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REPORT TO INFORM SCREENING FOR APPROPRIATE ASSESSMENT

for

**RATHCOOLE AGE-FRIENDLY DEVELOPMENT
TAY LANE, NEWCASTLE ROAD ,
RATHCOOLE,
DUBLIN 24**

On behalf of

Riverside Projects Limited

AUGUST 2022

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1 INTRODUCTION

1.1 Background

Gannon + Associates were commissioned by Riverside Projects Limited, the applicant, to produce an Appropriate Assessment Screening Report in regards to the proposed elderly housing development at Tay Lane, Rathcoole, Dublin 24. The site comprises an area of hardstanding and scrub and a single storey derelict structure. The proposed development broadly comprises the construction of 58no. elderly housing units.

This report contains information for the competent authority, in this case South Dublin County Council, to undertake a screening exercise for appropriate assessment in relation to the proposed development. The purpose of this report is to assess the potential for significant effects on relevant Natura 2000 sites (hereafter referred to as "European sites") from the proposed development in the context of the qualifying features and conservation objectives of such sites.

1.2 Legislative Context

The Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (hereafter referred to as "The Habitats Directive") provides a legal protection to both habitats and species of European Community interest. Articles 3 to 9 of the Directive give the legislative means to provide this protection via the designation and conservation of an EU-wide network of sites. This network of sites is composed of Special Areas of Conservation (SACs), designated under the Habitats Directive, and Special Protection Areas (SPAs), designated under the Conservation of Wild Birds Directive 79/409/ECC (hereafter referred to as "The Birds Directive"), which together form the Natura 2000 network of protected sites.

Articles 6(3) and 6(4) of the Habitats Directive layout the decision-making process for any projects or plans likely to affect European sites. Article 6(3) states:

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

1.3 Management of European Sites

The proposed project comprises a residential development and is not connected to, or necessary for, the management of any European site.

2 METHODOLOGY

2.1 Legislation and Guidance

The following guidance documents were consulted and followed in the completion of this Appropriate Assessment Screening Report:

- Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities (Department of Environment, Heritage and Local Government, 2010);
- Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPW 1/10 & PSSP 2/10;
- Assessment of Plans and Projects Significantly Affecting Natura 2000 sites: Methodological Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (European Commission, 2001); and
- Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitat's Directive 92/43/EEC (European Commission, 2018).

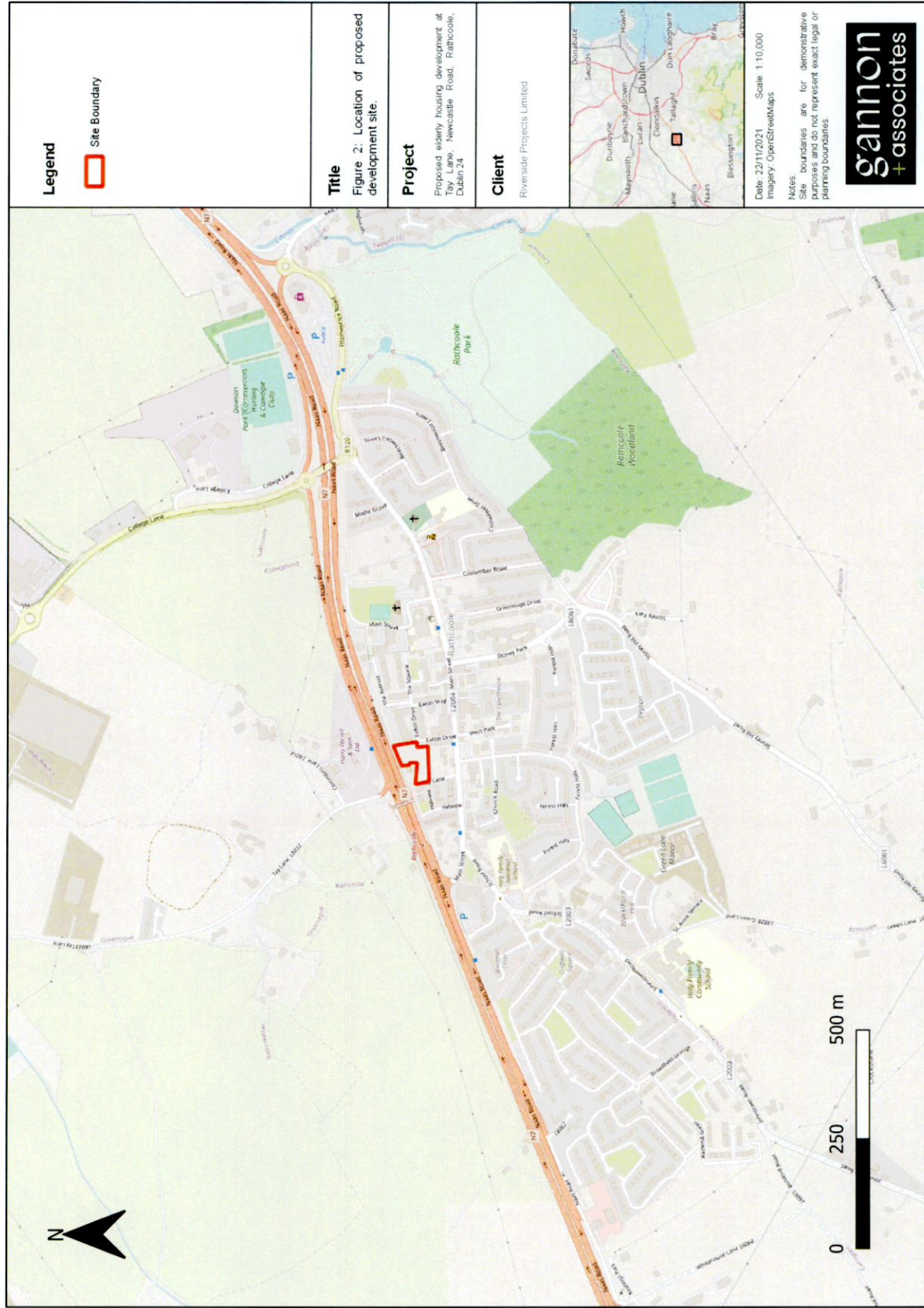
The Appropriate Assessment Screening methodology utilised in this report follows the above guidance. This includes adherence to the following steps:

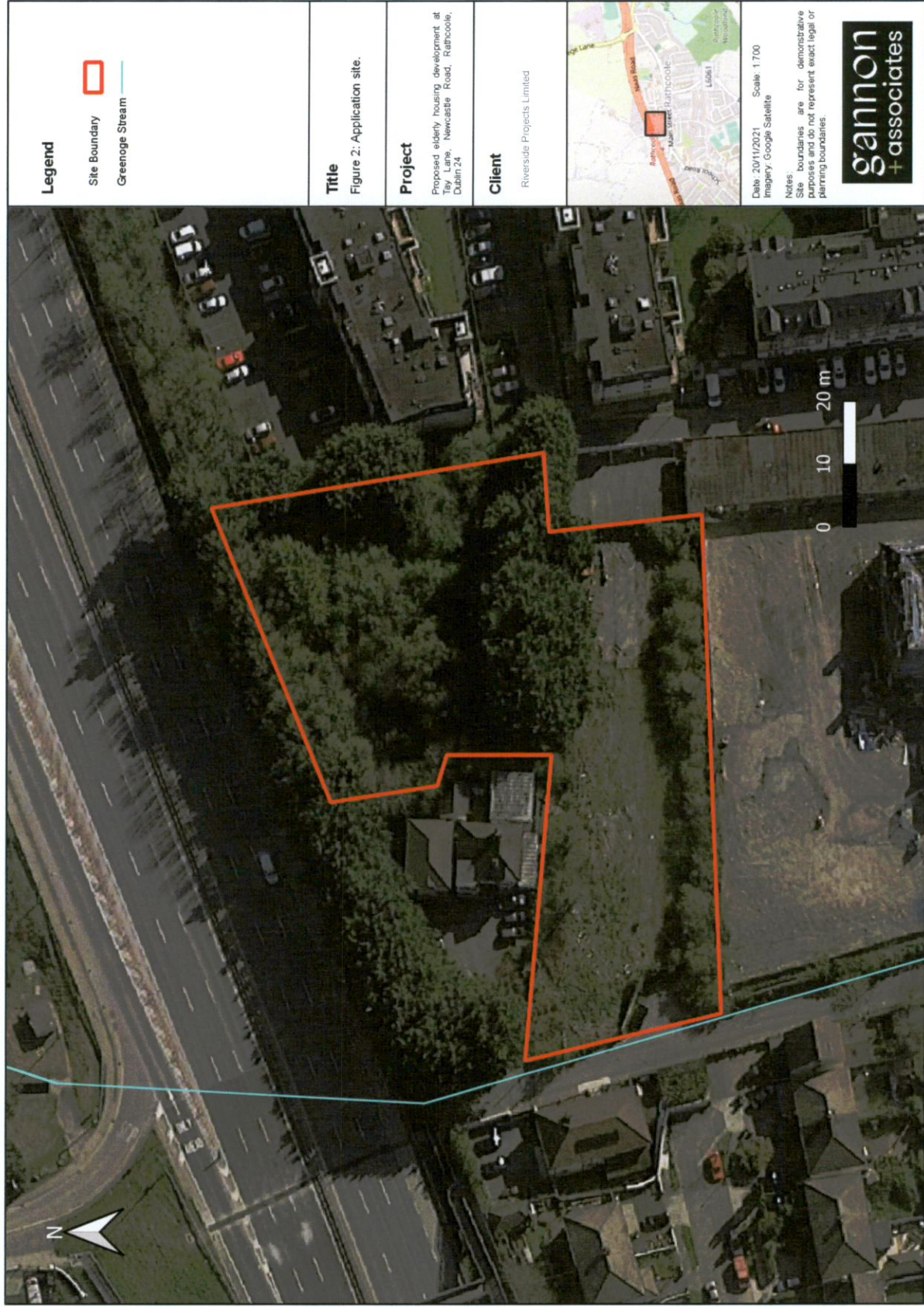
- Establish whether the plan is directly connected with or necessary for the management of a European site;
- Description of the plan or project and the description and characterisation of other projects or plans that in combination have the potential for having significant effects on the European site;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

2.2 Desktop Study

A review of available relevant information was conducted in order to reach the conclusions outlined in this report. This review, completed in November 2021, relied on the following information sources:

- Information on European sites and their qualifying features and conservation objectives, available from the National Parks and Wildlife Service (NPWS) at www.npws.ie;
- Information on waterbodies, water quality data and catchment areas available from the Environmental Protection Agency (EPA) at www.epa.ie;
- Information on geology, soils and hydrogeology available from the Geological Society of Ireland (GSI) available at www.gsi.ie;
- Satellite imagery and mapping available from multiple sources including: Ordnance Survey Ireland (OSI), Google, Bing and Digital Globe;
- Information on the status of EU protected species and habitats in Ireland (NPWS 2019a & 2019b);
- Information on any relevant consented, in-progress or existing developments available from the respective County Council online resources; and
- Information on the location, design and extent of the proposed development provided by the applicant and/or their agents.





3 PROJECT DESCRIPTION

3.1 Site Location

The application site is located within Rathcoole town in west Co. Dublin. The site is bounded to the north by the N7 and an existing dwelling, to the east and west by residential developments, and to the south by an area of hardstanding. The only structure within the site is a small derelict single storey flat-roofed building that has been damaged by fire.

The proposed development site is wholly located outside of any European sites and there are no European sites within the immediate surrounding area. The closest European site to the proposed development is the Glensamole Valley SAC, situated over 7km to the south-east. All other European sites are greater than 8km distant from the proposed development site.

3.2 Baseline Environment

The application site comprises an area of hardstanding (BL3^a) in the southern section of the site, much of which has been recolonised by vegetation (ED3), and area of dense scrub and immature trees in the northern section of the site. Species recorded across the areas of recolonising bare ground include rosebay willow-herb, perennial rye-grass, cock's foot, red clover, pineapple weed, nettle, ivy, ragwort, field horsetail and broad-leaved dock. Scrub (WS1) comprising largely bramble, ivy, nettle, butterfly bush and immature willows has also established across much of this section of the site.



FIGURE 3. AREA OF HARDSTANDING, RECOLONISING BARE GROUND AND DENSE SCRUB WITHIN SITE.

There is a hedgerow (WL1) along the southern boundary of the site, and a treeline (WL2) of mature cypress trees occurs in the centre of the site. A further treeline of poplar trees occurs along the boundary with the N7. During the site visit, the northern section of the site, between these two treelines, comprised of scrub with some stand-alone trees (largely cypress and birch). This has since been cleared (outside of the bird nesting season), and currently comprises some stand-alone birch trees.

^a Habitat codes from *A Guide to Habitats in Ireland* (Fossitt, 2000).

The habitats within the proposed development site (comprising hardstanding and scrub) do not conform to habitats listed in Annex II of the Habitats Directive, nor are they capable of supporting qualifying interest (QI) or special conservation interest (SCI) species from any European sites on an *ex-situ* basis. The qualifying faunal species of nearby European sites cumulatively comprise otter, greylag goose, lesser black-backed gull, merlin and peregrine falcon. There is no potential for *ex-situ* effects arising from the proposed development.



FIGURE 4. GREENOGE STREAM AS IT BRIEFLY OPENS BEFORE FLOWING UNDER N7, AND AS IT EMERGES FROM CULVERT NORTH OF N7.

There are no surface water bodies present within the proposed development site. The Greenoge Stream (EPA code: 09G31) flows along Tay Lane at the western boundary of the site. This watercourse is largely culverted along its length through Rathcoole town and is culverted along the length of the site boundary. The channel briefly opens up before flowing north under the N7. The Greenoge Stream flows north after emerging from the N7 culvert for a total of c.2km where it then joins the Grifeen River (09G01). The Grifeen River flows north through west Dublin, where it ultimately enters the River Liffey at Lucan over 10km further downstream. The River Liffey outflows to the Irish Sea at Dublin Port.

There will be no discharge of surface water to the Greenoge Stream as part of the proposed development. During operation both surface and foul waters will be connected to the respective existing networks. In addition, the overall downstream distance between the Greenoge Stream as it flows through Rathcoole town, and where the River Liffey outflows to Irish Sea is over 30km. The dilution factor of this cumulative downstream distance, in addition to the significant dilution factor of the Irish Sea, is such that any potential pollutants would be dissolved or diluted to insignificant levels. There is therefore no connectivity for effects on the European sites of Dublin Bay.

3.3 Description of Proposed Development

The proposed development will principally consist of the construction of a four storey apartment block consisting of 58no. age-friendly residential apartments comprising 20 no. 1-bedroom units and 38no. 2-bedroom units. The proposed development also includes the provision of an ancillary community facility, associated accommodation including refuse stores and cycle stores, car and cycle parking, landscaped communal and public open space and boundary treatment works. Planning permission is also sought for internal

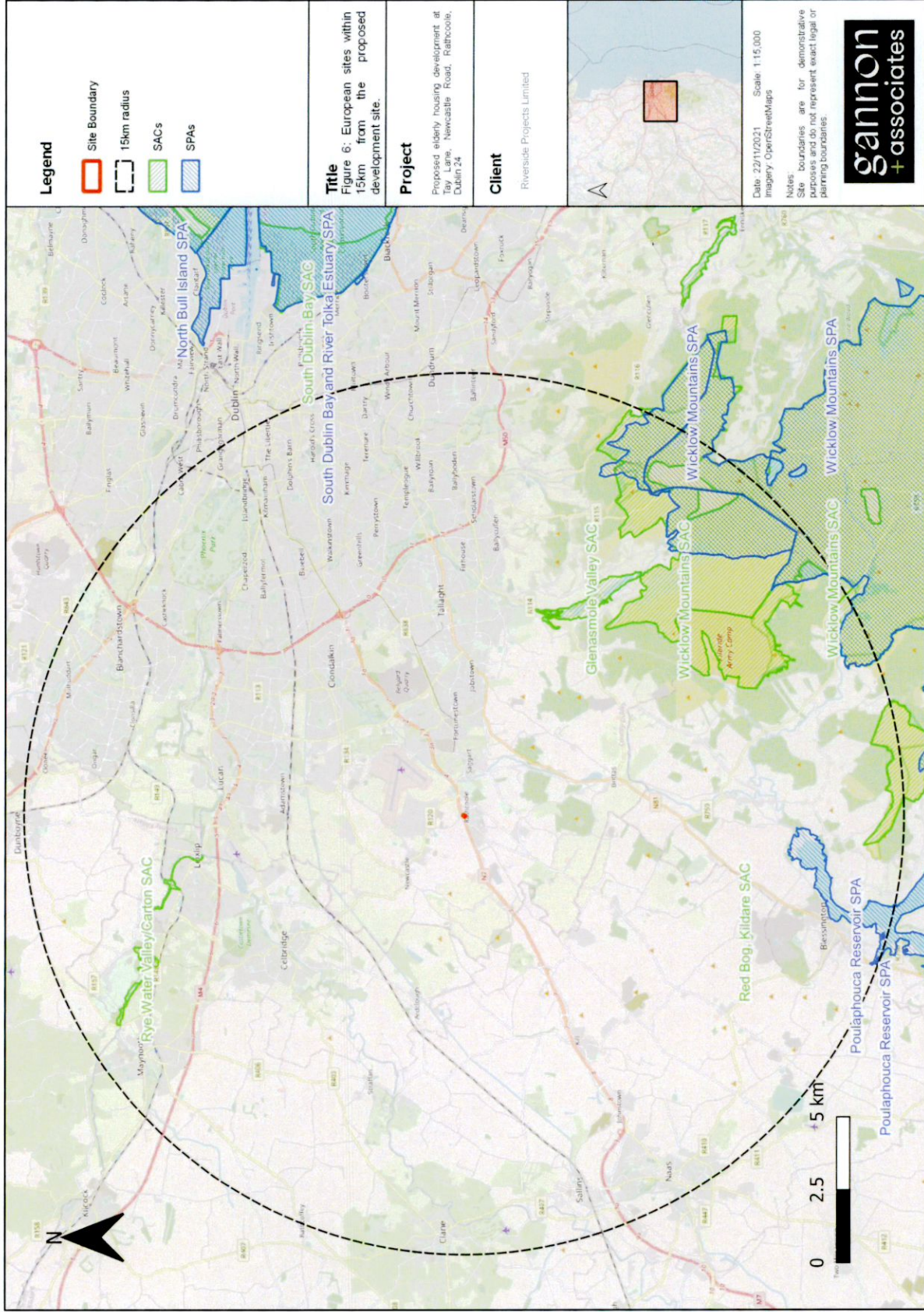
access roads and pedestrian / cycle pathways and linkages, public lighting, landscaping, and all associated site and development works to facilitate the proposed development.

FIGURE 5. LAYOUT OF PROPOSED DEVELOPMENT.



FIGURE 6. PROPOSED LANDSCAPE PLAN





4 EUROPEAN SITES

4.1 Source-Pathway-Receptor

In order to identify any connectivity between the proposed development and European sites, and to identify any potential effects on European sites as a result of the proposed development, a source-pathway-receptor approach has been applied.

In order for there to be a potential effect on a European site from the proposed development, there must be connectivity via an identified source (e.g. noise emissions or surface water run-off), a receptor (e.g. a qualifying interest or special conservation interest of a European site) and a pathway between the source and the receptor (e.g. a watercourse). As a starting point, and adopting the precautionary principle, all European sites within a 15km distance of the proposed development have been included for source-pathway-receptor assessment. Following this, if necessary, further European sites outside of this 15km area are assessed where connectivity may exist.

Where source-pathway-receptor connectivity is identified between the proposed development and a European site, the potential effect is then further assessed for its significance.

TABLE 1. EUROPEAN SITES WITHIN 15KM OF THE PROPOSED DEVELOPMENT, OR WHERE A SOURCE-PATHWAY-RECEPTOR LINK EXISTS.

Site Name and Code	Approx. Dist. to Site	Qualifying Features ^b	Source-Pathway-Receptor Assessment
Special Areas of Conservation (SAC)			
Glensamole Valley SAC [001209]	7.0km	[6210] Orchid-rich Calcareous Grassland* [6410] <i>Molinia</i> Meadows [7220] Petrifying Springs*	The SAC is located approximately 2.1km east of the proposed development site at its closest point. This is significantly beyond any zone of sensitivity for dust-related effects on habitats within the SAC (i.e. 50m, as outlined in IAQM (2014)), and there is no potential for such effects as a result of the proposed development during either construction or operation. The SAC is located upstream of, and within a different surface water catchment area to the proposed development. There is no hydrological connectivity to the SAC. There is no source-pathway-receptor connectivity between the proposed development and the SAC. There is no potential for impact.
Wicklow Mountains SAC [002122]	8.1km	[3110] Oligotrophic Waters containing very few minerals [3160] Dystrophic Lakes [4010] Wet Heath	The SAC is located approximately 8.1km south-east of the proposed development site at its closest point. This is significantly beyond any zone of sensitivity for noise or dust-related effects on habitats or species within the SAC (i.e. 50m ^c , as outlined in IAQM (2014) and 150m

^b * = priority; numbers in brackets are Natura 2000 codes.

^c The Institute of Air Quality Management 'Guidance on the Assessment of dust from demolition and construction' (IAQM, 2014) prescribes potential dust emission risk classes to ecological receptors. The guidelines specify that, for highly sensitive ecological

		<p>[4030] Dry Heath [4060] Alpine and Subalpine Heaths [6130] Calaminarian Grassland [6230] Species-rich <i>Nardus</i> Grassland* [7130] Blanket Bogs (Active)* [8110] Siliceous Scree [8210] Calcareous Rocky Slopes [8220] Siliceous Rocky Slopes [91A0] Old Oak Woodlands [1355] Otter (<i>Lutra lutra</i>)</p>	<p>for otter as outlined in NRA (2009)), and there is no potential for such effects as a result of the proposed development during either construction or operation.</p> <p>The SAC is located upstream of, and within a different surface water catchment area to the proposed development There is no hydrological connectivity to the SAC.</p> <p>There is no source-pathway-receptor connectivity between the proposed development and the SAC. There is no potential for impact.</p>
<p>Rye Water Valley/Carlton SAC [001398]</p>	<p>9.1km</p>	<p>[7220] Petrifying Springs* [1014] Narrow-mouthed Whorl Snail (<i>Vertigo angustior</i>) [1016] Desmoulin's Whorl Snail (<i>Vertigo moulinsiana</i>)</p>	<p>The SAC is located approximately 9.1km north of the proposed development site at its closest point. This is significantly beyond any zone of sensitivity for dust-related effects on habitats within the SAC (i.e. 50m, as outlined in IAQM (2014)), and there is no potential for such effects as a result of the proposed development during either construction or operation.</p> <p>The SAC is located upstream of, and within a different surface water catchment area to the proposed development There is no hydrological connectivity to the SAC.</p> <p>There is no source-pathway-receptor connectivity between the proposed development and the SAC. There is no potential for impact.</p>
<p>Red Bog, Kildare SAC [000397]</p>	<p>10.2km</p>	<p>[7140] Transition Mires</p>	<p>The SAC is located approximately 10.2km south-west of the proposed development site at its closest point. This is significantly beyond any zone of sensitivity for dust-related effects on habitats within the SAC (i.e. 50m, as outlined in IAQM (2014)), and there is no potential for such effects as a result of the proposed development during either construction or operation.</p> <p>The SAC is located upstream of, and within a different surface water catchment area to the proposed development There is no hydrological connectivity to the SAC.</p> <p>There is no source-pathway-receptor connectivity between the proposed development and the SAC. There is no potential for impact.</p>
<p>South Dublin Bay SAC [000210]</p>	<p>18.2km</p>	<p>[1140] Tidal Mudflats and Sandflats [1210] Annual vegetation of drift lines [1310] Salicornia and other annuals colonising mud and sand [2110] Embryonic shifting dunes</p>	<p>This SAC is located outside the 15km radius of the proposed development. However, source-pathway-receptor connectivity was examined due to the connectivity of this SAC to the River Liffey.</p> <p>The SAC is located approximately 18.2km north-east of the proposed development site at its closest point. This is significantly beyond any zone of sensitivity for dust-related effects on habitats within the SAC (i.e. 50m, as outlined in IAQM (2014)), and there is no potential for such effects as a result of the proposed development during either construction or operation.</p>

receptors, sensitivity to dust is 'High' up to 20m from the source, 'Medium' up to 50m from the source and reduces to 'Low' at distances over 50m from the source.

			<p>The Greenoge Stream joins the Griffeen River, which subsequently joins the River Liffey at Lucan, and ultimately outflows to the Irish Sea at Dublin Port. The Greenoge Stream flows adjacent to the western boundary of the proposed development site. The watercourse is culverted along the length of the site boundary, and the boundaries of the proposed development site comprise existing dense hedging. There will be no discharge of surface water to the Greenoge Stream as part of the proposed development. During operation both surface and foul waters will be connected to the respective existing networks. There is no hydrological connectivity to the SAC. In addition, the overall downstream distance between the Greenoge Stream as it flows through Rathcoole town, and where the River Liffey outflows to Irish Sea is over 30km. The dilution factor of this cumulative downstream distance, in addition to the significant dilution factor of the Irish Sea, is such that any potential pollutants would be dissolved or diluted to insignificant levels.</p> <p>There is no source-pathway-receptor connectivity between the proposed development and the SAC. There is no potential for impact.</p>
<p>North Dublin Bay SAC [000206]</p>	<p>21.2km</p>	<p>[1140] Tidal Mudflats and Sandflats [1210] Annual Vegetation of Drift Lines [1310] <i>Salicornia</i> Mud [1330] Atlantic Salt Meadows [1410] Mediterranean Salt Meadows [2110] Embryonic Shifting Dunes [2120] Marram Dunes (White Dunes) [2130] Fixed Dunes (Grey Dunes)* [2190] Humid Dune Slacks [1395] Petalwort (<i>Petalophyllum ralfsii</i>)</p>	<p>This SAC is located outside the 15km radius of the proposed development. However, source-pathway-receptor connectivity was examined due to the connectivity of this SAC to the River Liffey.</p> <p>The SAC is located approximately 21.2km north-east of the proposed development site at its closest point. This is significantly beyond any zone of sensitivity for dust-related effects on habitats within the SAC (i.e. 50m, as outlined in IAQM (2014)), and there is no potential for such effects as a result of the proposed development during either construction or operation.</p> <p>The Greenoge Stream joins the Griffeen River, which subsequently joins the River Liffey at Lucan, and ultimately outflows to the Irish Sea at Dublin Port. The Greenoge Stream flows adjacent to the western boundary of the proposed development site. The watercourse is culverted along the length of the site boundary, and the boundaries of the proposed development site comprise dense hedging. There will be no discharge of surface water to the Greenoge Stream as part of the proposed development. During operation both surface and foul waters will be connected to the respective existing networks. There is no hydrological connectivity to the SAC. In addition, the overall downstream distance between the Greenoge Stream as it flows through Rathcoole town, and where the River Liffey outflows to Irish Sea is over 30km. The dilution factor of this cumulative downstream distance, in addition to the significant dilution factor of the Irish Sea, is such that any potential pollutants would be dissolved or diluted to insignificant levels.</p> <p>There is no source-pathway-receptor connectivity between the proposed development and the SAC. There is no potential for impact.</p>
<p>Special Protection Areas (SPA)</p>			

<p>Poulaphouca Reservoir SPA [004063]</p>	<p>11.1km</p>	<p>Greylag Goose (<i>Anser anser</i>) [A043] Lesser Black-backed Gull (<i>Larus fuscus</i>) [A183]</p>	<p>The SPA is located approximately 11.1km south of the proposed development site at its closest point. This is significantly beyond any zone of sensitivity for noise or dust-related effects on habitats or SCI species within the SPA (e.g. IAQM (2014) & IECS (2013)^d respectively), and there is no potential for such effects as a result of the proposed development during either construction or operation.</p> <p>The SPA is located upstream of, and within a different surface water catchment area to the proposed development. There is no hydrological connectivity to the SPA.</p> <p>The SPA is designated for overwintering greylag geese and lesser black-backed gulls. The proposed development comprises hardstanding and scrub in an urban environment. These habitats are not capable of supporting SCI species of this SPA. As such, there is no connectivity between the proposed development and any SCI species of the SPA.</p> <p>There is no source-pathway-receptor connectivity between the proposed development and the SPA. There is no potential for impact.</p>
<p>Wicklow Mountains SPA [004040]</p>	<p>11.4km</p>	<p>Merlin (<i>Falco columbarius</i>) [A098] Peregrine (<i>Falco peregrinus</i>) [A103]</p>	<p>The SPA is located approximately 11.4km south-east of the proposed development site at its closest point. This is beyond any potential zone of sensitivity for noise or dust-related effects on SCI species within the SPA. There is no potential for such effects as a result of the proposed development during either construction or operation.</p> <p>The SPA is located upstream of, and within a different surface water catchment area to the proposed development. There is no hydrological connectivity to the SPA.</p> <p>The SPA is designated for breeding merlin and peregrine falcon. These species nest in upland blanket bog, rock faces and ledges respectively. The proposed development comprises hardstanding and scrub in an urban environment. There is no suitable breeding or foraging habitat for these species within the proposed development site or surrounding area. As such, there is no connectivity between the proposed development and the SCI species of the SPA.</p> <p>There is no source-pathway-receptor connectivity between the proposed development and the SPA. There is no potential for impact.</p>
<p>South Dublin Bay and River Tolka Estuary SPA [004024]</p>	<p>18.2km</p>	<p>Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] Oystercatcher (<i>Haematopus ostralegus</i>) [A130]</p>	<p>This SPA is located outside the 15km radius of the proposed development. However, source-pathway-receptor connectivity was examined due to the connectivity of this SPA to the River Liffey.</p>

^d The Waterbird Disturbance and Mitigation Toolkit, produced by the Institute of Estuarine & Coastal Studies (IECS), University of Hull, provides information on disturbance effects to a range of waterbirds (such as those listed as SCI species of this SPA) from construction works at coastal sites. The maximum distance from a receptor for which there is a potential for disturbance impacts from noise is 300m, which assumes high noise producing activities at source (120dB), such as piling. The proposed development is far beyond this maximum 300m distance from the SPA, and works will involve standard construction activities.

		<p>Ringed Plover (<i>Charadrius hiaticula</i>) [A137] Grey Plover (<i>Pluvialis squatarola</i>) [A141] Knot (<i>Calidris canutus</i>) [A143] Sanderling (<i>Calidris alba</i>) [A144] Dunlin (<i>Calidris alpina</i>) [A149] Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157] Redshank (<i>Tringa totanus</i>) [A162] Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] Roseate Tern (<i>Sterna dougallii</i>) [A192] Common Tern (<i>Sterna hirundo</i>) [A193] Arctic Tern (<i>Sterna paradisaea</i>) [A194] Wetland and Waterbirds [A999]</p>	<p>The SPA is located approximately 18.2km north-east of the proposed development site at its closest point. This is significantly beyond any zone of sensitivity for noise or dust-related effects on habitats or SCI species within the SPA (e.g. IAQM (2014) & IECS (2013)^d respectively), and there is no potential for such effects as a result of the proposed development during either construction or operation.</p> <p>The Greenoge Stream joins the Griffeen River, which subsequently joins the River Liffey at Lucan, and ultimately outflows to the Irish Sea at Dublin Port. The Greenoge Stream flows adjacent to the western boundary of the proposed development site. The watercourse is culverted along the length of the site boundary, and the boundaries of the proposed development site comprise dense hedging. There will be no discharge of surface water to the Greenoge Stream as part of the proposed development. During operation both surface and foul waters will be connected to the respective existing networks. There is no hydrological connectivity to the SPA. In addition, the overall downstream distance between the Greenoge Stream as it flows through Rathcoole town, and where the River Liffey outflows to Irish Sea is over 30km. The dilution factor of this cumulative downstream distance, in addition to the significant dilution factor of the Irish Sea, is such that any potential pollutants would be dissolved or diluted to insignificant levels.</p> <p>The SPA is designated for 10 overwintering waterbird species and three breeding tern species. These species predominately utilise coastal habitats (e.g. tidal flats, saltmarsh and shingle beach) with some species making use of terrestrial habitats for foraging at times during the winter (NPWS, 2014). The proposed development comprises hardstanding and scrub. These habitats are not capable of supporting SCI species of this SPA (NPWS, 2014). As such, there is no connectivity between the proposed development and any SCI species of the SPA.</p> <p>There is no source-pathway-receptor connectivity between the proposed development and the SPA. There is no potential for impact.</p>
<p>North Bull Island SPA [004006]</p>	<p>18.3km</p>	<p>Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] Shelduck (<i>Tadorna tadorna</i>) [A048] Teal (<i>Anas crecca</i>) [A052] Pintail (<i>Anas acuta</i>) [A054] Shoveler (<i>Anas clypeata</i>) [A056] Oystercatcher (<i>Haematopus ostralegus</i>) [A130] Golden Plover (<i>Pluvialis apricaria</i>) [A140] Grey Plover (<i>Pluvialis squatarola</i>) [A141] Knot (<i>Calidris canutus</i>) [A143] Sanderling (<i>Calidris alba</i>) [A144] Dunlin (<i>Calidris alpina</i>) [A149] Black-tailed Godwit (<i>Limosa limosa</i>) [A156]</p>	<p>This SPA is located outside the 15km radius of the proposed development. However, source-pathway-receptor connectivity was examined due to the connectivity of this SPA to the River Liffey.</p> <p>The SPA is located approximately 18.3km north-east of the proposed development site at its closest point. This is significantly beyond any zone of sensitivity for noise or dust-related effects on habitats or SCI species within the SPA (e.g. IAQM (2014) & IECS (2013)^d respectively), and there is no potential for such effects as a result of the proposed development during either construction or operation.</p> <p>The Greenoge Stream joins the Griffeen River, which subsequently joins the River Liffey at Lucan, and ultimately outflows to the Irish Sea at Dublin Port. The Greenoge Stream flows adjacent to the western boundary of the proposed development site. The watercourse is culverted along the length of the site</p>

	<p>Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157] Curlew (<i>Numenius arquata</i>) [A160] Redshank (<i>Tringa totanus</i>) [A162] Turnstone (<i>Arenaria interpres</i>) [A169] Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] Wetland and Waterbirds [A999]</p>	<p>boundary, and the boundaries of the proposed development site comprise dense hedging. There will be no discharge of surface water to the Greenoge Stream as part of the proposed development. During operation both surface and foul waters will be connected to the respective existing networks. There is no hydrological connectivity to the SPA. In addition, the overall downstream distance between the Greenoge Stream as it flows through Rathcoole town, and where the River Liffey outflows to Irish Sea is over 30km. The dilution factor of this cumulative downstream distance, in addition to the significant dilution factor of the Irish Sea, is such that any potential pollutants would be dissolved or diluted to insignificant levels.</p> <p>The SPA is designated for 17 overwintering waterbird species. These species predominately utilise coastal habitats (e.g. tidal flats, saltmarsh and shingle beach) with some species making use of terrestrial habitats for foraging at times during the winter (NPWS, 2014). The proposed development comprises hardstanding and scrub. These habitats are not capable of supporting SCI species of this SPA (NPWS, 2014). As such, there is no connectivity between the proposed development and any SCI species of the SPA.</p> <p>There is no source-pathway-receptor connectivity between the proposed development and the SPA. There is no potential for impact.</p>
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4.2 Summary

There is no source-pathway-receptor connectivity between the proposed development and any European sites.

5 PLANS AND PROJECTS WHICH COULD ACT IN-COMBINATION

As there is no connectivity between the proposed development and any European site, there is no potential for any in-combination effects with any other plans or projects.

6 ASSESSMENT OF SIGNIFICANCE

There is no connectivity between the proposed development and any European sites. There are no likely effects on European sites identified from the proposed development and, as such, there is no potential for significant effects.

7 CONCLUDING STATEMENT

In conclusion, upon the examination, analysis and evaluation of the relevant information including, in particular, the nature of the proposed development and the likelihood of significant effects on any European site, in addition to considering possible in-combination effects, and applying the precautionary principles, it is concluded by the authors of this report that, on the basis of objective information, the possibility may be excluded that the proposed development will have a significant effect on any European sites.

8 REFERENCES

DEHLG. (2009). Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities. Department of Environment, Heritage and Local Government.

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

European Commission. (2018). Managing Natura 2000 sites - The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC. Brussels.

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

IAQM (2014). Guidance on the assessment of dust from demolition and construction. Institute of Air Quality Management, London.

IECS (2013). Waterbird Disturbance and Mitigation Toolkit - TIDE Toolbox. Institute of Estuarine and Coastal Studies, University of Hull.

NPWS (2010). Circular NPW 1/10 & PSSP 2/10. Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Department of Environment, Heritage and Local Government.

NPWS (2014). North Bull Island SPA & South Dublin Bay and River Tolka Estuary SPA - Conservation Objectives Supporting Document, version 1. National Parks & Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin, Ireland.

NPWS (2019a). The Status of EU Protected Habitats and Species in Ireland. Species Assessments Volume 2, Version 1.0. National Parks & Wildlife Services. Department of Arts, Heritage and the Gaeltacht, Dublin, Ireland.

NPWS (2019b). The Status of EU Protected Habitats and Species in Ireland. Species Assessments Volume 3, Version 1.0. National Parks & Wildlife Services. Department of Arts, Heritage and the Gaeltacht, Dublin, Ireland.