Appropriate Assessment Screening Report

for proposed

Strand Road Trial Cycle Route

in accordance with the requirements of Article 6(3) of the EU Habitats Directive

for: Dublin City Council

Civic Offices Wood Quay Dublin 8 D08 RF3F



by: CAAS Ltd.

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1 Introduction

1.1 Background

CAAS has been appointed by Dublin City Council to prepare this Appropriate Assessment (AA) Screening Report (also known as *Stage One AA*) to support the Council's AA procedures by determining whether or not a Natura Impact Statement (NIS) (*Stage Two AA*) is required for the proposed Strand Road Trial Cycle Route, 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 report aims to provide legislative context supporting the overall assessment process being undertaken with respect to relevant guidelines and highlight the experience and qualifications of the author. The report 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. This 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. 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.

This is represented by the four stages (maximum) which may be involved in the AA process, as follows:



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: Natura Impact 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 impacts, an assessment of the potential mitigation of those impacts. If adequate mitigation is proposed to ensure no significant adverse impacts on European sites, then the process may end at this stage. The details of stage two assessments 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.

1.4 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, in particular qualifying features (qualifying interests or special conservation interests) 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 completed for the AA screening of the proposed measures comprised the following elements:

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

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

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 works;
- Pathway(s) e.g. groundwater connecting to nearby qualifying wetland habitats and
- Receptor(s) qualifying aquatic habitats and species of European sites.

In the interest 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 scheme provision 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 scheme.

Guidance

The AA Screening exercise 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, 2010
- 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.
- *Managing Natura 2000 sites: The Provisions of Article 6 of the Habitats Directive 92/43/EEC,* European Commission, 2000.

1.5 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 holds 4 national protected species licences. He is also a bat specialist with 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. For this work, Andrew designed and oversaw all ecological field work relating to the Environmental Impact Assessment and AA.

2 Description of proposed scheme

2.1 Overview of scheme

In light of the impacts of the Covid-19 pandemic on transport systems and the way in which we work, socialise and communicate, Dublin City Council seek to provide more space for the community to allow for social distancing and to support shops and business to operate in this new environment. The proposed development seeks to achieve this by re-allocating road space by implementing a one-way traffic system and introducing a two-way cycle route along Strand Road.

The scheme is currently proposed to be put in place for a temporary 6-month period.

2.2 Scheme details

The proposed scheme comprises:

- Provision of a two-way separated cycle track from Sean Moore Road to Merrion Gates and continuing southwards for approximately (approx.)700 m along Merrion Road to the junction with Trimlestown Avenue.
- Removal of inbound traffic lane on Strand Road to provide for a one-way outbound traffic system to facilitate the proposed two-way cycle track.
- Minimal civil works including localised alterations with minimal alterations to existing road surface and kerbs. Locations of such works include Merrion Gates, a number of mini roundabouts on the route and at the Beach Road and Sean Moore junction.
- Provision of bollards and orcas along the proposed cycle track.
- Installation of traffic signals equipped with Smart Micro technology to monitor cyclist numbers and vehicle classification.

The total scheme extent is approx. 3.3 km in length and 3.4 ha in area. This area includes the whole road width, including the western road carriageway, the use of which will be unchanged in the proposed scheme. The area subject to change of use can thus be taken to be approx. half of the total scheme area, approx. 1.7 ha.

The anticipated duration of the works to implement the scheme is 8-10 weeks.

During operation of the scheme, emerging road use patterns will be monitored and reviewed. Its benefits and impacts will be monitored and evaluated by DCC. Any adjustments will be subject to review and, if there is any potential for them to cause any significant effects on any European sites, they will be subject to separate AA screening.



Figure 1 Map of scheme





EXISTING CROSS SECTION J-J



PROPOSED CROSS SECTION J-J

Figure 3 Typical cross section at Strand Road - existing and proposed



Figure 4 Proposed layout at Merrion Road



Figure 5 Artist's impression of proposed scheme – Strand Road

3 Screening for Appropriate Assessment

3.1 Introduction

This stage of the process identifies any likely significant effects on European sites from a 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.

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 for AAs of plans. On a precautionary basis this radius has been adopted for this AA. A review of all sites within the ZOI has allowed a determination to be made that in the absence of significant hydrological links, the characteristics of the proposed scheme will not impose effects beyond 15km.

European sites that occur within 15km of the proposed scheme are listed in Table 1 and illustrated in Figure 6 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 Forms2.

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 scheme 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 <u>https://www.npws.ie/protected-sites</u>



Figure 6 European sites within 15km of the scheme area



Figure 7 Indicative scheme area with respect to the nearest European sites

3.3 Assessment criteria

Is the scheme necessary to the management of European sites?

Under the Habitats Directive, plans or 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 plan/project, even if this might result in positive or beneficial effects for a site(s).

The primary purpose of the proposed scheme is not the nature conservation management of the sites, but to provide additional signage and road markings and to address changing needs arising from the Covid-19 pandemic. Therefore, the proposed scheme is not considered by the Habitats Directive to be directly connected with or necessary to the management of European designated sites.

Elements of the proposed scheme 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 plans or projects) on the European sites. During this assessment a number of factors were 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 scheme.

For the purposes of this assessment the proposed scheme is identified to have both construction and operational phase effects. The operational phase of the scheme aims to reduce vehicular traffic in the area and increase bike usage along this stretch of road. Traffic modelling carried out by the NTA predicts that displaced northbound traffic will disperse through a number of alternative routes for the duration of the scheme. During the a.m. peak (the 'worst case') the changes in traffic on alternate routes are estimated to range from -9% to +63%. These alternate routes divert traffic away from the coast and therefore away from the SAC and SPA directly adjacent to the proposed scheme area, thus reducing overall effects such as noise and dust in this regard. This will result in an overall reduction in noise pollution and may alter the site usage patterns by visitors due to the decreased vehicular access through the introduction of the one-way system. Elements of the proposed scheme, as referenced in Section 2, that could potentially give rise to construction phase effects on European sites are as follows:

- Provision of a two-way separated cycle track from Sean Moore Road to Merrion Gates and continuing southwards for approx. 700 m along Merrion Road to the junction with Trimlestown Avenue.
- Removal of inbound traffic lane on Strand Road to provide for a one-way outbound traffic system to facilitate the proposed two-way cycle track.
- Minimal civil works including localised alterations with minimal alterations to existing road surface and kerbs. Locations of such works include Merrion Gates, a number of mini roundabouts on the route and at the Beach Road and Sean Moore junction.

- Provision of bollards and orcas along the proposed cycle track.
- Installation of traffic signals equipped with Smart Micro technology to monitor cyclist numbers and vehicle classification.

These features of the scheme have potential to require physical augmentation of existing infrastructure. However, all work will be undertaken on existing built surfaces as all of the site area is a built urban landscape. This involves road markings, the placing of bollards, minor changes at the existing mini roundabouts (removal or traffic islands) and upgrading existing pedestrians to provide cycle signals. These works are likely to require small scale concrete works, excavations and resurfacing works. **Error! Reference source not found.** shows the nature of the works being undertaken. There will be no material changes to the existing drainage network of the site. All works are identified as small-scale temporary, and are expected to be negligible in source emissions due to the characteristics of the scheme; minor screw down fixtures, painting of lines, placing of signs etc. Therefore, there are no construction phase sources for effects identified that will extend beyond the scheme boundary due to the nature of the proposed scheme. Furthermore, DCC have confirmed that the level potential noise, dust and surface water effects that would be expected during routine maintenance works for roads and traffic management.

The site is an existing recreation and amenity hotspot, supporting activities such as dog walking, kite surfing, cycling etc. The proposed scheme has potential to increase the overall appeal of the area from a recreation and amenity perspective. The increased capacity for two-way cycle tracks is likely to increase both commuter traffic which use non-motorised transport methods, but also recreational cycling. Therefore, there is expected to be an increase in walking and low intensity activities such as roller blading due to the alteration in site appeal. Recreation and amenity are known *threats and pressures* for the South Dublin Bay and River Tolka Estuary SPA and the South Dublin Bay SAC (see Table 1 below). Visitor movement patterns³ are known to cause effects such as:

- Destruction of structures, vegetation or fauna;
- Trampling of herbaceous vegetation;
- Disturbance of wildlife;
- Heavy littering or dumping quantities of waste;
- Addition/alteration of site features, transient emissions, noise;
- Harvesting of large quantities of shells from beach sites;
- Fishing activities;
- Removal and throwing of large rocks; and
- Unrestricted dogs causing disturbances to wildlife.

The site has minimal vegetation on site, with amenity grasslands and ornamental planting along the coast and no vegetation across the sand and mud flats area of the intertidal zone. Therefore, of the known effects caused by visitors, given the characteristics of the site and the proposed scheme there is potential for increased:

³ Fáilte Ireland (2019) Environmental Monitoring Database; A synthesis of the data published by Fáilte Ireland in the environmental implications of visitor movement pattern. These results are drawn from 26,000 visitor observation records across 57 sites.

- Disturbance of wildlife;
- Heavy littering or dumping quantities of waste;
- Fishing activities; and
- Unrestricted dogs causing disturbances to wildlife.

However, the site is already managed and maintained by Dublin City Council with ample waste management facilities. Furthermore, the Dublin City bylaws⁴ ensure dogs must be controlled by their owners at seashore sites such as this. Fisheries activities are monitored and controlled by IFI, and the fishing activities on site are not anticipated to increase due to the scheme. Therefore, the only foreseeable effect as a result of the operational phase would relate to disturbance of wildlife.

This is a key concern particularly for the SCI species of South Dublin Bay and River Tolka Estuary SPA. These effects are likely to be small scale, the scheme is a limited to a 6-month duration which minimises potential effects. Dublin City Council already undertake monitoring works in Dublin Bay as part of an ongoing wildlife conflict management strategy. The temporary nature of the proposed scheme and associated disturbance effects have been considered with respect to the existing management actions and monitoring protocols on site. On this basis it is considered that there are no significant effects are likely to result from the potential for increased recreational use of the site during the proposed scheme period.

If, following a monitoring and review, it is proposed to alter the proposed scheme, any changes will be subject to separate AA considerations, to ascertain whether or not they change the AA screening outcome.

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 scheme. 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 the European site. Secondly, the individual elements of the proposed scheme and the potential effects they may cause on the site were considered. The elements of the proposed scheme with potential to affect the integrity of European sites are presented in Table 1 below.

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 scheme and a site;
- Where a site is located at such a distance from the area of the proposed scheme 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 scheme.

⁴ made under Local Government Act, 1994 [Part II, First Schedule (f)]

3.4 Characterising potential significant effects

This section of the report explains the descriptions 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 proposed development.

Magnitude - Magnitude measures the size of an impact, which is described as high, medium, low, very low or negligible.

Extent - The area over which the impact occurs – this should be predicted in a quantified manner.

Duration - The time for which 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'.

Generic Conservation Objectives for cSACs have been provided as follows:

• 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.

One generic Conservation Objective has been provided for SPAs as follows:

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

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

In addition, the guidance outlines the following likely 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.

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

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

Site	Site Name	Distance	Qualifying Features	Potential effects (refer also to Sections 3.3.2	Pathway for	Potential for in-
Code		(Km)	(Qualifying Interests & Special Conservation Interests)	and 3.3.3 above)	significant	combination
					effects	effects
004024	South Dublin Bay and River Tolka Estuary SPA	0	Mediterranean gull (Larus melanocephalus) [A176], Eurasian curlew (Numenius arquata) [A160], Arctic tern (Sterna paradisaea) [A194], Ringed plover (Charadrius hiaticula) [A137], Red knot (Calidris canutus) [A143], Roseate tern (Sterna dougallii) [A192], Ruddy turnstone (Arenaria interpres) [A169], Sanderling (Calidris alba) [A144], Great cormorant (Phalacrocorax carbo) [A017], Eurasian oystercatcher (Haematopus ostralegus) [A130], Common redshank (Tringa totanus) [A162], Common tern (Sterna hirundo) [A193], Great crested grebe (Podiceps cristatus) [A005], Grey plover (Pluvialis squatarola) [A141], Bar-tailed godwit (Limosa lapponica) [A157], Red-breasted merganser (Mergus serrator) [A069], Mew gull (Larus canus) [A182], Black-headed gull (Larus ridibundus) [A179]	The known threats and pressures for the site include discharges, urbanised areas, human habitation, roads, motorways, walking, horse riding and non-motorised vehicles, nautical sports, eutrophication (natural), reclamation of land from sea, estuary or marsh, leisure fishing, industrial or commercial areas, bait digging or collection. The scheme area is an existing roadway in an urban environment. The construction phase elements will be small scale temporary effects in line with the existing condition of the site and general ongoing maintenance works. The operational phase will decrease traffic related disturbances and has potential to increase recreational pressures on the site. However, the Strand road area is a robust site with existing walkways, managed habitats and existing facilities. Furthermore, the existing ongoing monitoring and maintenance works of the DCC roads network outline existing processes for the management of this area with respect to traffic and visitor activities. The characteristics of the scheme and its temporary nature (6 months) result in there being no significant effects on the ecological integrity of the site. Therefore, no further consideration is	Νο	No
1				required.		

000210	South Dublin Bay	0	Mudflats and sandflats not covered by seawater at low	The known threats and pressures for the	No	No
000210	SAC	0	tide [1140]. Selicernia and other annuals selenising mud	site are discharges marine water pollution	NO	NO
	SAC			site are discharges, marine water poliution,		
			and sand [1310], Annual vegetation of drift lines [1210],	balt digging or collection, reclamation of		
			Shifting dunes (Embryonic shifting dunes) [2110]	land from sea, estuary or marsh, roads,		
				motorways, biocenotic evolution,		
				succession, nautical sports, walking,		
				horseriding and non-motorised vehicles,		
				accumulation of organic material, non-		
				motorized nautical sports industrial or		
				commercial areas changes in abiotic		
				conditions nothe treaks evaluate treaks		
				when its damage human habitation		
				urbanised areas, numan habitation.		
				The scheme area is an existing roadway in		
				an urban environment. The construction		
				nhase elements will be small scale		
				temporary effects in line with the existing		
				condition of the site and general ongoing		
				maintenance works		
				maintenance works.		
				The operational phase will decrease traffic		
				related disturbances and has potential to		
				increase recreational pressures on the site		
				However, the Strand road area is a robust		
				site with existing walkways, managed		
				babitate and existing facilities. Furthermore		
				the suisting agains manitaring and		
				the existing ongoing monitoring and		
				maintenance works of the DCC roads		
				network outline existing processes for the		
				management of this area with respect to		
				traffic and visitor activities. The		
				characteristics of the scheme and its		
				temporary nature (6 months) result in there		
				being no significant effects on the ecological		
				integrity of the site.		
				Therefore, no further consideration is		
				required.		
004006	North Bull Island	3.55	Eurasian curlew (Numenius grauata) [A160]. Black-	The SCI's of this sites are most susceptible to	No	No
	SPA	2.00	headed gull (Larus ridibundus) [A179] Common redshank	disturbance through noise pollution and		-
	.		(Tringa totanus) [A162] Furssian wigeon (Angs nenelone)	human activity. Due to the attenuation of		
			[A050] Northern shoveler (Anas cluneata) [A056] Red-	sound distance between sites and		
			(<i>Tringa totanus</i>) [A162], Eurasian wigeon (<i>Anas penelope</i>) [A050], Northern shoveler (<i>Anas clypeata</i>) [A056], Red-	human activity. Due to the attenuation of sound, distance between sites and		

			breasted merganser (Mergus serrator) [A069], Common shelduck (Tadorna tadorna) [A048], Ruff (Philomachus pugnax) [A151], Eurasian teal (Anas crecca) [A052], Northern pintail (Anas acuta) [A054], Common greenshank (Tringa nebularia) [A164], Bar-tailed godwit (Limosa lapponica) [A157], Eurasian oystercatcher (Haematopus ostralegus) [A130], European golden plover (Pluvialis apricaria) [A140], Red knot (Calidris canutus) [A143], Ringed plover (Charadrius hiaticula) [A137], Ruddy turnstone (Arenaria interpres) [A169], Mew gull (Larus canus) [A182], Mallard (Anas platyrhynchos) [A053], Grey plover (Pluvialis squatarola) [A141], Sanderling (Calidris alba) [A144], Short-eared owl (Asio flammeus) [A222]	urbanised nature of the receiving environment there is no pathway for effect identified and so no likely significant effects on the SPA		
000206	North Dublin Bay SAC	3.56	Salicornia and other annuals colonizing mud and sand [1310], Annual vegetation of drift lines [1210], Shifting dunes (<i>Embryonic shifting dunes</i>) [2110], Fixed coastal dunes with herbaceous vegetation ("grey dunes") [2130], Petalwort (<i>Petalophyllum ralfsii</i>) [1395], Mudflats and sandflats not covered by seawater at low tide [1140], Shifting dunes along the shoreline with Ammophila arenaria ("white dunes") [2120], Atlantic salt meadows (<i>Atlantic salt meadows (Glauco-Puccinellietalia maritimae</i>)) [1330], Humid dune slacks [2190]	There are no effects foreseen due to the localised nature of the sources identified and the distances between the sites. There are indirect hydrological pathways identified but the dilution effect of the Irish sea and the scale of works being proposed ensure that there will be no significant adverse effects on the ecological integrity of the SAC.	No	No
003000	Rockabill to Dalkey Island SAC	7.63	Harbour porpoise <i>(Phocoena phocoena)</i> [1351], Reefs [1170]	There are no effects foreseen due to the localised nature of the sources identified and the distances between the sites. There are indirect hydrological pathways identified but the dilution effect of the Irish sea and the scale of works being proposed ensure that there will be no significant adverse effects on the ecological integrity of the SAC.	No	No
004172	Dalkey SPA	8.38	Common tern <i>(Sterna hirundo)</i> [A193], Roseate tern <i>(Sterna dougallii)</i> [A192], Arctic tern <i>(Sterna paradisaea)</i> [A194]	The SCI's of this sites are most susceptible to disturbance through noise pollution and human activity. Due to the attenuation of sound, distance between sites and urbanised nature of the receiving environment there is no pathway for effect identified and so no likely significant effects on the SPA.	Νο	Νο

000202	Howth Head SAC	8.62	European dry heaths [4030], Vegetated sea cliffs of the Atlantic and Baltic Coasts [1230]	There are no effects foreseen due to the localised nature of the sources identified and the distances between the sites. There are indirect hydrological pathways identified but the dilution effect of the Irish sea and the scale of works being proposed ensure that there will be no significant adverse effects on the ecological integrity of the SAC.	No	No
000199	Baldoyle Bay SAC	8.99	Mudflats and sandflats not covered by seawater at low tide [1140], Atlantic salt meadows (<i>Atlantic salt</i> <i>meadows</i> (<i>Glauco-Puccinellietalia maritimae</i>)) [1330], Salicornia and other annuals colonizing mud and sand [1310]	There are no effects foreseen due to the localised nature of the sources identified and the distances between the sites. There are indirect hydrological pathways identified but the dilution effect of the Irish sea and the scale of works being proposed ensure that there will be no significant adverse effects on the ecological integrity of the SAC.	No	No
004016	Baldoyle Bay SPA	8.99	Sanderling (Calidris alba) [A144], Eurasian curlew (Numenius arquata) [A160], Northern lapwing (Vanellus vanellus) [A142], Eurasian teal (Anas crecca) [A052], Bar- tailed godwit (Limosa lapponica) [A157], Ruddy turnstone (Arenaria interpres) [A169], Ringed plover (Charadrius hiaticula) [A137], Eurasian oystercatcher (Haematopus ostralegus) [A130], Great crested grebe (Podiceps cristatus) [A005], Mallard (Anas platyrhynchos) [A053], Grey plover (Pluvialis squatarola) [A141], Red knot (Calidris canutus) [A143], Common greenshank (Tringa nebularia) [A164], Red-breasted merganser (Mergus serrator) [A069], Northern pintail (Anas acuta) [A054], Common shelduck (Tadorna tadorna) [A048], Common redshank (Tringa totanus) [A162], European golden plover (Pluvialis apricaria) [A140]	The SCI's of this sites are most susceptible to disturbance through noise pollution and human activity. Due to the attenuation of sound, distance between sites and urbanised nature of the receiving environment there is no pathway for effect identified and so no likely significant effects on the SPA.	No	No
002122	Wicklow Mountains SAC	10.2	Blanket bogs (* <i>if active bog</i>) [7130], Calcareous rocky slopes with chasmophytic vegetation [8210], Northern Atlantic wet heaths with Erica tetralix [4010], Calaminarian grasslands of the Violetalia calaminariae [6130], Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) [8110], Otter (Lutra lutra) [1355], Siliceous rocky slopes with chasmophytic vegetation [8220], Natural dystrophic lakes and ponds [3160], Alpine and Boreal heaths [4060].	There are no effects foreseen due to the localised nature of the sources identified and the distances between the sites. There are no hydrological pathways between the scheme are and the SAC. Therefore, there will be no significant adverse effects on the ecological integrity of the SAC.	No	No

			Western acidic oak woodland (Old sessile oak woods with Ilex and Blechnum in the British Isles) [91A0], European dry heaths [4030], Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110], Species-rich Nardus grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe) [6230]			
004040	Wicklow Mountains SPA	10.4	Wood warbler (<i>Phylloscopus sibilatrix</i>) [A314], Merlin (<i>Falco columbarius</i>) [A098], Peregrine falcon (<i>Falco peregrinus</i>) [A103]	The SCI's of this sites are most susceptible to disturbance through noise pollution and human activity. Due to the attenuation of sound, distance between sites and urbanised nature of the receiving environment there is no pathway for effect identified and so no likely significant effects on the SPA	No	No
004113	Howth Head Coast SPA	10.93	Common guillemot (<i>Uria aalge</i>) [A199], Peregrine falcon (<i>Falco peregrinus</i>) [A103], Razorbill (<i>Alca torda</i>) [A200], Northern fulmar (<i>Fulmarus glacialis</i>) [A009], Black-legged kittiwake (<i>Rissa tridactyla</i>) [A188]	The SCI's of this sites are most susceptible to disturbance through noise pollution and human activity. Due to the attenuation of sound, distance between sites and urbanised nature of the receiving environment there is no pathway for effect identified and so no likely significant effects on the SPA	No	No
000725	Knocksink Wood SAC	11.6	Petrifying springs with tufa formation <i>(Cratoneurion)</i> [7220]	There are no effects foreseen due to the localised nature of the sources identified and the distances between the sites. There are no hydrological pathways between the scheme are and the SAC. Therefore, there will be no significant adverse effects on the ecological integrity of the SAC.	No	No
004117	Ireland's Eye SPA	12.14	Razorbill (Alca torda) [A200], Great cormorant (Phalacrocorax carbo) [A017], Common guillemot (Uria aalge) [A199], Black-legged kittiwake (Rissa tridactyla) [A188], Atlantic puffin (Fratercula arctica) [A204], Northern gannet (Morus bassanus) [A016], Northern fulmar (Fulmarus glacialis) [A009], Peregrine falcon (Falco peregrinus) [A103]	The SCI's of this sites are most susceptible to disturbance through noise pollution and human activity. Due to the attenuation of sound, distance between sites and urbanised nature of the receiving environment there is no pathway for effect identified and so no likely significant effects on the SPA.	No	No
000713	Ballyman Glen SAC	12.3	Alkaline fens [7230], Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220]	There are no effects foreseen due to the localised nature of the sources identified and the distances between the sites. There are no hydrological pathways between the	No	No

				scheme are and the SAC. Therefore, there will be no significant adverse effects on the ecological integrity of the SAC.		
002193	Ireland's Eye SAC	12.34	Perennial vegetation of stony banks [1220], Vegetated sea cliffs of the Atlantic and Baltic Coasts [1230]	There are no effects foreseen due to the localised nature of the sources identified and the distances between the sites. There are no hydrological pathways between the scheme are and the SAC. Therefore, there will be no significant adverse effects on the ecological integrity of the SAC.	No	No
001209	Glenasmole Valley SAC	12.6	Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* <i>important</i> <i>orchid sites</i>) [6210], Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) [6410], Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220]	There are no effects foreseen due to the localised nature of the sources identified and the distances between the sites. There are no hydrological pathways between the scheme are and the SAC. Therefore, there will be no significant adverse effects on the ecological integrity of the SAC.	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.

A requirement of the AA process is to take into consideration any in combination effects as result of other plans in the area. Plans of relevance in the context of this proposal include:

- Dublin City Development Plan 2016-2022;
- Transport Strategy for the Greater Dublin Area 2016-2035;
- The Greater Dublin Area Cycle Network Plan

This being a heavily built-up area with dense infrastructure, there are limited developments in the area. A review of the DCC planning database for projects within the scheme area over the past 5 years identified that the projects within the area are small scale works predominantly relating to the alterations of existing structures. There were 5 projects identified to be directly connected to the subject lands area:

- 3346/20 Carpark extension at the Tara Towers Hotel;
- 3708/20 Domestic 2 story extension;
- 3262/20 Development of a car wash facility;
- WEB1774/20 Domestic entranceway reconfiguration; and
- WEB 1674/20 Domestic roof works and extension.

Dublin City Council also plan to install two pedestrian crossings at Sandymount Green.

Proposed measures within the scheme will be undertaken on existing hard surfaces and will use non intensive methods such as the screwing of bollards to existing surfaces, etc. Sources of effects arising from the construction and operational phases of the proposed scheme are consistent with the existing conditions at Strand Road. The effects from the proposed scheme are small scale temporary effects that are consistent with existing land uses.

Considered in-combination with other plans and projects, significant cumulative effects are unlikely to arise and are not likely to have significant effects on any European site which is identified in this screening report.

4 Conclusion

This stage one screening for AA of the proposed Strand Road Trial Cycle Route shows that implementation of the scheme is not foreseen to have any likely significant effects on European sites, if unmitigated.

The proposed scheme area is directly adjacent to the South Dublin Bay and River Tolka Estuary SPA and South Dublin Bay SAC. The level of potential noise, dust and surface water effects during of construction of the trial scheme will be less than the normal range of such effects that would be expected during routine maintenance works for roads and traffic management. The receiving area is a well-managed recreational and amenity space with serviced waste facilities etc. The operational phase elements of the proposed scheme will reduce traffic in the area and has potential to introduce temporary increases in amenity use of the site due to changes in the site dynamics (increased cycle lanes etc., resulting in increased use for the site by day trippers and tourism users). Given the urban context of the site and existing monitoring processes undertaken by DCC, these are not identified to be significant. 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.

Given the site context in relation to other plans and as well as the nature of the scheme, it's scale, and the temporary nature of the construction effects identified as potential sources, the proposed development will not lead to significant in-combination effect with any 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. It is concluded that the proposed project will not give rise to any significant adverse effects on designated European sites, alone or in combination with other plans or projects⁶. Consequently, a Stage Two AA / Natura Impact Statement is not required for the project.

a) no alternative solution available,

⁶ Except as provided for in Section 6(4) of the Habitats Directive, viz. There must be:

b) imperative reasons of overriding public interest for the plan to proceed; and

c) Adequate compensatory measures in place.

Appendix I Background information on European sites

European sites within 15km of the scheme area including the Qualifying Features (Qualifying Interests or Special Conservation Interests) and Site-Specific
Threats or Vulnerabilities ⁷

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
000199	Baldoyle Bay SAC	Mudflats and sandflats not covered by seawater at low tide [1140], <i>Salicornia</i> and other annuals colonizing mud and sand [1310], Atlantic salt meadows (<i>Atlantic salt meadows (Glauco-Puccinellietalia maritimae</i>)) [1330]	G01.02, F03.01, D01.02, G02.01, G01.01.02, F02.03.01, I01, K03.06, J02.01.02, K02.03, E03, E01	Walking, horse riding and non-motorised vehicles, Hunting, Roads, motorways, Golf course, Non-motorized nautical sports, Bait digging or collection, Invasive non-native species, Antagonism with domestic animals, Reclamation of land from sea, estuary or marsh, Eutrophication (<i>natural</i>), Discharges, Urbanised areas, human habitation
000202	Howth Head SAC	European dry heaths [4030], Vegetated sea cliffs of the Atlantic and Baltic Coasts [1230]	E01, C01, G01.02, I01, G05.04, C01.01.01, D01.01, A04.03, J01.01	Urbanised areas, human habitation, Mining and quarrying, Walking, horse riding and non-motorised vehicles, Invasive non-native species, Vandalism, Sand and gravel quarries, Paths, tracks, cycling tracks, Abandonment of pastoral systems lack of grazing, Burning down
000205	Malahide Estuary SAC	Atlantic salt meadows (Atlantic salt meadows (Glauco- Puccinellietalia maritimae)) [1330], Shifting dunes along the shoreline with Ammophila arenaria ("white dunes") [2120], Fixed coastal dunes with herbaceous vegetation ("grey dunes") [2130], Cord-grass swards (Spartina swards (Spartinion maritimae)) [1320], Salicornia and other annuals colonizing mud and sand [1310], Mudflats and sandflats not covered by seawater at low tide [1140]	G01.03, F03.01, D01.05, X, I01, J02.01.02, G02.01, G01.02, E01, D01.02, A08, G01.01	Motorised vehicles, Hunting, Bridge, viaduct, No threats or pressures, Invasive non-native species, Reclamation of land from sea, estuary or marsh, Golf course, Walking, horse riding and non- motorised vehicles, Urbanised areas, human habitation, Roads, motorways, Fertilisation, Nautical sports
000206	North Dublin Bay SAC	Shifting dunes along the shoreline with Ammophila arenaria ("white dunes") [2120], Petalwort (Petalophyllum ralfsii) [1395], Fixed coastal dunes with herbaceous vegetation ("grey dunes") [2130], Salicornia and other annuals colonizing mud and sand [1310], Annual vegetation of drift lines [1210], Shifting dunes (Embryonic shifting dunes) [2110], Atlantic salt meadows (Atlantic salt meadows (Glauco-Puccinellietalia maritimae)) [1330], Mudflats and	A04, J01.01, E02, E01, G02.01, G01.01, F02.03.01, H01.03, H01.09, G05.05, F02.03, E03, I01, K03.06, G01.02	Grazing, Burning down, Industrial or commercial areas, Urbanised areas, human habitation, Golf course, Nautical sports, Bait digging or collection, Other point source pollution to surface water, Diffuse pollution to surface waters due to other sources not listed, Intensive maintenance of public parcs or cleaning of beaches, Leisure fishing, Discharges, Invasive non-native species, Antagonism with domestic animals, Walking, horse riding and non-motorised vehicles

⁷ NPWS (2020) database of European sites, specifically the Standard Data Forms for each <u>https://www.npws.ie/protected-sites</u>

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
		sandflats not covered by seawater at low tide [1140], Humid dune slacks [2190]		
000210	South Dublin Bay SAC	Mudflats and sandflats not covered by seawater at low tide [1140], Annual vegetation of drift lines [1210], Salicornia and other annuals colonizing mud and sand [1310], Shifting dunes (Embryonic shifting dunes) [2110]	D01.01, G01.01.02, M01, H03, E02, E03, F02.03.01, G01.01, K02, E01, J02.01.02, D01.02, G01.02, K02.02	Paths, tracks, cycling tracks, Non-motorized nautical sports, Changes in abiotic conditions, Marine water pollution, Industrial or commercial areas, Discharges, Bait digging or collection, Nautical sports, Biocenotic evolution, succession, Urbanised areas, human habitation, Reclamation of land from sea, estuary or marsh, Roads, motorways, Walking, horse riding and non-motorised vehicles, Accumulation of organic material
000713	Ballyman Glen SAC	Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220], Alkaline fens [7230]	A01, A04, E01.01, A08, B01, A10.01, H01.03, E03.01, D01.02, E01.02, H02.01, C01.01	Cultivation, Grazing, Continuous urbanisation, Fertilisation, Forest planting on open ground, Removal of hedges and copses or scrub, Other point source pollution to surface water, Disposal of household or recreational facility waste, Roads, motorways, Discontinuous urbanisation, Groundwater pollution by leakages from contaminated sites, Sand and gravel extraction
000725	Knocksink Wood SAC	Petrifying springs with tufa formation (Cratoneurion) [7220]	G03, G05.07, A04, E03.01, D01.02, G05.06, G05.04, D01.01, E01.02, G01.02, B02.03, I01, B01.02, B01, D05, G02.08	Interpretative centres, Missing or wrongly directed conservation measures, Grazing, Disposal of household or recreational facility waste, Roads, motorways, Tree surgery, felling for public safety, removal of roadside trees, Vandalism, Paths, tracks, cycling tracks, Discontinuous urbanisation, Walking, horse riding and non- motorised vehicles, Removal of forest undergrowth, Invasive non- native species, Artificial planting on open ground (<i>non-native trees</i>), Forest planting on open ground, Improved access to site, Camping and caravans
001209	Glenasmole Valley SAC	Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220], Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) [6410], Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) [6210]	A04.02.01, A03, E01.02, A03.03, A08, A04.02.03, B01.02, J02, A04, A04.02.02, B01.01, D01, H01.05, B02.01.02, D01.03, C01.03, F02.03, I01, H02.07, B02.02, H01.08	Non intensive cattle grazing, Mowing or cutting of grassland, Discontinuous urbanisation, Abandonment or lack of mowing, Fertilisation, Non intensive horse grazing, Artificial planting on open ground (<i>non-native trees</i>), Human induced changes in hydraulic conditions, Grazing, Non intensive sheep grazing, Forest planting on open ground (<i>native trees</i>), Roads, paths and railroads, Diffuse pollution to surface waters due to agricultural and forestry activities, Forest replanting (<i>non-native trees</i>), Car parcs and parking areas, Peat extraction, Leisure fishing, Invasive non-native species, Diffuse groundwater pollution due to non-sewered population,

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures	
				Forestry clearance, Diffuse pollution to surface waters due to household sewage and waste waters	
002122	Wicklow Mountains SAC	Calcareous rocky slopes with chasmophytic vegetation [8210], Natural dystrophic lakes and ponds [3160], Northern Atlantic wet heaths with Erica tetralix [4010], Siliceous rocky slopes with chasmophytic vegetation [8220], European dry heaths [4030], Calaminarian grasslands of the Violetalia calaminariae [6130], Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>) [3110], Species-rich Nardus grasslands, on silicious substrates in mountain areas (and submountain areas in <i>Continental Europe</i>) [6230], Western acidic oak woodland (<i>Old sessile oak woods with Ilex and Blechnum in the British</i> <i>Isles</i>) [91A0], Otter (<i>Lutra lutra</i>) [1355], Blanket bogs (* <i>if</i> <i>active bog</i>) [7130], Alpine and Boreal heaths [4060], Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae and Galeopsietalia ladani</i>) [8110]	G05.04, E03.01, A04, G05.09, G05.06, E01, B06, G01.02, G05.07, I01, G04.01, D01.01, C01.03, G01, L05, K01.01, F04.02, G02.09, B02.05, G01.04, G01.03.02, G05.01, K04.05, J01.01, A05.02, F03.02.02, F03	Vandalism, Disposal of household or recreational facility waste, Grazing, Fences, fencing, Tree surgery, felling for public safety, removal of roadside trees, Urbanised areas, human habitation, Grazing in forests or woodland, Walking, horse riding and non- motorised vehicles, Missing or wrongly directed conservation measures, Invasive non-native species, Military manouvres, Paths, tracks, cycling tracks, Peat extraction, Outdoor sports and leisure activities, recreational activities, Collapse of terrain, landslide, Erosion, Collection (<i>fungi, lichen, berries etc.</i>), Wildlife watching, Non- intensive timber production (<i>leaving dead wood or old trees untouched</i>), Mountaineering, rock climbing, speleology, Off-road motorized driving, Trampling, overuse, Damage by herbivores (<i>including game species</i>), Burning down, Stock feeding, Taking from nest (<i>e.g. falcons</i>), Hunting and collection of wild animals (<i>terrestrial</i>)	
002193	Ireland's Eye SAC	Vegetated sea cliffs of the Atlantic and Baltic Coasts [1230], Perennial vegetation of stony banks [1220]	G01.01, J01, X, A04.03, G01.02, G05.01, G02.09	Nautical sports, Fire and fire suppression, Abandonment of pastoral systems lack of grazing, Walking, horse riding and non-motorised vehicles, Trampling, overuse, Wildlife watching	
003000	Rockabill to Dalkey Island SAC	Reefs [1170], Harbour porpoise (Phocoena phocoena) [1351]	J02.02, E03, D03.02, J02.11, F02.02, H06.01, D02	Removal of sediments (<i>mud</i>), Discharges, Shipping lanes, Siltation rate changes, dumping, depositing of dredged deposits, Professional active fishing, Noise nuisance, noise pollution, Utility and service lines	
004006	North Bull Island SPA	Eurasian curlew (Numenius arquata) [A160], Ringed plover (Charadrius hiaticula) [A137], Common shelduck (Tadorna tadorna) [A048], Mew gull (Larus canus) [A182], European golden plover (Pluvialis apricaria) [A140], Mallard (Anas platyrhynchos) [A053], Ruff (Philomachus pugnax) [A151], Red-breasted merganser (Mergus serrator) [A069], Northern shoveler (Anas clypeata) [A056], Short-eared owl (Asio flammeus) [A222], Sanderling (Calidris alba) [A144], Common redshank (Tringa totanus) [A162], Red knot (Calidris canutus) [A143], Eurasian oystercatcher (Haematopus ostralegus) [A130], Eurasian wigeon (Anas	G02.01, E01.01, G01.02, D01.02, D01.05, E02, D03.02, E03, E01.04, F02.03.01, G03, G01.01	Golf course, Continuous urbanisation, Walking, horse riding and non-motorised vehicles, Roads, motorways, Bridge, viaduct, Industrial or commercial areas, Shipping lanes, Discharges, Other patterns of habitation, Bait digging or collection, Interpretative centres, Nautical sports	

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
		penelope) [A050], Grey plover (Pluvialis squatarola) [A141], Northern pintail (Anas acuta) [A054], Ruddy turnstone (Arenaria interpres) [A169], Bar-tailed godwit (Limosa lapponica) [A157], Eurasian teal (Anas crecca) [A052], Black- headed gull (Larus ridibundus) [A179], Common greenshank (Tringa nebularia) [A164]		
004016	Baldoyle Bay SPA	Common redshank (<i>Tringa totanus</i>) [A162], Mallard (<i>Anas platyrhynchos</i>) [A053], Common shelduck (<i>Tadorna tadorna</i>) [A048], Ruddy turnstone (<i>Arenaria interpres</i>) [A169], Eurasian teal (<i>Anas crecca</i>) [A052], Red-breasted merganser (<i>Mergus serrator</i>) [A069], Eurasian oystercatcher (<i>Haematopus ostralegus</i>) [A130], Ringed plover (<i>Charadrius hiaticula</i>) [A137], Great crested grebe (<i>Podiceps cristatus</i>) [A005], Northern lapwing (<i>Vanellus vanellus</i>) [A142], Red knot (<i>Calidris canutus</i>) [A143], Bar-tailed godwit (<i>Limosa lapponica</i>) [A157], Northern pintail (<i>Anas acuta</i>) [A054], Eurasian curlew (<i>Numenius arquata</i>) [A160], European golden plover (<i>Pluvialis apricaria</i>) [A164], Sanderling (<i>Calidris alba</i>) [A144], Grey plover (<i>Pluvialis squatarola</i>) [A141]	D01.02, G02.01, J02.01.02, F03.01, F02.03.01, A08, E01, G01.02, I01, K02.03	Roads, motorways, Golf course, Reclamation of land from sea, estuary or marsh, Hunting, Bait digging or collection, Fertilisation, Urbanised areas, human habitation, Walking, horse riding and non- motorised vehicles, Invasive non-native species, Eutrophication (<i>natural</i>)
004024	South Dublin/Tolka Estuary SPA	Red knot (<i>Calidris canutus</i>) [A143], Mediterranean gull (<i>Larus melanocephalus</i>) [A176], Arctic tern (<i>Sterna paradisaea</i>) [A194], Ruddy turnstone (<i>Arenaria interpres</i>) [A169], Grey plover (<i>Pluvialis squatarola</i>) [A141], Mew gull (<i>Larus canus</i>) [A182], Roseate tern (<i>Sterna dougallii</i>) [A192], Sanderling (<i>Calidris alba</i>) [A144], Bar-tailed godwit (<i>Limosa lapponica</i>) [A157], Ringed plover (<i>Charadrius hiaticula</i>) [A137], Great crested grebe (<i>Podiceps cristatus</i>) [A005], Common redshank (<i>Tringa totanus</i>) [A162], Black-headed gull (<i>Larus ridibundus</i>) [A179], Eurasian curlew (<i>Numenius arquata</i>) [A160], Great cormorant (<i>Phalacrocorax carbo</i>) [A017], Common tern (<i>Sterna hirundo</i>) [A193], Red-breasted merganser (<i>Mergus serrator</i>) [A069], Eurasian oystercatcher (<i>Haematopus ostralegus</i>) [A130]	E03, E01, D01.02, G01.02, G01.01, K02.03, J02.01.02, F02.03, E02, F02.03.01	Discharges, Urbanised areas, human habitation, Roads, motorways, Walking, horse riding and non-motorised vehicles, Nautical sports, Eutrophication (<i>natural</i>), Reclamation of land from sea, estuary or marsh, Leisure fishing, Industrial or commercial areas, Bait digging or collection

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
004025	Broadmeadow/ Swords Estuary SPA	Bar-tailed godwit (<i>Limosa lapponica</i>) [A157], Eurasian oystercatcher (<i>Haematopus ostralegus</i>) [A130], Black- headed gull (<i>Larus ridibundus</i>) [A179], Common redshank (<i>Tringa totanus</i>) [A162], Red-breasted merganser (<i>Mergus serrator</i>) [A069], Mew gull (<i>Larus canus</i>) [A182], Northern lapwing (<i>Vanellus vanellus</i>) [A142], Common goldeneye (<i>Bucephala clangula</i>) [A067], Common greenshank (<i>Tringa nebularia</i>) [A164], European golden plover (<i>Pluvialis apricaria</i>) [A164], European golden plover (<i>Pluvialis apricaria</i>) [A140], Grey plover (<i>Pluvialis squatarola</i>) [A141], Common shelduck (<i>Tadorna tadorna</i>) [A048], Ringed plover (<i>Charadrius hiaticula</i>) [A137], Ruddy turnstone (<i>Arenaria interpres</i>) [A169], Red knot (<i>Calidris canutus</i>) [A143], Sanderling (<i>Calidris alba</i>) [A144], Great crested grebe (<i>Podiceps cristatus</i>) [A005], Eurasian teal (<i>Anas crecca</i>) [A052], Eurasian curlew (<i>Numenius arquata</i>) [A160], Northern pintail (<i>Anas acuta</i>) [A054], Mallard (<i>Anas platyrhynchos</i>) [A053], Ruff (<i>Philomachus pugnax</i>) [A151], Great cormorant (<i>Phalacrocorax carbo</i>) [A017], Common pochard (<i>Aythya ferina</i>) [A059]	I01, A08, D01.05, E02, D01.04, J02.01.02, E01, G01.02, G01.01, D01.01	Invasive non-native species, Fertilisation, Bridge, viaduct, Industrial or commercial areas, Railway lines, TGV, Reclamation of land from sea, estuary or marsh, Urbanised areas, human habitation, Walking, horse riding and non-motorised vehicles, Nautical sports, Paths, tracks, cycling tracks
004040	Wicklow Mountains SPA	Merlin (Falco columbarius) [A098], Peregrine falcon (Falco peregrinus) [A103], Wood warbler (Phylloscopus sibilatrix) [A314]	G01.02, D01.01, A04, G03, B, C01.03	Walking, horse riding and non-motorised vehicles, Paths, tracks, cycling tracks, Grazing, Interpretative centres, Sylviculture, forestry, Peat extraction
004113	Howth Head Coast SPA	Common guillemot (<i>Uria aalge</i>) [A199], Peregrine falcon (<i>Falco peregrinus</i>) [A103], Razorbill (<i>Alca torda</i>) [A200], Northern fulmar (<i>Fulmarus glacialis</i>) [A009], Black-legged kittiwake (<i>Rissa tridactyla</i>) [A188]	J01, G01.02	Fire and fire suppression, Walking, horse riding and non-motorised vehicles
004117	Ireland's Eye SPA	Razorbill (Alca torda) [A200], Peregrine falcon (Falco peregrinus) [A103], Northern fulmar (Fulmarus glacialis) [A009], Northern gannet (Morus bassanus) [A016], Common guillemot (Uria aalge) [A199], Atlantic puffin (Fratercula arctica) [A204], Black-legged kittiwake (Rissa tridactyla) [A188], Great cormorant (Phalacrocorax carbo) [A017]	F02.03, G01.02	Leisure fishing, Walking, horse riding and non-motorised vehicles
004172	Dalkey Islands SPA	Roseate tern (Sterna dougallii) [A192], Common tern (Sterna hirundo) [A193], Arctic tern (Sterna paradisaea) [A194]	G01.02, E01, A04, G01.01	Walking, horse riding and non-motorised vehicles, Urbanised areas, human habitation, Grazing, Nautical sports

Qualifying Interests	EU Code	Current threats to Qualifying Interests	Sensitivity of Qualifying Interests
Alkaline fens	[7230]	Land reclamation, peat extraction; afforestation; erosion and landslides triggered	Surface and groundwater dependent. Highly sensitive to
		by human activity; drainage; burning and infrastructural development.	hydrological changes. Inappropriate management.
Alpine and Boreal heaths	[4060]	Abandonment; overgrazing; burning; outdoor recreation; quarries;	Changes in management. Changes in nutrient or base
		communication networks; and wind farm developments.	status. Moderately sensitive to hydrological change.
Annual vegetation of drift	[1210]	Grazing; sand and gravel extraction; recreational activities; coastal protection	Overgrazing and erosion. Changes in management.
lines		works.	
Atlantic salt meadows	[1330]	Overgrazing; erosion; invasive species, particularly common cordgrass (Spartina	Marine and groundwater dependent. Medium sensitivity to
(Glauco-Puccinellietalia		anglica); infilling and reclamation.	hydrological change. Changes in salinity and tidal regime.
maritimae)			Overgrazing, erosion and accretion.
Blanket bogs (* if active bog)	[7130]	Land reclamation, peat extraction; afforestation; erosion and landslides triggered	Surface and groundwater dependent. Highly sensitive to
		by human activity; drainage; burning and infrastructural development.	hydrological changes. Inappropriate management.
Calaminarian grasslands of	[6130]	Land reclamation, afforestation; drainage; and infrastructural development.	Surface and groundwater dependent. Highly sensitive to
the Violetalia calaminariae			hydrological changes. Inappropriate management.
Calcareous rocky slopes with	[8210]	Overgrazing; extractive industries; recreational activities and improved access.	Erosion, overgrazing and recreation.
chasmophytic vegetation			
Embryonic shifting dunes	[2110]	Natural erosion processes exacerbated by recreation and sand extraction. Coastal	Overgrazing, and erosion. Changes in management.
		protection interfering with natural processes.	
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	[2130]	Recreation; overgrazing and inappropriate grazing: non-native plant species,	Overgrazing, and erosion. Changes in management.
herbaceous vegetation (grey		particularly sea buckthorn (Hippophae rhamnoides).	
dunes)			
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Qualifying Interests of SACs that have undergone assessment including Summaries of Current Threats and Sensitivities

Humid dune slacks	[2190]	Agricultural improvement; overgrazing and inappropriate grazing; forestry; recreational activity.	Overgrazing, and erosion. Changes in management. Sensitive to hydrological change.
Otter (Lutra lutra)	[1355]	Decrease in water quality: Use of pesticides; fertilization; vegetation removal; professional fishing <i>(including lobster pots and fyke nets)</i> ; uniting; 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 (Molinion caeruleae)	[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 Erica tetralix	[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 Ilex and Blechnum 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>Littorelletalia</i> uniflorae)	[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 (Petalophyllum ralfsii)	[1395]	There are no significant impacts affecting this species.	None identified.
Petrifying springs with tufa formation (Cratoneurion)	[7220]	Ground water interactions, on site management activities.	Surface and groundwater dependant. Highly sensitive to hydrological changes. Highly sensitive to pollution.
Harbour Porpoise (Phocoena phocoena)	[1351]	Pressures acting on the species in Irish waters mainly involve commercial vessel- based activities such as impacts arising from geophysical seismic exploration or from local/regional prey removal from fisheries.	Sensitive to disturbance, prey availability and pollution.
Reefs	[1170]	Professional fishing; taking for fauna; taking for flora; water pollution; climate change; and change in species composition.	Sensitive to disturbance and 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 (Festuco-Brometalia) (* 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 Ammophila arenaria (white dunes)	[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 (Androsacetalia alpinae and Galeopsietalia ladani)	[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 Nardus	[6230]	Bracken encroachment, succession, inappropriate grazing, afforestation; drainage;	Erosion, overgrazing and recreation.
grasslands, on siliceous		and infrastructural development.	
substrates in mountain areas			
(and submountain areas, in			
Continental Europe)			
Vegetated sea cliffs of the	[1230]	A number of significant pressures were identified, including trampling by walkers,	Land use activities such as tourism and/or agricultural
Atlantic and Baltic coasts		invasive non-native species, gravel extraction, and sea-level and wave exposure	practices. Direct alteration to the habitat or effects such as
		changes due to climate change. There have been no significant losses in sea cliff	burning or drainage.
		habitat since the Directive came into force.	

Appendix II Special Conservation Interests and Vulnerabilities of SPAs that have undergone assessment

Special Conservation Interests	Vulnerabilities of Special Conservation Interests
Great crested grebe (Podiceps cristatus) [A005] Northern fulmar (Fulmarus glacialis) [A009] Great cormorant (Phalacrocorax carbo) [A017] Common shelduck (Tadorna tadorna) [A048] Eurasian wigeon (Anas penelope) [A050] Eurasian teal (Anas crecca) [A052] Mallard (Anas platyrhynchos) [A053] Northern pintail (Anas acuta) [A054] Northern pintail (Anas acuta) [A054] Northern shoveler (Anas clypeata) [A056] Red-breasted merganser (Mergus serrator) [A069] Merlin (Falco columbarius) [A098] Peregrine falcon (Falco peregrinus) [A103] Eurasian oystercatcher (Haematopus ostralegus) [A130] Ringed plover (Charadrius hiaticula) [A137] European golden plover (Pluvialis apricaria) [A140] Grey plover (Pluvialis squatarola) [A141] Northern lapwing (Vanellus vanellus) [A142] Red knot (Calidris canutus) [A143] Sanderling (Calidris alba) [A144] Ruff (Philomachus pugnax) [A151] Bar-tailed godwit (Limosa lapponica) [A157] Eurasian curlew (Numenius arquata) [A160] Common redshank (Tringa nebularia) [A164] Ruddy turnstone (Arenaria interpres) [A169] Mediterranean gull (Larus ridibundus) [A176] Black-headed gull (Larus ridibundus) [A176] Black-legged kittiwake (Rissa tridactyla) [A188] Roseate tern (Sterna dougallii) [A192] Common tern (Sterna hirundo) [A193] Arctic tern (Sterna paradisaea) [A199] Razorbill (Alca torda) [A200] Short-eared owl (Asio flammeus) [A222] Wood warbler (Phylloscopus sibilatrix) [A314]	 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 2km. 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. 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.