

**Appropriate Assessment
Screening Report**

for the proposed

Rathcoole Courthouse Redevelopment

in accordance with the requirements of

Article 6(3) of the EU Habitats Directive

for: Dublin South County Council

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- Appendix I** Background information on European sites
- Appendix II** Qualifying Interests of SACs that have undergone assessment including summaries of current threats and sensitivities
- Appendix III** Special Conservation Interests of SPAs that have undergone assessment including vulnerabilities of the SCIs

1. Introduction

1.1. Background

CAAS has been appointed by South Dublin County Council to prepare this Appropriate Assessment (AA) Screening Report (also known as *Stage One AA*) to support AA procedures to determine whether or not a Natura Impact Statement (NIS) (*Stage Two AA*) is required for the proposed Rathcoole Courthouse redevelopment at Rathcoole Main Street, in accordance with the requirements of Article 6(3) of Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (as amended) (hereafter referred to as the “Habitats Directive”).

1.2. Report Structure

This section sets out the legislative context for the assessment process with reference to relevant guidelines and highlights the experience and qualifications of the author. It then details the proposed scheme and the works associated with this which are then interrogated to identify any possible effects which may be ecologically relevant. Following this, the metrics for the assessment of ‘significance’ of these effects are explained and applied to each of the European sites identified to be ecologically connected to the proposed scheme area. The assessment is undertaken in view of the conservation objectives and known sensitivities of the qualifying interests and special conservation interests for each European site. Other plans and projects are then considered to identify any likely in combination effects which may result in significant adverse effects to the ecological integrity of the European sites.

1.3. Legislative Context

The Habitats Directive provides legal protection for habitats and species of European importance. The overall aim of the Habitats Directive is to maintain or restore the “favourable conservation status” of habitats and species of European Community Interest. These habitats and species are listed in the Habitats and Birds Directives (Habitats Directive as above and Directive 2009/147/EC on the conservation of wild birds) with Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) designated to afford protection to the most vulnerable of them. These two designations are collectively known as European sites. Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to affect such sites. Article 6(3) establishes the requirement for AA. These requirements are implemented in the Republic of Ireland by the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended) and the Planning and Development Act 2000 (as amended).

Article 6(3) of the Habitats Directive 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'.

The AA process relates to the protection of species listed in Annex I and Annex II of the Habitats Directive which form the Natura 2000 network (Article 3(1)). Species breeding and resting places of species listed in Annex IV of the Habitats Directive are nationally protected in Ireland as per Articles 15 and 16 of the Habitats Directive. The species listed in Annex IV do not form part of the Natura 2000 network as they are not mentioned in Article 3(1) of the Directive which defines the Natura 2000 network.

Article 3(1) of the Habitats Directive States:

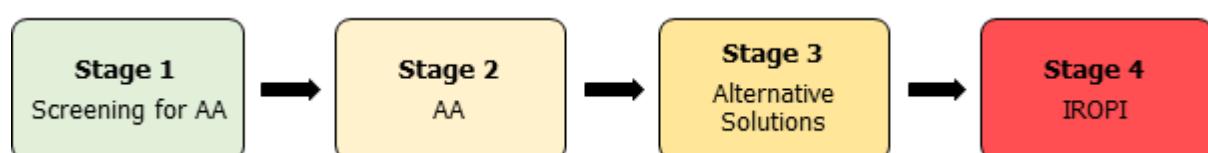
'A coherent European ecological network of special areas of conservation shall be set up under the title Natura 2000. This network, composed of sites hosting the natural habitat types listed in Annex I and habitats of the species listed in Annex II, shall enable the natural habitat types and the species' habitats concerned to be maintained or, where appropriate, restored at a favourable conservation status in their natural range'.

AA is an assessment of the likely significant effects arising from a plan or project, either individually or in combination with other plans or projects, to assess if the plan or project will adversely affect the integrity of the European site concerned including implications in view of the European site's conservation objectives. These sites consist of SACs and SPAs and provide for the protection and long-term survival of Europe's most valuable and threatened species and habitats. The AA process is concluded by the relevant competent authority in the formation of a determination in accordance with article 6(3) of the Habitats Directive.

1.4. Overview of the Habitats Directive and Appropriate Assessment Process

The Habitats Directive itself promotes a hierarchy of avoidance, mitigation and compensatory measures. This approach aims to avoid any effects on European sites by identifying possible effects early in the plan or project making process and avoiding such effects. Second, the approach involves the application of mitigation measures, if necessary, during the AA process to the point where no adverse impacts on the site(s) remain. If potential significant effects on the integrity of European sites remain, and no further practicable mitigation is possible, the approach requires the consideration of alternative solutions. If no alternative solutions are identified and the plan or project is required for imperative reasons of overriding public interest, then compensation measures are required for any remaining adverse effects.

There are four main stages in the AA process:



Stage One: Screening

The process that identifies the likely impacts upon a European site of a project or plan, either alone or in combination with other projects or plans and considers whether these impacts are likely to be significant.

Stage Two: Appropriate Assessment

The consideration of the impact on the integrity of the European site of the project or plan, either alone or in combination with other projects or plans, with respect to the site's structure and function and its conservation objectives. Additionally, where there are adverse effects mitigation measures are required to avoid or minimise potential effects. The details of these mitigation measures are then assessed in the context of the ecological integrity of the plan/project characteristics to ensure no significant adverse effects on European sites. If this assessment process shows there are no residual significant effect then the process may end at this stage, stage two, of the AA process which are formalised in Natura Impact Statements (NIS) reports which support the overall AA process. However, if the likelihood of significant impacts remains, then the process must proceed to Stage Three.

Stage Three: Assessment of Alternative Solutions

The process that examines alternative ways of achieving the objectives of the project or plan that avoids adverse impacts on the integrity of the European site.

Stage Four: Assessment where no alternative solutions exist and where adverse impacts remain

An assessment of compensatory measures where, in the light of an assessment of imperative reasons of overriding public interest (IROPI), it is deemed that the project or plan should proceed.

1.5. Approach

This AA screening is based on best scientific knowledge and has utilised ecological and hydrological expertise. In addition, a detailed online review of published scientific literature and 'grey' literature was conducted. This included a detailed review of the National Parks and Wildlife Website including mapping and available reports for relevant sites and in particular sensitive qualifying interests/special conservation interests described and their conservation objectives. The EPA Envision map viewer (www.epa.ie) and available reports were also reviewed, as was the NPWS (2019) publication "The Status of Protected EU Habitats and Species in Ireland".

The ecological desktop study that has been completed for the AA screening of the proposed project, comprised the following elements:

- Identification of European sites within 15km¹ of the subject lands;
- Identification of European sites within 15km of the site with identification of potential pathways to specific sites (if relevant) greater than 15km from the subject lands;

¹ While the actual zone of impact is likely to be much smaller, the default 15km zone extent has been applied on a precautionary basis

- Review of the NPWS site synopses and conservation objectives for European sites within 15km and for which potential pathways from the proposed site have been identified; and
- Examination of available information on protected species.

Source-Pathway Receptor Model

Ecological impact assessment of potential effects on European sites is conducted following a standard source-pathway-receptor model, where, in order for an effect to be established all three elements of this mechanism must be in place. The absence or removal of one of the elements of the mechanism is sufficient to conclude that a potential effect is not of any relevance or significance.

- Source(s) – e.g. pollutant run-off from proposed development;
- Pathway(s) – e.g. groundwater connecting to nearby qualifying wetland habitats; and,
- Receptor(s) – qualifying aquatic habitats and species of European sites.

For the purposes of this report, receptors are the ecological features that are known to be utilised by the qualifying interests or special conservation interests of a European site. A source is any identifiable element of the proposed Rathcoole Courthouse redevelopment that is known to interact with ecological processes. The pathways are any connections or links between the source and the receptor. This report provides information on whether direct, indirect and cumulative adverse effects could arise from the proposed development.

Guidance

The AA screening has been prepared taking into account legislation including the aforementioned legislation and guidance including the following:

- *Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities, Department of the Environment, Heritage and Local Government, 2009;*
- *Commission Notice: Managing Natura 2000 sites - The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC", European Commission 2018;*
- *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 Environment DG, 2002; and*
- *Managing Natura 2000 sites: The Provisions of Article 6 of the Habitats Directive 92/43/EEC", European Commission, 2000.*

1.6. Author Details

Andrew Torsney is a Senior Ecologist with 8 years' experience working on major national and local scale projects. Andrew graduated from University College Dublin in 2011 with a B.Sc. degree in Zoology and obtained Master's degree in Biodiversity and Conservation from the University of Leeds in 2012. He has a range of ecological skills which include habitat mapping, ecological surveying, data interpretation and report writing. Andrew is a vegetative plant specialist, who has a wealth of experience classifying riparian habitats and identifying rare floral species. Andrew has a vast knowledge of riparian and freshwater ecosystems and undertakes freshwater surveys regularly. Andrew holds 4 national protected species licenses and has a lot of experience optioning surveying

licenses for aquatic species such as the white clawed crayfish. He is also a Bat specialist with a wealth of experience, in acoustic surveying and monitoring of bats. Throughout Andrews's career he has worked on a number of large-scale multifaceted projects such as the Killaloe to Dublin water supply project NIS. On that project, Andrew designed and oversaw all ecological field work relating to the Environmental Impact Assessment (EIA) and AA.

2. Description of proposed development

2.1. Receiving Environment

The site is within the Rathcoole village on the Main Street. This is an urban environment on the outskirts of the Greater Dublin Area. There is a moderately sized scrubland 400m to the east of the site, and the town is bordered to the north by the M7. The wider landscape is dominated by agricultural land.

2.2. Overview of the proposed development

Internal and external development works to reconfigure and extend the existing Rathcoole Courthouse (as illustrated in Figure 1 and Figure 2 below). These works include:

- Wall construction;
- Glass fibre roof construction;
- Floor construction: 87m² extension to the existing 93.3m² floor area;
- Minor landscaping; and
- External court yard configurations.

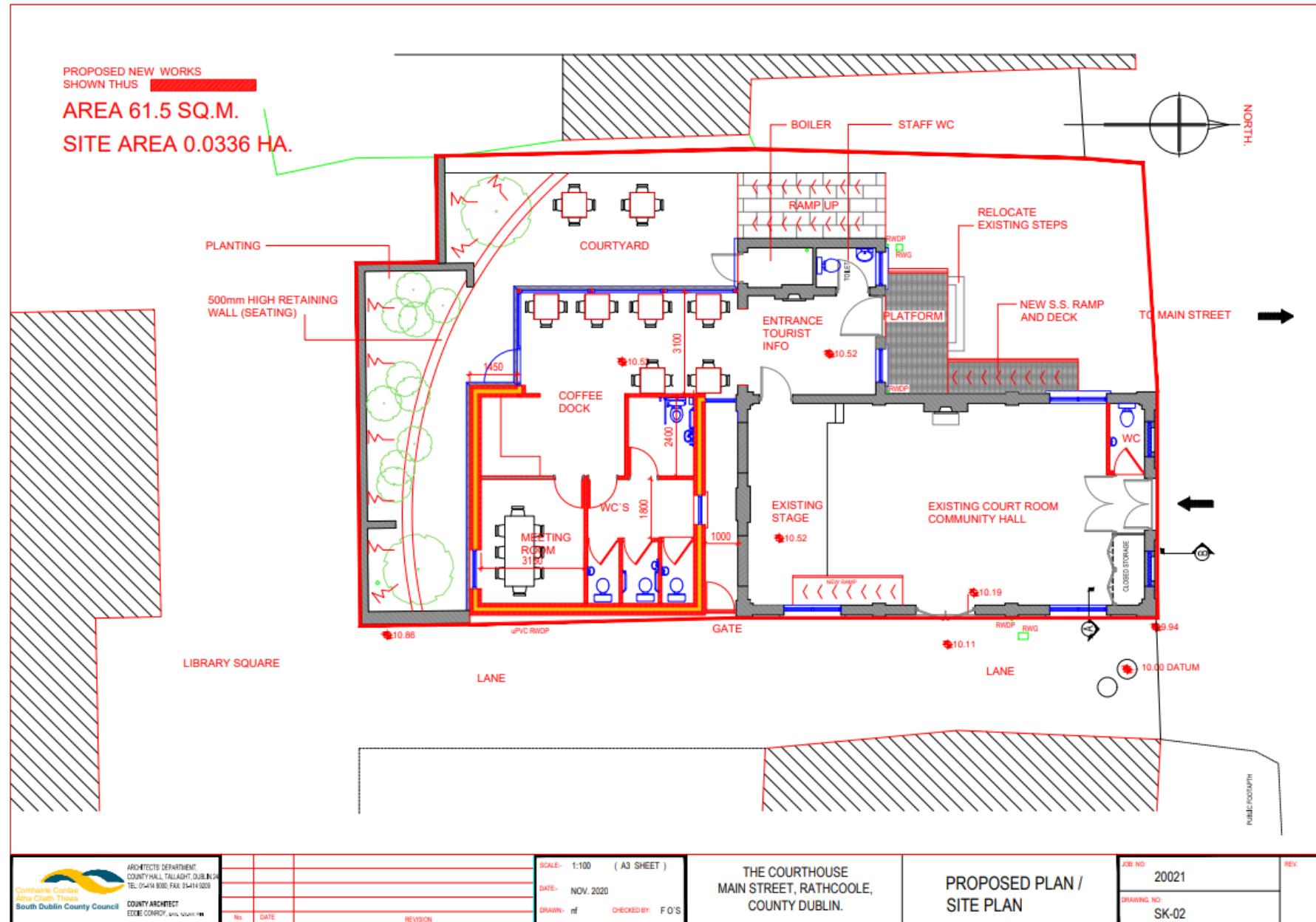


Figure 1 Proposed site plan for the Rathcoole Courthouse

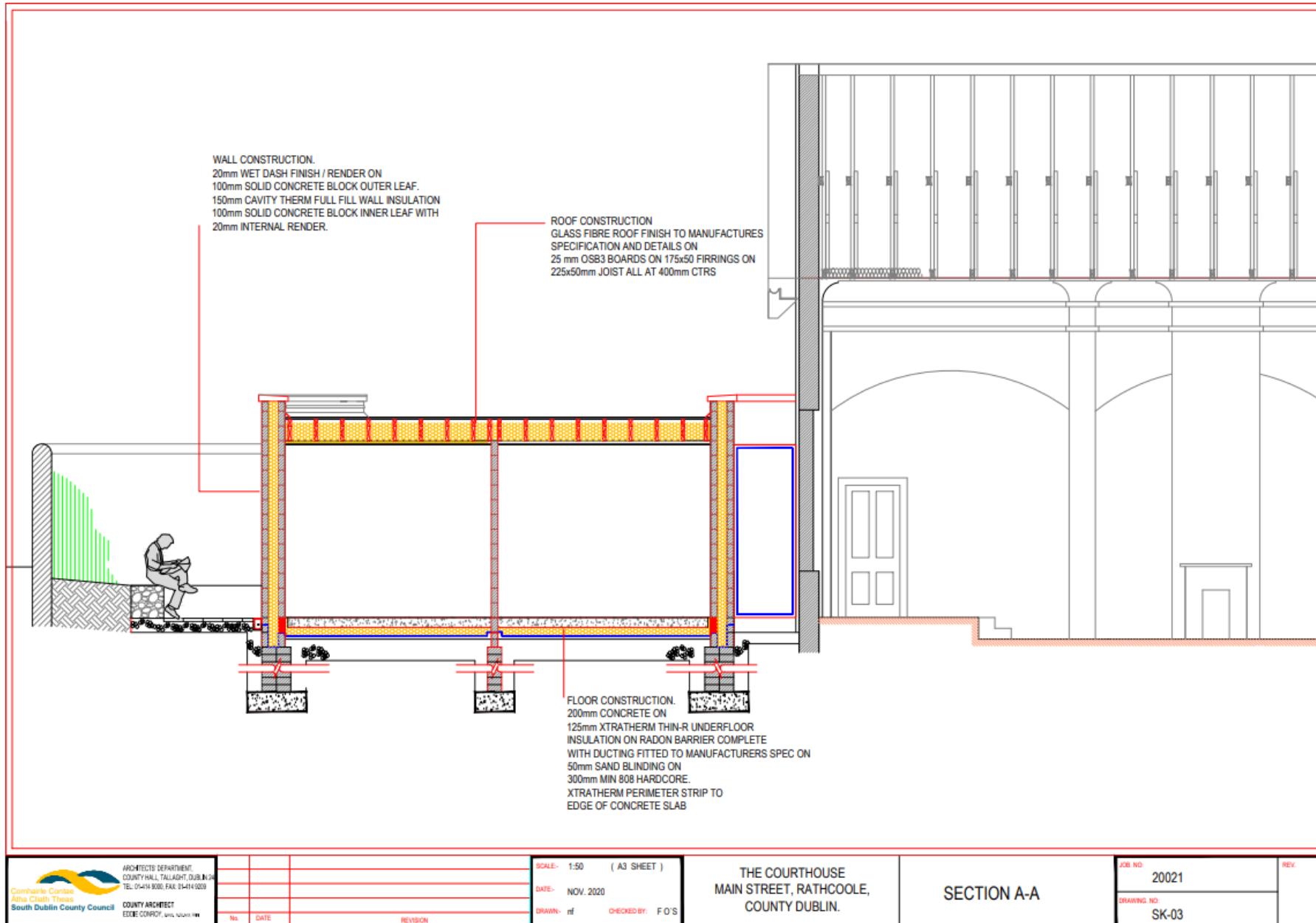


Figure 2 Proposed site plan landscape view for the Rathcoole Courthouse

3. Screening for Appropriate Assessment

3.1. Introduction

This stage of the process identifies any likely significant effects on European sites from the project, either alone or in combination with other projects or plans. A series of questions are asked in order to determine:

- Whether a plan or project can be excluded from AA requirements because it is directly connected with or necessary to the management of a European site.
- Whether the project will have a potentially significant effect on a European site, either alone or in combination with other projects or plans, in view of the site's conservation objectives or if residual uncertainty exists regarding potential impacts.

An important element of the AA process is the identification of the “conservation objectives”, “Qualifying Interests” (QIs) and/ or “Special Conservation Interests” (SCIs) of European sites requiring assessment. QIs are the habitat features and species listed in Annexes I and II of the Habitats Directive for which each European site has been designated and afforded protection. SCIs are wetland habitats and bird species listed within Annexes I and II of the Birds Directive. It is also vital that the threats to the ecological / environmental conditions that are required to support QIs and SCIs are considered as part of the assessment.

Site-Specific Conservation Objectives (SSCOs) have been designed to define favourable conservation status for a particular habitat or species at that site. According to the European Commission interpretation document ‘Managing Natura 2000 sites: The provisions of Article 6 of the Habitats Directive 92/43/EEC’, paragraph 4.6(3):

“The integrity of a site involves its ecological functions. The decision as to whether it is adversely affected should focus on and be limited to the site’s conservation objectives.”

Favourable conservation status of a habitat is achieved when:

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

The favourable conservation status of a species is achieved when:

- Population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats;
- The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; and
- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis of the Appropriate Assessment where they were deemed relevant to the European sites and their QIs/SCIs.

3.2. Identification of relevant European sites

This section of the screening process describes the European sites which exist within the Zone of Influence (ZOI) of the site. The Department of the Environment (2009) Guidance on AA recommends a 15km zone to be considered. On a precautionary basis this radius has been adopted for this AA. A review of all sites within the ZOI has identified that in the absence of significant hydrological links, the characteristics of the proposed development will not impose effects beyond 15km.

European sites that occur within 15km of – or hydrological pathways from – the proposed development are listed in Table 1 and illustrated in the Figure below. Details on the specific QIs and SCIs of each European site are also identified in Appendix I as well as site-specific threats and vulnerabilities of each of the sites.

In order to determine the potential effects of the proposal, information on the qualifying features, known vulnerabilities and threats to site integrity pertaining to any potentially affected European sites has been reviewed. Background information on threats to individual sites and vulnerability of habitats and species that was used during this assessment included the following:

- Ireland's Article 17 Report to the European Commission "*Status of EU Protected Habitats and Species in Ireland*" (NPWS, 2019);
- Site Synopses²; and
- NATURA 2000 Standard Data Forms³.

The assessment takes consideration of the SSCOs of each of the sites within the ZOI. Since the conservation objectives for the European sites focus on maintaining the favourable conservation condition of the QIs/SCIs of each site, the screening process has concentrated on assessing the potential effects of the proposed development against the QIs/SCIs of each site. The conservation objectives for each site have been consulted throughout the assessment process.

² NPWS (2019); NPWS Database of protected site data and associated documents for each European site; available at <https://www.npws.ie/protected-sites>; last accessed 5th March 2021

³ NPWS (2019); NPWS Database of protected site data and associated documents for each European site; available at <https://www.npws.ie/protected-sites>; last accessed 5th March 2021

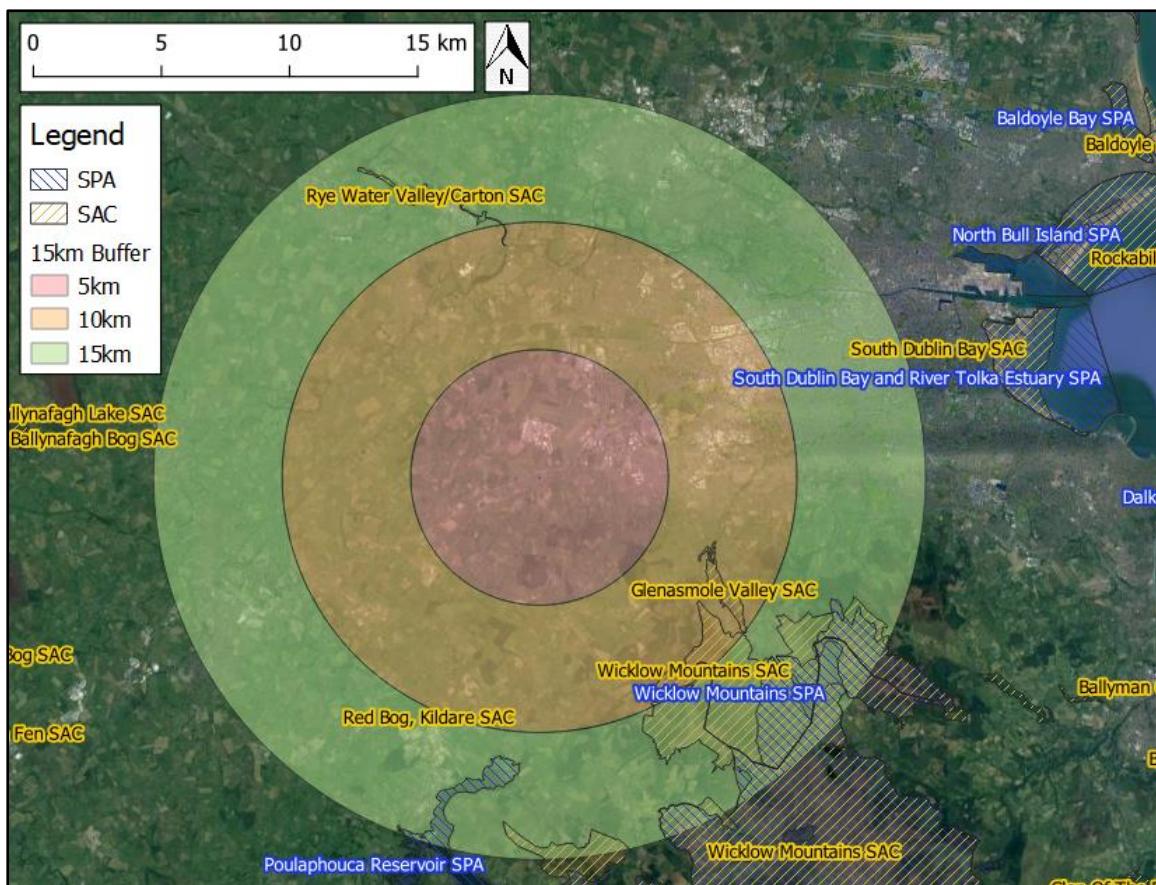


Figure 3.1 European sites within 15km of the proposed development boundary⁴

3.3. Assessment criteria

3.3.1. Is the development necessary to the management of European sites?

Under the Habitats Directive, projects that are directly connected with or necessary to the management of a European site do not require AA. For this exception to apply, management is required to be interpreted narrowly as nature conservation management in the sense of Article 6(1) of the Habitats Directive. This refers to specific measures to address the ecological requirements of annexed habitats and species (and their habitats) present on a site(s). The relationship should be shown to be direct and not a by-product of the project, even if this might result in positive or beneficial effects for a site(s).

The primary purpose of the proposed development is not the nature conservation management of the sites, but generally to provide for the development of the Rathcoole Courthouse and associated external facilities. Therefore, the proposed development would not be considered by the Habitats Directive to be directly connected with or necessary to the management of European designated sites.

3.3.2. Elements of the proposed development with potential to give rise to effects

This screening assessment process identifies whether the changes brought about by the proposal are likely to cause any direct, indirect or secondary effects (either alone or in combination with other

⁴ Source: NPWS (datasets downloaded 5th March 2021)

plans or projects) on the European sites. During this assessment a number of factors have been taken into account including the sites' conservation objectives and known threats. The overall aim of the assessment is to attempt to predict the consequences that can be reasonably foreseen by implementation of the proposed development.

For the purposes of this assessment the proposed development is identified to have both construction and operational phase effects. The operational phase of the project will provide improved courthouse facilities and update the facilities on site. This is consistent with the existing urban context of the site and is not foreseen to interact with European sites due to the distances involved.

The construction phase elements of the project also introduce potential sources for effects to ecological processes such as:

- Disturbance effects through noise;
- Earthworks (removal of vegetation etc.);
- Dust; and
- Surface water run-off.

The construction phase will be small scale and temporary. The construction phase effects identified are considered in the context of European sites identified above, their sensitivities and conservation objectives.

3.3.3. Identification of potential effects and screening of sites

This section documents the final stage of the screening process. It has used the information collected on the sensitivity of each European site and describes any potential effects on the integrity of European sites resulting from the proposed development. This assumes the absence of any controls, conditions, or mitigation measures. In determining the potential for effects, a number of factors have been taken into account. Firstly, the sensitivity and reported threats to European sites. Secondly, the individual elements of the proposed development and the potential effects they may cause on the sites were considered. The elements of the proposed development with potential to affect the integrity of European sites are presented in Table 3.1.

Sites are screened out based on one or a combination of the following criteria:

- where it can be shown that there are no significant pathways such as hydrological links between activities of the proposed development and a site;
- where a site is located at such a distance from proposed development area that effects are not foreseen; and
- where known threats or vulnerabilities of a site cannot be linked to potential impacts that may arise from the proposed development.

3.4. Characterising potential significant effects

This section of the report explains the metrics used when assessing if the potential effects (previously identified) will have significant implications for European sites. The following parameters are described when characterising impacts (following guidance from the Chartered Institute of

Ecology and Environmental Management, Environmental Protection Agency and National Roads Authority):

- **Direct and Indirect Impacts** - An impact can be caused either as a direct or as an indirect consequence of a Plan/Project.
- **Magnitude** - Magnitude measures the size of an impact, which is described as high, medium, low, very low or negligible.
- **Extent** - The area over that the impact occurs – this should be predicted in a quantified manner
- **Duration** - The time that the effect is expected to last prior to recovery or replacement of the resource or feature.
 - Temporary: Up to 1 Year;
 - Short Term: The effects would take 1-7 years to be mitigated;
 - Medium Term: The effects would take 7-15 years to be mitigated;
 - Long Term: The effects would take 15-60 years to be mitigated; and
 - Permanent: The effects would take 60+ years to be mitigated.
- **Likelihood** – The probability of the effect occurring taking into account all available information.
 - Certain/Near Certain: >95% chance of occurring as predicted;
 - Probable: 50-95% chance as occurring as predicted;
 - Unlikely: 5-50% chance as occurring as predicted; and
 - Extremely Unlikely: <5% chance as occurring as predicted.

The Chartered Institute of Ecology and Environmental Management (CIEEM) guidelines for ecological impact assessment (2016) define: an ecologically significant impact as an impact (negative or positive) on the integrity of a defined site or ecosystem and/or the conservation status of habitats or species within a given geographic area; and the integrity of a site as the coherence of its ecological structure and function, across its whole area, which enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified.

The Habitats Directive requires the focus of the assessment at this stage to be on the integrity of the site as indicated by its Conservation Objectives. It is an aim of NPWS to draw up conservation management plans for all areas designated for nature conservation. These plans will, among other things, set clear objectives for the conservation of the features of interest within a site.

SSCOs have been prepared for a number of European sites. These detailed SSCOs aim to define favourable conservation condition for the qualifying habitats and species at that site by setting targets for appropriate attributes which define the character habitat. The maintenance of the favourable condition for these habitats and species at the site level will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

Favourable conservation status of a **species** can be described as being achieved when: *'population data on the species concerned indicate that it is maintaining itself, and the natural range of the species is neither being reduced or likely to be reduced for the foreseeable future, and there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.'*

Favourable conservation status of a **habitat** can be described as being achieved when: '*its natural range, and area it covers within that range, is stable or increasing, and the ecological factors that are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and the conservation status of its typical species is favourable*'.

A Generic Conservation Objective for a cSAC is provided below:

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

A Generic Conservation Objective for a SPA is provided below:

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

3.4.1. Types of potential Effects

EC guidance⁵ outlines the types of effects that may affect European sites. These include effects from the following activities:

- Land take
- Resource requirements (drinking water abstraction etc.)
- Emissions (disposal to land, water or air)
- Excavation requirements
- Transportation requirements
- Duration of construction, operation, decommissioning

The 2001 European Commission AA guidance outlines the following potential changes that may occur at a designated site, which may result in effects on the integrity and function of that site:

- Reduction of habitat area
- Disturbance to key species
- Habitat or species fragmentation
- Reduction in species density
- Changes in key indicators of conservation value (water quality etc.)
- Climate change

The elements detailed above were considered with specific reference to each of the European sites identified below.

Loss/reduction of habitat area

There are no European sites present within the redline boundary and the closest European site is 6.91 km away. Similarly, there were no Annex I habitats or supporting habitat for Annex II species identified on site. Therefore, there will be no effects posed to European sites in this respect.

⁵ 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 Environment DG, 2001

Habitat or species fragmentation

The site is already a hard surface site in an urban context, therefore there are no ecological corridors connecting any of the European sites identified above. Similarly, there were no Annex I habitats or supporting habitat for Annex II species identified on site. Therefore, there will be no effects posed to European sites in this respect.

Disturbance to key species

None of the species and/or habitats identified in Table 3.1 were recorded on site. The nearest European site is 6.91 km away from the proposed site and therefore disturbance effects due to noise or lighting etc. are not present.

Reduction in species density

There are no ecological corridors between the site and any European site. Similarly, there are no habitats identified on site of any ecological significance. As there is no supporting habitat and/or connectivity between the site and any European site, there will be no reduction in species density of any of the QI or SCI species.

Changes of indicators of conservation value

The site is 6.91 km from the closest European site, the is Given the nature of the proposed work, the scale and the localised and temporary nature of the potential effects with negligible effects identified. There are no direct hydrological linkages identified between the site and any European site. Indirect hydrological pathways may result in dust and debris particles entering local water sources (although this is unlikely), these sources are connected to the Liffey which opens out into the marine environment where there are 4 identified European sites. The dilution effect introduced by this pathway are significant. Due to the nature, scale and temporary construction phase of the works, in combination with the identified indirect pathway, it is concluded that there are no likely significant effects to the ecological integrity of these European sites. The works provide for the development of the Rathcoole Courthouse and associated external facilities and there are no ecological pathways for effects between European sites. Therefore, there are no sources for effects with pathways that will affect any conservation indicators related to European sites.

Climate change

The proposed works will not result in any greenhouse gas emissions to air during the operational phase. The construction phase works will have increased temporary emissions which will be localised however, given the distance to the nearest European site these are determined to be negligible. Such effects upon greenhouse gas emissions will not affect changes projected to arise from climate change to the degree that it would affect the QIs or SCIs of the European sites considered.

Table 1 Screening assessment of the potential effects arising from the proposed development

Site Code	Site Name	Distance	Qualifying Feature	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
001209	Glenasmole Valley SAC	6.91	Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) [6210], Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220], Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) [6410]	<p>This site is designated for ground water sensitive habitats and habitats which are sensitive to direct land use management interactions.</p> <p>All sources for effects from the proposed redevelopment are identified to be associated with the construction phase. The operational phase will be consistent with existing land use. The construction phase sources are identified to be localised within the receiving environment due to the characteristics and scale of the proposed works. There are some indirect hydrological pathways identified from the site, however these lead to Dublin bay through the Liffey and Dublin Bay river catchment. Therefore, there are no pathways for effect between the proposed redevelopment and the SAC.</p> <p>Therefore, there are no further considerations required.</p>	No	No
002122	Wicklow Mountains SAC	7.82	European dry heaths [4030], Siliceous rocky slopes with chasmophytic vegetation [8220], Otter (<i>Lutra lutra</i>) [1355], Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae and Galeopsietalia ladani</i>) [8110], Natural dystrophic lakes and ponds [3160], Alpine and Boreal heaths [4060], Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>) [3110], Species-rich Nardus grasslands, on siliceous substrates in mountain areas (<i>and submountain areas in Continental Europe</i>) [6230], Calaminarian grasslands of the <i>Violetalia calaminariae</i> [6130], Western acidic oak woodland (<i>Old sessile oak woods with Ilex and Blechnum in the British Isles</i>) [91A0], Blanket bogs (* if active bog) [7130], Northern Atlantic wet heaths with <i>Erica tetralix</i> [4010], Calcareous rocky slopes with chasmophytic vegetation [8210]	<p>This site is designated for habitats which are sensitive to direct land use management interactions.</p> <p>All sources for effects from the proposed redevelopment are identified to be associated with the construction phase. The operational phase will be consistent with existing land use. The construction phase sources are identified to be localised within the receiving environment due to the characteristics and scale of the proposed works. There are some indirect hydrological pathways identified from the site, however these lead to Dublin bay through the Liffey and Dublin Bay river catchment. Therefore, there are no pathways for effect between the proposed redevelopment and the SAC.</p> <p>Therefore, there are no further considerations required.</p>	No	No

Site Code	Site Name	Distance	Qualifying Feature	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
001398	Rye Water Valley/Carton SAC	9.17	Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220], Desmoulin's whorl snail (<i>Vertigo mouliniana</i>) [1016], Narrow-mouthed whorl snail (<i>Vertigo angustior</i>) [1014]	<p>This site is designated for ground water sensitive habitats & species which are also sensitive to direct land use management interactions.</p> <p>All sources for effects from the proposed redevelopment are identified to be associated with the construction phase. The operational phase will be consistent with existing land use. The construction phase sources are identified to be localised within the receiving environment due to the characteristics and scale of the proposed works. There are some indirect hydrological pathways identified from the site, however these lead to Dublin bay through the Liffey and Dublin Bay river catchment. Therefore, there are no pathways for effect between the proposed redevelopment and the SAC.</p> <p>Therefore, there are no further considerations required.</p>	No	No
000397	Red Bog, Kildare SAC	10.12	Transition mires and quaking bogs [7140]	<p>This site is designated for ground water sensitive habitats which are also sensitive to direct land use management interactions.</p> <p>All sources for effects from the proposed redevelopment are identified to be associated with the construction phase. The operational phase will be consistent with existing land use. The construction phase sources are identified to be localised within the receiving environment due to the characteristics and scale of the proposed works. There are some indirect hydrological pathways identified from the site, however these lead to Dublin bay through the Liffey and Dublin Bay river catchment. Therefore, there are no pathways for effect between the proposed redevelopment and the SAC.</p> <p>Therefore, there are no further considerations required.</p>	No	No
004040	Wicklow Mountains SPA	11.25	Wood warbler (<i>Phylloscopus sibilatrix</i>) [A314], Peregrine falcon (<i>Falco peregrinus</i>) [A103], Merlin (<i>Falco columbarius</i>) [A098]	The SCIs of the SPA are sensitive to disturbance effects and on-site land management practices. As well as interactions with the trophic structure with regard to prey/resource availability. There are no pathways for effects from the proposed development and the SPA due to the characteristics	No	No

Site Code	Site Name	Distance	Qualifying Feature	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
				of the proposed redevelopment and the upland location of the SPA. Therefore, there is no further consideration required.		
004063	Poulaphouca Reservoir SPA	14.81	Greylag goose (<i>Anser anser</i>) [A043], Common goldeneye (<i>Bucephala clangula</i>) [A067], Great crested grebe (<i>Podiceps cristatus</i>) [A005], Eurasian teal (<i>Anas crecca</i>) [A052], Greylag goose (<i>Anser anser</i>) [A043], Whooper swan (<i>Cygnus cygnus</i>) [A038], Great cormorant (<i>Phalacrocorax carbo</i>) [A017], Lesser black-backed gull (<i>Larus fuscus</i>) [A183], Eurasian wigeon (<i>Anas penelope</i>) [A050], Mew gull (<i>Larus canus</i>) [A182], Mallard (<i>Anas platyrhynchos</i>) [A053], Eurasian curlew (<i>Numenius arquata</i>) [A160], Black-headed gull (<i>Larus ridibundus</i>) [A179]	The Poulaphouca reservoir is closer to the site in terms of physical distance, however the hydrological pathway is much more significant with the marine environment introducing substantial dilution effect from potential sources for effects. Given the characteristics of the proposed redevelopment, the scale and temporary nature of the construction phase, combined with the indirect hydrological pathways with considerable dilution potential. There are no likely significant effects on the ecological integrity of the SPA. Therefore, no further consideration is required.	No	No
000210	South Dublin Bay SAC	18.12	Shifting dunes (<i>Embryonic shifting dunes</i>) [2110], Annual vegetation of drift lines [1210], Salicornia and other annuals colonizing mud and sand [1310], Mudflats and sandflats not covered by seawater at low tide [1140]	The proposed redevelopment area is indirectly hydrologically linked to the SAC. The SAC is within the marine environment introducing substantial dilution effect from potential sources for effects. Given the characteristics of the proposed redevelopment, the scale and temporary nature of the construction phase, combined with the indirect hydrological pathways with considerable dilution potential. There are no likely significant effects on the ecological integrity of the SAC. Therefore, no further consideration is required.	No	No
004024	South Dublin Bay and River Tolka Estuary SPA	18.14	Grey plover (<i>Pluvialis squatarola</i>) [A141], Eurasian oystercatcher (<i>Haematopus ostralegus</i>) [A130], Black-headed gull (<i>Larus ridibundus</i>) [A179], Eurasian curlew (<i>Numenius arquata</i>) [A160], Ruddy turnstone (<i>Arenaria interpres</i>) [A169], Sanderling (<i>Calidris alba</i>) [A144], Red-breasted merganser (<i>Mergus serrator</i>) [A069], Great cormorant (<i>Phalacrocorax carbo</i>) [A017], Mew gull (<i>Larus canus</i>) [A182], Great crested grebe (<i>Podiceps cristatus</i>) [A005], Roseate tern (<i>Sterna dougallii</i>) [A192], Common redshank (<i>Tringa totanus</i>) [A162], Red	The proposed redevelopment area is indirectly hydrologically linked to the SPA. The SPA is within the marine environment introducing substantial dilution effect from potential sources for effects. Given the characteristics of the proposed redevelopment, the scale and temporary nature of the construction phase, combined with the indirect hydrological pathways with considerable dilution potential. There are no likely significant	No	No

Site Code	Site Name	Distance	Qualifying Feature	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
			knot (<i>Calidris canutus</i>) [A143], Mediterranean gull (<i>Larus melanocephalus</i>) [A176], Arctic tern (<i>Sterna paradisaea</i>) [A194], Bar-tailed godwit (<i>Limosa lapponica</i>) [A157], Common tern (<i>Sterna hirundo</i>) [A193], Ringed plover (<i>Charadrius hiaticula</i>) [A137]	effects on the ecological integrity of the SPA. Therefore, no further consideration is required.		
004006	North Bull Island SPA	21.14	Mew gull (<i>Larus canus</i>) [A182], Eurasian wigeon (<i>Anas penelope</i>) [A050], Black-headed gull (<i>Larus ridibundus</i>) [A179], Common greenshank (<i>Tringa nebularia</i>) [A164], Ruddy turnstone (<i>Arenaria interpres</i>) [A169], European golden plover (<i>Pluvialis apricaria</i>) [A140], Ruff (<i>Philomachus pugnax</i>) [A151], Northern shoveler (<i>Anas clypeata</i>) [A056], Bar-tailed godwit (<i>Limosa lapponica</i>) [A157], Sanderling (<i>Calidris alba</i>) [A144], Grey plover (<i>Pluvialis squatarola</i>) [A141], Northern pintail (<i>Anas acuta</i>) [A054], Eurasian oystercatcher (<i>Haematopus ostralegus</i>) [A130], Eurasian teal (<i>Anas crecca</i>) [A052], Mallard (<i>Anas platyrhynchos</i>) [A053], Common redshank (<i>Tringa totanus</i>) [A162], Eurasian curlew (<i>Numenius arquata</i>) [A160], Short-eared owl (<i>Asio flammeus</i>) [A222], Common shelduck (<i>Tadorna tadorna</i>) [A048], Ringed plover (<i>Charadrius hiaticula</i>) [A137], Red-breasted merganser (<i>Mergus serrator</i>) [A069], Red knot (<i>Calidris canutus</i>) [A143]	The proposed redevelopment area is indirectly hydrologically linked to the SPA. The SPA is within the marine environment introducing substantial dilution effect from potential sources for effects. Given the characteristics of the proposed redevelopment, the scale and temporary nature of the construction phase, combined with the indirect hydrological pathways with considerable dilution potential. There are no likely significant effects on the ecological integrity of the SPA. Therefore, no further consideration is required.	No	No
000206	North Dublin Bay SAC	21.15	Humid dune slacks [2190], Salicornia and other annuals colonizing mud and sand [1310], Shifting dunes (<i>Embryonic shifting dunes</i>) [2110], Mudflats and sandflats not covered by seawater at low tide [1140], Shifting dunes along the shoreline with Ammophila arenaria ("white dunes") [2120], Annual vegetation of drift lines [1210], Petalwort (<i>Petalophyllum ralfsii</i>) [1395], Atlantic salt meadows (<i>Atlantic salt meadows (Glauco-Puccinellietalia maritimae)</i>) [1330], Fixed coastal dunes with herbaceous vegetation ("grey dunes") [2130]	The proposed redevelopment area is indirectly hydrologically linked to the SAC. The SAC is within the marine environment introducing substantial dilution effect from potential sources for effects. Given the characteristics of the proposed redevelopment, the scale and temporary nature of the construction phase, combined with the indirect hydrological pathways with considerable dilution potential. There are no likely significant effects on the ecological integrity of the SAC. Therefore, no further consideration is required.	No	No

3.5. Other plans and projects

Article 6(3) of the Habitats Directive requires an assessment of a plan or project to consider other plans or projects that might, in combination with the plan or project, have the potential to adversely affect European sites.

As part of this assessment each plan or project is considered within a radius of the red line boundary of the proposed area as defined by the ecologist. The distance of this radius works from a standard 200m, but can be extended if the ecologist deems it necessary depending on whether certain characteristics are present, such as:

- Direct or indirect connectivity to a European site;
- In close proximity to a European site;
- The proposal is of a substantial scale relative to the conditions and/or current works taking place in the surrounding landscape.

These factors are considered particular to each proposal for each particular location and specification. Considering the characteristics of the proposed development with respect to the scale and nature of the works, the 200m search for in-combination effects was deemed to be sufficient.

Plans of relevance in the context of this proposal include:

- South Dublin County Development Plan 2016-2022.

The proposed project is extremely small scale in the context of the Plan identified above. Considering that the proposed development has a small-scale temporary construction phase and the operational phase is consistent with the existing land use, it is not foreseen that the proposed development will have any significant in-combination effects with this Plan.

Projects of relevance to this development:

To identify projects for consideration for the in-combination effects section the National Planning and Housing development database was used⁶. A review of all planning applications within the identified zone was conducted focusing on all application within the past 5 years.

The largest of these projects was identified to be SD19A/0075, SD20A/0080 and SD15A/0341 which are developments consisting of single-story upgrades and alterations. The other projects identified relate to small scale extension works and related projects (see table below). As the proposed development is not directly connected to any European site, taking into account the characteristics and scale, it is not foreseen that it will have any significant adverse effects on European sites in-combination effects with the aforementioned projects.

⁶ <https://data-housinggov.ie/opendata.arcgis.com/datasets/planning-application-sites-2010-onwards>; 5th March 2021

Table 2 Planning applications within the receiving environment of the proposed development

Project Code	Status	Overview	Project Area (sq m)	Possible significant effects from plan or project	Is there a risk of in-combination effects	Possible Significant in-combination effects
SD15A/0341	Grant Permission for Retention	Retention and repositioning of an existing single storey storage structure measuring 24sq.m in floor area to the rear of the existing nursing home.	23,769	Both projects are small scale with temporary construction phases. There are no direct pathways for effects to any European sites. Given the characteristics and scale of the projects combined with the indirect pathways identified with large distances between them there are no likely in combination effects.	No	No
SD20A/0080	Grant Permission	Temporary single storey prefabricated building to be linked to the existing single storey prefabricated building granted under Ref. SD19A/0075; 2 general classrooms each with toilet accommodation (one containing accessible WC); 1 store; entrance lobbies;	17,987	Both projects are small scale with temporary construction phases. There are no direct pathways for effects to any European sites. Given the characteristics and scale of the projects combined with the indirect pathways identified with large distances between them there are no likely in combination effects.	No	No
SD19A/0075	Grant Permission	Single storey prefabricated accommodation consisting of 2 classrooms with ancillary toilets; 1 resource room; a canopy to link the unit to the existing prefab; 4 car parking spaces, all located to the rear of the existing prefabricated unit; the works al	17,738	Both projects are small scale with temporary construction phases. There are no direct pathways for effects to any European sites. Given the characteristics and scale of the projects combined with the indirect pathways identified with large distances between them there are no likely in combination effects.	No	No
SD18A/0331	Grant Permission for Retention	Retention for a further 3-year period of the existing prefabricated accommodation building consisting of 4 classrooms, 1 resource room and plant room together with all associated site works located within the playing fields to the rear of the school and	17,398	Both projects are small scale with temporary construction phases. There are no direct pathways for effects to any European sites. Given the characteristics and scale of the projects combined with the indirect pathways identified with large distances between them there are no likely in combination effects.	No	No
SD19A/0355	Grant Permission	Single storey prefabricated buildings (floor area 870sq.m) to the side/rear of existing Community Centre for community/recreational use.	16,075	Both projects are small scale with temporary construction phases. There are no direct pathways for effects to any European sites. Given the characteristics and scale of the projects combined with the indirect pathways identified with large distances between them there are no likely in combination effects.	No	No

Project Code	Status	Overview	Project Area (sq m)	Possible significant effects from plan or project	Is there a risk of in-combination effects	Possible Significant in-combination effects
SD16A/0171	Grant Permission	Construction of 8 3-storey, 4-bedroom semi-detached houses and 4 3-storey, 3-bedroom semi-detached houses at the back of Protected Structure RPS No. 323 with associated car parking spaces. The development also includes the demolition of shed & workshop l	14,236	Both projects are small scale with temporary construction phases. There are no direct pathways for effects to any European sites. Given the characteristics and scale of the projects combined with the indirect pathways identified with large distances between them there are no likely in combination effects.	No	No
SD16A/0061	Grant Permission	Building 'A' fronting Main Street (as per previously granted planning permission, Reg. Ref. S00A/0732) - change of use of first floor 124sq.m of office to 2 x 1 bed apartments of 51sq.m & 55sq.m plus circulation with minimal alterations to the rear eleva	3,028	Both projects are small scale with temporary construction phases. There are no direct pathways for effects to any European sites. Given the characteristics and scale of the projects combined with the indirect pathways identified with large distances between them there are no likely in combination effects.	No	No
SD16B/0327	Grant Permission for Retention	Retain: (a) a single storey extension to the west (rear) elevation; (b) alterations to the facade along the east (front elevation) - revised window sizes; (c) reduced overall eaves height and overall roof height; (d) minor alterations to the existing hou	1,562	Both projects are small scale with temporary construction phases. There are no direct pathways for effects to any European sites. Given the characteristics and scale of the projects combined with the indirect pathways identified with large distances between them there are no likely in combination effects.	No	No
SD17B/0096	Grant Permission	Demolition of existing 20sq.m rear lean to, split chimney removal, addition of single storey alterations to existing dwelling comprising 2 bathrooms, additional bedroom, living/kitchen/utility to rear/ side in 63sq.m and 4sq.m porch, altered parking acce	1,350	Both projects are small scale with temporary construction phases. There are no direct pathways for effects to any European sites. Given the characteristics and scale of the projects combined with the indirect pathways identified with large distances between them there are no likely in combination effects.	No	No
SD19A/0361	Grant Permission for Retention	Retention of change of use from retail use to use as a crÃ©che/childcare facility.	1,057	Both projects are small scale with temporary construction phases. There are no direct pathways for effects to any European sites. Given the characteristics and scale of the projects combined with the indirect pathways identified with large distances between them there are no likely in combination effects.	No	No

Project Code	Status	Overview	Project Area (sq m)	Possible significant effects from plan or project	Is there a risk of in-combination effects	Possible Significant in-combination effects
SD19A/0094	Grant Permission	Extend childcare by converting adjoining vacant commercial unit to include a change of use from use as a gym to a creche/childcare facility, together with all associated works.	667	Both projects are small scale with temporary construction phases. There are no direct pathways for effects to any European sites. Given the characteristics and scale of the projects combined with the indirect pathways identified with large distances between them there are no likely in combination effects.	No	No
SD19B/0306	Grant Permission for Retention	Single storey flat roof extension to rear of previously existing two storey semi-detached dwelling where all new external finishes match previously existing and 2 no. roof lights included.	583	Both projects are small scale with temporary construction phases. There are no direct pathways for effects to any European sites. Given the characteristics and scale of the projects combined with the indirect pathways identified with large distances between them there are no likely in combination effects.	No	No
SD18B/0234	Grant Permission for Retention	Single storey extension to side of existing two-storey, semi-detached dwelling with lean-to roof, roof tiles to match existing and roof light window to side elevations.	583	Both projects are small scale with temporary construction phases. There are no direct pathways for effects to any European sites. Given the characteristics and scale of the projects combined with the indirect pathways identified with large distances between them there are no likely in combination effects.	No	No
SD15B/0302	Grant Permission	Single storey extension of 11sq.m to the front of existing mid-terraced, 2 storeys dwelling and associated drainage works.	523	Both projects are small scale with temporary construction phases. There are no direct pathways for effects to any European sites. Given the characteristics and scale of the projects combined with the indirect pathways identified with large distances between them there are no likely in combination effects.	No	No
SD20A/0194	Grant Permission	Change of use of existing acupuncture clinic to a single dwelling house.	451	Both projects are small scale with temporary construction phases. There are no direct pathways for effects to any European sites. Given the characteristics and scale of the projects combined with the indirect pathways identified with large distances between them there are no likely in combination effects.	No	No
SD17A/0117	Grant Permission	Change of use from retail use to use as a crÃ©che/childcare facility, together with new signage all associated works.	242	Both projects are small scale with temporary construction phases. There are no direct pathways for effects to any European sites. Given the characteristics and scale of the projects combined with the indirect pathways identified with large distances between them there are no likely in combination effects.	No	No
SD17A/0205	Grant Permission	Change of use from retail use to use as a crÃ©che/childcare facility, together with new signage and all associated works.	202	Both projects are small scale with temporary construction phases. There are no direct pathways for effects to any European sites. Given the characteristics and scale of the projects combined with the indirect pathways identified with large distances between them there are no likely in combination effects.	No	No

4. Conclusion

This stage one screening for AA of the proposed Rathcoole Courthouse redevelopment at Rathcoole Main Street demonstrates that the proposed development is not likely to have significant effects on any European site.

The AA screening process has considered potential effects which may arise during the construction and operational phases as a result of the implementation of the project. Through an assessment of the pathways for effects and an evaluation of the project characteristics, taking account of the processes involved and the distance of separation from European sites, it has been evaluated that there are no likely significant adverse effects on the qualifying interests, special conservation interest or the conservation objectives of any designated European site.

The proposed development is 6.91 km away from the closest SAC and 11.25 km away from the closest SPA. Given the nature of the proposed work, the scale and the localised and temporary nature of the potential effects, the proposed project will not lead to any significant effects in-combination with effects arising from any other plans or projects.

It is concluded that the proposed development is not foreseen to give rise to any significant adverse effects on any designated European sites, alone or in combination with other plans or projects. This evaluation is made in view of the conservation objectives of the habitats or species for which these sites have been designated. Consequently, a Stage Two AA (NIS) is not required.

Appendix I Background information on European sites

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known threats and pressures
000206	North Dublin Bay SAC	Shifting dunes (<i>Embryonic shifting dunes</i>) [2110], Annual vegetation of drift lines [1210], Atlantic salt meadows (<i>Atlantic salt meadows (Glauco-Puccinellietalia maritimae)</i>) [1330], Salicornia and other annuals colonizing mud and sand [1310], Petalwort (<i>Petalophyllum ralfsii</i>) [1395], Humid dune slacks [2190], Fixed coastal dunes with herbaceous vegetation ("grey dunes") [2130], Mudflats and sandflats not covered by seawater at low tide [1140], Shifting dunes along the shoreline with Ammophila arenaria ("white dunes") [2120]	A04, K03.06, G01.02, F02.03, H01.09, E01, E02, G01.01, I01, J01.01, H01.03, G02.01, E03, G05.05, F02.03.01	Grazing, antagonism with domestic animals, walking, horseriding and non-motorised vehicles, leisure fishing, diffuse pollution to surface waters due to other sources not listed, urbanised areas, human habitation, industrial or commercial areas, nautical sports, invasive non-native species, burning down, other point source pollution to surface water, golf course, discharges, intensive maintenance of public parks or cleaning of beaches, bait digging or collection
000210	South Dublin Bay SAC	Annual vegetation of drift lines [1210], Mudflats and sandflats not covered by seawater at low tide [1140], Shifting dunes (<i>Embryonic shifting dunes</i>) [2110], Salicornia and other annuals colonizing mud and sand [1310]	E01, G01.01.02, K02, D01.01, G01.02, K02.02, E03, M01, F02.03.01, G01.01, D01.02, H03, J02.01.02, E02	Urbanised areas, human habitation, non-motorized nautical sports, biocenotic evolution, succession, paths, tracks, cycling tracks, walking, horseriding and non-motorised vehicles, accumulation of organic material, discharges, changes in abiotic conditions, bait digging or collection, nautical sports, roads, motorways, marine water pollution, reclamation of land from sea, estuary or marsh, industrial or commercial areas
000397	Red Bog, Kildare SAC	Transition mires and quaking bogs [7140]	A04, F03.01, C01.01, E01.03, F02.03, A08	Grazing, hunting, sand and gravel extraction, dispersed habitation, leisure fishing, fertilisation
001209	Glenasmole Valley SAC	Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* <i>important orchid sites</i>) [6210], Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220], Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) [6410]	A03, A03.03, B02.02, H01.08, F02.03, A08, E01.02, C01.03, D01, A04, A04.02.01, A04.02.02, A04.02.03, B02.01.02, H01.05, H02.07, B01.02, I01, J02, D01.03, B01.01	Mowing or cutting of grassland, abandonment or lack of mowing, forestry clearance, diffuse pollution to surface waters due to household sewage and waste waters, leisure fishing, fertilisation, discontinuous urbanisation, peat extraction, roads, paths and railroads, grazing, non-intensive cattle grazing, non-intensive sheep grazing, non-intensive horse grazing, forest replanting (non-native trees), diffuse pollution to surface waters due to agricultural and forestry activities, diffuse groundwater pollution due to non-sewered population, artificial planting on open ground (non-native trees), invasive non-native species, human induced changes in hydraulic conditions, car parks and parking areas, forest planting on open ground (native trees)

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known threats and pressures
001398	Rye Water Valley/Carton SAC	Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220], Narrow-mouthed whorl snail (<i>Vertigo angustior</i>) [1014], Desmoulin's whorl snail (<i>Vertigo mouliniana</i>) [1016]	E01.03, A08, A04, D01.02, J02.05.02, E01.01, A10.01, B	Dispersed habitation, fertilisation, grazing, roads, motorways, modifying structures of inland water courses, continuous urbanisation, removal of hedges and copses or scrub, sylviculture, forestry
002122	Wicklow Mountains SAC	European dry heaths [4030], Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae and Galeopsietalia ladani</i>) [8110], Siliceous rocky slopes with chasmophytic vegetation [8220], Oligotrophic waters containing very few minerals of sandy plains (<i>Littorellatalia uniflorae</i>) [3110], Calcareous rocky slopes with chasmophytic vegetation [8210], Northern Atlantic wet heaths with <i>Erica tetralix</i> [4010], Natural dystrophic lakes and ponds [3160], Blanket bogs (* if active bog) [7130], Species-rich <i>Nardus</i> grasslands, on siliceous substrates in mountain areas (<i>and submountain areas in Continental Europe</i>) [6230], Western acidic oak woodland (<i>Old sessile oak woods with Ilex and Blechnum in the British Isles</i>) [91A0], Alpine and Boreal heaths [4060], Calaminarian grasslands of the <i>Violetalia calaminariae</i> [6130], Otter (<i>Lutra lutra</i>) [1355]	E03.01, D01.01, B02.05, F03.02.02, F04.02, C01.03, B06, A05.02, G05.01, G05.04, G01, A04, G05.09, F03, G02.09, G05.07, G01.03.02, K01.01, K04.05, E01, G04.01, I01, G01.04, G05.06, G01.02, J01.01, L05	Disposal of household or recreational facility waste, paths, tracks, cycling tracks, non- intensive timber production (leaving dead wood or old trees untouched), taking from nest (e.g. Falcons), collection (fungi, lichen, berries etc.), peat extraction, grazing in forests or woodland, stock feeding, trampling, overuse, vandalism, outdoor sports and leisure activities, recreational activities, grazing, fences, fencing, hunting and collection of wild animals (terrestrial), wildlife watching, missing or wrongly directed conservation measures, off-road motorized driving, erosion, damage by herbivores (including game species), urbanised areas, human habitation, military manouevres, invasive non-native species, mountaineering, rock climbing, speleology, tree surgery, felling for public safety, removal of roadside trees, walking, horseriding and non-motorised vehicles, burning down, collapse of terrain, landslide
004006	North Bull Island SPA	Common redshank (<i>Tringa totanus</i>) [A162], European golden plover (<i>Pluvialis apricaria</i>) [A140], Short-eared owl (<i>Asio flammeus</i>) [A222], Mew gull (<i>Larus canus</i>) [A182], Eurasian oystercatcher (<i>Haematopus ostralegus</i>) [A130], Northern shoveler (<i>Anas clypeata</i>) [A056], Red-breasted merganser (<i>Mergus serrator</i>) [A069], Eurasian curlew (<i>Numenius arquata</i>) [A160], Sanderling (<i>Calidris alba</i>) [A144], Mallard (<i>Anas platyrhynchos</i>) [A053], Grey plover (<i>Pluvialis squatarola</i>) [A141], Black-headed gull (<i>Larus ridibundus</i>) [A179], Bar-tailed godwit (<i>Limosa lapponica</i>) [A157], Northern pintail (<i>Anas acuta</i>) [A054], Eurasian wigeon (<i>Anas penelope</i>) [A050], Red knot (<i>Calidris canutus</i>) [A143], Eurasian teal (<i>Anas crecca</i>) [A052], Ruddy turnstone (<i>Arenaria interpres</i>) [A169], Ruff (<i>Philomachus pugnax</i>) [A151], Ringed plover (<i>Charadrius hiaticula</i>) [A137], Common greenshank (<i>Tringa nebularia</i>) [A164], Common shelduck (<i>Tadorna tadorna</i>) [A048]	F02.03.01, D01.05, G03, D01.02, G01.02, E02, G01.01, E01.04, E01.01, E03, G02.01, D03.02	Bait digging or collection, bridge, viaduct, interpretative centres, roads, motorways, walking, horseriding and non-motorised vehicles, industrial or commercial areas, nautical sports, other patterns of habitation, continuous urbanisation, discharges, golf course, shipping lanes

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known threats and pressures
004024	South Dublin Bay and River Tolka Estuary SPA	Roseate tern (<i>Sterna dougallii</i>) [A192], Eurasian curlew (<i>Numenius arquata</i>) [A160], Sanderling (<i>Calidris alba</i>) [A144], Mediterranean gull (<i>Larus melanocephalus</i>) [A176], Great crested grebe (<i>Podiceps cristatus</i>) [A005], Ruddy turnstone (<i>Arenaria interpres</i>) [A169], Arctic tern (<i>Sterna paradisaea</i>) [A194], Bar-tailed godwit (<i>Limosa lapponica</i>) [A157], Mew gull (<i>Larus canus</i>) [A182], Common redshank (<i>Tringa totanus</i>) [A162], Great cormorant (<i>Phalacrocorax carbo</i>) [A017], Black-headed gull (<i>Larus ridibundus</i>) [A179], Common tern (<i>Sterna hirundo</i>) [A193], Grey plover (<i>Pluvialis squatarola</i>) [A141], Red-breasted merganser (<i>Mergus serrator</i>) [A069], Eurasian oystercatcher (<i>Haematopus ostralegus</i>) [A130], Ringed plover (<i>Charadrius hiaticula</i>) [A137], Red knot (<i>Calidris canutus</i>) [A143]	G01.01, F02.03.01, G01.02, D01.02, F02.03, E01, K02.03, J02.01.02, E02, E03	Nautical sports, bait digging or collection, walking, horseriding and non-motorised vehicles, roads, motorways, leisure fishing, urbanised areas, human habitation, eutrophication (natural), reclamation of land from sea, estuary or marsh, industrial or commercial areas, discharges
004040	Wicklow Mountains SPA	Merlin (<i>Falco columbarius</i>) [A098], Wood warbler (<i>Phylloscopus sibilatrix</i>) [A314], Peregrine falcon (<i>Falco peregrinus</i>) [A103]	G01.02, D01.01, G03, B, C01.03, A04	Walking, horseriding and non-motorised vehicles, paths, tracks, cycling tracks, interpretative centres, sylviculture, forestry, peat extraction, grazing
004063	Poulaphouca Reservoir SPA	Greylag goose (<i>Anser anser</i>) [A043], Common goldeneye (<i>Bucephala clangula</i>) [A067], Great crested grebe (<i>Podiceps cristatus</i>) [A005], Eurasian teal (<i>Anas crecca</i>) [A052], Greylag goose (<i>Anser anser</i>) [A043], Whooper swan (<i>Cygnus cygnus</i>) [A038], Great cormorant (<i>Phalacrocorax carbo</i>) [A017], Lesser black-backed gull (<i>Larus fuscus</i>) [A183], Eurasian wigeon (<i>Anas penelope</i>) [A050], Mew gull (<i>Larus canus</i>) [A182], Mallard (<i>Anas platyrhynchos</i>) [A053], Eurasian curlew (<i>Numenius arquata</i>) [A160], Black-headed gull (<i>Larus ridibundus</i>) [A179]	D01.05, G01.01, F02.03, F03.01, B01	Bridge, viaduct, nautical sports, leisure fishing, hunting, forest planting on open ground

Appendix II Qualifying Interests of SACs that have undergone assessment including summaries of current threats and sensitivities

Characterisation of Potential Effects arising from the subject land area

Qualifying Interests	EU Code	Current threats to Qualifying Interests	Sensitivity of Qualifying Interests
Active raised bogs	[7110]	Drainage; burning; peat extraction; overgrazing; afforestation; erosion; and climate change.	Surface and groundwater dependent. Low sensitivity to hydrological changes. Erosion, land-use changes.
Alkaline fens	[7230]	Land reclamation, peat extraction; afforestation; erosion and landslides triggered by human activity; drainage; burning and infrastructural development.	Surface and groundwater dependent. Highly sensitive to hydrological changes. Inappropriate management.
Alpine and Boreal heaths	[4060]	Abandonment; overgrazing; burning; outdoor recreation; quarries; communication networks; and wind farm developments.	Changes in management. Changes in nutrient or base status. Moderately sensitive to hydrological change.
Annual vegetation of drift lines	[1210]	Grazing; sand and gravel extraction; recreational activities; coastal protection works.	Overgrazing and erosion. Changes in management.
Atlantic salt meadows (<i>Glaucococcum-Puccinellietalia maritimae</i>)	[1330]	Overgrazing; erosion; invasive species, particularly common cordgrass (<i>Spartina anglica</i>); infilling and reclamation.	Marine and groundwater dependent. Medium sensitivity to hydrological change. Changes in salinity and tidal regime. Overgrazing, erosion and accretion.
Blanket bogs (* if active bog)	[7130]	Land reclamation, peat extraction; afforestation; erosion and landslides triggered by human activity; drainage; burning and infrastructural development.	Surface and groundwater dependent. Highly sensitive to hydrological changes. Inappropriate management.
Calaminarian grasslands of the <i>Murawy galmanowa</i> (<i>Violetalia calaminariae</i>)	[6130]	Land reclamation, afforestation; drainage; and infrastructural development.	Surface and groundwater dependent. Highly sensitive to hydrological changes. Inappropriate management.
Calcareous rocky slopes with chasmophytic vegetation	[8210]	Overgrazing; extractive industries; recreational activities and improved access.	Erosion, overgrazing and recreation.
Degraded raised bogs still capable of natural regeneration	[7120]	Drainage; burning; peat extraction; overgrazing; afforestation; erosion; and climate change.	Surface and groundwater dependent. Low sensitivity to hydrological changes. Erosion, land-use changes.
Depressions on peat substrates of the <i>Rhynchosporion</i>	[7150]	Drainage; burning; peat extraction; overgrazing; afforestation; erosion; and climate change.	Surface and groundwater dependent. Low sensitivity to hydrological changes. Erosion, land-use changes.
Embryonic shifting dunes	[2110]	Natural erosion processes exacerbated by recreation and sand extraction. Coastal protection interfering with natural processes.	Overgrazing, and erosion. Changes in management.
Marsh Fritillary (<i>Euphydryas aurinia</i>)	[1065]	Declines in habitat quality lead to species decline.	Habitat management; land use change and drainage.

Qualifying Interests	EU Code	Current threats to Qualifying Interests	Sensitivity of Qualifying Interests
European dry heaths	[4030]	Afforestation, overburning, over-grazing, under-grazing and bracken invasion.	Moderately sensitive to hydrological change. Changes in management. Changes in nutrient status.
Fixed coastal dunes with herbaceous vegetation (grey dunes)	[2130]	Recreation; overgrazing and inappropriate grazing: non-native plant species, particularly sea buckthorn (<i>Hippophae rhamnoides</i>).	Overgrazing, and erosion. Changes in management.
Humid dune slacks	[2190]	Agricultural improvement; overgrazing and inappropriate grazing; forestry; recreational activity.	Overgrazing, and erosion. Changes in management. Sensitive to hydrological change.
Otter (<i>Lutra lutra</i>)	[1355]	Decrease in water quality: Use of pesticides; fertilization; vegetation removal; professional fishing (including lobster pots and fyke nets); hunting; poisoning; sand and gravel extraction; mechanical removal of peat; urbanised areas; human habitation; continuous urbanization; drainage; management of aquatic and bank vegetation for drainage purposes; and canalization or modifying structures of inland water course.	Surface and marine water dependent. Moderately sensitive to hydrological change. Sensitivity to pollution.
Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>)	[6410]	Agricultural intensification; drainage; abandonment of pastoral systems.	Surface and groundwater dependent. Moderately sensitive to hydrological change. Changes in management. Changes in nutrient status.
Mudflats and sandflats not covered by seawater at low tide	[1140]	Aquaculture, fishing, bait digging, removal of fauna, reclamation of land, coastal protection works and invasive species, particularly cord-grass; hard coastal defence structures; sea-level rise.	Surface and marine water dependent. Moderately sensitive to hydrological change. Moderate sensitivity to pollution. Changes to salinity and tidal regime. Coastal development.
Natural dystrophic lakes and ponds	[3160]	Nutrient alterations; management shifts in the associated peatland habitat, afforestation; waste water; invasive alien species; sport and leisure activities.	Surface and groundwater dependant. Highly sensitive to hydrological changes. Highly sensitive to pollution
Northern Atlantic wet heaths with <i>Erica tetralix</i>	[4010]	Reclamation, afforestation and burning; overstocking; invasion by non-heath species; exposure of peat to severe erosion.	Surface and groundwater dependent. Highly sensitive to hydrological changes. Inappropriate management.
Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles	[91A0]	The introduction of alien species; sub-optimal grazing patterns; general forestry management; increases in urbanisation and human habitation adjacent to oak woodlands; and the construction of communication networks through the woodland.	Changes in management. Changes in nutrient or base status. Introduction of alien species.
Oligotrophic waters containing very few minerals of sandy plains (<i>Littorellatalia uniflorae</i>)	[3110]	Nutrient enrichment; afforestation; waste water; invasive alien species; sport and leisure activities.	Surface and groundwater dependant. Highly sensitive to hydrological changes. Highly sensitive to pollution.
Petalwort (<i>Petalophyllum ralfsii</i>)	[1395]	There are no significant impacts affecting this species.	None identified.

Qualifying Interests	EU Code	Current threats to Qualifying Interests	Sensitivity of Qualifying Interests
Petrifying springs with tufa formation (<i>Cratoneurion</i>)	[7220]	Ground water interactions, on site management activities.	Surface and groundwater dependant. Highly sensitive to hydrological changes. Highly sensitive to pollution.
Salicornia and other annuals colonising mud and sand	[1310]	Invasive Species; erosion and accretion.	Marine water dependent. Medium sensitivity to hydrological change. Changes in salinity and tidal regime. Infilling, reclamation, invasive species.
Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>)* important orchid sites	[6210]	Land reclamation, afforestation; drainage; and infrastructural development.	Surface and groundwater dependent. Highly sensitive to hydrological changes. Inappropriate management.
Shifting dunes along the shoreline with white dunes (<i>Ammophila arenaria</i>)	[2120]	Recreation and coastal defences, which may interfere with local sediment dynamics.	Overgrazing, and erosion. Changes in management.
Siliceous rocky slopes with chasmophytic vegetation	[8220]	Pressures associated with the non-native invasive species New Zealand willowherb (<i>Epilobium brunnescens</i>).	Erosion, overgrazing and recreation.
Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>)	[8110]	Overgrazing, undergrazing and succession were recorded as medium-importance pressures in this reporting period, and Structure and functions were again assessed as Inadequate, the trend is considered to be stable rather than improving. This change is due to improved knowledge and the habitat is considered to have been stable since before the last assessment.	Erosion, overgrazing and recreation.
Species-rich <i>Nardus</i> grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe)	[6230]	Bracken encroachment, succession, inappropriate grazing, afforestation; drainage; and infrastructural development.	Erosion, overgrazing and recreation.
Transition mires and quaking bogs	[7140]	Drainage; burning; peat extraction; overgrazing; afforestation; erosion; and climate change.	Surface and groundwater dependent. Low sensitivity to hydrological changes. Erosion, land-use changes.
Narrow-mouthed Whorl Snail (<i>Vertigo angustior</i>)	[1014]	Loss of riverside and canalside habitat; exploitation of esker sites and drainage of wetlands, and sheep grazing and overexploitation of dune sites.	Changes to ground vegetation condition, groundwater dependent and is highly sensitive to hydrological changes.
Desmoulin's Whorl Snail (<i>Vertigo moulensisana</i>)	[1016]	Loss of riverside and canalside habitat; exploitation of esker sites and drainage of wetlands, and sheep grazing and overexploitation of dune sites.	Changes to ground vegetation condition, groundwater dependent and is highly sensitive to hydrological changes.

Appendix III Special Conservation Interests of SPAs that have undergone assessment including vulnerabilities of the SCIs

Special Conservation Interest Species identified for the SPAs within connected to the proposed development

Special Conservation Interest (SCI) Species
Great crested grebe (<i>Podiceps cristatus</i>) [A005]
Great cormorant (<i>Phalacrocorax carbo</i>) [A017]
Whooper swan (<i>Cygnus cygnus</i>) [A038]
Greylag goose (<i>Anser anser</i>) [A043]
Greylag goose (<i>Anser anser</i> [Iceland/UK/Ireland]) [A043]
Common shelduck (<i>Tadorna tadorna</i>) [A048]
Eurasian wigeon (<i>Anas penelope</i>) [A050]
Eurasian teal (<i>Anas crecca</i>) [A052]
Mallard (<i>Anas platyrhynchos</i>) [A053]
Northern pintail (<i>Anas acuta</i>) [A054]
Northern shoveler (<i>Anas clypeata</i>) [A056]
Common goldeneye (<i>Bucephala clangula</i>) [A067]
Red-breasted merganser (<i>Mergus serrator</i>) [A069]
Merlin (<i>Falco columbarius</i>) [A098]
Peregrine falcon (<i>Falco peregrinus</i>) [A103]
Eurasian oystercatcher (<i>Haematopus ostralegus</i>) [A130]
Ringed plover (<i>Charadrius hiaticula</i>) [A137]
European golden plover (<i>Pluvialis apricaria</i>) [A140]
Grey plover (<i>Pluvialis squatarola</i>) [A141]
Red knot (<i>Calidris canutus</i>) [A143]
Sanderling (<i>Calidris alba</i>) [A144]
Ruff (<i>Philomachus pugnax</i>) [A151]
Bar-tailed godwit (<i>Limosa lapponica</i>) [A157]
Eurasian curlew (<i>Numenius arquata</i>) [A160]
Common redshank (<i>Tringa totanus</i>) [A162]
Common greenshank (<i>Tringa nebularia</i>) [A164]
Ruddy turnstone (<i>Arenaria interpres</i>) [A169]
Mediterranean gull (<i>Larus melanocephalus</i>) [A176]
Black-headed gull (<i>Larus ridibundus</i>) [A179]
Mew gull (<i>Larus canus</i>) [A182]
Lesser black-backed gull (<i>Larus fuscus</i>) [A183]
Roseate tern (<i>Sterna dougallii</i>) [A192]
Common tern (<i>Sterna hirundo</i>) [A193]
Arctic tern (<i>Sterna paradisaea</i>) [A194]
Short-eared owl (<i>Asio flammeus</i>) [A222]
Wood warbler (<i>Phylloscopus sibilatrix</i>) [A314]

Vulnerabilities of Special Conservation Interests

- Bird species are particularly vulnerable to direct disturbance due to noise and/or vibration. These effects are localised, and disturbance effects are foreseen to be low at distances beyond 2km⁷.
- Direct habitat loss is a serious concern for bird species, as well as the reduction in habitat quality. Habitat degradation could occur through effects such as local enrichment due to agricultural practices or damage to habitat through activities such as trampling.
- Prey species diversity and availability is a key element of species conservation. Community dynamics and ecosystem functionality are complex concepts and require site specific information. The site synopsis and conservation objectives for the SPAs identified within the ZOI were used to identify any specific prey sensitivities.
- Availability of nesting/roosting habitat. Particularly for the Hen Harrier.
- Vegetation composition, structure and functionality.

Wetland and Waterbirds [A999] Direct land take is a common vulnerability to all sites; as well as significant water quality effects. The conservation objective of all SPAs designated for Wetland and Waterbirds is to maintain the favourable conservation condition of the wetland habitat as a resource for the regularly occurring migratory waterbirds using it.

⁷ SNH (2007) A Review of Disturbance Distances in Selected Bird Species: Scottish Natural Heritage; M. Ruddock & D.P. Whitfield