



BURNFOOT FLOOD RELIEF SCHEME

Screening for Appropriate Assessment



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Stage 1: Burnfoot FRS
Screening Appraisal
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1. HABITATS REGULATIONS APPRAISAL

1.1 Introduction

This report has been prepared by RPS on behalf of Donegal County Council. The purpose of a Stage 1 screening appraisal is to assist the Donegal County Council in its role as a Competent Authority, fulfilling its duties in accordance with European Communities (Natural Habitats) Regulations (S.I. No. 94 of 1997) under Regulation 31 (Annex 1.2). An appropriate assessment screening and, if required, an appropriate assessment, is required under the Habitats Directive for any plan or project likely to have significant effect on a Natura 2000 site.

With the introduction of the Habitats Directive (Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora) came the obligation to establish the Natura 2000 network of Sites of Community Interest (SCIs), comprising a network of areas of highest biodiversity importance for rare and threatened habitats and species across the European Union (EU).

The Natura 2000 network of sites comprises Special Areas of Conservation (SACs, including candidate SACs) designated under legislation transposing the obligations under Directive 92/43/EEC, and Special Protection Areas (SPAs, including proposed SPAs) classified under the Birds Directive (Directive 2009/147/EC on the conservation of wild birds) and designated under Irish legislation. SACs and SPAs make up the pan-European network of Natura 2000 sites in Ireland and they are referred to as European sites.

SACs are designated for the conservation of Annex I habitats (including priority types which are in danger of disappearance) and Annex II species (other than birds). SPAs are designated for the conservation of Annex I birds and other regularly occurring migratory birds and their habitats. The annexed habitats and species for which each site is designated correspond to the Qualifying Interests (QIs) of the sites in the case of SACs and Special Conservation Interests (SCIs) of the sites in the case of SPAs. From these qualifying features, the Conservation Objectives (COs) of the site are derived.

1.2 Legislation and the Appropriate Assessment procedure

1.2.1 The Habitats Directive

Article 6(3) of the Habitats Directive requires that–

“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.”

Thus, Article 6(3) provides a two-stage process:

- The first stage involves a screening for appropriate assessment; and
- The second stage arises where, having screened the proposed development, the competent authority determines that an appropriate assessment is required, in which case it must then carry out that appropriate assessment.

1.2.2 Irish legislation

For the purposes of applications for planning permission, Part XAB of the Planning and Development Act 2000, and as amended (“the PDA”) implement the obligations under Article 6(3) into Irish law. In relation to other consent regimes, the provisions of the European Communities (Birds and Natural Habitats) Regulations 2011, as amended (“the 2011 Regulations”), transpose those obligations.

This report has been drafted in support of an application for planning permission, and as such the provisions of the PDA apply. This report will also be used in support for an application for a Foreshore Lease.

1.2.3 Screening for appropriate assessment

Section 177U of the PDA requires inter alia that a screening for appropriate assessment of an application for consent for proposed development shall be carried out by the competent authority to assess, in view of best scientific knowledge, if that proposed development, individually or in combination with other plans or projects is likely to have a significant effect on a European site.

While the provisions of section 177U adopt the terminology used in Article 6(3) of the Habitats Directive in terms of the test for screening, section 177U expands on this in light of the interpretation given in decisions of the Court of Justice of the European Union. Thus, section 177U gives effect to the requirement to screen an application for development consent for appropriate assessment by assessing whether the proposed development is likely to have a significant effect on a European site by considering whether such a significant effect can or cannot be excluded.

1.2.4 Appropriate Assessment (AA)

Section 177V of the PDA requires inter alia that an appropriate assessment carried out by the competent authority shall include a determination under Article 6(3) of the Habitats Directive as to whether or not a proposed development would adversely affect the integrity of a European site and an appropriate assessment shall be carried out by the competent authority where it has made a determination under section 177U(4) that an appropriate assessment is required, before consent is given for the proposed development.

1.2.5 Step-wise procedure

According to European Commission guidance documents ‘Assessment of plans and projects significantly affecting Natura 2000 sites’ (EC, 2001) and the ‘Managing Natura 2000 sites: The Provisions of Article 6 of the ‘Habitats’ Directive 92/43/EEC’ (EC, 2019), the obligations arising under Article 6 establish a step-wise procedure for Habitats Regulations Appraisal as follows, and as illustrated in Figure 1.1.

The first part of this procedure consists of a pre-assessment stage (‘screening’) to determine whether, firstly, a plan or project is directly connected with or necessary to the management of the site, and secondly, whether it is likely to have a significant effect on the site either alone or in combination with other plans or projects; it is governed by the first sentence of Article 6(3).

The second part of the procedure, governed by the second sentence of Article 6(3), relates to the appropriate assessment and the decision of the competent national authorities.

A third part of the procedure (governed by Article 6(4)) comes into play if, despite a negative assessment, it is proposed not to reject a plan or project but to give it further consideration. In this case Article 6(4) allows for derogations from Article 6(3) under certain conditions.

The extent to which the sequential steps of Article 6(3) apply to a given plan or project depends on several factors, and in the sequence of steps, each step is influenced by the previous step. The order in which the steps are followed is therefore essential for the correct application of Article 6(3).

AA SCREENING

Each step determines whether a further step in the process is required. If, for example, the conclusion at the end of a Stage 1 screening appraisal is that significant effects on European sites can be excluded, there is no requirement to proceed to the next step.

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ANNEX II

Consideration of plans and projects affecting Natura 2000 sites

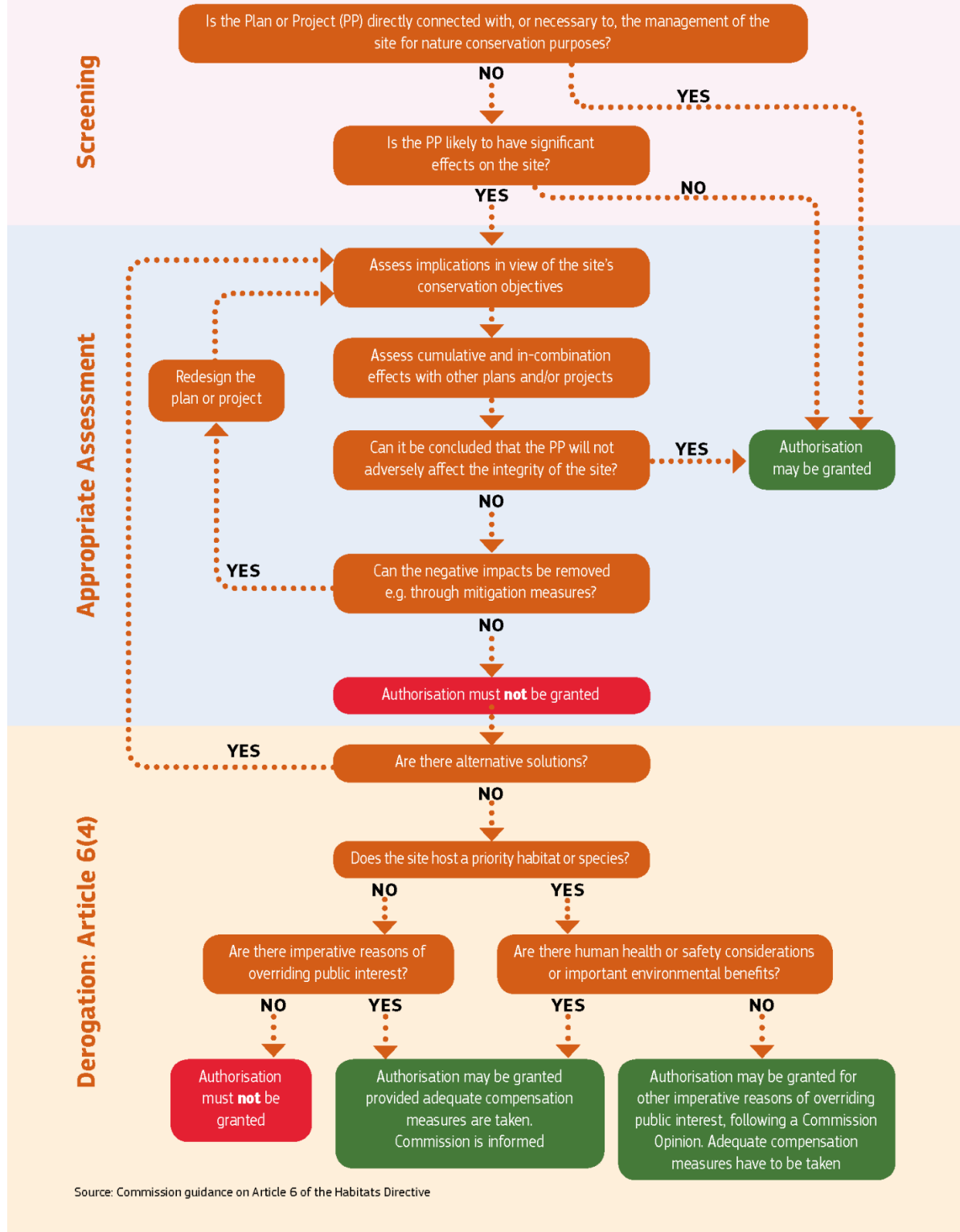


Figure 1.1: Step-wise procedure of Article 6 of the Habitats Directive

1.3 Document Structure

This report is structured as follows:

- Section 2: Methodology and Guidance - This section sets out the methodology followed and guidance documents used in conducting a Stage 1 screening appraisal of the implications of the proposed development on European sites;
- Section 3: the Proposed Development - This section describes the Proposed Development, and is the basis of the subsequent Stage 1 screening appraisal that follows; and
- Section 4: Stage 1 Screening Appraisal - This section contains a preliminary examination and analysis to understand whether or not the Proposed Development is likely to have a significant effect on any European site. This is the Stage 1 screening appraisal. It has been undertaken in view of best scientific knowledge, in light of the Conservation Objectives of the sites concerned and considers the Proposed Development individually and in combination with other plans and projects. Measures intended to avoid or reduce the harmful effects of the proposed development on European sites (i.e. “mitigation measures”) or best practice measures have not been taken into account in the screening stage appraisal, and should not be taken into account by the competent authority in conducting its screening exercise.

2. METHODOLOGY

2.1 Published guidance on HRA

Appropriate Assessment Guidelines for Planning Authorities have been published by the Department of the Environment, Heritage and Local Government (DEHLG, 2010a). In addition to the advice available from the Department, the European Commission has published a number of documents which provide a significant body of guidance on the requirements of Appropriate Assessment, most notably including, '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' (EC, 2001), which sets out the principles of how to approach decision making during the process.

These principal national and European guidelines have been followed in the preparation of this report. The following list identifies these and other pertinent guidance documents:

- Communication from the Commission on the Precautionary Principle., Office for Official Publications of the European Communities, Luxembourg (EC, 2000);
- Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Articles 6(3) and (4) of the Habitats Directive 92/43/EEC. Office for Official Publications of the European Communities, Brussels (EC, 2001);
- Estuaries and Coastal Zones within the Context of the Birds and Habitats Directives - Technical Supporting Document on their Dual Roles as Natura 2000 Sites and as Waterways and Locations for Ports. European Commission (EC, 2009);
- Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities. Department of the Environment, Heritage and Local Government, Dublin (DEHLG, 2010a);
- Department of Environment Heritage and Local Government Circular NPW 1/10 and PSSP 2/10 on Appropriate Assessment under Article 6 of the Habitats Directive – Guidance for Planning Authorities (DEHLG, 2010b);
- Guidance document on the implementation of the birds and habitats directive in estuaries and coastal zones with particular attention to port development and dredging. European Commission (EC, 2011a);
- European Commission Staff Working Document 'Integrating biodiversity and nature protection into port development' (EC, 2011b);
- European Commission Notice C(2018) 7621 'Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC', Office for Official Publications of the European Communities, Luxembourg (EC, 2019);

2.2 Likely Significant Effect

The Commission's 2018 Notice (EC, 2019) advises that the appropriate assessment procedure under Article 6(3) is triggered not by the certainty but by the likelihood of significant effects, arising from plans or projects regardless of their location inside or outside a protected site. Such likelihood exists if significant effects on the site cannot be excluded. The significance of effects should be determined in relation to the specific features and environmental conditions of the site concerned by the plan or project, taking particular account of the site's conservation objectives and ecological characteristics.

The requirement that the effect in question be 'significant' exists in order to lay down a *de minimis* threshold – thus, plans or projects that have no appreciable effect on the site are thereby excluded. A likely significant effect is triggered when:

- there is a probability or a risk of a plan or project having a significant effect on a European site;
- the plan is likely to undermine the site's conservation objectives; and
- a significant effect cannot be excluded on the basis of objective information.

EC (2020) advises that an assessment of significance must apply the principle of proportionality, be compatible with the precautionary principle and take into account:

- the nature, size and complexity of the plan or project;
- the expected effects, and
- the vulnerability and irreplaceability of the affected EU-protected habitats and species.

2.3 Mitigation Measures

In determining whether or not likely significant effects will occur or can be excluded in the Stage 1 appraisal, measures intended to avoid or reduce the harmful effects of the proposed development on European sites, (i.e. "mitigation measures") or best practice measures have not been taken into account in this screening stage appraisal. This approach is consistent with EU guidance and the case law of the Court of Justice of the European Union (CJEU):

EC (2001) states that "project and plan proponents are often encouraged to design mitigation measures into their proposals at the outset. However, it is important to recognise that the screening assessment should be carried out in the absence of any consideration of mitigation measures that form part of a project or plan and are designed to avoid or reduce the impact of a project or plan on a Natura 2000 site". This direction in the European Commission's guidance document is unambiguous in that it does not permit the inclusion of mitigation at screening stage.

In April 2018, the Court of Justice of the European Union issued a ruling in case C-323/17 *People Over Wind & Peter Sweetman v Coillte Teoranta* ("People Over Wind") that Article 6(3) of Directive 92/43/EEC must be interpreted as meaning that, in order to determine whether it is necessary to carry out, subsequently, an appropriate assessment of the implications, for a site concerned, of a plan or project, it is not appropriate, at the screening stage, to take account of the measures intended to avoid or reduce the harmful effects of the plan or project on that site.

The judgment in *People Over Wind* is further reinforced in EC (2019) which refers to CJEU Case C-323/17, and more recently in EC (2020) in relation to guidance on wind energy developments and EU nature legislation.

2.4 Consideration of ex-situ effects

EC (2019) advises that Member States, both in their legislation and in their practice, allow for the Article 6(3) safeguards to be applied to any development pressures, including those which are external to European sites but which are likely to have significant effects on any of them.

The CJEU developed this point when it issued a ruling in case C-461/17 ("*Brian Holohan and Others v An Bord Pleanála*") that determined *inter alia* that Article 6(3) of Directive 92/43/EEC must be interpreted as meaning that an appropriate assessment must on the one hand, catalogue the entirety of habitat types and species for which a site is protected, and, on the other, identify and examine both the implications of the proposed project for the species present on that site, and for which that site has not been listed, and the implications for habitat types and species to be found outside the boundaries of that site, provided that those implications are liable to affect the conservation objectives of the site.

In that regard, consideration has been given in this Habitats Directive appraisal to implications for habitats and species located both inside and outside of the European sites considered in the screening appraisal with reference to those sites' Conservation Objectives where effects upon those habitats and/or species are liable to affect the conservation objectives of the sites concerned.

2.5 Conservation Objectives

The conservation objectives (“COs”) for each European site are to maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the site has been selected.

The 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 (or condition, at a site level) 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.

The COs of European sites published by the National Parks and Wildlife Service (NPWS) in Ireland note that an appropriate assessment based on the most up to date conservation objectives will remain valid even if the targets are subsequently updated, providing they were the most recent objectives available when the assessment was carried out (e.g. Conservation Objectives: Lough Swilly SAC 002287 / Lough Swilly SPA 004075, version 1 (NPWS, 2011a)).

The most up-to-date COs for the European sites being considered have been used in this appraisal. Details in relation to the Qualifying Interests (“QIs”) of SACs is based on publicly available data sourced from the National Parks and Wildlife Service (NPWS) website in November 2020.

2.6 In-combination effects

Article 6(3) of the Habitats Directive requires that in-combination effects with other plans or projects are also considered. As set out in the Commission’s 2018 Notice (EC, 2019), significance will vary depending on factors such as magnitude of impact, type, extent, duration, intensity, timing, probability, cumulative effects and the vulnerability of the habitats and species concerned.

In addition, other plans or projects which are completed, approved but uncompleted, or proposed have been considered. EC (2019) specifically advises that “as regards other proposed plans or projects (i.e. other projects not proposed by the Applicant), on grounds of legal certainty it would seem appropriate to restrict the in-combination provision to those which have been actually proposed, i.e. for which an application for approval or consent has been introduced”.

3. THE PROPOSED DEVELOPMENT

3.1 Summary of Proposed Scheme

Donegal County Council wishes to undertake flood relief works in Burnfoot, following on from the Northwestern and Neagh Bann Catchment Flood Risk Assessment and Management (NWNB CFRAM). The Burnfoot Flood Relief Scheme has undertaken an optioneering assessment and multi-criteria analysis for a number of options which achieve the standard of protection required for the Burnfoot Area for Action (AFA). The emerging preferred option involves, replacement of the R238 road bridge and the implementation of hard defences to protect against the 1% Annual Exceedance Probability (AEP) fluvial event.

3.2 Location

The proposed Scheme is located within a Tier 4 settlement, Burnfoot, Co. Donegal, as shown in Figure 3.1.

3.3 Proposed Scheme

The Proposed Scheme for Burnfoot to protect against the 0.5% annual exceedance probability (AEP) fluvial flood event consists of the following main elements:

- Demolition and replacement of the existing R238 road bridge with a clear span structure and raising of the approach roads to the bridge to allow tie in with existing roads, designed to DMURS standard;
- Upgrade to existing culverts (2 no.) on the Carnashannagh Stream, a tributary of the Burnfoot River, which joins the main channel upstream of the existing R238 road bridge. These works consist of the construction of a new culvert inlet where the watercourse passes beneath Brae Road and a new culvert approximately 400m upstream;
 - Upgrade of lower culvert on the Carnashannagh Stream to a box culvert (1.2m height x 2.4m width), sized for future climate change flood flows, under Brae Road extending beyond the proposed embankment, with new headwall structures and debris screens as required;
 - Upgrade of upper culvert (box culvert of 1.2m height x 2.4m width), on the Carnashannagh Stream, sized for future climate change flood flows. To include new headwall structures and debris screens as required.
- 38m of reinforced concrete flood walls with foundations to accommodate future climate change flood scenarios on both banks of the Carnashannagh Stream upstream of the Brae Road, with a replacement shed to accommodate the construction.
- 315m of embankment, tying into raised laneways, around three properties to the south of the village near Slab Road (R239) with an average height of 0.79m.
- 630m of embankment along / adjacent to the Burnfoot River with an average defence height of 1.1m above ground level;
- 395 metres of sheet piled wall with an average height of 1.1 metres above existing ground adjacent to the Burnfoot River upstream and downstream of the R238 bridge;
- 35 metres of reinforced concrete flood walls with an average height of 1.1 metres above ground level upstream of the R238 road bridge. The foundations have been designed to accommodate future climate change flood scenarios;
- The first 183m of the Burnfoot/Skeoge Arterial Drainage Scheme embankment, downstream of Burnfoot, removed to provide short term storage on a recurring basis to reduce flood levels in the town centre by reconnecting the existing floodplain.

AA SCREENING

- The removal of 345m of embankment from the right bank of the Skeoge River as well as localised drainage amendment as required, to reconnect the existing floodplain.
- 120m of embankment with an average height of 0.8m around the existing sewerage treatment works to the west of Grianán Park estate
- 145m of embankment removed from the right-hand bank of the Burnfoot River, 168m upstream of the R238 bridge.
- Existing land on the right-hand bank of the Burnfoot River upstream of the R238 bridge, to be utilised for construction and safeguarding of existing floodplain within the settlement framework, will be landscaped.
- Surface water measures (road reprofiling / cambering, additional gullies and swale to discharge to watercourse) at:
 - a. R239 / Fairview Manor
 - b. L-1881 Brae Road
- Back drainage behind the proposed defences with associated outfalls;
- Land take to facilitate future operation and maintenance of flood embankments, including for embankment top ups and/or access to complete the same as well as general maintenance e.g. grass cutting and ad hoc repairs as necessary. Access to complete this work will be required on the defended side of embankments which are on benefiting lands, at the embankment on the left-hand bank immediately upstream of the bridge and at the embankment on the right-hand bank downstream of the bridge.
- The construction of the Proposed Scheme will require additional working areas, construction compounds, haul routes and site access. The proposed location of these is provide in Figure 3.1 and Figure 3.2 and in the submitted Planning Drawings.

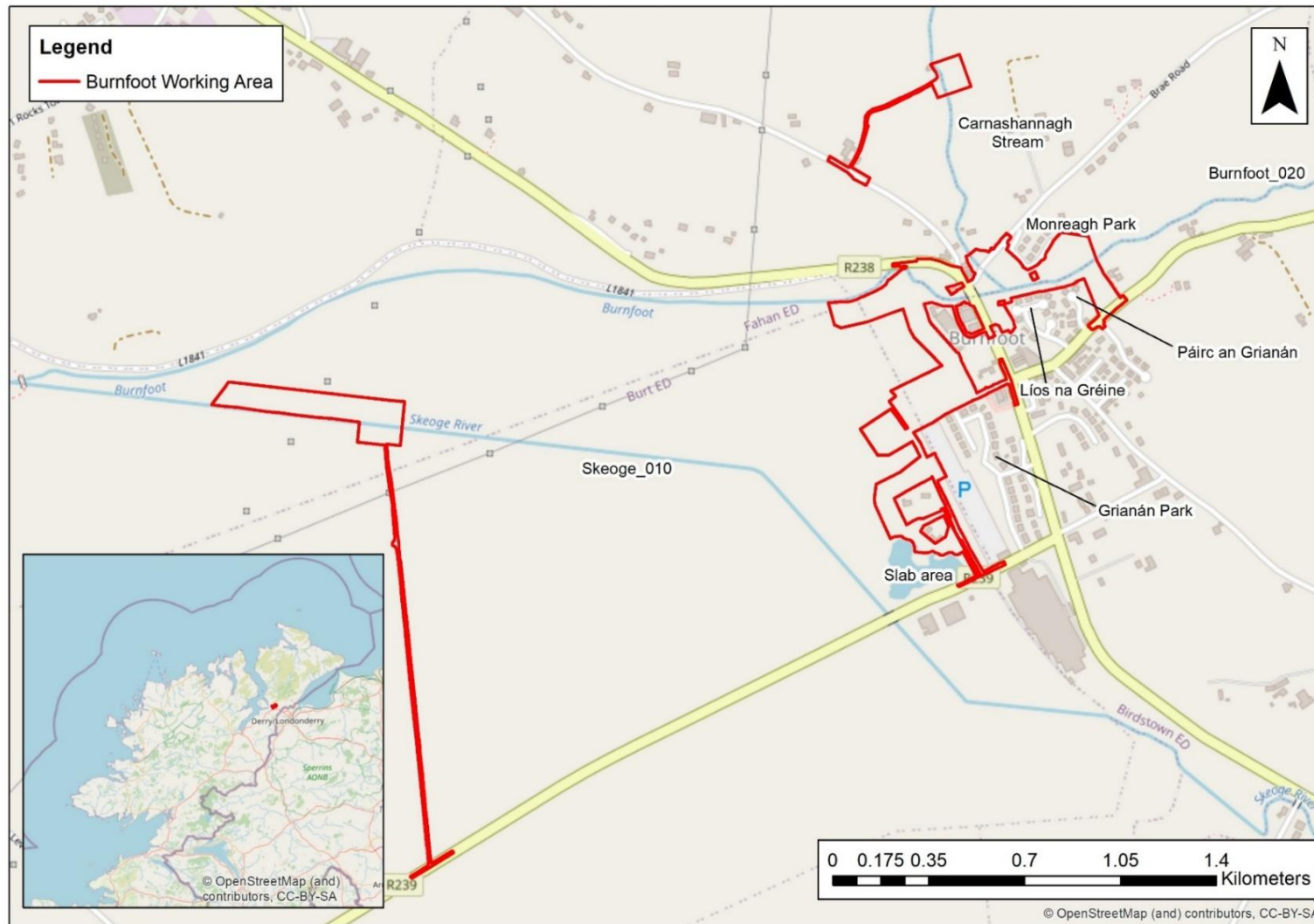


Figure 3.1: Site Location

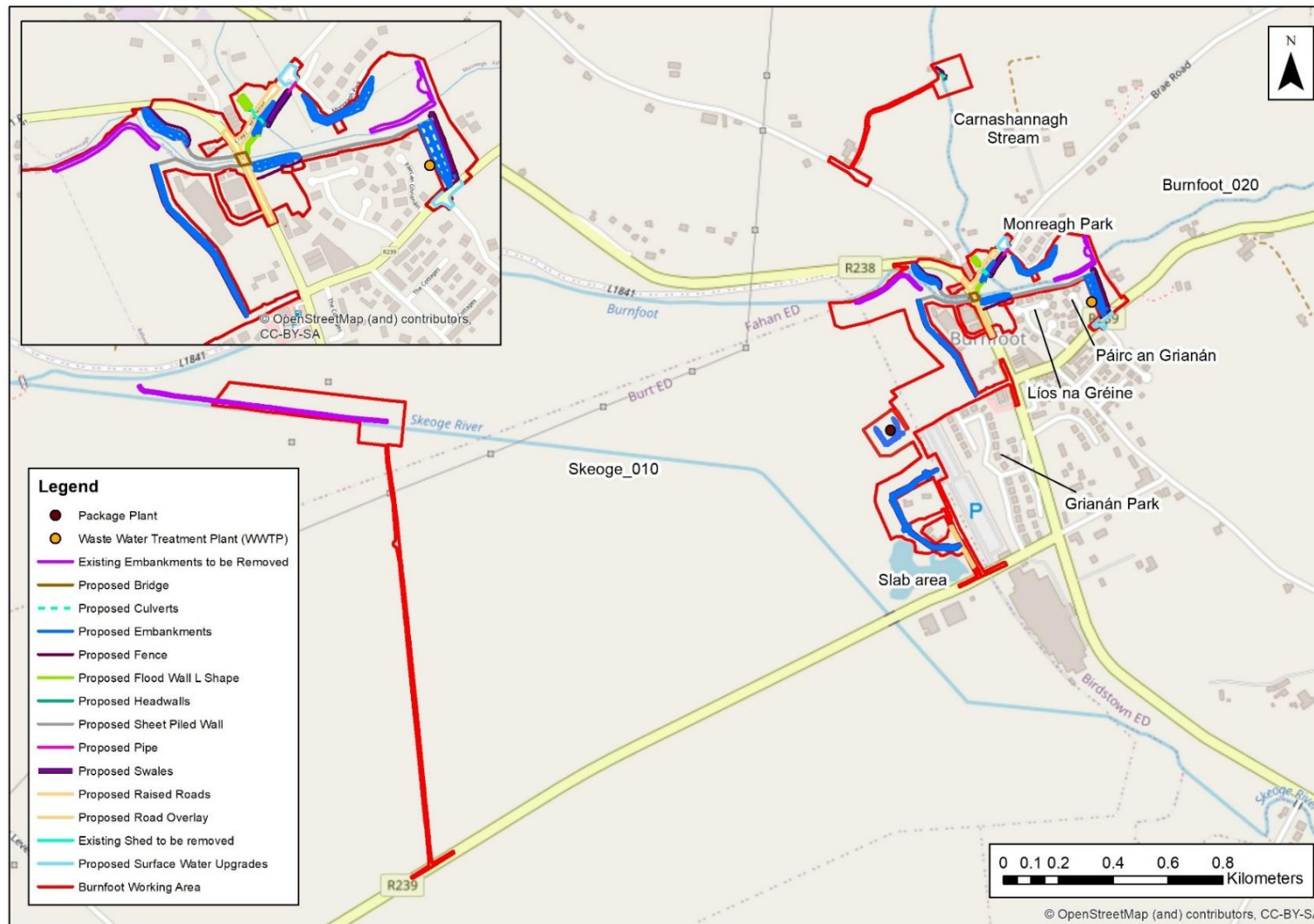


Figure 3.2: Proposed Scheme for Burnfoot

4. STAGE 1 SCREENING APPRAISAL

4.1 Directly connected with or necessary to the management of the site

The Proposed Scheme is located at Burnfoot, Co. Donegal will comprise of the following:

- A Replacement of the existing R238 Road Bridge with a clear span structure and raising of the approach roads to the bridge to allow tie in;
- Upgrade to existing culverts (2 no.) on the Carnashanngh Stream, a tributary of the Burnfoot River, which joins the main channel upstream of the existing R238 road bridge;
- Approximately 445 metres of earthen embankments with a maximum height of 2.3 metres above ground level;
- 173 metres of earthen embankment with pathway and maximum height of 1 metre above existing ground level;
- 57 metres of flood wall with maximum height of 1.56 metres above ground level; and
- 343 metres of sheet piled wall with a maximum height of 1.98 metres above existing ground level.

The Proposed Development is therefore not directly connected with or necessary to the management of any European Site and is subject to the provisions of the Article 6(3) procedure laid down by the Habitats Directive and its national implementing legislation.

4.2 European sites

A Stage 1 screening appraisal must be undertaken by the competent authority to determine whether, firstly, the Proposed Development is directly connected with or necessary to the management of the site, and secondly, whether it is likely to have a significant effect on the site.

In addition, the provisions of national legislation make clear that a Stage 1 screening for appropriate assessment shall be carried out to assess, in view of best scientific knowledge, if the Proposed Scheme, individually or in combination with other plans or projects is likely to have a significant effect on an European site.

Given the location and nature of the Proposed Development, a distance of 15 km radius has been selected to ensure that features of European sites that can potentially be affected at this distance are not automatically excluded by selecting a narrower range of sites to scope. The radius of 15 km is the distance currently recommended in NPWS guidance (NPWS, 2010).

In total, seven European sites were considered within this appraisal, four SACs and three SPAs. Four SACs and three SPAs are within the 15km potential zone of influence as identified above. These sites are illustrated in Figure 4.1 and Figure 4.2.

Having firstly determined that the Proposed Development is not directly connected with or necessary to the management of any European sites (refer section 4.1 above), the identified European sites will be screened against the activities of the Proposed Development in order to appraise whether or not its construction, operation or decommissioning is likely to have a significant effect on any of those European sites.

Details in relation to the QIs and SCIs of these European sites are provided in Table 4.1 in the case of SACs.

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The information contained in these tables is based on publicly available data on these European sites, which along with the most up-to-date COs for the European sites under consideration, have been sourced from the relevant Statutory Nature Conservation Bodies in Ireland and the UK in May 2022.

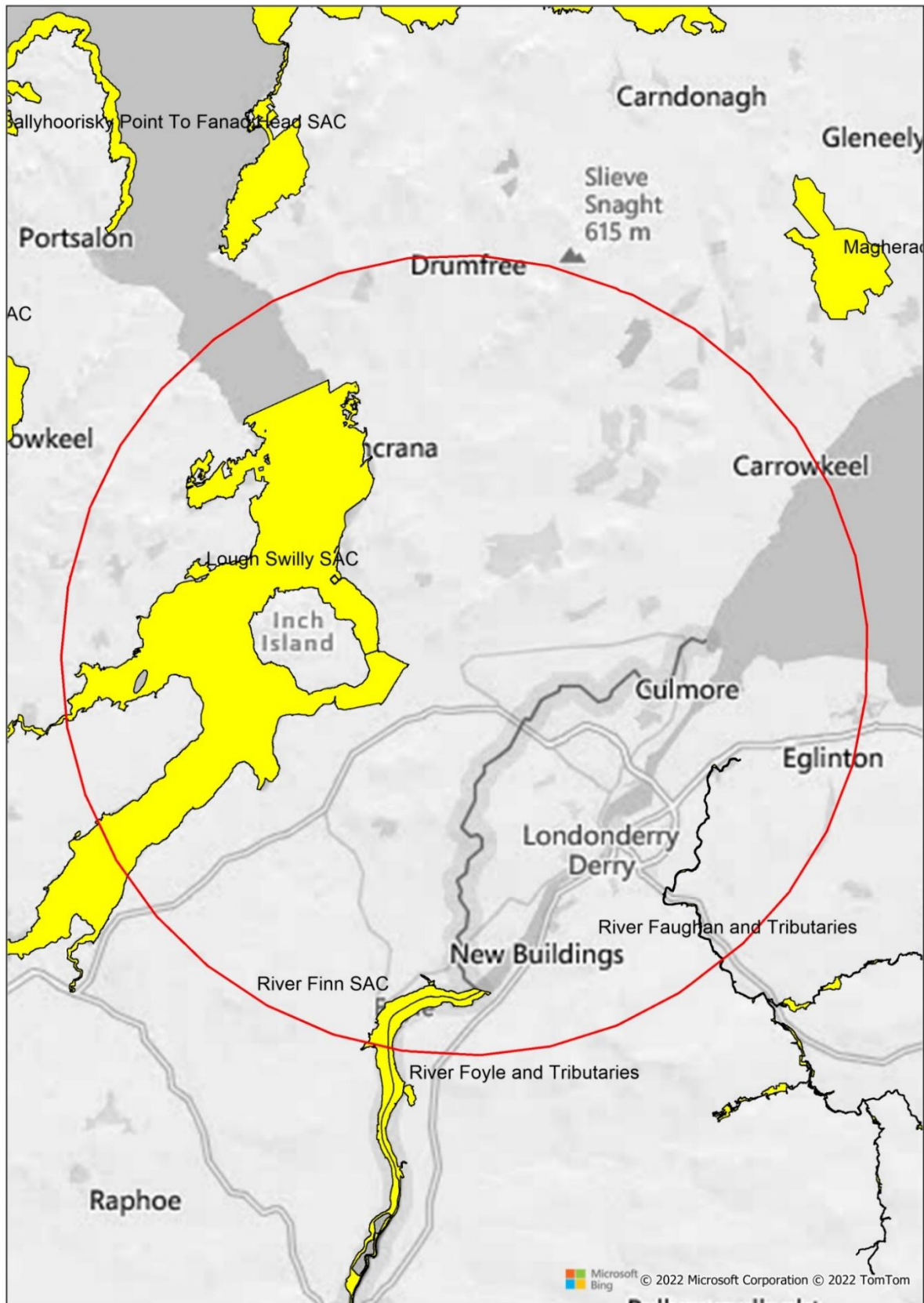


Figure 4.1: Special Areas of Conservation (SACs) in the anticipated 15km Zone of Influence of the Proposed Development

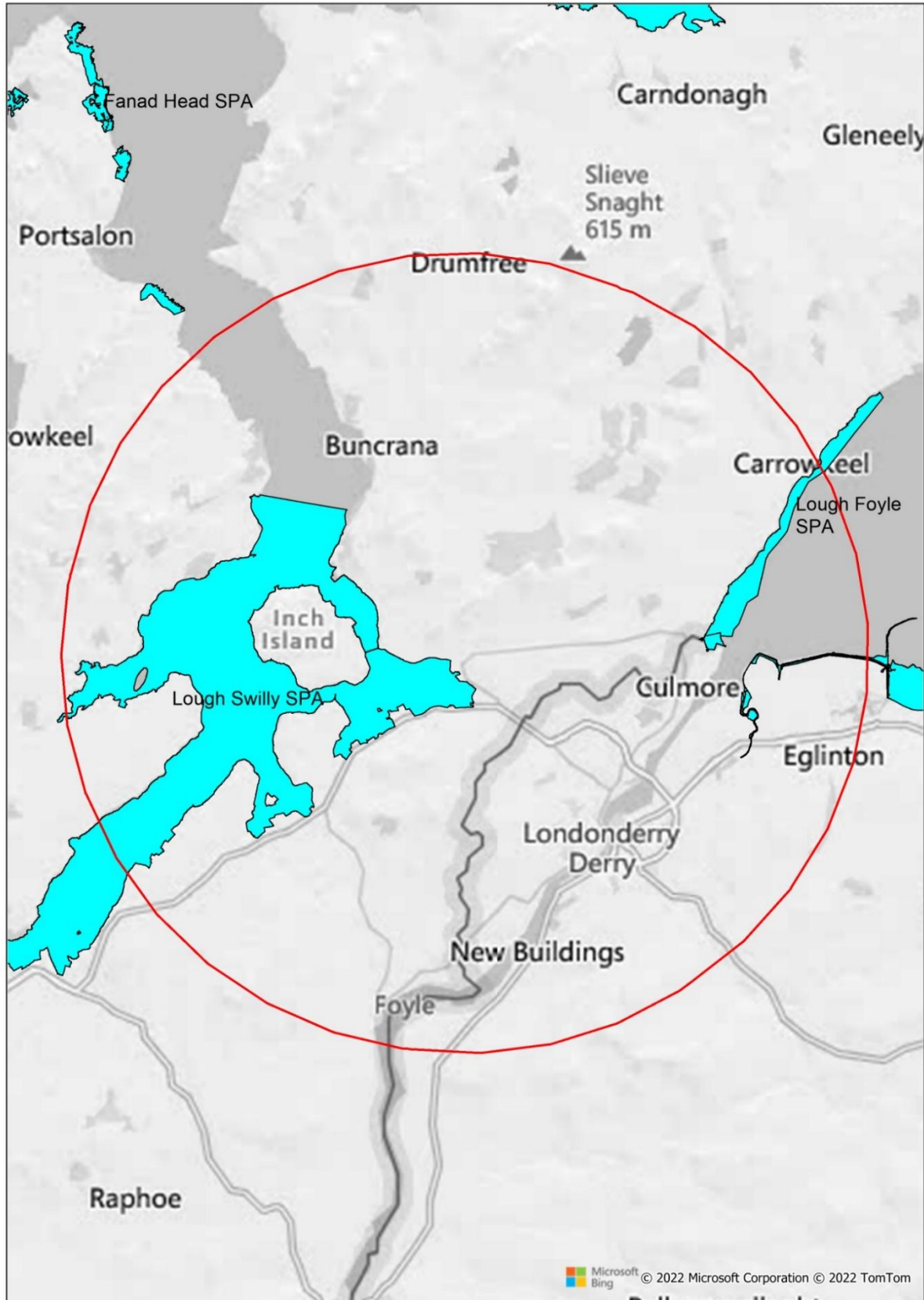


Figure 4.2: Special Protection Areas (SPAs) in the anticipated 15km Zone of Influence of the Proposed Development

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Table 4.1: SACs within the anticipated Zone of Influence of the Proposed Development

Site name	Qualifying Interest (QI)	Distance and direction of European site from the Proposed Development
Irish SACs		
Lough Swilly SAC (IE002287)	<ul style="list-style-type: none"> [1130] Estuaries [1150] Coastal lagoons* [1330] Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [6410] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) [91A0] Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [1355] Otter (<i>Lutra lutra</i>) 	1.8 km E There is a direct hydrological link.
River Finn SAC (IE002301)	<ul style="list-style-type: none"> [3110] Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>) [4010] Northern Atlantic wet heaths with <i>Erica tetralix</i> [7130] Blanket bogs (* if active bog) [7140] Transition mires and quaking bogs [1106] Salmon (<i>Salmo salar</i>) [1355] Otter (<i>Lutra lutra</i>) 	11.5 km No hydrological link.
UK SACs		
River Foyle and Tributaries SAC (UK0030320)	<p>Annex I habitats that are a primary reason for selection of this site</p> <ul style="list-style-type: none"> 3260 Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation <p>Annex II species that are a primary reason for selection of this site</p> <ul style="list-style-type: none"> 1106 Atlantic salmon <i>Salmo salar</i>: <ul style="list-style-type: none"> The River Foyle and Tributaries is a large, cross-border river in the north-west of Britain and Ireland. The river is notable for the physical diversity and naturalness of the banks and channels, especially in the upper reaches, and the richness and naturalness of its plant and animal communities. The river has the largest population of Atlantic salmon <i>Salmo salar</i> in Northern Ireland, with around 15% of the estimated spawning numbers. The majority of the salmon returning are grilse (single wintering salmon), with a smaller but important number of spring salmon (multi-wintering salmon) also occurring. Research has indicated that individual sub-catchments within the system support genetically distinct salmon populations. 	11.5 km No hydrological link.

AA SCREENING

Site name	Qualifying Interest (QI)	Distance and direction of European site from the Proposed Development
	Annex II species present as a qualifying feature, but not a primary reason for site selection <ul style="list-style-type: none"> 1355 Otter <i>Lutra lutra</i> 	
River Faughan and Tributaries SAC (UK0030361)	Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site <ul style="list-style-type: none"> 91A0 Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles Annex II species that are a primary reason for selection of this site <ul style="list-style-type: none"> 1106 Atlantic salmon <i>Salmo salar</i> Annex II species present as a qualifying feature, but not a primary reason for site selection <ul style="list-style-type: none"> 1355 Otter <i>Lutra lutra</i> 	11.5 km SE No hydrological link.

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Table 4.2: SPAs within the anticipated Zone of Influence of the Proposed Development

Irish SPAs		
Lough Swilly SPA (IE004075)	<ul style="list-style-type: none"> • Great Crested Grebe (<i>Podiceps cristatus</i>) [A005] • Grey Heron (<i>Ardea cinerea</i>) [A028] • Whooper Swan (<i>Cygnus cygnus</i>) [A038] • Greylag Goose (<i>Anser anser</i>) [A043] • Shelduck (<i>Tadorna tadorna</i>) [A048] • Wigeon (<i>Anas penelope</i>) [A050] • Teal (<i>Anas crecca</i>) [A052] • Mallard (<i>Anas platyrhynchos</i>) [A053] • Shoveler (<i>Anas clypeata</i>) [A056] • Scaup (<i>Aythya marila</i>) [A062] • Goldeneye (<i>Bucephala clangula</i>) [A067] • Red-breasted Merganser (<i>Mergus serrator</i>) [A069] • Coot (<i>Fulica atra</i>) [A125] • Oystercatcher (<i>Haematopus ostralegus</i>) [A130] • Knot (<i>Calidris canutus</i>) [A143] • Dunlin (<i>Calidris alpina</i>) [A149] • Curlew (<i>Numenius arquata</i>) [A160] • Redshank (<i>Tringa totanus</i>) [A162] • Greenshank (<i>Tringa nebularia</i>) [A164] • Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] • Common Gull (<i>Larus canus</i>) [A182] • Sandwich Tern (<i>Sterna sandvicensis</i>) [A191] • Common Tern (<i>Sterna hirundo</i>) [A193] • Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>) [A395] • Wetland and Waterbirds [A999] 	<p>240 m E</p> <p>There is a direct hydrological link.</p>
Lough Foyle SPA (IE004087)	<ul style="list-style-type: none"> • [A001] Red-throated Diver (<i>Gavia stellata</i>) • [A005] Great Crested Grebe (<i>Podiceps cristatus</i>) • [A037] Bewick's Swan (<i>Cygnus columbianus bewickii</i>) • [A038] Whooper Swan (<i>Cygnus cygnus</i>) • [A043] Greylag Goose (<i>Anser anser</i>) • [A046] Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) • [A048] Shelduck (<i>Tadorna tadorna</i>) • [A050] Wigeon (<i>Anas penelope</i>) • [A052] Teal (<i>Anas crecca</i>) • [A053] Mallard (<i>Anas platyrhynchos</i>) • [A063] Eider (<i>Somateria mollissima</i>) • [A069] Red-breasted Merganser (<i>Mergus serrator</i>) • [A130] Oystercatcher (<i>Haematopus ostralegus</i>) 	<p>9.5 km W</p> <p>No hydrological link.</p>

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Irish SPAs

- [A140] Golden Plover (*Pluvialis apricaria*)
- [A142] Lapwing (*Vanellus vanellus*)
- [A143] Knot (*Calidris canutus*)
- [A149] Dunlin (*Calidris alpina*)
- [A157] Bar-tailed Godwit (*Limosa lapponica*)
- [A160] Curlew (*Numenius arquata*)
- [A162] Redshank (*Tringa totanus*)
- [A179] Black-headed Gull (*Chroicocephalus ridibundus*)
- [A182] Common Gull (*Larus canus*)
- [A184] Herring Gull (*Larus argentatus*)
- [A999] Wetland and Waterbirds

UK SPAs

Lough Foyle SPA (UK9020031)

- [A005] Great Crested Grebe (*Podiceps cristatus*)
- [A037] Bewick's Swan (*Cygnus columbianus bewickii*)
- [A038] Whooper Swan (*Cygnus cygnus*)
- [A017] Cormorant (*Phalacrocorax carbo*)
- [A043] Greylag Goose (*Anser anser*)
- [A046] Light-bellied Brent Goose (*Branta bernicla hrota*)
- [A048] Shelduck (*Tadorna tadorna*)
- [A050] Wigeon (*Anas penelope*)
- [A052] Teal (*Anas crecca*)
- [A053] Mallard (*Anas platyrhynchos*)
- [A063] Eider (*Somateria mollissima*)
- [A069] Red-breasted Merganser (*Mergus serrator*)
- [A130] Oystercatcher (*Haematopus ostralegus*)
- [A140] Golden Plover (*Pluvialis apricaria*)
- [A142] Lapwing (*Vanellus vanellus*)
- [A143] Knot (*Calidris canutus*)
- [A149] Dunlin (*Calidris alpina*)
- [A157] Bar-tailed Godwit (*Limosa lapponica*)
- [A160] Curlew (*Numenius arquata*)
- [A162] Redshank (*Tringa totanus*)

8.9 km W

No hydrological link.

4.3 Potential Effects

4.3.1 Ascertaining whether or not Pathways of Effect exist

The possibility of significant effects is considered using a source-pathway-receptor model. 'Source' is defined as the individual elements of the proposed works that have the potential to affect the identified ecological receptors both within the European site and outside of it in accordance with the 'Holohan' judgment (refer section 2.4 above). 'Pathway' is defined as the means or route by which a source can affect the ecological receptor. 'Ecological receptor' is defined as the SCI (of SPAs) or QI (of SACs) for which COs have been set for the European sites under consideration. Each element can exist independently however an effect is created when there is a linkage between the source, pathway and receptor.

Possible direct and indirect effects arising as a result of activities undertaken as part of the Project are as follows:

- Direct Effects:
 - Habitat loss of Annex I habitats in SACs or wetland habitats in SPAs;
 - Aerial noise and/or visual disturbance or displacement of breeding or non-breeding waterbirds inside or outside of SPAs; and
- Indirect Effects
 - Reduction in water quality and habitat deterioration of Annex I habitats in SACs or wetland habitats in SPAs as result of suspended sediments or pollution incidents.

4.3.2 Annex I Habitats

Habitat Loss

As can be seen from Figure 4.1, the Proposed Development is not located within any European site. There will be no direct habitat loss from any European site as a result of the construction, operation or decommissioning of the Proposed Development.

Likely significant effects will not occur as a result of direct habitat loss. This is the case in the absence of mitigation measures.

The site is hydrologically connected to a number of European sites supporting marine and/or coastal habitats via the Burnfoot River, Lough Swilly and the North Atlantic. Consideration is then given as to whether or not the Proposed Development could indirectly affect the qualifying habitats of any of those European sites.

Habitat Deterioration

There is potential for elevated concentrations of suspended sediments or contaminants arising as a result of construction and maintenance activities in the marine environment to result in a reduction in water quality and habitat deterioration of qualifying Annex I marine and/or coastal habitats in Lough Swilly SAC. The site is located 1.8 km downstream from the Proposed Scheme.

The nearest SPA site with wetland habitat as a special conservation interest is Lough Swilly SPA located 240m downstream from the site of Proposed Scheme.

Any elevated concentrations of suspended sediments or localised polluting events arising at construction at the site of the Proposed Scheme would decrease in the water column of the open sea beyond Lough Swilly over time and with distance and across the normal tidal cycle as sediments and concentrations of pollutants disperse and dilute to background levels. Mobilised suspended sediments and pollutants cannot remain in a concentrated plume across 15+ km of dispersion through the currents and wave action and across the tidal

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cycles experienced before reaching European sites at these distances. These sites are far beyond the reach of any reasonably predicted temporary sediment plumes or pollution events.

As such, there is only potential for likely significant effects from habitat deterioration with respect to the on the Annex I marine or coastal habitats of Lough Swilly SAC / SPA. There are no likely significant effects on any other European Site within 15km of the Proposed Scheme.

4.3.3 Annex IV Species

During construction, species listed on Annex IV of the Habitats Directive may be disturbed by the presence and movement of personnel and machinery and aerial noise from construction activities.

Observations made during overwintering waterbird surveys of the site confirmed the presence of Otter in the vicinity of the Proposed Scheme.

In the absence of mitigation, likely significant effects on Annex IV species of Lough Swilly SAC as a result of aerial noise or visual disturbance during works at Burnfoot cannot be excluded.

There are no likely significant effects on any other European Site within 15km of the Proposed Scheme.

4.3.4 Birds Directive species risks

During construction, overwintering waterbirds may be disturbed by the presence and movement of personnel and machinery and aerial noise from construction activities in and around Inch Levels. In the absence of any survey information, it is unknown what species of waterbirds may be disturbed and whether or not they are also special conservation interests of any SPA.

Provisional findings from ongoing overwintering waterbird surveys have not highlighted the area of Proposed Scheme to host high concentrations of overwintering waterbirds.

During operation, activities would be considered to be similar to those already occurring at Burnfoot and would not likely give rise to increased disturbance as a result.

The closest SPA designated for breeding birds is Lough Swilly SPA, located 240 m west. There is a potential for risk that aerial noise or visual disturbance during works at Burnfoot could have an impact upon breeding seabirds and wildfowl at Lough Swilly SPA.

As such, there is only potential for likely significant effects from aerial noise or visual disturbance with respect to the on the Qualifying Interests of Lough Swilly SPA. There are no likely significant effects on any other European Site within 15km of the Proposed Scheme.

4.3.5 Evaluation

The foregoing sections have identified that there is potential for likely significant effects under a range of impact pathways. The European sites identified in section 4.1 must be evaluated with respect to their QIs and SCIs, and in light of the COs set for those sites where an impact pathway exists.

A total of thirty QIs of one SAC and one SPA were considered for the potential for these types of effects to interact with them as a result of the construction of the Proposed Scheme.

4.3.6 Terrestrial habitat QIs

Of the five SAC QI features considered, two are terrestrial features not connected by an impact pathway to the construction of the Proposed Scheme: These features are listed below:

- Old sessile oak woods [91A0]

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- Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) [1330]

As such, effects on the COs of this terrestrial QI cannot occur. Likely significant effects can be excluded at the screening stage. That is the case in the absence of mitigation measures for the following European sites.

4.3.7 Coastal habitat QIs

Of the five SAC QI features considered, two are coastal features which occur in the intertidal or supralittoral zones.

- Estuaries [1130]
- Coastal lagoons [1150]

Conservation objectives set for these coastal features aim to define the favourable conservation condition of the habitats (or species) by setting targets for area; range; and structure and function, with this latter group broken down into a number of attributes, including physical structure, vegetation structure and vegetation composition at a particular site.

Lough Swilly SAC is located 1.8 km from the Proposed Scheme. The site contains Annex I (and priority Annex I) habitats. All other European sites containing coastal habitats are located in excess of 15 km from the Proposed Scheme.

In the absence of mitigation and further specialist evaluation and analysis demonstrating the predicted extent of sediment plumes arising during construction stage activities then the risk of habitat deterioration as a result of interference with the sediment supply cannot be discounted for Lough Swilly SAC at construction stage.

4.4 In-Combination Effects

Article 6(3) of the Habitats Directive requires that in-combination effects with other plans or projects are also considered. As set out in the Commission's 2018 Notice (EC, 2019), significance of effect will vary depending on factors such as magnitude of impact, type, extent, duration, intensity, timing, probability, cumulative effects and the vulnerability of the habitats and species concerned. The significance of any identified combined effects of the Proposed Development alongside other past, present or reasonably foreseeable future plans or projects must be evaluated.

In that context, plans or projects which are completed, approved but uncompleted, or proposed have been considered. EC (2019) specifically advises that "as regards other proposed plans or projects, on grounds of legal certainty it would seem appropriate to restrict the in-combination provision to those which have been actually proposed, i.e. for which an application for approval or consent has been introduced".

Having consulted the Donegal County Council Planning Portal, there are no additional projects which will be considered for their potential in-combination effects.

5. CONCLUSIONS OF THE STAGE 1 SCREENING APPRAISAL

The Stage 1 screening appraisal was completed in compliance with EU and Irish law and relevant European Commission and national guidelines to determine whether or not Likely Significant Effects on any European site could be excluded as a result of the construction, operation or decommissioning of the Proposed Development.

The Proposed Development is not directly connected with or necessary to the management of any European site.

The outcome of the Stage 1 screening appraisal is summarised in Table 5.1 for SACs and Table 5.2 for SPAs.

5.1 Summary

From the findings of the screening stage appraisal presented, the possibility of Likely Significant Effects cannot be excluded for the following European sites and QIs at the screening stage, in the absence of further evaluation and analysis and/or mitigation measures:

- **Lough Swilly SAC**
 - Estuaries [1130]
 - Coastal Lagoons [1150]
 - Otter [1355]
- **Lough Swilly SPA**
 - All 24 No. SCI bird species
 - Wetland habitats [A999]

It can be excluded, on the basis of objective information and in the absence of reasonable scientific doubt, that the Proposed Development will have a significant effect on the remaining SAC sites considered. As summarised in Table 5.1, that is the case in the absence of mitigation measures.

5.2 Next Steps

Having regard to the methodology employed and the findings of the Stage 1 screening appraisal, it is concluded that a Stage 2 appraisal for appropriate assessment of the implications of the Proposed Development is required.

A Natura Impact Statement (“NIS”) must be prepared in accordance with relevant guidance and the PDA, and shall focus on the likely significant effects identified for the QIs of SACs and SPAs identified in Section 5.1 as a result of the Proposed Scheme.

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Table 5.1: Outcome of Stage 1 screening appraisal for SACs (sites and QIs with likely significant effects shaded grey)

Site Name	Qualifying Interest (QI)	Can Likely Significant Effects be excluded at the screening stage?	Why?
Lough Swilly SAC	Estuaries [1130]	No	Risk of habitat deterioration effects
	Coastal lagoons [1150]	No	Risk of habitat deterioration effects
	Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330]	Yes	No pathway of effect
	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) [6410]	Yes	No pathway of effect
	Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0]	Yes	No pathway of effect
	Lutra lutra (Otter) [1355]	No	Risk of disturbance to or displacement of individuals outside of the SAC

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Table 5.2: Outcome of Stage 1 screening appraisal for SPAs (sites and QIs with likely significant effects shaded grey)

Site Name	Qualifying Interest (QI)	Can Likely Significant Effects be excluded at the screening stage?	Why?
Lough Swilly SPA	Great Crested Grebe (<i>Podiceps cristatus</i>) [A005]	No	Risk of disturbance to or displacement of individuals
	Grey Heron (<i>Ardea cinerea</i>) [A028]	No	
	Whooper Swan (<i>Cygnus cygnus</i>) [A038]	No	
	Greylag Goose (<i>Anser anser</i>) [A043]	No	
	Shelduck (<i>Tadorna tadorna</i>) [A048]	No	
	Wigeon (<i>Anas penelope</i>) [A050]	No	
	Teal (<i>Anas crecca</i>) [A052]	No	
	Mallard (<i>Anas platyrhynchos</i>) [A053]	No	
	Shoveler (<i>Anas clypeata</i>) [A056]	No	
	Scaup (<i>Aythya marila</i>) [A062]	No	
	Goldeneye (<i>Bucephala clangula</i>) [A067]	No	
	Red-breasted Merganser (<i>Mergus serrator</i>) [A069]	No	
	Coot (<i>Fulica atra</i>) [A125]	No	
	Oystercatcher (<i>Haematopus ostralegus</i>) [A130]	No	
	Knot (<i>Calidris canutus</i>) [A143]	No	
	Dunlin (<i>Calidris alpina</i>) [A149]	No	
	Curlew (<i>Numenius arquata</i>) [A160]	No	
	Redshank (<i>Tringa totanus</i>) [A162]	No	
Greenshank (<i>Tringa nebularia</i>) [A164]	No		
Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179]	No		

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Site Name	Qualifying Interest (QI)	Can Likely Significant Effects be excluded at the screening stage?	Why?
	Common Gull (<i>Larus canus</i>) [A182]	No	
	Sandwich Tern (<i>Sterna sandvicensis</i>) [A191]	No	
	Common Tern (<i>Sterna hirundo</i>) [A193]	No	
	Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>) [A395]	No	
	Wetland and Waterbirds [A999]	No	Risk of habitat deterioration effects

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