Comhairle Contae Fhine Gall
Fingal County Council

An Roinn um Pleanáil agus Infrastruchtúr Straitéiseach
Planning and Strategic Infrastructure Department

Fingal Development Plan 2011-2017

Proposed Variation

Lands at Ballycoolin, Blanchardstown, Dublin 15

Screening for Appropriate Assessment

February 2014

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1 INTRODUCTION

1.1 BACKGROUND

This report comprises information in support of screening for an Appropriate Assessment in line with the requirements of Article 6(3) of the EU Habitats Directive (Directive 92/43/EEC) of the proposed variation to the Fingal County Development Plan 2011-2017 in Blanchardstown Dublin 15. The report has taken into consideration the European Commissions publication- *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*, Circular Letter SEA 1/08 & NPWS 1/08 from the Department of the Environment, Heritage and Local Government, the Planning and Development Acts 2000-2010 and *Appropriate Assessment of Plans and Project in Ireland –Guidance for Planning Authorities* (February 2010) from the Department of the Environment, Heritage and Local Government.

1.2 LEGISLATIVE CONTEXT

The Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora, better known as "The Habitats Directive", provides legal protection for habitats and species of European importance. Articles 3 to 9 provide the legislative means to protect habitats and species of Community interest through the establishment and conservation of an EU-wide network of sites known as Natura 2000. These are Special Areas of Conservation (SACs) designated under the Habitats Directive and Special Protection Areas (SPAs) designated under the Conservation of Wild Birds Directive (79/409/ECC).

Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to affect Natura 2000 sites (Annex 1.1). Article 6(3) establishes the requirement for Appropriate Assessment (AA):

Any plan or project not directly connected with or necessary to the management of the [Natura 2000] site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subjected to appropriate assessment of its implications for the site in view of the site's conservation objectives. In 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.

Article 6(4) states '*If, in spite of a negative assessment of the implications for the [Natura 2000] site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, Member States shall take all compensatory measures*

necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted'.

Where the site concerned hosts a priority natural habitat type and/or a priority species the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest. The Habitats Directive is implemented in Ireland by the European Communities (Natural Habitats) Regulations SI 94/1997.

1.3 SCREENING OF APPROPRIATE ASSESSMENT

This Appropriate Assessment has been prepared in accordance with the European Commission Environment DG document *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, referred to as the "EC Article 6 Guidance Document (EC2000)". The guidance within this document provides a non-mandatory methodology for carrying out assessments required under Article 6(3) and 6(4) of the Habitats Directive, and are viewed as an interpretation of the EU Commission's document "*Managing Natura 2000 sites: The Provisions of Article 6 of the Habitats Directive 92/43/EEC", referred to as "MN2000*".

This Assessment has also has taken into consideration the Department of the Environment, Heritage and Local Government publication *Appropriate Assessment of Plans and Project in Ireland – Guidance for Planning Authorities* (February 2010).

In complying with the obligations under Article 6(3) and following the EC2000 and MN2000 Guidelines, this AA has been structured as a stage by stage approach as follows:

Screening stage

- Description of the plan;
- Identification of Natura 2000 sites potentially affected;
- Identification and description of individual and cumulative impacts likely to result;
- Assessment of the significance of the impacts identified above on site integrity;
- Exclusion of sites where it can be objectively concluded that there will be no significant effects;
- Screening conclusion.

The Habitats Directive promotes a hierarchy of avoidance, mitigation and compensatory measures. First, the plan should aim to avoid any negative impacts on European sites by identifying possible impacts early in the plan-making, and writing the plan in order to avoid such impacts. Second, mitigation measures should be applied, if necessary, during

the AA process to the point where no adverse impacts on the site(s) remain. If the plan is still likely to result in adverse effects, and no further practicable mitigation is possible, then it is rejected. If no alternative solutions are identified and the plan is required for imperative reasons of overriding public interest (IROPI test) under Article 6(4) of the Habitats Directive, then compensation measures are required for any remaining adverse effect.

2 SCREENING OF PROPOSED CHANGE IN ZONING

2.1 DESCRIPTION OF THE PLAN AND SITE CHARACTERISTICS

This site comprises approximately 16.4 hectares of land in North-West Blanchardstown located approximately 2.5km from Blanchardstown Centre. The site adjoins to the north Ballycoolin Road/Rosemount Business Park. To the west it adjoins Snugborough Road/ IDA industrial park. To the south it adjoins 'Open Space' lands/National Sports Campus/ National Aquatic Centre. The Tolka River Valley and James Connolly Hospital are further south.

The land-bank is zoned 'RU'- 'Protect and promote in a balanced way, the development of agriculture and rural-related enterprise, biodiversity, the rural landscape, and the built and cultural heritage.'

There are a number of built structures on site:

- Agricultural out-buildings
- Farmhouse

There is a Local Objective on the lands - LO 482 – Prepare a study on the optimum use of lands and the provision of employment-creating sites along the Metro West route.

2.2 DESCRIPTION OF PROPOSED VARIATION

This variation is to allow for the change in zoning of land, zoned 'RU'- 'Protect and promote in a balanced way, the development of agriculture and rural-related enterprise, biodiversity, the rural landscape, and the built and cultural heritage' to HT – 'Provide for office, research and development and high technology/high technology manufacturing type employment in a high quality built and landscaped environment'.

2.3 BRIEF DESCRIPTION OF THE NATURA 2000 SITES

This section of the screening process describes the Natura 2000 sites within a 15km radius of the Plan Area. A 15km buffer zone has been chosen as a precautionary measure, to ensure that all potentially affected Natura 2000 sites are included in the screening process, which is in line with *Appropriate Assessment of Plans and Projects in Ireland –*

Guidance for Planning Authorities produced by the Department of the Environment, Heritage and Local Government.

Table 2.1a and Table 2.1b lists the Natura 2000 sites that are within 15km of the plan area and Figure 1 shows their locations in relation to the plan area. The qualifying features for each site area have been obtained through a review of the site synopses available from the NPWS website.

TABLE 2.1a SPAs located within 15km of the site.

Site Code	Site Name	Approximate distance from Natura 2000 Site	Qualifying Feature Annex I Species	Likely Impacts
004016	Baldoyle Bay	14.4km	Golden plover and Bar tailed Godwit	
004025	Broadmeadow/Swords Estuary SPA	12.4km	Golden Plover, Bar-tailed Godwit and Ruff.	
004006	North Bull Island SPA	12.7km	Light-bellied Brent Goose, Shelduck, Teal, Pintail, Shoveler, Oystercatcher, Ringed Plover, Golden Plover, Grey Plover, Knot, Sanderling, Dunlin, Black-tailed Godwit, Bar-tailed Godwit, Curlew, Redshank, Turnstone and Black-headed Gull.	
004024	South Dublin Bay and River Tolka Estuary SPA	9.8km	Light-bellied Brent Goose, Oystercatcher, Golden Plover, Grey Plover, Knot, Sanderling, Bar-tailed Godwit, Redshank, Black-headed Gull, Roseate Tern, Common Tern and Arctic Tern.	At a sufficient distance from the Plan area to not be impacted directly or indirectly.

Baldoyle Bay (Site Code 004016)

The site comprises a relatively small estuarine system in north County Dublin. It receives the flows of the Mayne and Sluice rivers, both of which drain an agricultural / suburban catchment. Much of the estuary is sheltered from the sea by a large sand dune peninsula

(now mostly a golf course). Sediments in the inner sheltered areas are mostly muds or muddy sands, often with a high organic content. Towards Portmarnock Point, the sediments are predominantly well-aerated sands. In addition to the intertidal flats and salt marsh habitats, a small area of sand hills and sandy beach at Portmarnock Point is included in the site.Baldoyle Bay is a typical eastern estuarine system with fairly extensive intertidal sand and mud flats which have Zostera spp. It also has good salt marsh fringes where birds roost. The quality of habitats present is variable but generally good. The site supports a good diversity of wintering waterfowl and notably an internationally important population of Branta bernicla hrota. It has nationally important populations of Tadorna tadorna, Anas acuta, Charadrius hiaticula, Pluvialis apricaria, Pluvialis squatarola and Limosa lapponica. At high tide the shallow waters regularly attract species such as Podiceps cristatus and Mergus serrator. Sterna albifrons formerly bred at the site, but not since the early 1990s.

Broadmeadow/Swords Estuary SPA (Site Code 004025)

This site is situated in north Co. Dublin, between the towns of Malahide and Swords. It is the estuary of the River Broadmeadow, a substantial river which drains a mainly agricultural, though increasingly urbanised, catchment. A railway viaduct, built in the 1800s, crosses the site and has led to the inner estuary becoming lagoonal in character and only partly tidal. Much of the outer part of the estuary is well-sheltered from the sea by a large sand spit, known as "The Island". This spit is now mostly converted to golf-course. The outer part empties almost completely at low tide and there are extensive intertidal flats exposed. The site extends eastwards to the rocky shore at Robswalls. Substantial stands of eelgrass (both *Zostera noltii* and *Z. angustifolia*) occur in the sheltered part of the outer estuary, along with Tasselweed (*Ruppia maritima*). Green algae, mostly *Enteromorpha* spp. and *Ulva lactuca*, are frequent on the sheltered flats. Common Cord-grass (*Spartina anglica*) is well established in the outer estuary and also in the innermost part of the site. The intertidal flats support a typical macroinvertebrate fauna, with polychaete worms (*Arenicola marina* and *Hediste diversicolor*), bivalves such as *Cerastoderma edule*, *Macoma balthica* and *Scrobicularia plana*, the small gastropod *Hydrobia ulvae* and the crustacean *Corophium volutator*. Salt marshes, which provide important roosts during high tide, occur in parts of the outer estuary and in the extreme inner part of the inner estuary. These are characterised by such species as Sea Purslane (*Halimione portulacoides*), Sea Aster (*Aster tripolium*), Thrift (*Armeria maritima*), Sea Arrowgrass (*Triglochin maritima*) and Common Saltmarsh-grass (*Puccinellia maritima*). This site is of high importance for wintering waterfowl and supports a particularly good diversity of species. It has an internationally important population of Brent Goose (956) or 4.8% of the national total (figures given here and below are average maximum counts for the five winters 1995/96-1999/00) and nationally important populations of a further 12 species as follows: Shelduck (439), Pintail (58), Goldeneye (215), Red-breasted Merganser (105), Oystercatcher (1,493), Golden Plover (1,843), Grey Plover (201), Knot (915), Dunlin (1,594), Black-tailed Godwit (409), Redshank (581) and Greenshank (38). A range of other species occur in numbers of

regional importance, including Great Crested Grebe, Mute Swan, Pochard, Ringed Plover, Lapwing, Bar-tailed Godwit, Curlew and Turnstone. The high numbers of diving ducks reflects the lagoon-type nature of the inner estuary, and this is one of the few sites in eastern Ireland where substantial numbers of Goldeneye can be found. The estuary also attracts on a regular basis migrant wader species such as Ruff, Curlew Sandpiper, Spotted Redshank, Green Sandpiper and Little Stint. These occur mainly in autumn, though occasionally in spring and winter. Breeding birds of the site include Ringed Plover, Shelduck and Mallard. Up to the 1950s there was a major tern colony at the southern end of Malahide Island. Grey Herons breed nearby and feed regularly within the site. The inner part of the estuary is heavily used for water sports, which causes disturbance to the bird populations. A section of the outer estuary has recently been in-filled for a marina and housing development. Broadmeadow/Swords Estuary SPA is a fine example of an estuarine system, providing both feeding and roosting areas for a range of wintering waterfowl. The lagoonal nature of the inner estuary is of particular value as it increases the diversity of birds which occur. The site is of high conservation importance, with an internationally important population of Brent Goose and nationally important populations of a further 12 species. Three of the species which occur regularly (Golden Plover, Bar-tailed Godwit and Ruff) are listed on Annex I of the E.U. Birds Directive.

North Bull Island (Site Code 004006)

This site covers all of the inner part of north Dublin Bay, with the seaward boundary extending from the Bull Wall lighthouse across to Drumleck Point at Howth Head. The North Bull Island sand spit is a relatively recent depositional feature, formed as a result of improvements to Dublin Port during the 18th and 19th centuries. It is almost 5 km long and 1 km wide and runs parallel to the coast between Clontarf and Sutton. Part of the interior of the island has been converted to golf courses. A well-developed and dynamic dune system stretches along the seaward side of the island. Various types of dunes occur, from fixed dune grassland to pioneer communities on foredunes. Marram Grass (*Ammophila arenaria*) is dominant on the outer dune ridges. Species of the fixed dunes include Wild Pansy (*Viola tricolor*), Kidney Vetch (*Anthyllis vulneraria*), Bird's-foot Trefoil (*Lotus corniculatus*), Pyramidal Orchid (*Anacamptis pyramidalis*) and, in places, the scarce Bee Orchid (*Ophrys apifera*). A feature of the dune system is a large dune slack with a rich flora, usually referred to as the 'Alder Marsh' because of the presence of Alder (*Alnus glutinosa*) trees. The water table is very near the surface and is only slightly brackish. Sea Rush (*Juncus maritimus*) is the dominant species, with Meadowsweet (*Filipendula ulmaria*) and Devil's-bit Scabious (*Succisa pratensis*) being frequent. The orchid flora is notably diverse in this area. Saltmarsh extends along the length of the landward side of the island and provides the main roost site for wintering birds in Dublin Bay. On the lower marsh, Glasswort (*Salicornia europaea*), Common Saltmarsh-grass (*Puccinellia maritima*), Annual Seablite (*Suaeda maritima*) and Greater Sea-spurrey (*Spergularia media*) are the main species. Higher up in the middle marsh Sea Plantain (*Plantago maritima*), Sea Aster (*Aster tripolium*), Sea Arrowgrass (*Triglochin maritima*) and Thrift (*Armeria maritima*) appear. Above the mark of the normal high tide, species such as Common Scurvygrass (*Cochlearia officinalis*) and Sea Milkwort (*Glaux*

maritima) are found, while on the extreme upper marsh, Sea Rush and Saltmarsh Rush (*Juncus gerardi*) are dominant.

The island shelters two intertidal lagoons which are divided by a solid causeway. These lagoons provide the main feeding grounds for the wintering waterfowl. The sediments of the lagoons are mainly sands with a small and varying mixture of silt and clay. Tasselweed (*Ruppia maritima*) and small amounts of Eelgrass (*Zostera* spp.) are found in the lagoons. Common Cord-grass (*Spartina anglica*) occurs in places. Green algal mats (*Enteromorpha* spp., *Ulva lactuca*) are a feature of the flats during summer. These sediments have a rich macro-invertebrate fauna, with high densities of Lugworm (*Arenicola marina*) and Ragworm (*Hediste diversicolor*). Mussels (*Mytilus edulis*) occur in places, along with bivalves such as *Cerastoderma edule*, *Macoma balthica* and *Scrobicularia plana*. The small gastropod *Hydrobia ulvae* occurs in high densities in places, while the crustaceans *Corophium volutator* and *Carcinus maenas* are common. The sediments on the seaward side of North Bull Island are mostly sands and support species such as Lugworm and the Sand Mason (*Lanice conchilega*). The site includes a substantial area of the shallow marine bay waters.

The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Light-bellied Brent Goose, Shelduck, Teal, Pintail, Shoveler, Oystercatcher, Ringed Plover, Golden Plover, Grey Plover, Knot, Sanderling, Dunlin, Black-tailed Godwit, Bar-tailed Godwit, Curlew, Redshank, Turnstone and Black-headed Gull. The site is also of special conservation interest for holding an assemblage of over 20,000 wintering waterbirds. The E.U. Birds Directive pays particular attention to wetlands and, as these form part of this SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds.

The North Bull Island SPA is of international importance for waterfowl on the basis that it regularly supports in excess of 20,000 waterfowl. It also qualifies for international importance as the numbers of three species exceed the international threshold – Light-bellied Brent Goose (1,548), Black-tailed Godwit (367) and Bartailed Godwit (1,529) (all waterfowl figures given are average maxima for the five winters 1995/96 to 1999/00). The site is the top site in the country for both of these species. A further 14 species have populations of national importance – Shelduck (1,259), Teal (953), Pintail (233), Shoveler (141), Oystercatcher (1,784), Ringed Plover (139), Golden Plover (1,741), Grey Plover (517), Knot (2,623), Sanderling (141), Dunlin (3,926), Curlew (937), Redshank (1,431) and Turnstone (157). The populations of Pintail and Knot are of particular note as they comprise more than 10% of the respective national totals. Species such as Grey Heron, Cormorant, Wigeon, Goldeneye, Red-breasted Merganser and Greenshank are regular in winter in numbers of regional or local importance. Gulls are a feature of the site during winter, especially Black-headed Gull (2,196). Common Gull (332) and Herring Gull (331) also occur here. While some of the birds also frequent South Dublin Bay and the River Tolka Estuary for feeding and/or roosting purposes, the majority remain within the site for much of the winter. The wintering bird populations have been monitored more or less continuously since the late 1960s and the site is now surveyed each winter as part of the larger Dublin Bay complex.

The North Bull Island SPA is a regular site for passage waders, especially Ruff, Curlew Sandpiper and Spotted Redshank. These are mostly observed in single figures in autumn but occasionally in spring or winter. The site formerly had an important colony of Little

Tern but breeding has not occurred in recent years. Several pairs of Ringed Plover breed, along with Shelduck in some years. Breeding passerines include Skylark, Meadow Pipit, Stonechat and Reed Bunting. The island is a regular wintering site for Short-eared Owl, with up to 5 present in some winters.

The site has five Red Data Book vascular plant species, four rare bryophyte species, and is nationally important for three insect species. The rare liverwort, *Petalophyllum ralfsii*, was first recorded from the North Bull Island in 1874 and its presence here has recently been re-confirmed. This species is of high conservation value as it is listed on Annex II of the E.U. Habitats Directive. A well-known population of Irish Hare is resident on the island.

The main land uses of this site are amenity activities and nature conservation. The North Bull Island is one of the main recreational beaches in Co. Dublin and is used throughout the year. Two separate Statutory Nature Reserves cover much of the island east of the Bull Wall and the surrounding intertidal flats. North Bull Island is also a Wildfowl Sanctuary, a Ramsar Convention site, a Biogenetic Reserve, a Biosphere Reserve and a Special Area Amenity Order site. Much of the SPA is also a candidate Special Area of Conservation. The site is used regularly for educational purposes and there is a manned interpretative centre on the island. The North Bull Island SPA is an excellent example of an estuarine complex and is one of the top sites in Ireland for wintering waterfowl. It is of international importance on account of both the total number of waterfowl and the individual populations of Lightbellied Brent Goose, Black-tailed Godwit and Bar-tailed Godwit that use it. Also of significance is the regular presence of several species that are listed on Annex I of the E.U. Birds Directive, notably Golden Plover and Bar-tailed Godwit, but also Ruff and Short-eared Owl.

South Dublin Bay and Rover Tolka Estuary SPA (Site code 004024):

The South Dublin Bay and River Tolka Estuary SPA comprises a substantial part of Dublin Bay. It includes the intertidal area between the River Liffey and Dun Laoghaire, and the estuary of the River Tolka to the north of the River Liffey, as well as Booterstown Marsh. A portion of the shallow marine waters of the bay is also included. In the south bay, the intertidal flats extend for almost 3 km at their widest. The sediments are predominantly well-aerated sands. Several permanent channels exist, the largest being Cockle Lake. A small sandy beach occurs at Merrion Gates, while some bedrock shore occurs near Dun Laoghaire. The landward boundary is now almost entirely artificially embanked. The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Light-bellied Brent Goose, Oystercatcher, Ringed Plover, Golden Plover, Grey Plover, Knot, Sanderling, Dunlin, Bar-tailed Godwit, Redshank, Black-headed Gull, Roseate Tern, Common Tern and Arctic Tern. The E.U. Birds Directive pays particular attention to wetlands, and as these form part of the SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds. The site is an important site for wintering waterfowl, being an integral part of the internationally important Dublin Bay complex. The south bay is an important tern roost in the autumn (mostly late July to September). Birds also use the Dalkey Islands to the south. The South Dublin Bay and River Tolka Estuary SPA

is of international importance for Light-bellied Brent Goose and of national importance for nine other waterfowl species.

TABLE 2.1b SACs located within 15km of the site.

Site Code	Site Name	Approximate distance for Plan Area	Qualifying Feature		Likely Impacts
			Annex I Species/Habitat	**Annex II habitat**	
000205	Malahide Estuary	12.4km	Tidal mudflats and sandflats, Atlantic salt meadows, *Spartina* swards, Mediterranean salt meadows, *Salicornia* mud, Marram dunes and fixed dunes.		At a sufficient distance from the Plan area to not be impacted directly or indirectly
000199	Baldoyle Bay	14.4km	Tidal mudflats and sandflats, Atlantic salt meadows, *Spartina* swards, Mediterranean salt meadows and *Salicornia* mud.		At a sufficient distance from the Plan area to not be impacted directly or indirectly
000206	North Dublin Bay	12.7km	Tidal mudflats and sandflats, Atlantic salt meadows, *Spartina* swards, Mediterranean salt meadows, *Salicornia* mud, Marram dunes, fixed dunes, Embryonic shifting dunes and annual vegetation of drift lines.	*Petalophyllum ralfsii* (Petalwort)	At a sufficient distance from the Plan area to not be impacted directly or indirectly

000210	South Dublin Bay	12.2km	Tidal mudflats and sandflats.		At a sufficient distance from the Plan area to not be impacted directly or indirectly
001398	Rye Water Valley/Carton	9.5km	Kingfisher	Vertigo angustior; Vertigo moulinsiana. Mineral spring	At a sufficient distance from the Plan area to not be impacted directly or indirectly

Malahide Estuary (Site Code 000205)

Malahide Estuary is situated immediately north of Malahide and east of Swords. It is the estuary of the River Broadmeadow. The site is divided by a railway viaduct built in the 1800s. The outer part of the estuary is mostly cut off from the sea by a large sand spit, known as "the island". The outer estuary drains almost completely at low tide, exposing sand and mud flats. There is a large bed of Eelgrass (*Zostera noltii* and *Z. angustifolium*) in the north section of the outer estuary, along with Tassel Weed (*Ruppia maritima*) and extensive mats of green algae (*Enteromorpha* spp., *Ulva lactuca*). Cordgrass (*Spartina anglica*) is also widespread in this sheltered part of the estuary. The dune spit has a well developed outer dune ridge dominated by Marram Grass (*Ammophila arenaria*). The dry areas of the stabilised dunes have a dense covering of Burnet Rose (*Rosa pimpinellifolia*), Red Fescue (*Festuca rubra*) and species such as Yellow Wort (*Blackstonia perfoliata*), Field Gentian (*Gentianella amarella*), Hound's Tongue (*Cynoglossum officinale*), Carline Thistle (*Carlina vulgaris*) and Pyramidal Orchid (*Anacamptis pyramidalis*). Much of the interior of the spit is taken up by a golf course. The inner stony shore has frequent Sea-holly (*Eryngium maritimum*). Well-developed saltmarshes occur at the tip of the spit. Atlantic salt meadow is the principle type and is characterised by species such as Sea Purslane (*Halimoine portulacoides*), Sea Aster (*Aster tripolium*), Thrift (*Armeria maritima*), Sea Arrowgrass (*Triglochin maritima*) and Common Saltmarsh-grass (*Puccinellia maritima*). Elsewhere in the outer estuary, a small area of Mediterranean salt meadow occurs which is characterised by the presence of Sea Rush (*Juncus maritimus*). Below the salt marshes there are good examples of pioneering Glasswort swards and other annual species, typified by *Salicornia dolichostachya* and Annual Sea-blite *(Suaeda*

maritima). The inner estuary does not drain at low tide apart from the extreme inner part. Here, patches of saltmarsh and salt meadows occur, with Sea Aster, Sea Plantain (*Plantagomaritima*) and Sea Clubrush (*Scirpus maritimus*). Tassel Weed (*Ruppia maritima*) occurs in one of the channels. The site includes a fine area of rocky shore south-east of Malahide and extending towards Portmarnock. This represents the only continuous section through the fossiliferous Lower Carboniferous rocks in the Dublin Basin, and is the type locality for several species of fossil coral. The estuary is an important wintering bird site and holds an internationally important population of Brent Geese and nationally important populations of a further 15 species. Average maximum counts during the 1995/96-1997/98 period were Brent Geese 1217; Great Crested Grebe 52; Mute Swan 106; Shelduck 471; Pochard 200; Goldeneye 333; Red-breasted Merganser 116; Oystercatcher 1228; Golden Plover 2123; Grey Plover 190; Redshank 454; Wigeon 50; Teal 78; Ringed Plover 106; Knot 858; Dunlin 1474; Greenshank 38; Pintail 53; Black-tailed Godwit 345; Bar-tailed Godwit 99. The high numbers of diving birds reflects the lagoon-type nature of the inner estuary. The estuary also attracts migrant species such as Ruff, Curlew Sandpiper, Spotted Redshank and Little Stint. Breeding birds of the site include Ringed Plover, Shelduck and Mallard. Up to the 1950s there was a major tern colony at the southern end of the island and the habitat remains suitable for these birds. The inner part of the estuary is heavily used for water sports. A section of the outer estuary has recently been infilled for a marina and housing development. This site is a fine example of an estuarine system with all the main habitats represented. The site is important ornithologically, with a population of Brent Geese of international significance.

Baldoyle Bay (Site Code 000199)

Baldoyle Bay extends from just below Portmarnock village to the west pier at Howth, Co. Dublin. It is a tidal estuarine bay protected from the open sea by a large sanddune system. Two small rivers, the Mayne and the Sluice, flow into the bay. The site contains four habitats listed on Annex I of the EU Habitats directive: *Salicornia* mud, Mediterranean salt meadows, Atlantic salt meadows and Tidal mudflats. Large areas of intertidal flats are exposed at low tide. These are mostly sands but grade to muds in the inner sheltered parts of the estuary. Extensive areas of Common Cord-grass (*Spartina anglica*) occur in the inner estuary. Both the Narrow-leaved Eelgrass (*Zostera angustifolia*) and the Dwarf Eelgrass (*Z. noltii*) are also found here. During summer, the sandflats of the sheltered areas are covered by mats of green algae (*Enteromorpha* spp. and *Ulva lactuca*). The sediments have a typical macrofauna, with Lugworm (*Arenicola marina*) dominating the sandy flats. The tubeworm *Lanice conchilega* is present in high densities at the low tide mark and the small gastropod *Hydrobia ulvae* occurs in the muddy areas, along with the crustacean *Corophium volutator*.Areas of saltmarsh occur near Portmarnock Bridge and at Portmarnock Point, with narrow strips along other parts of the estuary. Species such as Glasswort (*Salicornia* spp.), Sea-purslane (*Halimione portulacoides*), Sea Plantain (*Plantago maritima*) and Sea Rush (*Juncus maritimus*) are found here. Portmarnock Spit formerly had a welldeveloped sand dune system but this has been largely replaced by golf courses and is mostly excluded from the site. A few dune hills are still intact at Portmarnock Point, and there are small dune hills east of Cush Point and below the Claremont Hotel. These are mostly dominated by Marram (*Ammophila arenaria*), though

Lyme-grass (*Leymus arenarius*) is also found. The site includes a brackish marsh along the Mayne River. Soils here have a high organic content and are poorly drained, and some pools occur. Rushes (*Juncus* spp.) and salt tolerant species such as Common Scurvygrass (*Cochleria officinalis*) and Greater Sea-spurrey (*Spergularia media*) are typical of this area. Knotted Hedgeparsley (*Torilis nodosa*), a scarce plant in eastern Ireland, has been recorded here, along with Brackish Water-crowfoot (*Ranunculus baudotti*), a species of brackish pools and ditches which has declined in most places due to habitat loss. Two plant species, legally protected under the Flora (Protection) Order, 1999, occur in the Mayne marsh: Borrer's Saltmarsh-grass (*Puccinellia fasciculata*) and Meadow Barley (*Hordeum secalinum*).
Baldoyle Bay is an important bird site for wintering waterfowl and the inner part of the estuary is a Special Protection Area under the EU Birds Directive as well as being a Statutory Nature Reserve. Internationally important numbers of Pale-bellied Brent Geese (418) and nationally important numbers of two Annex I Birds Directive species - Golden Pover (1,900) and Bar-tailed Godwit (283) - have been recorded. Four other species also reached nationally important numbers: Shelduck (147), Pintail (26), Grey Plover (148) and Ringed Plover (218) - all figures are average peaks for four winters 1994/95 to 1997/1998. Breeding wetland birds at the site include Shelduck, Mallard and Ringed Plover. Small numbers of Little Tern, a species listed on Annex I of the EU Birds Directive, have bred on a few occasions at Portmarnock Point but not since 1991. Because the area surrounding Baldoyle Bay is densely populated, the main threats to the site include visitor pressure, disturbance to wildfowl and dumping. In particular, the dumping of spoil onto the foreshore presents a threat to the value of the site. Baldoyle Bay is a fine example of an estuarine system. It contains four habitats listed on Annex I of the EU Habitats Directive and has two legally protected plant species. The site is also an important bird area and part of it is a Special Protection Area under the EU Birds Directive, as well as being a Statutory Nature Reserve. It supports internationally important numbers of Brent Geese and nationally important numbers of six other species including two Annex I Birds Directive species.

North Dublin Bay (Site Code 000206)

This site covers the inner part of north Dublin Bay, the seaward boundary extending from the Bull Wall lighthouse across to the Martello Tower at Howth Head. The North Bull Island is the focal point of this site. The island is a sandy spit which formed after the building of the South Wall and Bull Wall in the 18th and 19th centuries. It now extends for about 5 km in length and is up to 1 km wide in places. A well-developed and dynamic dune system stretches along the seaward side of the island. Various types of dunes occur, from fixed dune grassland to pioneer communities on foredunes. Marram Grass (*Ammophila arenaria*) is dominant on the outer dune ridges, with Lyme Grass (*Leymus arenarius*) and Sea Couchgrass (*Elymus farctus*) on the foredunes. Behind the first dune ridge, plant diversity increases with the appearance of such species as Wild Pansy (*Viola tricolor)*, Kidney Vetch (*Anthyllis vulneraria*), Bird's-foot Trefoil (*Lotus corniculatus*), Rest Harrow (*Ononis repens*), Yellow Rattle (*Rhinanthus minor*) and Pyramidal Orchid (*Anacamptis pyramidalis*). In these grassy areas and slacks, the scarce Bee Orchid

(*Ophrys apifera*) occurs. About 1 km from the tip of the island, a large dune slack with a rich flora occurs, usually referred to as the 'Alder Marsh' because of the presence of Alder trees (*Alnus* spp). The water table is very near the surface and is only slightly brackish. Saltmarsh Rush (*Juncus maritimus*) is the dominant species, with Meadow Sweet (*Filipendula ulmaria*) and Devil's-bit (*Succisa pratensis*) being frequent. The orchid flora is notable and includes Marsh Helleborine (*Epipactis palustris*), Common Twayblade (*Listera ovata*), Autumn Lady's-tresses (*Spiranthes spiralis*) and Marsh orchids (*Dactylorhiza* spp.) Saltmarsh extends along the length of the landward side of the island. The edge of the marsh is marked by an eroding edge which varies from 20 cm to 60 cm high. The marsh can be zoned into different levels according to the vegetation types present. On the lower marsh, Glasswort (*Salicornia europaea*), Saltmarsh Grass (*Puccinellia maritima*), Annual Sea-blite (*Suaeda maritima*) and Greater Sea-spurrey (*Spergularia media*) are the main species. Higher up in the middle marsh Sea Plantain (*Plantago maritima*), Sea Aster (*Aster tripolium*), Sea Arrowgrass (*Triglochin maritima*) and Sea Pink (*Armeria maritima*) appear. Above the mark of the normal high tide, species such as Scurvy Grass (*Cochlearia officinalis*) and Sea Milkwort (*Glaux maritima*) are found, while on the extreme upper marsh, Sea Rushes (*Juncus maritimus* and *J. gerardii*) are dominant. Towards the tip of the island, the saltmarsh grades naturally into fixed dune vegetation. The island shelters two intertidal lagoons which are divided by a solid causeway. The sediments of the lagoons are mainly sands with a small and varying mixture of silt and clay. The north lagoon has an area known as the "*Salicornia* flat", which is dominated by *Salicornia dolichostachya*, a pioneer Glasswort species, and covers about 25 ha. Tassel Weed (*Ruppia maritima)* occurs in this area, along with some Eelgrass (*Zostera angustifolia*). Eelgrass (*Z. noltii*) also occurs in Sutton Creek. Cordgrass (*Spartina anglica*) occurs in places but its growth is controlled by management. Green algal mats (*Enteromorpha* spp., *Ulva lactuca*) cover large areas of the flats during summer. These sediments have a rich macrofauna, with high densities of Lugworms (*Arenicola marina*) in parts of the north lagoon. Mussels (*Mytilus edulis*) occur in places, along with bivalves such as *Cerastoderma edule*, *Macoma balthica* and *Scrobicularia plana*. The small gastropod *Hydrobia ulvae* occurs in high densities in places, while the crustaceans *Corophium volutator* and *Carcinus maenas* are common. The sediments on the seaward side of North Bull Island are mostly sands. The site extends below the low spring tide mark to include an area of the sublittoral zone.

Three Rare plant species legally protected under the Flora Protection Order 1987 have been recorded on the North Bull Island. These are Lesser Centaury (*Centaurium pulchellum*), Hemp Nettle (*Galeopsis angustifolia*) and Meadow Saxifrage (*Saxifraga granulata*). Two further species listed as threatened in the Red Data Book, Wild Sage (*Salvia verbenaca*) and Spring Vetch (*Vicia lathyroides*), have also been recorded. A rare liverwort, *Petalophyllum ralfsii*, was first recorded from the North Bull Island in 1874 and has recently been confirmed as being still present there. This species is of high conservation value as it is listed on Annex II of the E.U. Habitats Directive. The North Bull is the only known extant site for the species in Ireland away from the western seaboard.

North Dublin Bay is of international importance for waterfowl. During the 1994/95 to 1996/97 period the following species occurred in internationally important numbers (figures are average maxima): Brent Geese 2,333; Knot 4,423; Bar-tailed Godwit 1,586.

A further 14 species occurred in nationally important concentrations - Shelduck 1505; Wigeon 1,166; Teal 1,512; Pintail 334; Shoveler 239; Oystercatcher 2,190; Ringed Plover 346; Grey Plover 816; Sanderling 357; Dunlin 6,238; Blacktailed Godwit 156; Curlew 1,193; Turnstone 197 and Redshank 1,175. Some of these species frequent South Dublin Bay and the River Tolka Estuary for feeding and/or roosting purposes (mostly Brent Goose, Oystercatcher, Ringed Plover, Sanderling, Dunlin).
The tip of the North Bull Island is a traditional nesting site for Little Tern. A high total of 88 pairs nested in 1987. However, nesting attempts have not been successful since the early 1990s. Ringed Plover, Shelduck, Mallard, Skylark, Meadow Pipit and Stonechat also nest. A well-known population of Irish Hare is resident on the island The invertebrates of the North Bull Island have been studied and the island has been shown to contain at least seven species of regional or national importance in Ireland (Orders Diptera, Hymenoptera, Hemiptera).
The main landuses of this site are amenity activities and nature conservation. The North Bull Island is the main recreational beach in Co Dublin and is used throughout the year. Much of the land surface of the island is taken up by two golf courses. Two separate Statutory Nature Reserves cover much of the island east of the Bull Wall and the surrrounding intertidal flats. The site is used regularly for educational purposes.
North Bull Island has been designated a Special Protection Area under the E.U. Birds Directive and it is also a statutory Wildfowl Sanctuary, a Ramsar Convention site, a Biogenetic Reserve, a Biosphere Reserve and a Special Area Amenity Order site.
This site is an excellent example of a coastal site with all the main habitats represented. The holds good examples of ten habitats that are listed on Annex I of the E.U. Habitats Directive; one of these is listed with priority status. Several of the wintering bird species have populations of international importance, while some of the invertebrates are of national importance. The site contains a numbers of rare and scarce plants including some which are legally protected. Its proximity to the capital city makes North Dublin Bay an excellent site for educational studies and research.

South Dublin Bay (Site Code 000210)

This site lies south of the River Liffey and extends from the South Wall to the west pier at Dun Laoghaire. It is an intertidal site with extensive areas of sand and mudflats, a habitat listed on Annex I of the E.U. Habitats Directive. The sediments are predominantly sands but grade to sandy muds near the shore at Merrion gates. The main channel which drains the area is Cockle Lake. There is a bed of Eelgrass (*Zostera noltii*) below Merrion Gates which is the largest stand on the east coast. Green algae (*Enteromorpha* spp. and *Ulva lactuca*) are distributed throughout the area at a low density. Fucoid algae occur on the rocky shore in the Maretimo to Dún Laoghaire area. Species include *Fucus spiralis, F. vesiculosus, F. serratus, Ascophyllum nodosum* and *Pelvetia canaliculata.* Several small, sandy beaches with incipient dune formation occur in the northern and western sectors of the site, notably at Poolbeg, Irishtown and Merrion/Booterstown. The formation at Booterstown is very recent. Driftline vegetation occurs in association with the embryonic and incipient fore dunes. Typically drift lines occur in a band approximately 5 m wide, though at Booterstown this zone is wider in places. The habitat occurs just above the High Water Mark and below the area of embryonic dune. Species

pesent are Sea Rocket (*Cakile maritima*), Frosted *Orache (Atriplex laciniata*), Spear-leaved Orache (*A. prostrata*), Prickly Saltwort (*Salsola kali*) and Fat Hen (*Chenopodium album*). Also occurring is Sea Sandwort (*Honkenya peploides*), Sea Beet (*Beta vulgaris*) and Annual Sea-blithe (*Suaeda maritima*). A small area of pioneer salt marsh now occurs in the lee of an embryonic sand dune just north of Booterstown Station. This early stage of salt marsh development is here characterized by the presence of pioneer stands of Glasswort (*Salicornia* spp.) occurring below an area of drift line vegetation. As this is of very recent origin, it covers a small area but ample areas of substrate and shelter are available for the further development of this habitat. Lugworm (*Arenicola marina*) and Cockles (*Cerastoderma edule*) and other annelids and bivalves are frequent throughout the site. The small gastropod *Hydrobia ulvae* occurs on the muddy sands off Merrion Gates. South Dublin Bay is an important site for waterfowl. Although birds regularly commute between the south bay and the north bay, recent studies have shown that certain populations which occur in the south bay spend most of their time there. The principal species are Oystercatcher (1215), Ringed Plover (120), Sanderling (344) and Dunlin (2628), Redshank (356) (average winter peaks 1996/97 and 1997/98). Up to 100 Turnstones are usual in the south bay during winter. Brent Geese regularly occur in numbers of international importance (average peak 299). Bar-tailed Godwit (565), a species listed on Annex I of the EU Birds Directive, also occur. Large numbers of gulls roost in South Dublin Bay, e.g. 4,500 Black-headed Gulls in February 1990; 500 Common Gulls in February 1991. It is also an important tern roost in the autumn, regularly holding 2000-3000 terns including Roseate Terns, a species listed on Annex I of the E.U. Birds Directive. South Dublin Bay is largely protected as a Special Protection Area. At low tide the inner parts of the south bay are used for amenity purposes. Baitdigging is a regular activity on the sandy flats. At high tide some areas have windsurfing and jet-skiing. This site is a fine example of a coastal system with extensive sand and mudflats, a habitat listed on Annex I of the E.U. Habitats Directive. South Dublin Bay is also an internationally important bird site.

Rye Water Valley/Carton (Site Code 001398):

This site is located between Leixlip and Maynooth. It extends along the Rye Water, a tributary of the River Liffey. The woods at Carton Demesne are the site of a rare Myxomycete fungus, Diderma deplanatum. Within the woods, Blackcap, Woodcock and Longeared Owl have been recorded. Little Grebe, Coot, Moorhen, Tufted Duck, Teal and Kingfisher, the latter a species listed on Annex I of the EU Birds Directive, occur on and about the lake. The mineral spring found at the site is of a type considered to be rare in Europe and is a habitat listed on Annex I of the EU Habitats Directive. The Rye Water is a spawning ground for Trout and Salmon, and the rare, Whiteclawed Crayfish (Austropotamobius pallipes) has been recorded at Leixlip. The latter two species are listed on Annex II of the EU Habitats Directive. The semi-aquatic snails Vertigo angustior and V. moulinsiana occur in marsh vegetation near Louisa Bridge; both are rare in Ireland and Europe and are listed on Annex II of the EU Habitats Directive. The scarce Dragonfly, Orthetrum coerulescens, has been recorded at Louisa Bridge. The main importance of the site lies in the presence of several rare and threatened plant and animal

species, and of a rare habitat, thermal, mineral, petrifying spring. The woods found on Carton Estate and their birdlife are of additional interest.

2.4 CONSERVATION OBJECTIVES OF THE NATURA 2000 SITES

2.4.1 CONSERVATION OBJECTIVES OF THE SACS

The integrity of a Natura 2000 site (referred to in Article 6.3 of the EU Habitats Directive) is determined based on the conservation status of the qualifying features of the SAC. The following Conservation Objectives for the SACs located within 15 km of the subject site are set out below:

Malahide Estuary (Site Code 000205)(Version 1, 27th May 2013)

- To maintain the favourable conservation condition of Mudflats and sandflats not covered by seawater at low tide in Malahide Estuary SAC

- To maintain the favourable conservation condition of Salicornia and other annuals colonising mud and sand in Malahide Estuary SAC

- To restore the favourable conservation condition of Atlantic salt meadows (Glauco-Puccinellietalia maritimae) in Malahide Estuary SAC,

- To maintain the favourable conservation condition of Mediterranean salt meadows (Juncetalia maritimi) in Malahide Estuary SAC,

- To restore the favourable conservation condition of Shifting dunes along the shoreline with Ammophila arenaria ('white dunes') in Malahide Estuary SAC

- To restore the favourable conservation condition of Fixed coastal dunes with herbaceous vegetation ('grey dunes') in Malahide Estuary SAC

Baldoyle Bay (Site Code 000199)(Version 1.0, 19th Nov 2012)

- To maintain the favourable conservation condition of Mudflats and sandflats not covered by seawater at low tide in Baldoyle Bay SAC,

- To maintain the favourable conservation condition of *Salicornia* and other annuals colonizing mud and sand in Baldoyle Bay SAC,
- To maintain the favourable conservation condition of *Salicornia* and other annuals colonizing mud and sand in Baldoyle Bay SAC,

- To maintain the favourable conservation condition of Atlantic salt meadows (*Glauco Puccinellietalia maritimae*) in Baldoyle Bay SAC

- To maintain the favourable conservation condition of Atlantic salt meadows (*Glauco Puccinellietalia maritimae*) in Baldoyle Bay SAC

- To maintain the favourable conservation condition of Mediterranean salt meadows (*Juncetalia maritimi*) in Baldoyle Bay SAC,

- To maintain the favourable conservation condition of Mediterranean salt meadows (*Juncetalia maritimi*) in Baldoyle Bay SAC

North Dublin Bay (Site Code 000206)(Generic Version 3.0, 18th July 2011)

- 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:

- *Mudflats and sandflats not covered by seawater at low tide*
- *Annual vegetation of drift lines*
- *Salicornia and other annuals colonizing mud and sand*
- *Atlantic salt meadows (Glauco Puccinellietalia maritimae)*
- *Petalophyllum ralfsii*
- *Mediterranean salt meadows (Juncetalia maritimi)*
- *Shifting dunes along the shoreline with Ammophila arenaria ("white dunes")*
- *Fixed coastal dunes with herbaceous vegetation ("grey dunes")*
- *Humid dune slacks*

South Dublin Bay (Site Code 000210)(Version 1, 22 August 2013)

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

Rye Water Valley/Carton (Site Code 001398)(Generic Version 3.0, 18th July 2011):

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

  Vertigo angustior
  Vertigo moulinsiana
  Petrifying springs with tufa formation (Cratoneurion).

2.4.2 CONSERVATION OBJECTIVES OF SPAs

Conservation objectives for SPAs are available from the NPWS. The following Conservation Objectives for the SPAs located within 15 km of the subject site are set out below:

Baldoyle Bay SPA (Site Code 004016), (Version 1, 27th Feb 2013)

- To maintain the favourable conservation condition of Light-bellied Brent Goose in BaldoyleBay SPA,
- To maintain the favourable conservation condition of Shelduck in Baldoyle Bay SPA,
- To maintain the favourable conservation condition of Ringed Plover
- To maintain the favourable conservation condition of Golden Plover
- To maintain the favourable conservation condition of Grey Plover
- To maintain the favourable conservation condition of Bar-tailed Godwit
- To maintain the favourable conservation condition of the wetland habitat in Baldoyle Bay SPA,

Broadmeadow/Swords (Malahide) Estuary SPA (Site Code 004025) (Version 1, 16th August 2013):

- To maintain the favourable conservation condition in MalahideEstuary SPA for

- *Great Crested Grebe*
- *Light- bellied Brent Goose,*
- *Shelduck,*
- *Pintail,*
- *Goldeneye,*
- *Red-breasted Merganser,*
- *Oystercatcher,*
- *Golden Plover,*
- *Grey Plover,*
- *Knot,*
- *Dunlin,*
- *Bar-tailed Godwit*
- *Black-tailed Godwit,*
- *Redshank,*

- To maintain the favourable conservation condition of the wetland habitat in Malahide Estuary SPA as a resource for the regularly-occurring migratory waterbirds that utilise it.

North Bull Island SPA (Site Code 004006)(Generic Version 4.0, 16th April 2012)

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

- *Branta bernicla hrota [wintering]*
- *Tadorna tadorna [wintering]*
- *Anas crecca [wintering]*
- *Anas acuta [wintering]*
- *Anas clypeata [wintering]*
- *Haematopus ostralegus [wintering]*
- *Pluvialis apricaria [wintering]*
- *Pluvialis squatarola [wintering]*
- *Calidris canutus [wintering]*
- *Calidris alba [wintering]*
- *Calidris alpina [wintering]*
- *Limosa limosa [wintering]*
- *Limosa lapponica [wintering]*
- *Numenius arquata [wintering]*
- *Tringa totanus [wintering]*
- *Arenaria interpres [wintering]*
- *Chroicocephalus ridibundus [wintering]*
- *Wetlands*

South Dublin Bay and River Tolka Estuary SPA (Site code 004024)(Generic Version 4.0, 16th April 2012):

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

Branta bernicla hrota [wintering]
Haematopus ostralegus [wintering]
Charadrius hiaticula [wintering]
Pluvialis squatarola [wintering]
Calidris canutus [wintering]
Calidris alba [wintering]
Calidris alpina [wintering]

Limosa lapponica [wintering]
Tringa totanus [wintering]
Chroicocephalus ridibundus [wintering]
Sterna dougallii [passage]
Sterna hirundo [breeding + passage]
Sterna paradisaea [passage]
Wetlands

2.5 ASSESSMENT CRITERIA

2.5.1 DIRECT, INDIRECT OR SECONDARY IMPACTS

Table 2.1a and 2.1b list the Natura 2000 sites within 15km of the Plan area. There are 9 sites in all, 5 no. SAC and 4 no. SPA. None of the Natura 2000 sites lie within the boundaries of the site lands, therefore no direct impacts will occur through landtake or fragmentation of habitats. In addition the site is approximately 9.5km from the closest Natura 2000 site, therefore no significant impacts through direct disturbance of habitats and species will occur from development resulting through this variation.

TABLE 2.5.1 Potential Direct, Indirect or Secondary Impacts of the Development on Natura 2000 Sites

Site Name	Direct Impacts	Indirect Impacts	Resource Requirements (Drinking Water Abstraction etc)	Emissions (Disposal to Land, Water or Air)	Excavation Requirements	Transportation Requirements	Duration of Construction and Operation
South Dublin Bay and River Tolka Estuary SPA	At a sufficient distance from the Plan area to not be impacted directly	No impact on qualifying habitat or species	No impact on qualifying habitat or species	No impact on qualifying habitat or species	No impact on qualifying habitat or species	No impact on qualifying habitat or species	No impact on qualifying habitat or species
Baldoyle Bay	At a sufficient distance from the Plan area to not be impacted directly	No impact on qualifying habitat or species	No impact on qualifying habitat or species	No impact on qualifying habitat or species	No impact on qualifying habitat or species	No impact on qualifying habitat or species	No impact on qualifying habitat or species
Broadmeadow/ Swords Estuary SPA	At a sufficient distance from the Plan area to not be impacted directly	No impact on qualifying habitat or species	No impact on qualifying habitat or species	No impact on qualifying habitat or species	No impact on qualifying habitat or species	No impact on qualifying habitat or species	No impact on qualifying habitat or species
North Bull Island SPA	At a sufficient	No impact on	No impact on qualifying	No impact on	No impact on qualifying	No impact on qualifying	No impact on qualifying

	distance from the Plan area to not be impacted directly	qualifying habitat or species	habitat or species	qualifyin g habitat or species	habitat or species	habitat or species	habitat or species
Malahide Estuary SAC	At a sufficient distance from the Plan area to not be impacted directly	No impact on qualifying habitat or species	No impact on qualifying habitat or species	No impact on qualifyin g habitat or species	No impact on qualifying habitat or species	No impact on qualifying habitat or species	No impact on qualifying habitat or species
Baldoyle Bay SAC	At a sufficient distance from the Plan area to not be impacted directly	No impact on qualifying habitat or species	No impact on qualifying habitat or species	No impact on qualifyin g habitat or species	No impact on qualifying habitat or species	No impact on qualifying habitat or species	No impact on qualifying habitat or species
North Dublin Bay SAC	At a sufficient distance from the Plan area to not be impacted directly	No impact on qualifying habitat or species	No impact on qualifying habitat or species	No impact on qualifyin g habitat or species	No impact on qualifying habitat or species	No impact on qualifying habitat or species	No impact on qualifying habitat or species
South Dublin Bay SAC	At a sufficient distance from the Plan area to not be impacted directly	No impact on qualifying habitat or species	No impact on qualifying habitat or species	No impact on qualifyin g habitat or species	No impact on qualifying habitat or species	No impact on qualifying habitat or species	No impact on qualifying habitat or species
Rye Water Valley /Carton SAC	At a sufficient distance from the Plan area to not be impacted directly	No impact on qualifying habitat or species	No impact on qualifying habitat or species	No impact on qualifyin g habitat or species	No impact on qualifying habitat or species	No impact on qualifying habitat or species	No impact on qualifying habitat or species

2.5.2 CUMULATIVE AND IN COMBINATION IMPACTS

There is no potential for cumulative and in combination impacts on any Natura 2000 Site, in particular having regard to the proposed variation and the site's location distant from any Natura 2000 Site.

2.5.3 LIKELY CHANGES TO THE NATURA 2000 SITES

The likely changes that will arise from the development have been examined in the context of a number of factors that could potentially affect the integrity of the Natura 2000 sites. Overall, it has been found that the change in zoning will not cause any changes to the integrity of the Natura 2000 sites.

TABLE 2.5.2 Likely Changes to Natura Sites

Site Name	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
South Dublin Bay and River Tolka Estuary SPA	None	None	None	None	None	None
Baldoyle Bay SPA	None	None	None	None	None	None
Broadmeadow/Swords Estuary SPA	None	None	None	None	None	None
North Bull Island SPA	None	None	None	None	None	None
Malahide Estuary SAC	None	None	None	None	None	None
Baldoyle Bay SAC	None	None	None	None	None	None
North Dublin Bay SAC	None	None	None	None	None	None
South Dublin Bay SAC	None	None	None	None	None	None
Rye Water Valley /Carton SAC	None	None	None	None	None	None

3.0 PRELIMINARY AA SCREENING CONCLUSION (prior to consultation)

A preliminary screening report was prepared by Fingal County Council to determine whether a full Stage 2 appropriate assessment was required for the proposed variation of the Fingal Development Plan 2011-2017 to change the zoning from RU to HT. All Natura 2000 sites within a 15km radius of the site were considered. On the basis of the findings of this Screening for Appropriate Assessment of Natura 2000 sites, it was concluded that the proposed development will not have a significant effect on the Natura 2000 network and a Stage 2 Appropriate Assessment was not required.

4.0 CONSULTATION

Notice was given by Fingal County Council to the following environmental authorities:

The Department of the Environment, Community and Local Government
The Environmental Protection Agency (EPA).
The Department of Agriculture, Fisheries and Food.
The Department of Communications, Energy and Natural Resources.

The Department of Arts, Heritage and the Gaeltacht.

The notice stated that Fingal County Council has prepared a preliminary AA Screening Report for the Ballycoolin Variation and requested submissions or observations in relation to same from the environmental authorities.

The AA Screening Report has been updated taking on board views and comments received from the environmental authorities. There is no change to the Preliminary AA Screening Conclusion. The Planning Authority is satisfied that the proposed development will not have a significant effect on the Natura 2000 network and a Stage 2 Appropriate Assessment is not required.

Comhairle Contae Fhine Gall
Fingal County Council

Proposed Variation at Ballycoolin, Dublin 15

Appropriate Assessment

Figure 1

- A — Variation Location
- Distance (kms)
- Special Area of Conservation (SAC)
- Special Protection Area (SPA)
- Ballycoolin 15KM Catchment area
- FIngal County Boundary

N

Scale @ A3 1:125,000