

Grange Cottage

Appropriate Assessment Screening Report

South Dublin County Council

Project number: 60687020

March 2024

Delivering a better world

Quality information

Prepared by	Checked by	Verified by	Approved by
Aoife Whyte Qualifying member of CIEEM	Emma Boston MCIEEM MRSB Principal Ecologist	Tony Marshall CEcol MCIEEM Technical Director	Kiernan Culleton Principal Landscape Architect
Graduate Ecologist			

Revision history

Revision	Revision date	Details	Authorised	Name	Position
P01	12/03/2024	Final	KC	Kiernan Culleton	Principal Landscape Architect

Prepared for:

South Dublin County Council

Prepared by:

AECOM Ireland Limited 4th Floor Adelphi Plaza Georges Street Upper Dun Laoghaire Co. Dublin A96 T927 Ireland

T: +353 1 696 6220 aecom.com

© 2024 AECOM Ireland Limited. All Rights Reserved.

This document has been prepared by AECOM Ireland Limited ("AECOM") for sole use of our client (South Dublin County Council) in accordance with generally accepted consultancy principles, the budget for fees and the terms of reference agreed between AECOM and the Client. Any information provided by third parties and referred to herein has not been checked or verified by AECOM, unless otherwise expressly stated in the document. No third party may rely upon this document without the prior and express written agreement of AECOM.

Table of contents

1.	1. Introduction				
	1.1	Background	1		
	1.2	Project description	1		
	1.3	Legislative context	1		
	1.4	Purpose of this Report	2		
	1.5	Quality assurance and statement of authority	2		
2.	Metho	odology	3		
	2.1	Overview of the Appropriate Assessment process	3		
	2.2	Sources of guidance	3		
	2.3	Data sources	4		
	2.4	AA Screening process	4		
	2.5	Establishing the Zone of Influence	6		
	2.6	Potential sources of impact	6		
3.	Releva	ant baseline information	10		
	3.1	Terrestrial habitats	10		
	3.2	Aquatic habitats	10		
	3.3	Protected species	10		
	3.4	Invasive non-native species	10		
4.	Europ	ean sites within the Zone of Influence	11		
5.	Test of	f likely significant effects	16		
	5.1	Considering the Proposed Development alone	16		
	5.2	Screening assessment	17		
	5.3	In-combination effects	18		
6.	AA Sc	reening statement	19		
7.	Refere	ences	20		
8.	Figure	9S	22		
Apper	ndix A P	Planning applications	23		
Apper	ndix B Ir	nformation on European sites within the Zol of the Proposed Development	30		

Figures

Figure 1: Site extent

Figure 2: European sites within the potential Zol

Tables

1. Introduction

1.1 Background

This report to inform an Appropriate Assessment (AA) Screening has been prepared by AECOM Ireland Limited (AECOM) on behalf of South Dublin County Council (SDCC) (herein also referred to as the 'Applicant'). This Report accompanies the application for Part 8 planning permission for Grange Cottage which will involve the redevelopment of Grange Cottage and associated farm outbuildings (herein referred to as the 'Proposed Development'). The location of the Proposed Development is referred to as the 'Site' and is shown on Figure 1.

This AA Screening Report assesses the potential of the Proposed Development to result in likely significant effects and, where those are identified, adverse effects on the integrity of relevant Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) (collectively referred to as 'European sites'). The Proposed Development is included in the area of the 12th Lock Masterplan which involves the development of the area around the Lock 12 at Grand Canal and the AA Screening already carried out for the Masterplan concluded that likely significant effects from the 12th Lock Masterplan on any European site, whether individually or in combination with other plans or projects, beyond reasonable scientific doubt, can be excluded (AECOM, 2023a).

1.2 **Project description**

The Site is located on the northern edge of Grange Castle Business Park facing onto the south bank of the Grand Canal and it is situated to the east of the R120. The Proposed Development consists of Grange Cottage and the associated farm outbuildings which enclose two courtyards to the north and the east of the house. The Site is currently derelict with the structures in various levels of deterioration. Dry meadow grasslands, treelines, mixed broadleaved woodland and scrub border the courtyards and outbuildings.

The Proposed Development proposes to reuse and repair the existing buildings to introduce a mixed development of compatible uses and facilities based on local need. The following buildings are proposed; childcare facility; two restaurants/cafés; multipurpose event space; shop; boat house; and artists' studio. The Proposed Development will be carried out in two phases. Phase One will involve the redevelopment of Grange Cottage into a childcare facility and artists' studios. Phase Two phase will involve the redevelopment of the rest of the outbuildings.

The Proposed Development will involve the removal of a small amount of scrub vegetation to enable the construction of a clear-span pedestrian bridge over the River Griffeen in the western section of the Site. There will be no other areas of vegetation removal, but the Proposed Development will involve the trimming of vegetation to facilitate the redevelopment and extension of the buildings. The proposed bridge will connect the Proposed Development to the existing car park in Grange Castle Business Park.

The Proposed Development will involve the provision of four no. parking spaces and the redevelopment of the external ground areas, courtyard space and all associated site work. There will also be some works to drainage to upgrade the existing system where required and make new connections to the existing foul sewer network and the Proposed Development will also include Sustainable Drainage System (SuDS) features. The existing footprint will be maintained, and the Proposed Development will be developed in line with the zoning provisions of the 12th Lock Masterplan.

1.3 Legislative context

Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora, which is more commonly known as the 'Habitats Directive', requires Member States of the European Union (EU) to take measures to maintain or restore, at favourable conservation status, natural habitats and wild species of fauna and flora of Community interest. The provisions of the Habitats Directive require that Member States designate Special Areas of Conservation for habitats listed in Annex I and for species listed in Annex II. Similarly, Directive 2009/147/EC on the conservation of wild birds, which is more commonly known as the 'Birds Directive', provides a framework for the conservation and management of wild birds. It also requires Member States to identify and classify Special Protection Areas for rare or vulnerable species listed in Annex I of the Birds Directive, as well as for certain regularly occurring migratory species. Collectively, SACs and SPAs are known as 'European sites'.

In Ireland, the habitats and/or species which are the reason(s) for designation of an SAC are referred to as 'Qualifying Interests' (QIs). In relation to SPAs, the bird species for which a particular site is designated are referred to as the 'Special Conservation Interests' (SCIs).

Under Article 6(3) of the Habitats Directive, 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 on such a site, either individually or in-combination with other plans or projects, must be subject to an Appropriate Assessment of its implications for the SAC / SPA in view of the site's Conservation Objectives.

In the Republic of Ireland, the requirements of Article 6(3) are transposed into national law through Part XAB of the Planning and Development Act 2000 (as amended) (hereafter abbreviated to the 'PDA') for planning matters, and by the European Communities (Birds and Natural Habitats) Regulations 2011 in relation to other relevant approvals / consents.

The competent authority which is responsible for carrying out the AA is the relevant consenting body for each project or plan, which in this case is SDCC. In fulfilling its duty as competent authority, SDCC is required to apply the Precautionary Principle (as defined in European Commission (2000) and UNESCO (2005)) to European sites and can only grant consent once it has been ascertained that the Proposed Development will not adversely affect the integrity of any European site.

1.4 Purpose of this Report

Whilst the various steps involved in the AA process must be carried out by a Competent Authority (as already stated, in this case the Competent Authority is SDCC), project proponents or their consultants may provide the information required to inform this assessment. This document has therefore been written to provide SDCC with the information needed to undertake an AA Screening of the Proposed Development. It has been prepared with regard to best scientific knowledge and an examination of all of the potential impacts of the Proposed Development on European sites.

1.5 Quality assurance and statement of authority

This Report and the assessment described within it has been completed in accordance with the AECOM Integrated Management System (IMS). AECOM's IMS places emphasis on professionalism, technical excellence, quality, as well as covering health, safety, environment and sustainability management. All AECOM staff members are committed to maintaining this accreditation to those parts of BS EN ISO 9001:2015 and 14001:2015, as well as BS OHSAS 18001:2007 that are relevant to a consultancy service. The Appropriate Assessment has been carried out by AECOM ecologists with experience in conducting such appraisals.

2. Methodology

2.1 Overview of the Appropriate Assessment process

The process required by Articles 6(3) and 6(4) of the Habitats Directive is stepwise and must be followed in sequence. Diagram 1 below outlines the steps of AA according to current European Commission (EC) guidance (European Commission, 2021). These steps are essentially iterative, being revisited as necessary in response to more detailed information, recommendations, and any relevant changes to the plan or project until no significant adverse effects remain.





2.2 Sources of guidance

This AA Screening has been prepared in accordance with the European Commission (EC) guidance document Assessment of Plans and Projects in relation to Natura 2000 Sites: Methodological Guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC (EC, 2021). In addition, the following sources of guidance were also considered when carrying out the Appropriate Assessment:

• Appropriate Assessment Screening for Development Management (OPR, 2021);

- Appropriate Assessment of Plans and Projects in Ireland (Department of the Environmental Heritage and Local Government (DoEHLG), 2010);
- Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC (EC, 2018); and,
- Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular Letter National Parks and Wildlife Service (NPWS) 1/10 & PSSP 2/10 (NPWS, 2010).

2.3 Data sources

A range of data sources were used to identify to help establish the baseline conditions relevant to the Proposed Development. The following resources were analysed to inform the baseline description of the site of the Proposed Development and for assessing sensitivities of European sites:

- Environmental Protection Agency (EPA) Maps website (<u>https://gis.epa.ie/EPAMaps/</u>) (accessed 01 February 2024);
- National Parks and Wildlife Service (NPWS) Protected Sites in Ireland website (<u>https://www.npws.ie/protected-sites</u>) (accessed 01 February 2024);
- Air Pollution Information System (APIS) website (<u>https://www.apis.ac.uk/</u>) (accessed 01 February 2024);
- Google maps website (<u>https://maps.google.com/</u>) (accessed 01 February 2024);
- The Status of European Union (EU) Protected Habitats and Species in Ireland (Article 17 Report)
 (<u>https://www.npws.ie/publications/article-17-reports/article-17-reports-2019</u>) (accessed 01 February 2024);
 and,
- The results of a high-level ecological walkover survey which was carried out for the 12th Lock Masterplan in July 2022, and again in April 2023 and February 2024 to identify habitats, protected and notable species, and any invasive non-native species (AECOM, 2023b, 2024). Habitats present within the Site were classified in accordance with *A Guide to Habitats in Ireland* (Fossitt, 2000) and *Best Practice Guidance for Habitat Survey and Mapping* (Smith *et al.*, 2011).

2.4 AA Screening process

The first step in the sequence of tests (after evidence gathering) is to establish whether an AA is required. This is often referred to as 'AA Screening'. Diagram 2 below outlines the steps of the AA Screening according to Office of the Planning Regulation (OPR) (2021).

Diagram 2. The AA Screening process (taken from OPR (2021))



Steps and matters to be considered:



The purpose of AA Screening is to determine, in view of best available scientific knowledge, whether a plan or project, either alone or in-combination with other plans or projects, could have likely significant effects on a European site, in view of that site's Conservation Objectives.

Section 177U of the PDA specifies:

"A screening for appropriate assessment of ... [an] application for consent for proposed development shall be carried out by the competent authority to assess, in view of best scientific knowledge, if that ... proposed development, individually or in combination with another plan or project is likely to have a significant effect on the European site.

The competent authority shall determine that an appropriate assessment of ... a proposed development, ..., is required **if it cannot be excluded** [emphasis added], on the basis of objective information, that ... the proposed development, individually or in combination with other plans or projects, will have a significant effect on a European site".

For this purpose and as a result of case law 'likely' in practice means 'possible'¹. If the Competent Authority determines that there are no likely significant effects (including 'in combination' effects from other plans or projects), then no further assessment is necessary and the plan or project can, subject to any other consent processes, be taken forward.

If, however, the competent authority determines that there are likely significant effects or if there is reasonable scientific doubt, then the next stage in the process must be initiated and a detailed NIS must be prepared. The purpose of a NIS is to further explore the potential impacts and effects and to determine whether a conclusion of no adverse effects on integrity can be drawn for any of the 'screened in' impacts/European sites. One of the key

¹ Waddenzee (C-127/02).

considerations during the NIS stage is whether there is available mitigation that would entirely address potential effects.

2.5 Establishing the Zone of Influence

Department of the Environment, Heritage and Local Government guidance (DoEHLG, 2010) states that European sites with the potential to be affected by a project should be identified taking into consideration the potential for direct, indirect and/or cumulative (in-combination) effects. It also states that the specific approach in each case will differ depending on the scale and likely effects of the project. However, it advises that the following sites should generally be included:

- all European sites within or immediately adjacent to the project area;
- all European sites within the likely Zone of Influence (ZoI) of the project; and,
- all European sites for which there is doubt as to whether or not such sites might be significantly affected (adopting the Precautionary Principle after UNESCO, 2005).

The likely Zol of a project is the geographic extent over which it could affect the receiving environment in a way that will result in LSEs on the QIs or SCIs of a European site (OPR, 2021). In the case of projects, the DoEHLG guidance acknowledges that the Zol must be devised on a case-by-case basis with reference to the following criteria:

- the nature, size/scale and location of the project;
- sensitivity of ecological features under consideration; and,
- cumulative effects.

When seeking to identify the relevant European sites, consideration was given to identified impact pathways and the source-pathway-receptor approach (OPR, 2021), rather than adopting solely a distance-based approach. The source-pathway-receptor approach is a standard tool in environmental assessment. For an effect to occur, all three elements of this mechanism must be in place. The absence or removal of one of the elements of the mechanism means there is no possibility of an effect occurring. If, for example, there is a sensitive European site in the vicinity of the Proposed Development but no mechanism by which the Proposed Development would impact that site then there is no potential for an ecological effect. Furthermore, even where an impact is predicted to occur, it may not result in likely significant effects.

No decommissioning phase is anticipated for the Proposed Development and this development stage is not included in this Screening Report.

2.6 Potential sources of impact

Several potential sources of impacts were considered in this AA Screening. However, direct loss of and/or direct damage to habitat within a European site was not considered to be a potential source of impact from the Proposed Development as the Proposed Development is not situated within or adjacent to any European sites (the closest European site, which is the Rye Water Valley/Carton SAC, is located approximately 4.4 km north-west).

A description of each potential impact, and their potential relevance to the qualifying features of European sites, is provided under the following sub-headings.

Loss of habitat outside a European site which supports qualifying species

Habitat outside of the designated boundary of a European site that supports the qualifying species of that site, is defined as being 'functionally-linked' habitat. The ruling in the Holohan and Others v An Bord Pleanála case (C-461/17) concluded that the loss of functionally-linked habitat could result in significant effects on the qualifying features of a European site, if this prevented the site from meeting its Conservation Objectives.

To determine whether habitat may be functionally-linked to a European site requires some level of detailed study, often including targeted field survey. However, this impact can only occur on mobile animal species which could be present outside of the European site for which they are designated. For several bird species, NatureScot and Natural England have produced guidance on the distances up to which qualifying species may use functionally-linked habitat outside of European sites (Scottish Nature Heritage (SNH), 2016; Natural England, 2021) and this guidance is likely to be applicable to the same species in Ireland. The distances given in this guidance were used

when searching for SPAs which may be within the Zol of the Proposed Development. Accordingly, SPAs up to 20 km were searched for, as this is given as the largest core foraging range for any species (non-breeding pink-footed goose *Anser brachyrhynchus* and greylag goose *Anser anser*). The core foraging ranges from their roosting sites for most waterfowl and waders are much smaller than this.

For other mobile terrestrial, aquatic or amphibious animals for which SACs are designated in Ireland, the following distances were used when searching for sites which could be impacted by loss of functionally-linked habitat:

- otter studies quoted in Reid *et al.* (2013) are that otter have large home ranges in Ireland (approximately 6.5 13.2 km). Thus, a buffer of 15 km, and only where there is direct hydrological connectivity to the Proposed Development, was used when searching for SACs designated for otter;
- lesser horseshoe bat *Rhinolophus hipposideros* the Bat Conservation Trust (BCT) estimate that the 'core sustenance zone' (CSZ) for lesser horseshoe bats extends to around 2 km from a roost site. The CSZ is the area surrounding a communal roost within which habitat availability and quality are expected to have a significant influence on the resilience and conservation status of the colony using the roost (BCT, 2020). Therefore, the Zol of the Proposed Development on lesser horseshoe bats was considered to extend to at least 2 km from the location of the Proposed Development;
- fish species no set distance was used when considering potential impacts on fish species. Where a direct
 hydrological link exists between the Proposed Development and an SAC designated for fish, it was
 considered that there could be impacts on these QIs;
- marine mammals no set distance was used when considering potential impacts on marine mammals. They are largely limited to estuarine and saline waters; therefore, functionally-linked habitat for these species was considered only to exist within the marine habitats surrounding any SAC for which these species are QI;
- marsh fritillary *Euphydryas aurinia* research by Wahlberg *et al.* (2002) found that the average dispersal distance of male marsh fritillaries was 1.3 km, and up to 510 m for females. On a precautionary basis, therefore, a distance of 1.5 km was adopted; and,
- other invertebrates although the whorl snails Vertigo angustior, Vertigo geyeri and Vertigo moulinsiana, and Kerry slug Geomalacus maculosus are all mobile species, their ability to move over substantial distances is extremely limited. Therefore, functionally-linked habitat for these species was considered to only exist up to a distance of 100 m from any SAC for which these species are a QI. Freshwater pearl mussel Margaritifera margaritifera is not a mobile species. However, it relies upon salmonid fish for part of its lifecycle. Therefore, in cases where a direct hydrological connection exists between the Proposed Development and an SAC designated for freshwater pearl mussel, the potential impacts on this species were considered.

Disturbance of qualifying species

Construction and operational activities have the potential to cause disturbance of qualifying animal species. Disturbance can be caused visually (for example by the presence of personnel and plant, or as a result of artificial illumination of habitats) and/or by the noise and vibration generated by works. This could impact qualifying species outside of a European site when using functionally-linked habitat.

The potential for disturbance to be caused will depend on the location and nature of construction / operational activities, the distribution of the qualifying species, and the sensitivity of the species to noise and visual disturbance from human activities. This may need to be determined through detailed study, including field survey, to establish the distribution of the relevant species. However, where disturbance is caused, it can have multiple adverse effects on species, including increased energy expenditure, reduced feeding time, behavioural changes, and displacement.

Based on the published guidance referenced below, the following distances were used when considering how far construction and operational activities may disturb qualifying species:

- otter 150 m, guidance published by the NRA (2008) suggests this distance for otter breeding sites, reducing to 20 m for resting sites not used for breeding purposes;
- lesser horseshoe bat on a precautionary basis, a distance of 150 m is considered the maximum at which disturbance could be caused to roosting lesser horseshoe bats by construction and operational activities;

- non-breeding waterbirds the studies and guidance published on bird disturbance generally suggest
 that disturbance of non-breeding waterbirds can occur up to distances of around 300 m from
 construction works. However, the Waterbird Disturbance Mitigation Toolkit (Cutts *et al.*, 2013) and
 Disturbance Distance Review by NatureScot (Goodship and Furness, 2022) provide species-specific
 information on the sensitivity of several bird species which are qualifying features of SPAs;
- breeding birds 1 km, this being the maximum distance at which NatureScot consider disturbance could
 occur on the most sensitive species for which SPAs are designated (Goodship and Furness, 2022). For
 most species the disturbance distance is much smaller;
- fish species disturbance of fish species is considered possible where works take place within 50 m of watercourses, although even within this distance disturbance is unlikely due to the vibration-dampening effect of intervening soil and rock; and,
- invertebrates snail and slug species have no acoustic sense (Chase, 2001) and are not considered to be vulnerable to disturbance as a result of construction works.

Injury or mortality of qualifying species

The direct injury or mortality of QI or SCI species could occur in the construction phase where a species in question is using functionally-linked habitat outside of a European site boundary.

The potential for the direct mortality of fish species as a result of waterborne pollution is also considered below.

Prevention of migratory movements of qualifying species

The only feasible way in which construction works could impact on species in such a way that their migratory movements could be prevented is where they take place in or near to watercourses. The pollution of a watercourse, noise / visual disturbance, or installation of instream structures could all act to prevent the migratory movement of QI fish and/or otter.

Therefore, this impact was considered relevant where construction takes place adjacent to a river which is hydrologically linked to a SAC for which fish and/or otter are a QI. Any new instream structures could act as a barrier to fish migration or impede movements of otter during the operational phase of the Proposed Development.

Changes to surface water or groundwater hydrology

Changes to surface water hydrology can occur as a result of engineering activities during the construction phase. Abstraction of water (e.g. for use in dust suppression or other construction works) can also reduce water levels and surface water flows to a watercourse.

These impacts can act on QIs and SCIs of a European site if they pass through or occur within the relevant part of the watercourse. Therefore, any European site with direct freshwater hydrological connectivity (i.e. not including marine sites) could be impacted by changes to surface water hydrology.

Waterborne pollution

Construction and operational activities have the potential to pollute watercourses and/or waterbodies. These could themselves represent qualifying features of a European site, may be within a European site and support the qualifying features of that site, or may be outside of a European site but be functionally-linked to such a site if used by the qualifying animals. Waterborne pollution may arise through spillages of fuels, oils, chemicals or other pollutants, or from the uncontrolled released of sediment. Discharges of effluent, which could increase the nutrient levels in the water would also fall under this category of impact.

Waterborne pollution can degrade habitats and can lead to the direct mortality of qualifying species such as fish and freshwater pearl mussel. However, the distance over which such impacts could have effects would depend on the severity of the pollution. Furthermore, a huge dilution effect would occur for any estuarine or marine designations hydrologically connected to the Proposed Development due to the massive volume of the sea, thus reducing any risk of impact.

Airborne pollution

Airborne pollution could occur during the construction and operation phases of the Proposed Development and could impact qualifying habitats of European sites.

Dust generated during construction activities can directly impact vegetation or aquatic environments and can indirectly impact animal species (for example where these habitats are used by them for foraging). During extended periods of dry weather, dust can cover plant foliage and adversely affect photosynthesis or other biological functions. Rainfall can then remove deposited dust and rapidly leach chemicals into the soil (Holman *et al.*, 2014). Guidance published by the Institute of Air Quality Management (IAQM) advises that consideration should be given to construction-related air quality impacts on nature conservation sites within 50m of works, including any access routes, extending to 500 m from the entrance to the construction site (Holman *et al.*, 2014).

Vehicles and plant which operate via internal combustion engines emit airborne pollutants. The most important of these for European sites are oxides of nitrogen (NO_x) and (for vehicles with catalytic converters) ammonia (NH₃). At close distances to source, NO_x can have a directly toxic effect on vegetation at very high concentrations. However, according to the Air Pollution Information System (APIS), the negative effects of NO_x/NO₂ in atmosphere (as distinct from its role in nitrogen deposition) are most likely to arise in the presence of equivalent concentrations of sulphur dioxide $(SO_2)^2$. Vehicle exhausts do not emit notable amounts of SO₂ as sulphur is not in the regulated fuels, and APIS indicates that background SO₂ concentrations at the Proposed Development are very low compared to critical levels for SO₂ of 10-20 µgm⁻³. Since the SO₂ concentrations are so low, no synergistic effect with NO_x is expected. Likely to be of greater concern would be the contribution NO_x and ammonia make to the deposition of nitrogen to soils. Increases in nitrogen deposition from the atmosphere can, if sufficiently great, enhance soil fertility and lead to eutrophication. This can have adverse effects on community composition and quality of semi-natural, nitrogen-limited terrestrial and aquatic habitats (e.g. Wolseley et al., 2006; Dijk, 2001; http://www.apis.ac.uk/search-pollutant-impacts). Ammonia is also toxic to plants in relatively low concentrations. The major source of ammonia is agriculture and some chemical and industrial processes, but road vehicles with catalytic converters also emit ammonia. The guideline atmospheric concentration advocated for the protection of vegetation from ammonia is 3 µgm⁻³, known as the Critical Level. For lichens and bryophytes the Critical Level reduces to 1 µgm⁻³. An equivalent threshold known as the Critical Load applies to nitrogen deposition. However, unlike the Critical Level the Critical Load is bespoke to each habitat as different habitats have different sensitivity to nitrogen deposition. Both the IAQM and the Design Manual for Roads and Bridges (DMRB) advise that for road traffic, air quality impacts are only likely to extend to a maximum of 200 m from a road (or works area), and that air pollution levels fall sharply within the first few tens of metres (Holman et al., 2019; Highways England et al., 2019).

Based on the CIEEM (2021) air quality advisory guidance, marine and inter-tidal systems that are subject to tidal flushing will remove a large proportion of any nitrogen that may deposit from the atmosphere, thus preventing it from accumulating to the same extent as in terrestrial habitat, and the majority of nitrogen in those systems will come from marine and fluvial sources rather than from atmosphere. Therefore, marine habitats subjected to tidal flushing including the open sea are not considered to be sensitive to air quality pollution. Open lowland freshwater bodies are generally considered to be phosphorus-limited (meaning phosphorus is the key growth-limiting nutrient) rather than nitrogen-limited and are therefore less sensitive to atmospheric nitrogen deposition. For this reason most open freshwater habitats do not have an applicable Critical Load for nitrogen deposition.

Spread of invasive non-native species (INNS)

Invasive non-native species (INNS) can have detrimental effects on native flora and fauna. While the construction and operation of the Proposed Development are very unlikely to result in the spread of INNS, any construction works have the potential to spread INNS, including into European sites.

It has been assumed that the spread of invasive non-native plants could occur where construction works take place up to a distance of 50 m from a European site, or where there is otherwise a direct hydrological connection between the Proposed Development and a European site. As for animal species, there is no way in which the operation of the Proposed Development could cause the spread of invasive non-native animal species.

² Nitrogen Oxides (NOx) | Air Pollution Information System (apis.ac.uk)

3. Relevant baseline information

3.1 Terrestrial habitats

The Site consist of hardstanding surfaces with pavement, Grange Cottage and a number of derelict farm outbuildings with vegetation including dry meadow grassland, hedgerows, mixed broadleaved woodlands, and scrub bordering the courtyards and outbuildings.

3.2 Aquatic habitats

The Grand Canal is located approximately 11 m to the north of the Site boundary. Sections of the River Griffeen are diverted within the Site and survey area and are modified for use as a drainage system. The River Griffeen crosses underneath the Grand Canal just north of the Site and approximately 200 m east of the 12th Lock Bridge. The River Griffeen joins the River Liffey approximately 3.9 km downstream of the Site which then outflows into Dublin Bay approximately 24.4 km along the river course downstream of the Site.

3.3 **Protected species**

Evidence of bats in the form of bat droppings was recorded within the Site and structures within the Site are considered to have suitable feeding roosts for foraging bat species. The Grand Canal and River Griffeen in the survey area are likely used by bats. These watercourses have limited suitability for otter and no evidence of otter was noted during the otter surveys.

No other protected or important species were recorded within the Site, nor was evidence of them found. The Site itself is not considered to be particularly important to protected or important species as it dominated by hardstanding surfaces (derelict buildings and structures) and the areas of natural vegetation including the treelines, dry meadow grasslands and scrub are of low ecological value given they consist of common and widespread species as well as INNS (see Section 3.4 below).

3.4 Invasive non-native species

The Scheduled low-impact INNS, Spanish bluebell *Hyacinthoides hispanica* is located within the Site to the south of Grange Cottage in an area approximately 3 x 6 m within the dry meadow grassland. Spanish bluebell is also found in flowerpots adjacent to the derelict house in the south-west section of the Site. Two non-Scheduled INNS were also observed within the Site: butterfly-bush *Buddelja davidii* and cherry laurel *Pranus aurocerasus*. Two single strands of butterfly-bush were recorded within the Site, no taller than 3 m in height. Cherry laurel was observed growing within a 5 x 2 m bush with other scrub vegetation in the north section of the Site along the gravel path.

4. European sites within the Zone of Influence

The process of determining European sites that lie within the ZoI of the Proposed Development is an iterative assessment of the potential for each impact source to affect the QIs/SCIs in such sites as described above in Section 2.5. This process was carried out in Table 1.1 below and was conducted with cognisance of all potential impact sources described above in Section 2.6.

Not all impacts will have pathways for effects to the QIs/SCIs of all European sites within the ZoI. Consequently, some sites may be within the ZoI for certain impacts, but not for others.

Impact source	Pathway(s) to European site(s)	European sites within the potential Zone of Influence
Construction phase		
Loss of habitat outside of European sites but which supports qualifying species (i.e., loss of functionally-linked habitat).	On a precautionary basis, and in accordance with SNH (2016) and Natural England (2021), an initial worst-case Zol of 20 km from the Proposed Development was used when considering the loss of functionally-linked habitat for SCI bird species of SPAs. However, there is no suitable habitat for SCI bird species within the Site. Therefore, there is no possible pathway for the loss of functionally- linked habitat of SPAs.	None.
	The section of the Griffeen River within the Site is largely unsuitable but theoretically could be used by otter, a QI of the Wicklow Mountains SAC, however this SAC is 11.4 km distant and has no direct hydrological connectivity to the Site. For other mobile terrestrial, aquatic, or amphibious animals for which SACs are designated in Ireland, there is no functionally-linked habitat of any SAC that could possibly be lost by the Proposed Development. The closest SAC that is designated for mobile QIs is the Rye Water Valley/Carton SAC, which is 4.4 km north-west of the Proposed Development. This European site is designated for narrow- mouthed whorl snail and Desmoulin's whorl snail, which are only considered mobile up to a very short distance from any SAC for which they are a QI. All other SACs designated for QI animal species, including otter and lesser horseshoe bat, are located further than 15 km and/or are not hydrologically linked to the Proposed Development, and thus could not be impacted by loss of functionally-linked habitat by the Proposed Development. Therefore, there is no possible pathway for the loss of any functionally-linked habitat of SACs.	
Disturbance of qualifying species (e.g., visual, noise, vibration or artificial light).	Given the distance of the Proposed Development from European sites (the closest is the Rye Water Valley/Carton SAC, which is located 4.4 km away) visual and noise disturbance of qualifying	South Dublin Bay and River Tolka Estuary SPANorth Bull Island SPA

Table 1.1. Establishing the Zone of Influence of the Proposed Development

Impact source	Pathway(s) to European site(s)	European sites within the potential Zone of Influence
	species that are located within any European site during the construction phase is not possible. Disturbance of SCI species during the construction phase could occur where these are using functionally-linked habitat outside the of the boundary of a European site. According to Cutts <i>et al.</i> (2013) disturbance of waterbirds can occur at distances of up to 300 m from construction works. Noise from construction works therefore has the potential to disturb any SCI birds that may occur in habitats in the surrounding area of the Site.	
Injury or mortality of qualifying species	SCI bird species that could be using functionally-linked habitat during the construction phase are considered to be vulnerable to injury or mortality from damage or destruction of nests. However, as described above, there is no suitable habitat for SCI bird species within the Site and therefore no possible pathway for injury or mortality of SCI birds. Injury or mortality to other QI animal species is considered to possibly occur where works take place within 50 m of a SAC boundary, on a precautionary basis, or if these species occur in functionally-linked habitat away from a European site. However, as this is not the case for the Proposed Development (see 'loss of functionally-linked habitat in the first row of this table), there is no possible pathway for the injury or mortality of other QI animal species of any SACs as a result of the Proposed Development.	None.
Barriers to movement or displacement of QI / SCI or supporting species.	The Proposed Development poses no risk of disrupting the movement of birds or aquatic species as it will involve no obstacles to flight or migration routes. The Proposed Development will include the construction of a clear-span bridge over the River Griffeen but there is no hydrological connection between the Proposed Development and any SAC designated for fish species, otter or freshwater pearl mussel. Thus, there is no possibility of the Proposed Development preventing the regular movements, including migration, of any qualifying species.	None.
Changes to surface water hydrology	During the construction phase, any aquatic European site crossed by, adjacent to (i.e., within 50 m) or with a direct hydrological connection to the Proposed Development could be impacted by changes to surface water hydrology. The nearest European site is well beyond this distance (4.4 km distant) and there are no European Sites with a direct hydrological connection to the Site, therefore, there are no European sites that could be impacted by changes to surface water hydrology from the Proposed Development.	None.
Changes to groundwater hydrology	Guidance published by the Scottish Environment Protection Agency (SEPA) suggests that excavation works can act on	None.

Impact source	Pathway(s) to European site(s)	European sites within the potential Zone of Influence
	groundwater-dependent terrestrial ecosystems (GWDTE) up to 100 m from excavations less than 1m in depth, extending up to 250 m for deeper excavations (SEPA, 2017). Considering that deep excavations will not be required for the Proposed Development, it is very unlikely that groundwater impacts will extend more than 100 m. The nearest European site is well beyond this distance (4.4 km distant) and, therefore, no hydrological impacts on groundwater will occur.	3
Waterborne pollution	The River Griffeen within the Site, is a tributary of the River Liffey that outflows into the Dublin Bay approximately 24.4 km downstream of the Proposed Development. Another watercourse is located in the survey area. The Grand Canal is located approximately 11 m to the north of the Site and outflows into Dublin Bay approximately 18.7 km downstream of the Site. As such, the Grand Canal and the River Griffeen have an indirect hydrological connection to four European sites: South Dublin Bay and River Tolka Estuary SPA, South Dublin Bay SAC, North Dublin Bay SAC, and North Bull Island SPA. Thus, any pollution during the construction phase that enters the water has the potential to flow downstream of the Proposed Development and into these European sites. There is no hydrological connection to any other European sites and consequently no realistic way in which water quality impacts could arise within other European sites.	 South Dublin Bay SAC South Dublin Bay River and Tolka Estuary SPA North Bull Island SPA North Dublin Bay SAC
Airborne pollution	On a precautionary basis, all European sites within 500 m (to account for IAQM guidance in relation to potential dust deposition impacts from construction site entrances) were considered at this stage to be within the potential ZoI of this impact. There are no European sites within 500 m of the Proposed Development.	None.
Spread of invasive non-native species	The Site contains three INNS including Spanish bluebell (Scheduled, low-impact), cherry laurel (non-Scheduled, high- impact) and butterfly bush (non-Scheduled, medium impact). Generally, the spread of INNS can occur where construction works take place up to a distance of 50 m from or within 50 m of a watercourse which is connected to a European site. A section of the Griffeen River (a tributary of the River Liffey) is located within the Site and the Grand Canal is located just 11 m to the north of the Site. Both of these watercourses indirectly outflow into Dublin Bay. Therefore, the spread of INNS to European sites cannot be ruled out as the Proposed Development has an indirect hydrological connection to European sites in Dublin Bay including South Dublin Bay and River Tolka Estuary SPA, South Dublin Bay SAC, North Dublin Bay SAC, and North Bull Island SPA.	 South Dublin Bay SAC South Dublin Bay River and Tolka Estuary SPA North Bull Island SPA North Dublin Bay SAC

Impact source	Pathway(s) to European site(s)	European sites within the potential Zone of Influence
Operational phase		
Loss of habitat outside of European sites but which supports qualifying species (i.e., loss of functionally-linked habitat).	There is no mechanism by which operation of the Proposed Development could result in a loss of functionally-linked habitat outside of the boundary of a European site.	None.
Disturbance of qualifying species	As described previously, the Site is not hydrologically linked to any SACs that are designated for otter or fish and the Site contains large areas of hardstanding with no suitable habitat for any SCI birds. Therefore, it does not support any QI species of SACs or any SCI bird species.	 South Dublin Bay and River Tolka Estuary SPA North Bull Island SPA
	Consequently, the potential for disturbance of QI or SCI species is considered to be very low. However, increasing visitor pressure as a result of the Proposed Development has the potential to disturb SCI birds from South Dublin Bay and River Tolka Estuary SPA and North Bull Island SPA that may occur in habitats in the surrounding area of the Site for foraging.	
Injury or mortality of qualifying species	There is no possible pathway for the injury or mortality of QI or SCI species.	None.
Barriers to or displacement of QI/SCI or supporting species.	There is no hydrological connection between the Proposed Development and any SAC designated for fish species or freshwater pearl mussel. Thus, there is no possibility of the Proposed Development preventing the regular movements, including migration, of any qualifying species.	None.
Changes to surface water hydrology	There is no mechanism by which operation of the Proposed Development could result in changes to surface water hydrology of any European site.	None.
Changes to groundwater hydrology	There is no mechanism by which operation of the Proposed Development could result in changes to groundwater hydrology of any European site.	None.
Waterborne pollution	The operation of the Proposed Development will be similar to existing conditions. There will be some works to drainage to upgrade the existing system where required and make new connections to the existing foul sewer network. Run-off from the Proposed Development will enter the existing drainage system and there will be no significant increase in run-off of water or possible inputs of pollutants. In line with case law ³ , consideration cannot be given at this stage to mitigation measures that are specifically designed to avoid likely significant effects on a European site. However, standard measures that are inherent to the project design	None.

³ Eco Advocacy v An Bord Pleanála (Case C-721/21)

Impact source	Pathway(s) to European site(s)	European sites within the potential Zone of Influence
	can be considered at this stage as long as they were not specifically designed to protect any European sites. The Proposed Development will include some Sustainable Drainage System (SuDS) features that will reduce surface run-off and filter potential pollutants. There is consequently no potential for waterborne pollution during the operational phase.	
Airborne pollution	There is no possible pathway of dust or other airborne pollution on European sites. Air quality will be similar to the levels prior to the Proposed Development.	None.
Spread of invasive non-native species	There is no mechanism by which the operation of the Proposed Development could cause the spread of invasive non-native plant or animal species.	None.

5. Test of likely significant effects

5.1 Considering the Proposed Development alone

This section assesses the potential for the identified construction and operational phase impacts, for which pathways exist to European sites, to result in likely significant effects on the relevant European sites. 'Likely' in this context is taken to mean 'possible', while a 'significant' effect is one which could undermine the Conservation Objectives of a European site.

The purpose of AA Screening is to determine those elements of a project regarding which it can be stated, without detailed appraisal, that significant effects on a European site are unlikely. In line with case law⁴, consideration cannot be given at this stage to mitigation measures that are specifically designed to avoid likely significant effects on a European site. However, standard measures that are inherent to the project design can be considered at this stage as long as they were not specifically designed to protect any European sites. The test of likely significant effects in this section is therefore necessarily a high-level appraisal, with a precautionary approach adopted when reaching a conclusion.

For those impacts for which likely significant effects cannot be 'screened out' (i.e., excluded), further appraisal at the Appropriate Assessment stage will be required.

On the basis of the initial assessment described in Section 4 of this Report, the following impacts have been screened out as there is no possibility of these impacts arising:

- during the <u>construction phase</u>:
 - loss of habitat outside of European sites but which supports qualifying species (i.e. loss of functionallylinked habitat);
 - injury or mortality of qualifying species;
 - barriers to or displacement of QI/SCI or supporting species;
 - changes to surface water hydrology;
 - changes to groundwater hydrology; and,
 - airborne pollution of qualifying, supporting or functionally-linked habitat(s), or of qualifying or supporting species.
- during the operational phase:
 - loss of habitat outside of European sites but which supports qualifying species (i.e. loss of functionallylinked habitat);
 - injury or mortality of qualifying species;
 - barriers to or displacement of QI/SCI or supporting species;
 - changes to surface water hydrology;
 - changes to groundwater hydrology;
 - waterborne pollution of qualifying, supporting or functionally-linked habitat(s), or of QI / SCI or supporting species;
 - airborne pollution of qualifying, supporting or functionally-linked habitat(s), or of qualifying or supporting species; and,
 - spread of invasive non-native species.

5.1.1 Impacts tested for likely significant effects

For all other impacts given in Table 1.1, the European sites within the potential zone of influence of the Proposed Development was established.

Possible impacts during the construction phase are as follows:

⁴ Eco Advocacy v An Bord Pleanála (Case C-721/21)

- waterborne pollution of qualifying, supporting or functionally-linked habitat(s), or of QI/SCI or supporting species;
- disturbance of SCI species; and
- spread of invasive non-native species.

Disturbance of SCI species is the only impact possible during the operational phase.

5.2 Screening assessment

For each European site, the construction and operational phase impacts for which that site was determined to be within the Zol of the Proposed Development are examined under the following subheadings for their potential to result in significant effects on the qualifying features.

The European sites being assessed in this Section are:

- North Dublin Bay SAC;
- South Dublin Bay SAC;
- South Dublin Bay and River Tolka Estuary SPA; and,
- North Bull Island SPA.

Information on each European site relevant to the test of likely significant effects, including the list of QI/SCI, Conservation Objectives, and known existing threats or pressures, was obtained from the National Parks and Wildlife Service (NPWS) website (<u>https://www.npws.ie/</u>). Further information on these European sites is provided in Appendix B.

5.2.1 Waterborne pollution of qualifying, supporting or functionally-linked habitat(s), or of QI / SCI or supporting species during construction phase

As set out in Table 1.1, South Dublin Bay SAC, South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, and North Dublin Bay SAC are within the potential Zol of the Proposed Development as these European sites are located downstream of the Site (shown on Figure 2). The Proposed Development is unlikely to cause significant waterborne pollution during construction given a) no instream works are proposed, and b) the proposed works associated with the Proposed Development are minor and thus any pollution generated during the construction phase is likely to be extremely limited. In addition, the aforementioned downstream European sites are located more than approximately 24.4 km from the Site and the dilution effect from the River Griffeen, the River Liffey and Dublin Bay itself mean that there will be no effect on European sites from pollution. Therefore, there is **no potential for likely significant effects** as a result of the Proposed Development.

5.2.2 Disturbance of SCI species during construction and operational phases

As set out in Table 1.1, South Dublin Bay and River Tolka Estuary SPA, and North Bull Island SPA are within the potential Zol of the Proposed Development as SCI species from these European sites may occur in areas of habitat within the possible disturbance distance of the Proposed Development (taken to be up to a maximum of 300 m). However, any such areas of habitats are small in extent and highly disturbed by the existing urban nature of the environment. Any disturbance as result of the Proposed Development during the construction phase will be temporary and disturbance during the operational phase of Proposed Development, will be of a similar nature to existing background levels of human activity in the area, which any SCI species that occur in proximity to the Site would already be habituated to. Furthermore, these SPAs are located within Dublin Bay and so the sites are already subject to a large number of visitors and are consequently managed in such a way as to mitigate the potential effects of recreational pressure. Therefore, disturbance to SCI species will likely not occur and there is **no potential for likely significant effects** as a result of the Proposed Development.

5.2.3 Spread of invasive non-native species during construction phase

As set out in Table 1.1, South Dublin Bay SAC, South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, and North Dublin Bay SAC are within the potential Zol of the Proposed Development as these European sites are located downstream of the Site (shown on Figure 2). The proposed works associated with the Proposed Development are minor in nature and involve the repurposing of existing structures and the construction of a proposed clear span bridge. There are three INNS present within the Site, however given the distance of the Site from the aforementioned European sites any viable parts of an INNS (e.g. seeds) that may be carried

downstream as a result of the Proposed Development would not persist due to the saline environment of Dublin Bay and so could not establish. Therefore, there is no possible impact on European sites as a result of the spread of INNS. Therefore, there is **no potential for likely significant effects** as a result of the Proposed Development.

5.3 In-combination effects

Cumulative effects can result from individually insignificant but collectively significant actions taking place over a period of time or concentrated in a location (CIEEM, 2022). Effects which arise in-combination with other projects or plans must be considered as part of the AA Screening process. In accordance with OPR (2021), the assessment of in-combination effects must examine:

- completed projects
- projects which are approved but not completed
- proposed projects (i.e. for which an application for approval or consent has been made, including refusals subject to appeal and not yet determined)
- proposals in adopted plans
- proposals in finalised draft plans formally published or submitted for consultation or adoption

Planning applications that have been identified as having the potential to act in-combination with the Proposed Development are detailed in Appendix A with their planning status. No possible effects were identified for any impacts which may arise from the Proposed Development. No plans have been identified which could give rise to in-combination effects with the possible impacts from the Proposed Development.

Waterborne pollution must be managed as a requirement of other relevant legislation by these projects. In addition, a range of measures will be adopted by the Proposed Development at all phases to ensure no pollution of the water environment. It can therefore be reliably concluded that this possible impact will not give rise to significant adverse effects on European sites in-combination with the Proposed Development.

It is thus concluded that there will be no adverse effects on the integrity of any European sites from the Proposed Development acting in-combination with any plans or projects.

6. AA Screening statement

In view of best available scientific knowledge and on the basis of objective information, likely significant effects from the Proposed Development on European sites, either alone or in-combination with other plans or projects, can be excluded.

Based on the information provided in this Report, there is no requirement to proceed to the next stage of AA or for a Natura Impact Statement (NIS) to be produced.

7. References

AECOM (2024). *Grange Cottage Ecological Impact Assessment Report*. Produced for South Dublin County Council.

AECOM (2023a). 12th Lock Masterplan Preliminary Ecological Appraisal. Produced for South Dublin County Council.

AECOM (2023b). *12th Lock Masterplan Appropriate Assessment Screening Report*. Produced for South Dublin County Council.

BCT (2020). Core Sustenance Zones and habitats of importance for designing Biodiversity Net Gain for bats. Bat Conservation Trust, London. https://www.bats.org.uk/resources/guidance-for-professionals/bat-species-core-sustenance-zonesand-habitats-for-biodiversity-net-gain

Chase, R (2001). Sensor Organs and the Nervous System, in: Barker, G.M. (ed.). The Biology of Terrestrial Molluscs. CABI Publishing, Oxford.

CIEEM (2022). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine (Version 1.2 – April 2022). Chartered Institute of Ecology and Environmental Management, Winchester.

CIEEM (2021). Advisory Note: Ecological Assessment of Air Quality Impacts.

Cutts, N., Hemingway, K. and Spencer, J. (2013). *Waterbird Disturbance Mitigation Toolkit. Institute of Estuarine and Coastal Studies*, University of Hull.

DoEHLG (2010). *Appropriate Assessment of plans and projects in Ireland. Guidance for Planning Authorities*. Department of Environment, Heritage and Local Government: Ireland.

European Commission (2021). Assessment of Plans and Projects Significantly Affecting European sites: Methodological Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (European Commission Environment Directorate-General).

European Commission (2018). *Commission Notice: Managing Natura 2000 sites*. The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC. Brussels, 21.11.2018 (2018) 7621 final.

European Commission (2000). *Communication from the Commission on the Precautionary Principle*. Office for Official Publications of the European Communities, Luxembourg.

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

Goodship, N.M. and Furness, R.W. (2022). *NatureScot Research Report 1283 – Disturbance Distances Review: An updated literature review of disturbance distances in selected bird species*. Available from: <u>https://www.nature.scot/doc/naturescot-research-report-1283-disturbance-distances-review-updated-literature-review-disturbance</u>.

Highways England, Transport Scotland, Welsh Government and Department for Infrastructure (2019). *Design Manual for Roads and Bridges. Sustainability and Environment Appraisal. LA 105: Air quality.* Available from: https://www.standardsforhighways.co.uk/prod/attachments/10191621-07df-44a3-892e-c1d5c7a28d90?inline=true.

Holman, C., Barrowcliffe, R., Harker, G., Hawkings, C., Horrocks, S. and Prismall, F. (2019). *A guide to the assessment of air quality impacts on designated nature conservation sites*. Version 1.1. – May 2020. Institute of Air Quality Management, London.

Holman, C., Barrowcliffe, R., Birkenshaw, D., Dalton, H., Gray, G., Harker, G., Laxen, D., Marner, B., Marsh, D., Prismall, F., Pullen, J., Stoaling, M., Storey, C. and Vining, L. (2014). *Guidance on the assessment of dust from demolition and construction.* Version 1.1., June 2016. Institute of Air Quality Management, London.

Natural England (2021). *Identification of Functionally Linked Land supporting SPA waterbirds in the North-West of England*. Natural England Commissioned Report NECR361.

NPWS (2010). Circular NPW 1/10 & PSSP 2/10 Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities.

NRA (2008). *Guidelines for the Treatment of Otters Prior to the Construction of National Road Schemes.* National Roads Authority (now Transport Infrastructure Ireland), Dublin.

OPR (2021). OPR Practice Note PN01: Appropriate Assessment Screening for Development Management. March 2021.

Reid, N., Hayden, B., Lundy, M.G., Pietravalle, S., McDonald, R.A. & Montgomery, W.I. (2013) *National Otter Survey of Ireland 2010/12. Irish Wildlife Manuals No. 76.* National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin, Ireland

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

SNH (2016). Assessing Connectivity with Special Protection Areas (SPAs). Version 3, June 2016. Available from: https://www.nature.scot/assessing-connectivity-special-protection-areas.

Wahlberg, N., Klemetti, T., and Hanski, I. (2002). Dynamic Populations in a Dynamic Landscape: The Metapopulation Structure of the Marsh Fritillary Butterfly. Ecography, **25(2)**, 224–232. http://www.jstor.org/stable/3683604

UNESCO (2005). *The Precautionary Principle*. World Commission on the Ethics of Scientific Knowledge and Technology, UNESCO

8. Figures

Figure 1. Site extent

Figure 2. European sites within the potential Zol





Grange Cottage

CLIENT

South Dublin County Council

CONSULTANT

AECOM Ireland Limited 4th Floor, Adelphi Plaza Georges Street Upper Dun Laoghaire Co. Dublin A96 T927 www.aecom.com

LEGEND



NOTES

Copyright Government of Ireland. Licenced for re-use under the Creative Commons attribution 4.0 International Licence. Maxar, Microsoft, Esri UK, Esri, TomTom, Garmin, FAO, NOAA, USGS

ISSUE PURPOSE

FINAL PROJECT NUMBER

60693986

FIGURE TITLE

Site Extent

FIGURE NUMBER

Figure 1









Grange Cottage

CLIENT

South Dublin County Council

CONSULTANT

AECOM Ireland Limited 4th Floor, Adelphi Plaza Georges Street Upper Dun Laoghaire Co. Dublin A96 T927 www.aecom.com

LEGEND



Watercourses

Special Protection Area (SPA)

Special Area of Conservation (SAC)

NOTES

Copyright Government of Ireland. Licenced for re-use under the Creative Commons attribution 4.0 International Licence. Esri Community Maps Contributors, Esri UK, Esri, TomTom, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS, Maxar, Microsoft, Earthstar Geographics, Esri UK, Esri, TomTom, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS, Esri UK, Esri, TomTom, Garmin, FAO, NOAA, USGS

ISSUE PURPOSE

FINAL

PROJECT NUMBER

60693986

FIGURE TITLE

European Sites within the potential Zol

FIGURE NUMBER

Figure 2

Appendix A Planning applications

Table 1A. Planning search for relevant developments within 1 km of the Site

Planning Authority	Ref. no.	Address	Summary of Proposed Development	Grant date	Distance from Site (approx.) (m)
SDCC	SD22A/0022	Takeda Ireland Limited, Grange Castle Business Park, Clondalkin, Dublin 22	The construction of a 2-storey extension and any associated site works to the south elevation of the existing engineering stores in the administration offices building which comprises of construction of circa 34m ² area with a maximum height of 9.4m to accommodate two storey units at Grange Castle Business Park, Grange Castle, Dublin 22. The application relates to development which comprises of an activity, which requires an Industrial Emissions (IE) Licence in accordance with the First Schedule of the EPA Act 1922 as amended.	05/05/2022	98
SDCC	SD22A/0025	Takeda Ireland Limited, Grange Castle Business Park, Clondalkin, Dublin 22	Retention and continuance of the use for a further two years of the temporary gas powered generation plant, that is located to the rear of the Takeda Ireland complex, that is sited within a walled year of 2,836m ² containing 12 generator units with associated flues (each 15m high), which was permitted initially for a period of three years under Reg Ref. SD16A/0345 and was subsequently extended for an additional period of 2 years from the 4th February 2020 under Condition no. 2 of permission granted under SD19A/0342 Vehicular access to the generation plan will remain from the permitted service road into Edgeconnex site and Grange Castle Business Park as originally permitted.	28/03/2022	241
SDCC	SD22A/0303	Grange Castle Business Park, Grange Castle, Dublin 22	Construction of a Volatile Organic Compound (VOC) Abatement system comprising of a thermal oxidiser (TO), associated plant equipment and scrubbers positioned on a bunded concrete plinth with a maximum single stack height of 12m along with two access platforms at 2.5 high and 5.0m high used for maintenance only; The system is set within a 489m ² (including a bunded area of 213 m ²) concrete compound enclosed by a 2.4m high paladin weldmesh black fence to match the existing utilities perimeter fence; 135m ² single storey utilities workshop will sit adjacent to the Volatile Organic Compound (VOC) abatement system compound with associated hardstanding area and soakpit; 55m (L) x 3.2m (W) x 5.6m (H) pipe rack extension with the addition of a second tier extension 118.6m (L) X 3.2M (W) 1.2m (H) to the existing pipe rack is required to service the new VOC abatement system compound; a contractor's compound 3,420m ² comprising single stacked portacabins, workshops, parking for 30 contractors, materials delivery and set down area; the compound will be enclosed by a 2.4m tall paladin weldmesh black fence; modifications to the existing internal access road will include the addition of a new access road and footpath around the VOC abatement system compound and utilities workshop; a permanent pedestrian crossing including associated signage at the existing access road giving access between the contractor's compound and the voe abatement system compound; An EIAR (Environmental Impact Assessment Report) will be submitted with the application; this application relates to development which comprises an activity requiring an IE Licence in accordance with the First Schedule of the EPA Act 1922 as amended.	07/09/2022	273
SDCC	SD15A/0061	Grange Castle Business Park, Clondalkin, Dublin 22	10-year permission for the construction of a 115MW Peaker Power Plant in a single storey building with a mezzanine level office and electrical control area. This building has a platform height of 17.52m, 7 shafts with a height of 20.74m and 2 stacks with a height of 25m. The development also includes water and fuel tanks with	22/06/2015	311

Planning Authority	Ref. no.	Address	Summary of Proposed Development	Grant date	Distance from Site (approx.) (m)
			associated pump houses; 1 building consisting of a compact workshop and warehouse and a security area, with a height of 6.5m; site access and entrance gates; internal roadways and footpaths; security fencing; 6 car parking spaces (1 of these is accessible) and appropriate landscaping all on a site of 1.23ha site in the north of Grange Castle Business Park. The total gross floor area of the facility is approx. 3,583m ² . This application relates to development which comprises of an activity which requires an IE Licence in accordance with the First Schedule of the EPA Act 1992 as amended.		
SDCC	SD23A/0079	Grange Castle Business Park, Nangor Road, Clondalkin, Dublin 22	Alterations to a previously approved development (Reg. Ref. SD15A/0061 and Reg. Ref. SD16A/0398) which relates to a 10-year permission for the construction of a Peaker Power Plant in a single storey building with a mezzanine level, together with associated plant equipment including water & fuel tanks. The alterations to the previously approved development (Reg. Ref. SD15A/0061 & SD16A/0398) include the following: (i) alterations to the previously approved building within the eastern portion of the site as follows: (a) an increase in the overall footprint of the building to the north-west to include office space, and staff facilities at ground floor level; and to the north-east to include a boiler room at ground floor level; (b) revised roof footprint to the rear of the building, with the roof being lowered to the rear; (c) relocation of stair cores and updates to building elevations, including the introduction of additional glazing; (d) amendments to the external open service yard to the north of the building including the removal of the previously approved transformer rooms, addition of containerised plant and minor alterations to the location of shaft towers; (e) a minor increase in the height (by 600mm) of the screen to the service yard. Alterations to the western portion of the site include; (ii) minor amendments to the location of the site, and the addition of contained plant and a pump house building; (iv) minor amendment to the location of the approved tanker unloading area; (v) relocation of car parking space; (vi) provision of a gas skid & support structure to the south-west of the site; (vii) provision of a new bicycle parking shelter comprising 8 no. parking spaces; (x) amendments to soft landscaping to accommodate the revised layout and; (xi) drainage, boundary treatments, site lighting, EV car charging ports; and all associated site development and ancillary works necessary to facilities the development. The capacity of the plant will be 115MW as approved under Reg. Ref. SD15A/0061. This applicatio	14/06/2023	311
SDCC	SDZ23A/0004	Adamstown, Lucan, Co. Dublin	385 dwelling units (139 houses, 70 Build-to-Rent duplex / apartments, 72 duplex / apartments and 104 apartments), ranging between two to six storeys in height comprising the following: - Total of 139 houses consisting of 102 three bedroom two storey terraced houses (House Type: 0, E & F); 11 four bedroom two storey terraced houses (House Type: 0, E & F); 11 four bedroom two storey terraced houses (House Type: 0, E & F); 11 four bedroom two storey terraced houses (House Type: 0, E & F); 11 four bedroom two storey terraced houses (House Type: C); 26 four bedroom three storey terraced houses (House Type: A & B); Total of 70 Build-to-Rent duplex / apartments units consisting of 35 two bedroom units (House Type: J, L & O); 35 three bedroom units (House Type: K, M & P); Total of 72 duplex / apartment units consisting of: - 36 two bedroom units (House Type: J, L & O); 36 three bedroom units (House Type: K, M & P); Total of 104 apartment units accommodated in 2 blocks ranging from four to six storeys consisting of 48 one bedroom units (House Type: A1 & A2); 56 two bedroom units (House Type: B1 & B2); Private rear gardens are provided for all houses. Private patios / terraces and balconies are provided for all duplexes and apartments; Vehicular access to serve the development is provided off the Clonburris Southern Link Street permitted under SDCC Reg. Ref. SDZ20A/0021 and currently under construction. Pedestrian and cycle access is also provided to the Newcastle Road (R120) and to the Clonburris Southern Link Street; All associated and ancillary site development, infrastructural, hard and soft landscaping and boundary treatment works, including: - A single storey tenant	15/12/2023	318

Planning Authority	Ref. no.	Address	Summary of Proposed Development	Grant date	Distance from Site (approx.) (m)
			amenity building (c. 170m ²); Areas of public open space (1.45ha); 538 car parking spaces and 878 bicycle parking spaces (660 long-term spaces and 218 visitor spaces); Bin and bicycle stores; Plant provided at undercroft level and additional plant provided at roof level (including solar panels) of the proposed apartment blocks; 3 ESB substations; Demolition of remaining walls and hardstanding associated with a former agricultural building; The development proposed includes minor revisions to an attenuation pond, connections to water services (wastewater, surface water and water supply) and connections to permitted cycle/ pedestrian paths permitted under SDCC Reg. Ref. SDZ20A/0021 on a site (c. 8.94 Ha) in the townland of Adamstown, within the Clonburris Strategic Development Zone (Adamstown Extension). On lands generally bound by the Dublin-Cork Rail Line to the north; Hayden's Lane, the Griffeen River and the undeveloped lands of Clonburris Strategic Development Zone to the east; Lucan Pitch and Putt to the south; and Newcastle Road (R120) to the west. This site consists of Development Areas AE-SI and AE-S2 within the Clonburris Strategic Development Zone, as prescribed by the Clonburris Strategic Development Zone Planning Scheme 2019; This application is being made in accordance with the Clonburris Strategic Development Zone Planning Scheme Area, as defined by Statutory Instrument No. 604 of 2015.		
SDCC	SD19A/0322	The Grange, Ballymakaily, Newcastle Road, Lucan, Co. Dublin.	Construction of 1 & 2 storey office building, c.9.43m in height providing a total GFA of 459m ² ; provision of 11 total car parking spaces; 8 covered cycle parking spaces; the removal of the existing temporary structures, landscaping, tree planting and all associated site and infrastructural works.	05/12/2019	384
SDCC	SD22A/0148	Grange Castle Business Park, Clondalkin, Dublin 22	1 screened bin compound to be relocated to the south-east corner of the site; 2 transformers within individual compounds and adjoining switch room (35.2m ²) to be located to the east of the permitted data centre to replace screened transformer compound permitted to the south-east of the site; 1 new plantroom (19.8m ²) and 1 water storage tank to be located to the west of the permitted data centre to replace previously approved fire suppression enclosure and new double gates to replace sliding gates at entrance into the permitted data centre site.	30/08/2022	468
SDCC	SD20A/0147	Grange Castle Business Park, Nangor Road, Clondalkin, Dublin 22	Construction of P3 Phase II expansion of the existing P3 biopharma production facility which includes the construction of a circa 2,155m ² , two storey biopharma production facility to a maximum height of circa 14.9m to be located to the south of the existing P3 building; single storey administration extension of circa 210m ² to a maximum height of 4m to the north of the existing P3 building and internal modifications to the existing P3 building in addition to all associated site works including delivery area; courier pick up/drop off area with 5 parking spaces (including 1 accessible parking space and 1 E-car space); extension to existing external utilities yard (circa 485m ²) for 3 heat pumps and other ancillary equipment; new internal site circulation road and realignment of existing circulation road; 48 additional car parking spaces (including 3 accessible parking spaces and 5 E-car spaces); 24 covered bicycle stands, hard and soft landscaping and external lighting; there will be temporary site entrance and associated temporary access road located to the south east of the site during the construction phase all on 3.68ha application site located within the Takeda Ireland facility at Grange Castle Business Park; an EIAR (Environmental Impact Assessment Report) is submitted with the application and relates to development comprising of an activity which requires and IE Licence in accordance with the First Schedule of the EPA Act 1992 as amended.	08/10/2020	470
ABP	PL06S.317802	Ballymakaily, West of Newcastle Road	Construction of 2 adjoined single storey data centres with associated office and service areas with an overall gross floor area of 15,274m ² comprising of the construction of 2 adjoined single storey data centres with a gross floor area of 12,859m ² that will include a single storey goods receiving area / store and single storey office area	Pending decision	502

Grange Cottage

Planning Authority	Ref. no.	Address	Summary of Proposed Development	Grant date	Distance from Site (approx.) (m)
		(R120), Lucan, Co. Dublin	(2,415m ²) with PV panels above, located to the east of the data centres as well as associated water tower, sprinkler tank, pump house and other services; The data centres will also include plant at roof level; with 24 standby diesel generators with associated flues (each 25m high) that will be located within a generator yard to the west of the data centres; New internal access road and security gates to serve the proposed development that will provide access to 36 new car parking spaces (including 4 electric and 2 disabled spaces) and sheltered bicycle parking to serve the new data centres; New attenuation ponds to the north of the proposed data centres; Green walls are proposed to the south and east that will enclose the water tower and pump house compound; The development will also include ancillary site works, connections to existing infrastructural services as well as fencing and signage; The development will include minor modifications to the permitted landscaping to the west of the site as granted under SDCC Planning Ref. SD19A/0042 / ABP Ref. PL06S.305948 and Ref. SD21A/0042; The site will remain enclosed by landscaping to all boundaries; The development will be accessed off the R120 via the permitted access granted under SDCC Planning Ref. SD19A/0042 / ABP Ref. PL06S.305948 and SD21A/0042; An Environmental Impact Assessment Report (EIAR) has been submitted with this application.	Decision due date: 21/03/2024	
SDCC	SD22A/0105	Ballymakaily, West of Newcastle Road (R120), Lucan, Co. Dublin	Amendments to the electrical substation compound and structures permitted under Reg. Ref. SD19A/0042 and ABP Ref. 305948-19 comprising of amendment to the layout and extent of the permitted substation compound, to include an extension of the compound area to c. 0.77ha; reorientation of the Gas Insulated Switchgear (GIS) substation building to a northsouth orientation, and associated amendments to the building footprint, layout, and elevations, providing for a two storey building with a gross floor area (GFA) of c. 1,456m ² ; alterations to the permitted single storey Client Control Building to provide for the substitution of this structure with 5 single storey modular client control units, with a combined total GFA of c. 231m ² (GFA of c. 46.2m ² per module); associated amendments to the permitted substation access arrangements (3 gated access points provided), transformers, security fencing (to be 2.6 metres high in place of the 2.4 metre high fencing permitted), lighting, services, MV substation, parking, utility cabling, amendments to permitted landscaping and berms adjoining the substation compound and associated and ancillary works.	08/06/2022	634
SDCC	SD19A/0042	Newcastle Road, Lucan, Co Dublin	Phased development that will include 4 single storey data halls all with associated plant at roof level; 32 standby generators with associated flues (each 15m high); associated office and service areas; service road infrastructure and car parking; ESB sub-station/transformer yard with an overall gross floor area of 17,685m ² ; temporary gas powered generation plant within a walled yard containing 19 generator units with associated flues (each 17m high) to be located to the west of the proposed data halls on a site within the townland of Ballymakaily; Phase 1, 2 single storey data halls (6,950m ²) with roof plant and 16 stand-by generators with associated flues (each 15m high) as well as associated water tower and pump room and other services; single storey goods receiving area/store and single storey office area (1,522m ²) located attached and to the north-east of the data halls; temporary gas powered generation plant with 15 generators with associated flues (each 17m high) to be located transformer yard and single storey transformer building (247m ²) within compound; Phase 2, 2 single storey data halls (6,950m ²) with roof plant and 16 stand-by generators with associated flues (each 15m high) as well as associated water tower and pump room and other services; single storey goods receiving area/store and single storey into float and 16 stand-by generators with associated transformer yard and single storey transformer building (247m ²) within compound; Phase 2, 2 single storey data halls (6,950m ²) with roof plant and 16 stand-by generators with associated flues (each 15m high) as well as associated water tower and pump room and other services; single storey goods receiving area/store and single storey office area (1,522m ²) located attached and to the east of the data halls under this Phase and attached and to the north of the offices proposed under Phase 1; 4 additional generators with associated flues (each 17m high) to be constructed within the temporary gas powered generation plant; also ancillary si	05/10/2020	647

Planning Authority	Ref. no.	Address	Summary of Proposed Development	Grant date	Distance from Site (approx.) (m)
			landscaping to all boundaries of the overall site of 22.1ha. Application for enabling works to facilitate this development has been made under Reg. Ref. SD19A/0004. An Environmental Impact Assessment Report (EIAR) has been submitted with this application. An EPA IE Licence will be applied for to facilitate the operation of Phase 2 of the permission.		
SDCC	SD21A/0042	Ballymakaily, West of Newcastle Road (R120), Lucan, Co. Dublin	Construction of two single storey data centres with associated office and service areas; and three gas powered generation plant buildings with an overall gross floor area of 24,624m ² that will comprise of the following: Demolition of abandoned single storey dwelling, remaining agricultural shed and derelict former farm building; Construction of 2 single storey data centres (12,797m ²), both with associated plant at roof level, with 24 standby diesel generators with associated flues (each 25m high) that will be attached to a single storey goods receiving area/store and a single storey office area (2,404m ²) located to the west of the data centres as well as associated water tower and sprinkler tank and other services; Amendments to the internal access road and omission of access to loading bay permitted under SDCC planning Ref. SD19/N0042/ABP Ref. PL06S.305948 that include the relocation of permitted, and new, internal security gates; and new internal access roads to serve the proposed development of 3 two storey gas powered generation plants (9,286m ²) within three individual buildings and ancillary development to provide power to facilitate the development of the overall site to be located within the south-west part of the overall site. Gas plant 1 (3,045m ²) will contain 20 generator units (18+2) with associated flues (each 25m high) will facilitate, once operation all the decommissioning of the temporary Gas-Powered Generation Plant within its open compound as granted under SDCC Planning Ref. SD19A/0042/ABP Ref. FL06S.305948. Gas plant 2 (3,045m ²) will contain 20 generator units (18+2) with associated flues (each 25m high). and, Gas plant 3 (3,196m ²) will contain 21 generator units (18+2) with associated flues (each 25m high). These plants will be built to provide power to each data centre, if and, when required. The gas plants will be required as back-up power generation once the permitted power connection via the permitted substation is achieved; New attenuation pond to the north of the site; Gre	09/03/2022	647
SDCC	SD22A/0289	Ballymakaily, West of Newcastle Road (R120), Lucan, Co. Dublin	The development will consist of the amendment of Condition no. 3 (ii) and 3 (iii) of the permission granted under Reg. Ref. SO21A/0042 that related to the Gas Plant of the overall permitted development only, so that these aspects of the new condition shall read as follows:	r 02/12/2022	647
			 Condition no. 3(ii): Within four (4) years from the date the first Gas Plant commences operation, the applicant or operator shall undertake a review with GNI of the ability to serve the Gas Plant with green gas and / or hydrogen (or similar fuels) shall be Investigated and reported to the Planning Authority. Any ability for the Gas Plant to be operated with green gas and/ or hydrogen (or similar fuels) shall be implemented within an agreed timeline agreed with GNI. 		

Planning Authority	Ref. no.	Address	Summary of Proposed Development	Grant date	Distance from Site (approx.) (m)
			 Condition no. 3(iii): If the applicant receives a firm offer from Eirgrid under which the Gas Plant is not required, and the connection has been realized with capacity onsite from Eirgrid, then the Gas Plants shall be removed from the entire site within a year of the ceasing of operation. The nature and extent of the permitted Gas Plants, or any other element of the parent permission granted under Reg. Ref. SD21A/0042 will otherwise not be amended by this application. An EPA IE licence will be applied for to facilitate the operation of the Gas Plant that Is subject of this amendment application. 		
SDCC	SD23A/0301	Gollierstown and Milltown (west of Grange Castle Business Park & The Adamstown Road (R120)), Newcastle, Dublin	The proposed development will consist of the construction of five logistics / warehousing units (Units 1 - 5) with associated office accommodation, service yards, ancillary structures/areas, and substations. The overall floor area of the proposed logistics / warehousing units is c. 56,932 sq.m (Gross Internal Area (GIA)) with a total of c. 4,336 sq.m of office space. See following breakdown of each unit: Unit 1 will comprise GIA c. 10,432 sq.m (including c. 579 sq.m of associated office space) and measures c. 17.9m from finished floor level (FFL) to roof ridge; Unit 2 will comprise GIA c. 18,065 sq.m (including c. 1,005 sq.m of associated office space) and measures c. 18.4m from FFL to roof ridge; Unit 3 will comprise GIA c. 6,325 sq.m (including c. 579 sq.m of associated office space) and measures c. 17.4m from FFL to roof ridge; Unit 4 will comprise GIA c. 8,762 sq.m (including c. 484 sq.m of associated office space) and measures c. 17.6m from FFL to roof ridge; Unit 5 will comprise GIA c. 13,348 sq.m (including c. 1,689 sqm of associated office space) and measures c. 17.8m from FFL to roof ridge; Access to the site will be from the existing roundabout to the south of the site; Provision of no. 419 car parking spaces and 172 bicycle spaces to serve the proposed development; Associated works for the diversion of the existing foul sewer within the site; The provision of attenuation basins / wetlands across the site; Associated works for re-routing of the existing ESB overhead wires which traverse the site to underground cables within the site; The formation of plateaus on the site with surplus excavated material to allow for the future Phase 2 development and; All ancillary landscaping, boundary treatments, internal roads and roundabout, cycle / pedestrian paths, associated infrastructure, and site development works to support the development.	15/01/2024	736
ABP	PL06S.314272	Hayden's Lane, Adamstown, Lucan, Co. Dublin	Construction of a residential development comprising 3 three to five storey blocks of 74 apartments (20 one bed, 48 two bed and 6 three bed) all with associated private balconies/terraces to the north/south/east/west elevations; vehicular and pedestrian access from Hayden's Lane to the north west of the site and closure of the second existing vehicular entrance at south west of site; pedestrian access from Griffeen Park to the south east of the site; provision of car and cycle parking, public and communal spaces, bin stores and all associated site development and clearance works, landscaping, boundary treatments and other servicing works.	Pending decision Decision date overdue	753
SDCC	SD23A/0151	Ballymakaily, West of Newcastle Road (R120), Lucan, Co. Dublin	 Permission for development at this site within the townland of Ballymakaily to the west of the Newcastle Road, Lucan, Co. Dublin. The development will consist of amendments to the permitted development as granted under SDCC Planning Ref. SD19A/0042 that will include: Reduction in the number of back-up generators, flues and other related plant from 32 to 24 within the permitted generator compound located to the west of the data centre granted under SDCC Planning Ref. SD19A/0042; and Repositioning of the 24 no. back-up generators, flues and other plant within the permitted generator compound. 	25/08/2023	768
SDCC	SD19A/0004	Ballymakaily, Lucan, Co. Dublin	Enabling works to facilitate the future development of the site; topsoil strip and a cut and fill operation across the site; temporary construction access will be created off the R120 to facilitate the works within the townland of Ballymakaily to the west of the Newcastle Road (R120).	16/04/2019	778

Grange Cottage

Planning Authority	Ref. no.	Address	Summary of Proposed Development	Grant date	Distance from Site (approx.) (m)
SDCC	SD20A/0283	Grange Castle Business Park, Nangor Road, Clondalkin, Dublin 22	Demolition of existing single storey vacant house, garage and outhouse (total gross floor area (GFA) c.291.2m ²) and removal of existing temporary construction car park; Construction of a single 1-4 storey Central Administration Building and 2 2-storey (with mezzanine) data centres (DUB14 & DUB15) all to be located west of data centres DUB9, DUB10, DUB12 & DUB13 within the MS campus; The Central Administration Building (c.6.03m to c.19.85m high) will comprise central office administration, with staff cafeteria, staff gym and reception (GFA c.3,520m ²), with provision of PV panels on the roof; each data centre (c.15.6m high to parapet height and c.18.65m to top of roof plant) will include data halls, admin blocks (comprising offices, canteen, loading dock, storage and ancillary areas) and a variety of mechanical and electrical plant areas/structures including Modular Electrical Rooms (MERs), battery rooms and transformer areas. GFA of DUB14 is c.28,072m ² and GFA of DUB15 is c.28,173m ² (c.56,246m ² in total); DUB14 will also include 21 diesel generators and associated sub-stations (E-houses) and 11 mechanical flues (each c.30.75m high); Provision of a gas generator compound (to serve DUB15) containing 20 generators, 5 E-houses and 5 flues (c.25m max height); Provision of a Gas Networks Ireland gas skid including 3 kiosk buildings; Expansion of existing electrical sub-station compound (originally granted under SD07A/0632) to provide 3 additional transformer bays. 3 E-houses and 1 control room, 2 auxiliary transformers; 2 sprinkler tank and pump house areas, 1 additional rainwater harvesting plant; Provision of 168 permanent car parking spaces and 40 cycle parking spaces; Provision of additional western access to the MS campus (to serves the Central Administration Building) from the Business Park estate road (including bridge over the Griffeen River) with existing temporary access to be extinguished; Physical integration with the remainder of the existing MS campus (including internal access roads and landsc	29/03/2021	790
SDCC	SD23A/0257	Pfizer Ireland Pharmaceuticals, Grange Castle Business Park, Clondalkin, Dublin 22	Construction of a part one /part three storey extension on the western and (part) southern elevation of the existing QAQC Building to provide and expanding staff cafeteria at ground floor (including the remodelling of the canteen within the existing building)and office accommodation on the 1 st and 2 nd floors: construction of plant room and plant area enclosure on the roof of existing QAQC building and all associated site works required to facilitate the proposed development including hard and soft landscaping to the north, western and southern boundaries of the proposed extension, a subterranean surface water attenuation tank and foul eater grease trap to the north end of proposed extension, and 2 no, surface level external plant enclosures to the south of the proposed extension.	03/01/2024	857
SDCC	SD15A/0084/EP	'The Bungalow', Hayden's Lane, Lucan, Co. Dublin.	Demolition of an existing single storey house and garage (145.30m ²) and the erection of 6no. 2 storey houses with converted attics (140m ² each) in 2 terraced blocks of 3 houses, with dormer windows to the front, 'Velux' windows to the rear and associated site development and drainage works including a new vehicular access for each house fronting onto the public roadway and new front boundary wall and brick piers.	07/12/2020	913

Appendix B Information on European sites within the ZoI of the Proposed Development

Below are details on the European sites which were established through AA Screening to fall within the Zol of the construction and operation of the Proposed Development.

South Dublin Bay SAC

Local planning authority: South Dublin County Council

Special Conservation Interests:

Site code: 0002010

Mudflats and sandflats not covered by seawater at low tide [1140] Annual vegetation of drift lines [1210] Salicornia and other annuals colonising mud and sand [1310] Embryonic shifting dunes [2110]

Conservation objectives:

• To maintain the favourable conservation condition of Mudflats and sandflats not covered by seawater at low tide in South Dublin Bay SAC.

Existing threats, pressures, and activities with impacts on the site None specified.

North Dublin Bay SAC

Site code: 000206

Local planning authority: Dublin City County Council

Special Conservation Interests:

Mudflats and sandflats not covered by seawater at low tide [1140] Annual vegetation of drift lines [1210] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) [1330] Mediterranean salt meadows (*Juncetalia maritimi*) [1410] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Humid dune slacks [2190] Petalwort *Petalophyllum ralfsii* [1395]

Conservation objectives:

- To restore the favourable conservation condition of Annual vegetation of drift lines in North Dublin Bay SAC
- To restore the favourable conservation condition of Salicornia and other annuals colonizing mud and sand in North Dublin Bay SAC
- To maintain the favourable conservation condition of Atlantic salt meadows (*GlaucoPuccinellietalia maritimae*) in North Dublin Bay SAC
- To maintain the favourable conservation condition of Mediterranean salt meadows (*Juncetalia maritimi*) in North Dublin Bay SAC
- To restore the favourable conservation condition of Embryonic shifting dunes in North Dublin Bay SAC
- To restore the favourable conservation condition of Shifting dunes along the shoreline with Ammophila arenaria ('white dunes') in North Dublin Bay SAC
- To restore the favourable conservation condition of Fixed coastal dunes with herbaceous vegetation ('grey dunes') in North Dublin Bay SAC
- To restore the favourable conservation condition of Humid dune slacks in North Dublin Bay SAC
- To maintain the favourable conservation condition of Petalwort in North Dublin Bay SAC

Existing threats, pressures, and activities with impacts on the site None specified.

South Dublin and River Tolka Estuary SPA

Site code: 004024

Local planning authority: South Dublin County Council

Special Conservation Interests:

Light-bellied brent goose (*Branta bernicla hrota*) [A046] Oystercatcher (*Haematopus ostralegus*) [A130] Ringed plover (*Charadrius hiaticula*) [A137] Grey plover (*Pluvialis squatarola*) [A141] Knot (*Calidris canutus*) [A143] Sanderling (*Calidris alba*) [A144] Dunlin (*Calidris alpina*) [A149] Bar-tailed godwit (*Limosa lapponica*) [A157] Redshank (*Tringa totanus*) [A162] Black-headed gull (*Chroicocephalus ridibundus*) [A179] Roseate tern (*Sterna dougallii*) [A192] Common tern (*Sterna hirundo*) [A193] Arctic tern (*Sterna paradisaea*) [A194] Wetland and waterbirds [A999]

Conservation objectives:

- To maintain the favourable conservation condition of SCI species in South Dublin Bay and River Tolka Estuary SPA (excluding grey plover, see below), which is defined by the following list of attributes and targets.
- Grey plover is proposed for removal from the list of Special Conservation Interests for South Dublin Bay and River Tolka Estuary SPA. As a result, a site-specific conservation objective has not been set for this species.
- To maintain the favourable conservation condition of the wetland habitat in South Dublin Bay and River Tolka Estuary SPA as a resource for the regularly occurring migratory waterbirds that utilise it.

Existing threats, pressures, and activities with impacts on the site

None specified.

North Bull Island SPA

Site code: 004006

Local planning authority: Fingal County Council

Special Conservation Interests:

- Light-bellied brent goose (Branta bernicla hrota) [A046]
- Shelduck (Tadorna tadorna) [A048]
- Teal (Anas crecca) [A052]
- Pintail (Anas acuta) [A054]
- Shoveler (Anas clypeata) [A056]
- Oystercatcher (*Haematopus ostralegus*) [A130]
- Golden plover (Pluvialis apricaria) [A140]
- Grey plover (Pluvialis squatarola) [A141]
- Knot (Calidris canutus) [A143]
- Sanderling (*Calidris alba*) [A144]
- Dunlin (Calidris alpina) [A149]
- Black-tailed godwit (Limosa limosa) [A156]
- Bar-tailed godwit (Limosa lapponica) [A157]
- Curlew (Numenius arquata) [A160]
- Redshank (Tringa totanus) [A162]
- Turnstone (Arenaria interpres) [A169]
- Black-headed gull (Chroicocephalus ridibundus) [A179]
- Wetland and Waterbirds [A999]
- Conservation objectives:
- To maintain the favourable conservation condition of light-bellied brent goose, shelduck, teal, pintail, shoveler, oystercatcher, golden plover, grey plover, knot, sanderling, dunlin, black-tailed godwit, bar-tailed godwit, curlew, redshank, turnstone and black-headed gull which is defined by the following list of attributes and targets:
 - Population trend: Long term population trend stable or increasing. Measurable by percentage change.

North Bull Island SPA

- Distribution: There should be no significant decrease in the range, timing or intensity of use of areas by the SCI bird species other than that occurring from natural patterns of variation. Measurable by range, timing and intensity of use.
- To maintain the favourable conservation condition of the wetland habitat in the SPA as a resource for the regularlyoccurring migratory waterbirds that utilise it, which is defined by the following list of attributes and targets:.
 - Wetland habitat area: The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 1,713 ha, other than that occurring from natural patterns of variation. Measurable by hectares.

