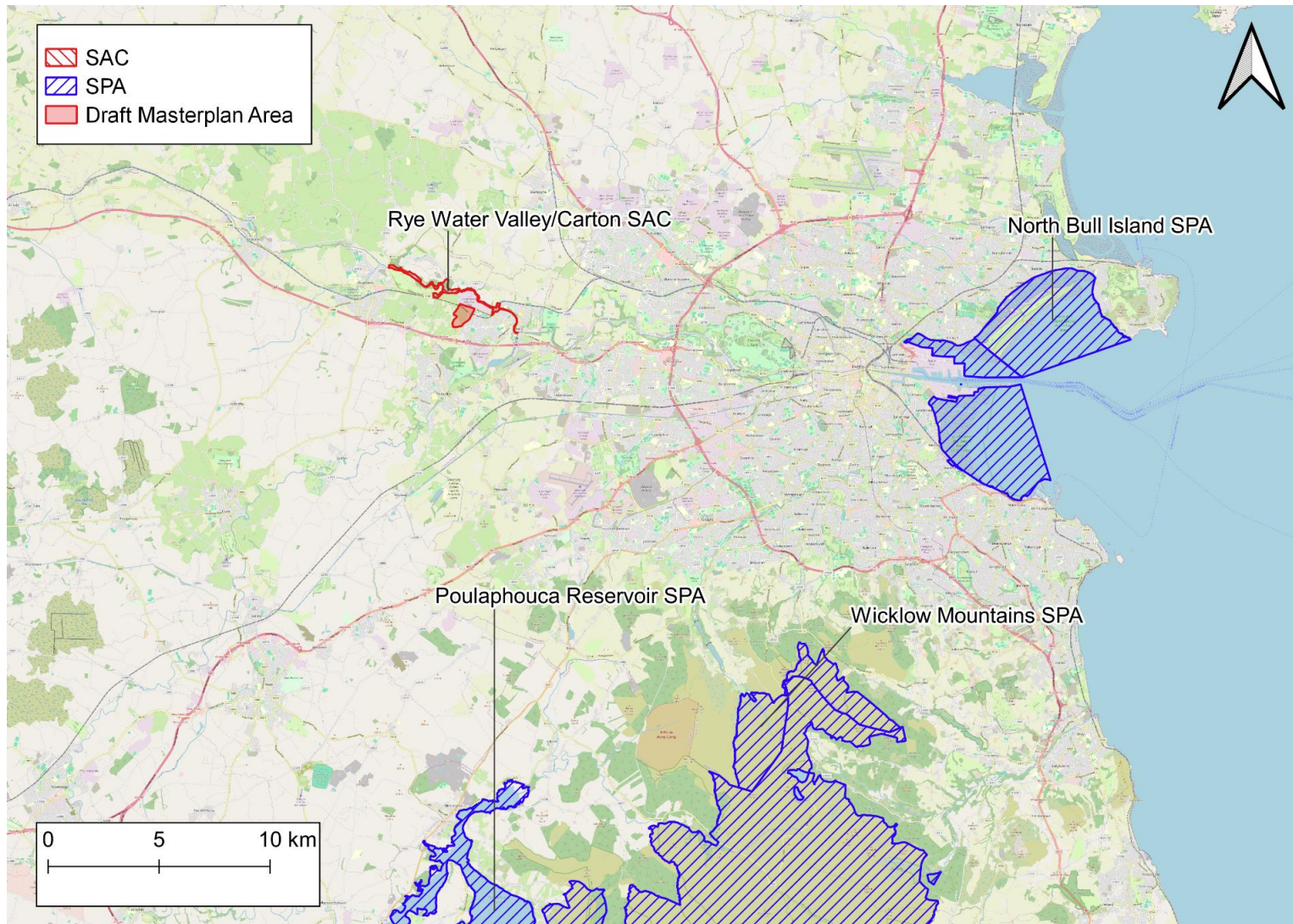


Figure 5 European Sites Discussed in this Report (© OpenStreetMap)