

Stillorgan

Draft Local Area Plan 2018 - 2024

Appendix II - Strategic Environmental Assessment Screening Report
Appendix III - Appropriate Assessment Screening Report
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Appendix II

Draft Stillorgan Local Area Plan

Strategic Environmental Assessment Screening Report

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ABBREVIATIONS

AA	-	Appropriate Assessment
ACA	-	Architectural Conservation Area
CDP	-	County Development Plan
CFRAM	-	Catchment Flood Risk Assessment Management
DAFM	-	Department of Agriculture, Food and the Marine
DAHG	-	Department of Arts, Heritage and the Gaeltacht
DCENR	-	Department of Communications Energy, and Natural Resources
DECLG	-	Department of Environment, Community and Local Government
DLRCC	-	Dún Laoghaire-Rathdown County Council
EIA	-	Environmental Impact Assessment
EPA	-	Environmental Protection Agency
FRA	-	Flood Risk Assessment
LAP	-	Local Area Plan
NHA/pNHA	-	Natural Heritage Area / proposed Natural Heritage Area
NPWS	-	National Parks and Wildlife Service
OPW	-	Office of Public Works
RBD	-	River Basin District
SAC	-	Special Area of Conservation
cSAC	-	Candidate Special Area of Conservation
SEA	-	Strategic Environmental Assessment
SEO	-	Strategic Environmental Objective
SPA	-	Special Protection Area
SuDS	-	Sustainable Drainage System

1 STRATEGIC ENVIRONMENTAL ASSESSMENT - SCREENING

1.1 INTRODUCTION

Dún Laoghaire-Rathdown County is preparing the Draft Stillorgan Local Area Plan (LAP) 2017-2023 in accordance with Part II, Sections 18, 19 and 20 of the Planning and Development Act 2000-2011, which set out the provisions for the preparation of Local Area Plans.

The Stillorgan Draft LAP is being prepared as a result of an objective contained within the Dún Laoghaire-Rathdown County Development Plan (DLRCDP) 2016-2022 and in accordance to the policies and objectives contained within the DLRCDP. The DLRCDP is the overarching statutory framework for the development of the County and the Stillorgan Draft LAP must be consistent with the objectives of the DLRCDP 2010-2016 under the Planning and Development Acts.

The DLRCDP identifies Stillorgan as an area for 'Development and Regeneration' where the vision is *'to address local issues facing Stillorgan including traffic volumes and congestion and aims to promote a more pedestrian friendly environment. The Plan identifies a vision for redevelopment of Stillorgan as a District Centre and Neighbourhood Centre with a strong sense of place.'*

The planning process is iterative and therefore this document includes the Strategic Environmental Assessment Screening of the Draft LAP (chapters 1 to 4) and the Final LAP, including the amendments stage (chapter 5).

1.2 PURPOSE OF THE LOCAL AREA PLAN

As outlined, the Stillorgan Draft LAP 2017-2023 has been prepared in accordance with the Planning and Development (Amendment) Act 2000 as amended. Section 20 states that *"...a local area plan may be prepared in respect of any area or an existing suburb of an urban area, which the planning authority considers suitable and, in particular, for those areas which require economic, physical and social renewal"*. The Draft LAP will be in effect for a six year period following its adoption but may be extended up to 10 years under the mechanisms of the Planning and Development (Amendment) Act, 2000 (as amended).

LAPs take a detailed look at a specific area, identifying and analysing the various issues of relevance, before establishing and setting out principles for the future development in the defined area. These issues include among others:

- Infrastructure and Services;
 - Economic Development and Employment;
 - Natural Heritage;
 - Built Heritage;
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- Social and Community Facilities;
 - Recreation, Leisure and Tourism; and
 - Urban Development.

The main aim of the Stillorgan Draft LAP is to set out a framework for the physical regeneration of the area to allow for growth in a co-ordinated, sensitive and orderly manner while conserving the area's built and cultural heritage. The Draft LAP strives to inform the general public, statutory authorities, developers and other interested bodies of the policy framework, objectives and land-use proposals for the Stillorgan area.

The Stillorgan Draft LAP is being prepared with careful consideration of existing services, land-uses, infrastructure, planning proposals and outstanding planning permissions. Environmental considerations and the concept of sustainable development underpin all the aims, policies and objectives of the plan, based on an analysis of social, economic, infrastructural, environmental and heritage data.

The emphasis of the Plan is to enhance the sense of place and community within Stillorgan, improving its vitality and viability as a District Centre. The Plan strategy is to seek a transformative improvement in the quality of the public realm where priority movement for pedestrians, cyclists and public transport will be ensured and the creation of high quality spaces will be a prerequisite. The influence and impact of the private car on the environs of the District Centre will be moderated.

The high-quality regeneration and redevelopment of key sites in Stillorgan District Centre will be encouraged, in tandem with a radically improved public realm, to provide a coherent and balanced urban environment in respect of scale, design and layout. Stillorgan will successfully perform its role as a high-quality, accessible retail and commercial centre serving the needs of the wider community.

New residential development in Stillorgan will assist in improving the diversity of the housing mix in the area and reversing the long-term trends of population decline in the area. The residential amenity of established residential areas on the fringes of the District Centre is to be protected and, where possible, enhanced through the successful integration of future developments with the existing built fabric of Stillorgan.

The development of the Stillorgan Draft LAP has been iterative, in tandem with the mandatory Strategic Environmental Assessment (SEA) and Appropriate Assessment (AA) screening processes.

1.3 PURPOSE OF SEA SCREENING

The purpose of this Screening Report is to consider whether the Stillorgan Draft LAP requires a Strategic Environmental Assessment (SEA). SEA is the formal, systematic evaluation of the likely significant environmental effects of implementing a plan/ programme before a decision is made to adopt the plan/ programme; the procedures for which are set out in the Planning and Development (SEA) Regulations 2004 (as amended by S.I. 201 of 2011). The preparation of a full SEA is not mandatory for LAPs with a population, or target population, of less than 5,000 persons, such as the Stillorgan Draft LAP. However, in accordance with the above SEA Regulations, the planning authority of Dún Laoghaire-Rathdown County Council must determine whether or not the

implementation of such a Plan would be likely to have significant effects on the environment and therefore require an SEA.

Screening is the process for deciding whether a particular plan, in this case the Stillorgan Draft LAP, other than those for which SEA is mandatory, would be likely to have significant environmental effects, and would thus warrant SEA.

2 SCREENING METHODOLOGY

2.1 SEA DIRECTIVE

Articles 2 and 3 of *Directive 2001/42/EC of the European Parliament and the Council on the assessment of the effects of certain plans and programmes on the environment* (SEA Directive), set out the criteria to be used to determine the need for SEA. In making this decision the primary concern in the SEA process (as set out in Article 3 of the Directive) is to determine whether the Plan is likely to have significant environmental effects. This determination should be made having regard to the criteria set out in Annex II of the SEA Directive and through consultation with the statutory government authorities according to Article 6.

In regard to the Stillorgan Draft LAP it directly falls within the criteria stated in Article 2 of the SEA Directive, which states that plans and programmes requiring SEA are those:

- *which are subject to preparation and / or adoption by an authority at national, regional or local level or which are prepared by an authority for adoption, through a legislative procedure by parliament or government; and*
- *are required by legislative, regulative or administrative provisions.*

Article 3 of the SEA Directive details the type of 'plans and programmes' to which the provisions of the Directive shall apply, by way of their purpose and likely effects. According to Article 3, environmental assessment is required for plans and programmes which:

- *are likely to have significant environmental effects;*
- *are prepared for agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications, tourism, town and country planning or land-use and which set the framework for future development consent of projects listed in Annexes I and II to Directive 85/337/EC (EIA Directive); and*
- *in view of the likely effects on sites, have been determined to require an assessment pursuant to Article 6 or 7 of Directive 92/43/EEC (Habitats Directive).*

2.2 PLANNING AND DEVELOPMENT (SEA) REGULATIONS

As previously stated, the SEA Directive, as transposed into Irish Law under the Planning and Development (Strategic Environmental Assessment) Regulations 2011, (S.I. No. 201 of 2011), amending the Planning and Development Regulations 2004 (S.I. No. 436 of 2004) provides the legal basis for the undertaking of strategic environmental assessments in Ireland. In addition, the Department of the Environment, Community and Local Government Circular (PSSP 6/2011) 'Further Transposition of the EU Directive 2001//42/EC on SEA' outlines the updated requirements as a result of the 2011 Regulations.

Article 14A of the 2004 Regulations, as amended, states:

"Where a planning authority proposes to prepare or amend a local area plan referred to in sub-article (1), the planning authority shall, prior to giving notice under section 20(3) of the Act, consider whether or not implementation of the local area plan or amended plan would be likely to have significant effects on the environment, taking account of relevant criteria set out in Schedule 2A.

The proposed Stillorgan Draft LAP has been considered in the context of the County Development Plan and in whether or not its implementation would be likely to have significant effects on the environment, taking into account the relevant criteria set out in Schedule 2A of the SEA Regulations. In making an overall assessment on whether SEA was required, each of the criteria in Schedule 2A was considered.

The 2011 SEA Regulations included a number of key amendments for land use plans and outline that SEA is required for LAPs whose population or target population are over 5,000 persons or whose plan area is greater than 50km². A determination, known as a Screening Process, is also required for a local area plan that falls below these thresholds.

The Stillorgan Draft LAP area is quite limited in area and comprises predominantly retail and commercial lands. There are approximately 12 occupied residential dwellings within the Draft Plan area with an estimated existing population of c. 30 persons. The total projected population for the Draft Plan area is potentially c.1,000 for Stillorgan Draft LAP. The area of Stillorgan Draft LAP is approximately 16.5ha in area therefore, in accordance with the regulations there is not a statutory requirement for SEA for this particular plan, however SEA Screening is required.

2.3 APPROPRIATE ASSESSMENT

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) as codified by Directive 2009/147/EC and the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477/2011).

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.

These Articles mean that where the implementation of the plan, in this case the Stillorgan Draft LAP, has potential to have a significant effect on a Natura 2000 site, the relevant Local Authority (Dún Laoghaire-Rathdown County Council) must ensure that an appropriate assessment is carried out in view of that site's conservation objectives. The Stillorgan Draft LAP can be approved by DLRCC only if it has been ascertained that it will not adversely affect the integrity of the Natura 2000 site(s) concerned, or in the case of a negative assessment and where there are no alternative solutions, the scheme can only be approved for reasons of overriding public interest.

Appropriate Assessment Screening has been undertaken on the Stillorgan Draft LAP to ensure that the policies and objectives contained within said plan are not likely to result in significant adverse effects on the Natura 2000 network. The likely impacts that will arise from the Stillorgan Draft LAP have been examined in the context of a number of factors that could potentially affect the integrity of the Natura 2000 network. No Natura 2000 site(s) within 15km of the Draft LAP area will be adversely affected. On the basis of the findings of the Screening for Appropriate Assessment of Natura 2000 sites, it was concluded that the Stillorgan Draft LAP will not have a significant effect on the Natura 2000 network and a Stage 2 Appropriate Assessment is not required.

2.4 CONSULTATIONS

This SEA Screening Statement will be issued to the statutory consultees to provide them with an opportunity to comment on whether or not they consider that there would be significant effects on the environment arising from the Stillorgan Draft LAP. The amended regulations identifies the bodies to be consulted, which are outlined in Article 13A (4) (a) of S.I. 201 of 2011, as follows;

- (i) *the Environmental Protection Agency;*
 - (ii) *the Minister for the Environment, Community and Local Government;*
 - (iii) *where it appears to the planning authority that the plan or programme or modification of the plan or programme, might have significant effects on fisheries or the marine environment, the Minister for Agriculture, Marine and Food, and the Minister for Communications, Marine and Natural Resources;*
 - (iv) *where is appears to the competent authority that the plan or programme or amendment to a plan or programme, might have significant effects in relation to the architectural or archaeological heritage or to nature conservation, the Minister for Arts, Heritage and Gaeltacht Affairs; and*
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- (v) *any adjoining planning authority whose area is contiguous to the area of a planning authority which prepared a draft plan, proposed variation or local area plan.*

The Environmental Protection Agency and the Department of Communications, Energy and Natural Resources provided responses to the SEA Screening Report. These submissions outlined a number of comments in relation to the Draft Plan and the full responses have been included in **Appendix A** of this Screening Report. Their comments have been taken on board in this SEA Screening Report.

3 STILLORGAN DRAFT LAP

The Plan area is bounded to the east by the N11, to the North by the residential developments of St. Laurence's Park, Woodlands and Beaufield. To the South, the Plan area is bounded by the residential developments of Glenalbyn, Linden Lea Park and Allen Park and to the West by the Kilmacud Road Upper and the residential area of Cherry Garth.

Figure 1 provides an outline of the location of the Stillorgan Draft LAP.

3.1 LOCAL CONTEXT

The District Centre is dominated by a two storey Shopping Centre at the junction of the Kilmacud Road Lower and Old Dublin Road which is in need of redevelopment. Elsewhere, there is a prevalence of poor quality 1960's, 1970's and 1980's architecture, whereby the structures appear unsympathetic to the original urban form, eroding the character and identity of the area.

The area is traversed by a heavily trafficked road network and dominated by a major traffic node at the junction of the Kilmacud Road Lower, Old Dublin Road and 'The Hill'. The landscape is dominated by traffic and surface car parking.

There are no Landscape High Amenity Zone designations within the Draft LAP, or in close proximity to the Draft LAP. No Historic Landscape Character Assessments have been conducted for the Draft LAP or are proposed to be conducted within the Draft LAP.

There are no Protected Structures, Architectural Conservation Areas or Recorded Monuments located within the Plan area. A Recorded Monument in the form of an Ecclesiastical Site is located just outside the Plan area to the north at Tyne Villa on the Old Dublin Road, which is now a private residential dwelling. There is also a Recorded Monument located just outside the Plan area to east in the form of a 16th/17th Century House at Park House in Stillorgan Park, which is now the New Horizons Resource Centre. Park House is also a Protected Structure.

To the south of the Plan area are Recorded Monuments in the form of a Church Site, Graveyard and Ecclesiastical Enclosure off St Brigid's Church Road. Saint Brigid's Church, the Rectory and the Old Schoolhouse, which is now home to Saint Brigid's Parish Playschool, are also Protected Structures. All of these designated Recorded Monuments lie within zones of archaeological potential.

Population

The population within the Draft Plan area is small – estimated at approximately 30 persons, with only a small number of occupied dwellings within the area occupied. The Draft LAP area contains a number of key opportunity areas for redevelopment such as lands at the former Blakes restaurant site and the Leisureplex site.

Surface Water

The Draft LAP is located within the Eastern River Basin District (ERBD). The Carysfort Maretimo Stream is the main watercourse which flows on the fringes of the Draft LAP boundary. This stream, which is extensively culverted, originates in the Tree Rock

Mountains and flows under the M50 and across the heavily urbanised areas of Sandyford, Leopardstown and Stillorgan before discharging into Dublin Bay at Blackrock.

The Environmental Report carried out as part of the Carysfort Maretimo Stream Improvement Scheme found that there was no evidence of fish or invertebrate species of conservation importance within the stream; all species found within the stream were identified as common. The river is not known for populations of salmon, trout or lamprey as significant culverting has not made it suitable for many fish species.

Water Services

Stillorgan is served by the Sandyford High Level Water Supply Scheme (SHLWSS) and wastewater is via the West Pier Pumping Station which pumps the waste across Dublin Bay to the Ringsend Waste Water Treatment Plant.

Stillorgan is located within the Dún Laoghaire West Pier Drainage catchment which encompasses some 2,300 hectares of urban and suburban areas including Stillorgan. The drainage system is a combined foul and surface water system. The current system varies greatly which can result in occasional storm water overflows at various locations during severe rain events. The Greater Dublin Strategic Study (2005) states that the existing system is capable of meeting the current and future projected populations in the catchment up to the 2031 design horizon.

Flooding

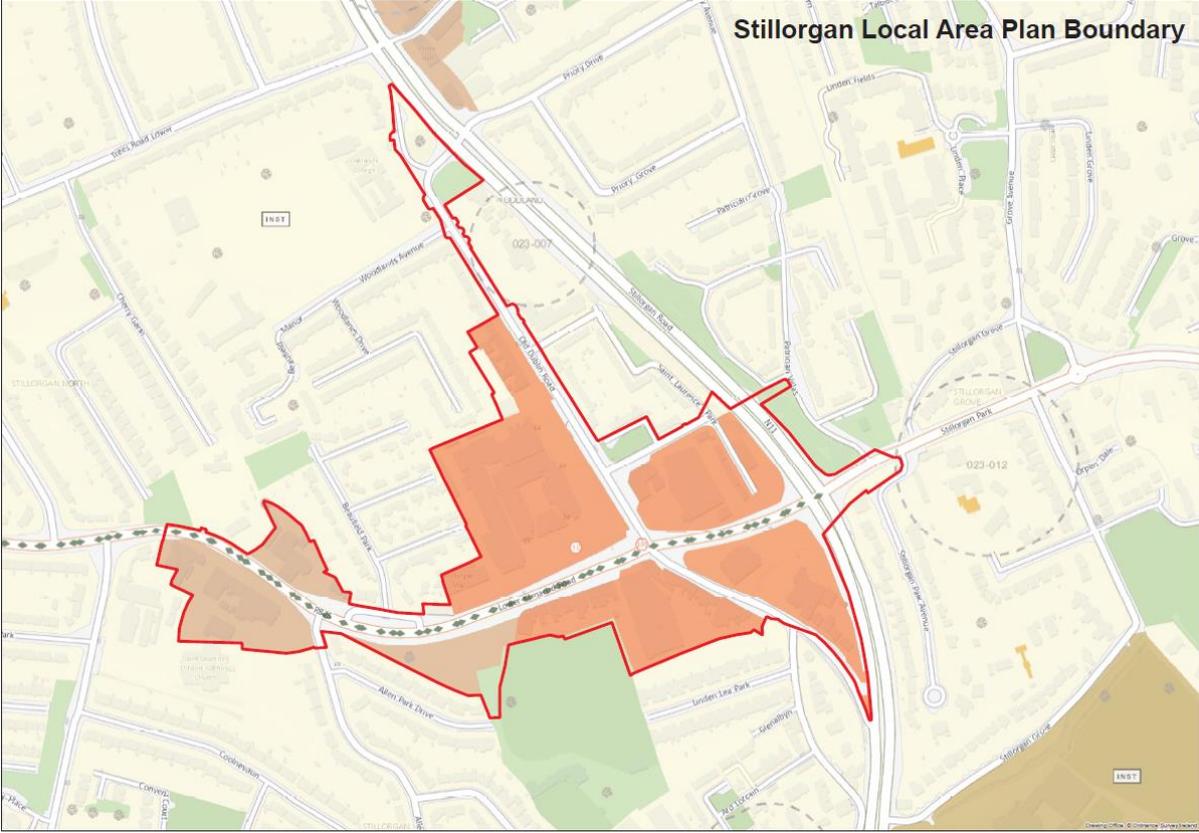
Stillorgan lies within the Eastern Catchment Flood Risk Assessment and Management (ECFRAM). CFRAM is a national programme for the medium to long-term strategy for the reduction and management of flood risk in Ireland. It will deliver on core components of the National Flood Policy and on the requirements of the EU Flood Directive. The Office of Public Works is the lead agency for flood risk management in Ireland and is working in partnership with all the local authorities to deliver the objectives of this programme. These CFRAM studies will produce Flood Risk Management Plans along with a strategy for implementation.

Carysfort Maretimo

The CFRAM shows flood risk along the majority of the Carysfort Maretimo River, being a combination of Flood Zone A and B and covering a range of land existing land uses, including open space, residential and office and enterprise (Figure 5-7). In particular, flooding is indicated at Blackrock Bypass, Brookfield, Carysfort Avenue, Avondale Lawn, Carysfort Hall, Avoca Park, Grove Paddock, Stillorgan Grove, Stillorgan Road and Brewery Road, Blackthorn Avenue and Blackthorn Road, Corrig Road, Blackthorn Drive, Lakelands, Moreen Estate, along M50 at Sandyford Interchange, Sandyford Park, Coolkill, Sandyford Downs and Sandyford Village (15). Where there is existing residential housing, and supporting infrastructure, Part 1 and 2 of the Justification Test have been applied and passed and flood risk can be managed through nonstructural responses. Future development within Flood Zone A and B should be limited to extensions, changes of use and small scale infill and flood risks can be managed through a site specific FRA, which should include consideration of culvert blockage (where appropriate) and the impact this could have on flood risk at lower return periods. The majority of flood risk highlighted in the Sandyford Business District and surrounding area is shown to be Flood Zone B, with small pockets indicated to be Flood Zone A. Where less vulnerable development is proposed within or near Flood Zone A or B a site specific flood risk assessment should be

undertaken with the aim of a) refining the delineation of flood risk based on local topography and surface water systems; b) demonstrating that the proposed development will not increase flood risk to neighbouring lands; and c) developing flood management measures appropriate to the development proposed. There is a length of defence along this watercourse which runs parallel to Rockfield Park (16). These defences are of robust construction, although consideration of the impacts of overtopping, either through higher return period events or with the impact of climate change on river flows, should be taken into account in any site specific flood risk assessment. Breach assessment is unlikely to be required.

Figure 1: Stillorgon Draft LAP Study Area



Natural Heritage

There are no Special Areas of Conservation (SAC), Special Protection Area (SPA), Natural Heritage Areas (NHA) or proposed Natural Heritage Areas (pNHA) within the Draft LAP area.

South Dublin Bay and River Tolka Estuary Special Protection Area (Site Code 004024), South Dublin Bay candidate Special Area of Conservation (Site Code 000210), South Dublin Bay pNHA (Site Code 000210) and Booterstown Marsh pNHA (Site Code 001205) are located to the north of the Draft LAP.

The Dalkey Coastal Zone and Killiney Hill pNHA and the Rockabill to Dalkey Island SAC (Site Code 003000) are located to the south east of the Draft LAP. The Appropriate Assessment Screening report undertaken on the Stillorgan Draft LAP outlines other SPAs and SACs within 15km of the Draft LAP.

3.2 DLR COUNTY DEVELOPMENT PLAN (2016-2022)

There are a number of overarching policies from the DLRCDP (2016-2022) that directly relate to the Stillorgan Draft LAP. They include;

- Encourage potential redevelopment as higher density, urban mixed-use centre in accordance with general provisions of the adopted Local Area Plan. Limited expansion of convenience and comparison retail floorspace.
- To promote the future redevelopment of Stillorgan as a multi-faceted, mixed-use sustainable District Centre having regard to the broad objectives of the adopted Stillorgan Local Area Plan.
- The regeneration and redevelopment of Stillorgan District Centre should create an urban context in respect of scale, design and layout.
- Good quality residential development shall be encouraged to ensure vitality and animation both day and night.
- The creation of quality spaces and enhanced public realm will be a prerequisite.

These policies have been taken into account in the drafting of the Stillorgan Draft LAP.

4 SEA SCREENING CONCLUSION OF DRAFT LAP

4.1 INTRODUCTION

The following assessment has been conducted in accordance with the Planning and Development (Strategic Environmental Assessment) Regulations 2004, as amended. The Screening of the proposed Stillorgan Draft LAP is undertaken using specified criteria for determining the likely significant environmental impacts of a Plan as set out in Schedule 2a of the SEA Regulations (S.I. 436 of 2004).

4.2 CHARACTERISTICS OF THE PLAN HAVING REGARD, IN PARTICULAR, TO:

(i) The degree to which the Plan sets a framework for projects and other activities, either with regard to the location, nature, size and operating conditions or by allocating resources.

The Stillorgan Draft LAP has provided a framework for the proper planning and sustainable development of Stillorgan and its environs for a duration of six years, spanning from 2017-2023, unless amended. It contains objectives, policies, site framework strategies and land use zonings within the defined Draft LAP area based on the principles of sustainable development. The Draft LAP provides for the conservation and enhancement of the natural and physical environment within and surrounding Stillorgan.

The development of the Stillorgan Draft LAP has been in line with the Core Strategy of the County Development Plan to ensure that the Draft LAP is consistent with national and regional guidelines and adopts an evidence based approach to the zoning of land. Therefore, the framework for development in the Stillorgan Draft LAP shall be of a nature and scale appropriate to the District Centre.

The Stillorgan Draft LAP provides a framework for development of projects within the plan area having regard to location, type, size and operation. It is possible that specific areas such as the Blakes site, the Leisureplex site and potentially the Stillorgan Shopping Centre site will eventually fall under the title of a project and be subject to an environmental impact assessment under the EIA Directive and affiliated legislation. The Draft LAP has a number of general objectives one of which is PP3 which states that *"it is an objectives of the Council that the EU Directives for Strategic Environmental Assessment (SEA), the Planning and Development Strategic Environmental Assessment Regulations (SI. 436 of 2004) as amended by (SI. 201 of 2011) and Environmental Impact Assessment (EIA) are the fundamental policy framework of environmental protection measures and legislation for the delivery of the policies within this document and full compliance with the EIA and SEA Directives shall be provided"*. Therefore, these specific areas will be developed in compliance with the relevant environmental assessment processes.

(ii) The degree to which the Plan influences other plans, including those in a hierarchy.

The Stillorgan Draft LAP 2017-2023, provides a land-use planning framework at a local village level. It is located at the bottom of the statutory land-use planning hierarchy, and

therefore, is not likely to influence other statutory plans so as to have any significant environmental impact.

(iii) The relevance of the Plan for the integration of environmental considerations in particular with a view to promoting sustainable development.

The Stillorgan Draft LAP has been prepared under the Planning and Development Act 2000 (as amended), and therefore, must confine itself to the proper planning and development of the Draft LAP area. All strategies, objectives and policies of the Draft LAP have been informed by the principles of sustainable development. The Draft LAP is subject to higher level international, national, regional and county environmental protection policies, and therefore must be consistent with these policies and implement them at a local level. For example the preparation of the Stillorgan Draft LAP was guided by the overall strategies, objectives and policies of the Dún Laoghaire-Rathdown County Development Plan (2016-2022).

During the development of the Stillorgan Draft LAP both the SEA and the AA Environmental Teams provided input into the Draft LAP in the form of suggested policies for the protection of the environment. These policies were included within the Draft LAP to ensure that the Stillorgan Draft LAP is in compliance with the required Environmental Directives.

The Draft LAP will provide for sustainable growth and will regulate pressures from urban development, especially through the promotion of infill development in close proximity of frequent public transport services. Sustainable mobility has been addressed within the Stillorgan Draft LAP through the promotion of walking and cycling, including the provision of associated infrastructure. Some existing roads already include bus lanes, cycle lanes and footpaths, which promote sustainable travel. The Draft LAP has taken onboard the measures outlined in the Greater Dublin Area Transport Strategy (NTA).

(iv) Environmental problems relevant to the Plan.

It is considered that the Stillorgan Draft LAP will not result in any strategic environmental problems due to the implementation of the Draft LAP and associated proposed development, including site framework strategies. Should local environmental issues develop they will be dealt with through the comprehensive environmental policies and objectives contained within the Draft LAP.

A strategic flood risk assessment (SFRA) was undertaken for the Stillorgan Draft LAP. Several flooding issues have been identified in the Draft LAP. The *'Planning System and Flood Risk Management Guidelines for Planning Authorities'*, outline that *"flood risk issues and its impact on deliverability of zoned land should be addressed in the development plan primarily"*. The DLRCDP identified flood risk issues for the Carysfort Maretimo Stream and alleviation measures have been implemented in some places along the length of this stream catchment through the aforementioned improvement works.

The Draft Stillorgan LAP identifies that flood risk assessments are required for individual planning applications should the application be in an area where flooding may be present.

Stillorgan is located within the Dún Laoghaire West Pier Drainage catchment. The drainage system is a combined foul and surface water system. As outlined in the Stillorgan Draft LAP the current system varies greatly which can result in occasional storm water overflows at various locations during severe rain events. The Greater Dublin

Strategic Study (GDSS, 2005) states that the existing system is capable of meeting the current and future projected populations in the catchment up to the 2031 design horizon. The Stillorgan Draft LAP states that "the existing foul and surface water drainage networks are generally adequate to satisfy current demand and infill growth. More detailed investigations would, however, have to be carried out on the capacity of the network for any proposal which would have a significant impact on the drainage network. Any network improvements required to address deficiencies identified by these investigations require to be advanced by Irish Water."

To ensure that adequate services are provided for future development within Stillorgan the Draft LAP contains an Objective (SI2) which states that *"it is an objective of the Council to support Irish Water in the provision of adequate water and waste water treatment infrastructure to serve the needs of the existing and future population of the Plan area and ensuring that such infrastructure is provided prior to, or in tandem with, new development"* and an Objective (SI3) which states that *"it is an objective of the Council to facilitate Irish Water in ensuring that all wastewater generated is collected, treated and discharged after treatment in a safe and sustainable manner, having regard to the standards and requirements set out in EU and national legislation and guidance"*.

The Draft LAP clearly states that all new developments will be in compliance with the GDSS in relation to sustainable urban drainage systems (SuDS). There is an Objective (SI6) to ensure that new development is in line with SuDS which states *"it is an objective of the Council to ensure that Sustainable Drainage Systems (SuDS) is applied to any development in Stillorgan and that site specific solutions to surface water drainage systems are developed which meet the requirements of the Water Framework Directive and associated River Basin Management Plans. SuDS measures may include green roofs, permeable paving, detention basins, water butts, infiltration etc"*.

(v) The relevance of the plan for the implementation of European Union legislation on the environment (e.g. plans linked to waste-management or water protection).

The Stillorgan Draft LAP does not have the direct purpose of implementing EU legislation; however, it is influenced by and must comply with relevant EU environmental policies and regulations, and will contribute towards the national implementation of these EU environmental policies and regulations. Environmental policies and objectives have been incorporated into the Draft LAP to ensure that full account is taken of European legislation. It is an intention of the Draft Plan that any development within the Local Area Plan boundary shall be in accordance with the requirements of the EU Directives and associated legislation, (National and Regional Guidelines) and County Development Plan policy provisions.

In addition the Stillorgan Draft LAP contains an Objective (SI10) which states that *"It is an objective of the Council that all plans or projects within the Local Area Plan that are likely to give rise to significant effects on the Natura 2000 Sites will be subject to Appropriate Assessment Screening in accordance with Article 6(3) of the Habitats Directive"*. Further, it is an Objective (SI7) of the Draft Plan "to ensure the protection of groundwater resources within the Draft Stillorgan Local Area Plan boundary and associated habitats and species in accordance with the EU Groundwater Directive. All new planning applications within the Stillorgan Local Area Plan boundary shall have regard to the likely impacts the proposed development may have on groundwater resources".

4.3 CHARACTERISTICS OF THE EFFECTS AND OF THE AREA LIKELY TO BE AFFECTED, HAVING REGARD, IN PARTICULAR, TO:

(i) The probability, duration, frequency and reversibility of the effects.

In the case of the Stillorgan Draft LAP the effects may be considered to include various land uses, including residential development, employment and infrastructural improvements. Uncontrolled development in the Draft LAP could result in significant impacts on the environment such as development near or adjacent to the Natura 2000 sites, which could potentially affect the qualifying interests of the sites. However, the Stillorgan Draft LAP in tandem with the DLRCDP (2016-2022) provides significant measures to avoid adverse impacts arising from proposed development through stringent policies and objectives.

The target population for the Stillorgan Draft LAP will increase the demand on provisions for drinking water supply. Both existing and future populations within the Draft LAP area should continue to have access to adequate high quality clean drinking water. Water for Stillorgan comes from the Sandyford High Level Water Supply Scheme (SHLWSS) and this is capable of catering for future developments in the area. There are no particular constraints in terms of supplying water to future development within the Draft LAP lands. Any medium to large scale development in the area may be required to upgrade sections of the existing network to ensure adequate security of supply as deemed necessary. The existing water network is generally adequate for current demand and small infill growth; however more detailed investigations would have to be carried out on the capacity of the network for any proposal which would generate significant water usage.

Stillorgan is served by the Ringsend Waste Water Treatment Plant which has over recent years been upgraded with increased capacity. Compliance with the Waste Water Discharge Licence issued under Regulation 28(1) of the Waste Water Discharge (Authorisation) Regulations 2007 is required for the Draft LAP area. Development within Stillorgan Draft LAP shall be preceded by sufficient capacity in the public waste water treatment plants and appropriate extensions in the existing public waste water treatment catchments. The relevant recommendations set out in *'Focus on Urban Waste Water Discharges in Ireland (Report for the years 2008-2011)* (EPA, Office of Environment Enforcement, 2012) will be complied with.

Improvements to the transport network within the Stillorgan Draft LAP along with the promotion of sustainable travel will have a positive impact on the environment. A number of positive measures have been outlined in the Draft LAP such as improvements to public transport provision, improvements to the pedestrians and cyclists experience within Stillorgan and provision of solutions to manage the movement of motor vehicles within the centre of the urban village.

(ii) The cumulative nature of the effects.

The Stillorgan Draft LAP is a land-use plan that is based on a strategic framework and adheres to the Core Strategy contained within the DLRCDP (2016-2022), to ensure proper phased development of the village and its surroundings.

It is not considered that the cumulative effect of development will have a significant environmental impact as appropriate environmental protection policies have been integrated into the Draft LAP.

(iii) The transboundary nature of the effects.

The effects from the Stillorgan Draft LAP are likely to be confined to Stillorgan village and its immediate environs. Therefore, there is likely to be no significant national or regional transboundary effects as the Stillorgan Draft LAP will have orderly and planned growth. Strategies in the form of objectives and policies have been implemented within the Draft LAP to preserve the environment, and therefore, ensure no significant transboundary effects.

It is important to note that transport infrastructure has a transboundary character. The Draft LAP area is bisected by the important regional road and public transport links, namely the N11 road and QBC. The proposals of the Draft LAP do not have a significant impact on the operations of these links as regional and national infrastructure.

(iv) The risk to human health or the environment (e.g. due to accidents).

There are no designated SEVESO sites or significant industrial operations within Stillorgan Draft LAP. The Draft LAP contains site framework strategies for residential development along with strategies for retail development and transport improvements. Stillorgan is a long established District Centre and provides a centre of employment for surrounding residential communities. The centre of Stillorgan is zoned District Centre and the main sources of employment are retail with some smaller scale office based services. Therefore, it is not considered that there will be any significant risk to human health or the environment in implementing the Stillorgan Draft LAP.

(v) The magnitude and spatial extent of the effects (geographical area and size of the population likely to be affected).

As noted above, the population of the Stillorgan Draft LAP is approximately 30 persons. The Draft LAP contains certain key opportunity areas for redevelopment such as lands at the Blake's site, the Leisureplex site and the Stillorgan Shopping Centre Site.

The DLRCDP (2016-2022) sets out an overall strategy for the county which contains an objective for evidence base for zoning decisions. The Planning and Development (Amendment) Act 2010 introduced the requirement for an evidence-based Core Strategy to be incorporated as part of all County Development Plans. The purpose of a Core Strategy is to articulate a medium-to-longer term quantitatively based strategy for the spatial development of the area of the Planning Authority, and, in so doing, to demonstrate that a Development Plan and its policies and objectives are entirely consistent with national and regional development objectives as set out in the National Spatial Strategy 2002-2022 (NSS) and the Regional Planning Guidelines 2010-2022 (RPGs).

The Core Strategy seeks to ensure a level of equilibrium between residential land supply in the County and forecast household growth. The Draft LAP lands, which are predominantly zoned 'District Centre', and therefore have a mixed-use focus as opposed to a purely residential one, form a part of the Council's medium-to-long term residential land supply and are highlighted in the Core Strategy as such.

It is not considered that the development of the zoned lands including the Site Framework Strategies and the achievement of the population targets will result in significant environmental impacts.

(vi) The value and vulnerability of the area likely to be affected due:

(a) Special natural characteristics or cultural heritage

Stillorgan Draft LAP does not lie in an area that has a rich architectural/archaeological heritage. There are no protected structures or recorded monuments and places within the Draft LAP. There are no candidate Architectural Conservation Areas (cACA) or Architectural Conservation Areas (ACA) contained within the Draft LAP area.

There are no nationally or internationally designated sites for nature conservation within the boundary of the Stillorgan Draft LAP.

Appropriate Assessment Screening has been undertaken on the Stillorgan Draft LAP and it is not considered that the Draft LAP will have any significant negative effect on the Natura 2000 network.

A number of objectives are contained within the Draft LAP to ensure the protection and conservation of the natural heritage within and adjacent to the Draft LAP boundary. It is not considered that the development of the Draft LAP lands will result in significant environmental impacts on the natural heritage of this area.

(b) Exceeded environmental quality standards or limit values

It is not expected that environmental quality standards will be exceeded or that the value of vulnerable areas will be limited as a result of the Stillorgan Draft LAP. Environmental policies and objectives contained within the Stillorgan Draft LAP ensure that the impact of any proposed developments on existing habitats, species and the value of the existing landscape are kept to a minimum. Development proposals within the Draft LAP boundary will be subject to assessment as part of a planning application and will also be required to demonstrate compliance with the relevant legislation and environmental quality standards and limits.

(c) Intensive land-use

The focus of the Draft LAP, in line with the DLRCDP objectives, is the potential for development of sites that are presently unoccupied or less intensively used. The development of these sites will intensify the land-use, however not to a degree that would adversely impact upon the existing natural and built environment.

(vii) The effects on areas or landscapes which have a recognised European Union or international protection status.

As previously identified there are no nationally or internationally designated sites for nature conservation within the boundary of the Stillorgan Draft LAP. However, Appropriate Assessment Screening has been undertaken in accordance with the European Union Habitats Directive. It concluded that Stillorgan Draft LAP will not have a significant effect on the Natura 2000 network and a Stage 2 Appropriate Assessment is not required.

There are no Landscape High Amenity Zones within the Stillorgan Draft LAP or in close proximity to it. The policies contained within the Stillorgan Draft LAP will ensure that it

does not have a significant effect on landscapes which have a European or International protection status.

4.4 SCREENING CONCLUSION

Taking into account the aforementioned criteria it is concluded that the Stillorgan Draft LAP (2017-2023) is not likely to have significant effects on the environment. The key strategies, objectives and policies of the Dún Laoghaire-Rathdown County Development Plan (2016-2022) have been embraced during the preparation of the Stillorgan Draft LAP (2017-2023). Its implementation with regard to residential, economic, transport and community development is perceived not to have any direct adverse effects on international or national designated sites of environmental protection.

It is therefore considered that a full Strategic Environmental Assessment is not required in respect of the Stillorgan Draft LAP. Any localised environmental effects as a result of any proposed development carried out on the land within the Draft LAP area can be dealt with through the assessment of individual planning applications.

Appendix III

Draft Stillorgan Local Area Plan

Appropriate Assessment Screening Report

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Source: NPWS (January 2018)

1 Introduction

1.1 Background

This report forms the Screening of Appropriate Assessment (AA) of the Stillorgan Draft Local Area Plan 2017 – 2023 in accordance with the requirements of Article 6(3) of the EU Habitats Directive and in accordance with Part XAB in the Planning & Development Acts 2000-2011.

The obligation to undertake appropriate assessment derives from Article 6(3) and 6(4) of the Habitats Directive and both involve a number of steps and tests that need to be applied in sequential order.

Article 6(3) is concerned with the strict protection of sites, while Article 6(4) is the procedure for allowing derogation from this strict protection in certain restricted circumstances. Each step in the assessment process precedes and provides a basis for other steps. The results at each step must be documented and recorded carefully so there is full traceability and transparency of the decisions made.

The first test is to establish whether, in relation to a particular plan or project, appropriate assessment is required. This is termed Screening for Appropriate Assessment. Its purpose is to determine, on the basis of a preliminary assessment and objective criteria, whether a plan or project, alone and in combination with other plans or projects, could have significant effects on a Natura 2000 site in view of the site's conservation objectives. The need to apply the precautionary principle in making any key decisions in relation to the tests of AA has been confirmed by European Court of Justice case law. Therefore, where significant effects are likely, uncertain or unknown at screening stage, AA will be required.

Circular Letter SEA 1/08 & NPWS 1/08 issued by the Department of Environment, Heritage and Local Government requires that, as a result of European Court of Justice Case 418/04 EC Commission v Ireland, any draft land use plan (or amendments or variations) proposed under the Planning & Development Act 2000 (as amended) must be screened for any potential impact on areas designated as Natura 2000 sites. The results of the screening should be recorded and made available to the public.

It should be noted that a Strategic Environmental Assessment Screening Report has been prepared for the Stillorgan Draft Local Area Plan 2017 – 2023.

1.2 Legislative Context

Article 6 of the 'Habitats' Directive (92/43/EEC) plays a crucial role in the management of Natura 2000 sites and determines the relationship between the conservation of the habitats and species and other types of land use within these designated areas. It has three main sets of provisions. Article 6(1) makes provision for the establishment of the necessary conservation measures. Article 6(2) makes provision for avoidance of habitat deterioration and significant species disturbance. Its emphasis is therefore preventive. Article 6(3) and 6(4) set out a series of procedural and substantive safeguards governing plans and projects likely to have a significant effect on a Natura 2000 site. Within this structure, it can be seen that there is a distinction between Article 6(1) and (2) which define a general regime and Article 6(3) and 6(4) which define a procedure applying to specific circumstances.

Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans or projects affecting Natura 2000 sites. Article 6(3) establishes the requirement for Appropriate Assessment:

"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.”

Article 6(4) deals with the steps that should be taken when it is determined, as a result of Appropriate Assessment, that a plan/project will adversely affect a European site. Issues dealing with alternative solutions, imperative reasons of overriding public interest and compensatory measures need to be addressed in this case. Article 6(4) states:

“If, in spite of a negative assessment of the implications for the 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, the 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 requirements of Articles 6(3) and 6(4) of the Habitats Directive have been transposed into Irish legislation by means of the Habitats Regulations, 1997 (S.I. No. 94 of 1997) and the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 / 2011).

Part XAB of the Planning & Development Acts was first inserted by Section 57 of the Planning & Development (Amendment) Act 2010. This Section was subsequently amended by the Environment (Miscellaneous Provisions) Act 2013 and further amended by the European Union (Environmental Impact Assessment & Habitats) Regulations 2011. Part XAB introduces the requirement into primary legislation, for an assessment of the likely significant effects of a proposed land use plan or proposed development on a European site.

1.3 Guidance

Guidance on the Appropriate Assessment (AA) process was produced by the European Commission in 2002, which was subsequently developed into guidance specifically for Ireland by the Department of Environment, Heritage and Local Government (DEHLG) (2009). The methodology followed in relation to this AA screening has had regard to the following guidance:

- Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities. Department of Environment, Heritage and Local Government.
- Managing Natura 2000 Sites: the provisions of Article 6 of the Habitats Directive 92/43/EEC, referred to as MN2000, European Commission 2000;
- 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);
- Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC – Clarification of the concepts of: alternative solutions, imperative reasons of overriding public interest, compensatory measures, overall coherence, opinion of the commission.

1.4 Methodology

There are four main stages in the Appropriate Assessment process (see Figure 1-1 below); the requirements for each depending on likely impacts to European Sites (SAC/SPA).

Stage 1: Screening for Appropriate Assessment

The initial, screening stage of the Appropriate Assessment is to determine:

- a. whether the proposed plan or project is directly connected with or necessary for the management of the European designated site for nature conservation
- b. if it is likely to have a significant adverse effect on the European designated site, either individually or in combination with other plans or projects

For those sites where potential adverse impacts are identified, either alone or in combination with other plans or projects, further assessment is necessary to determine if the proposals will have an adverse impact on the integrity of a European designated site, in view of the sites conservation objectives (i.e. the process proceeds to Stage 2).

Stage 2: Appropriate Assessment

This stage requires a more in-depth evaluation of the plan or project, and the potential direct and indirect impacts of them on the integrity and interest features of the European designated site(s), alone and in-combination with other plans and projects, taking into account the site's structure, function and conservation objectives. Where required, mitigation or avoidance measures will be suggested.

The competent authority can only agree to the plan or project after having ascertained that it will not adversely affect the integrity of the site(s) concerned. If this cannot be determined, and where mitigation cannot be achieved, then alternative solutions will need to be considered (i.e. the process proceeds to Stage 3).

Stage 3: Alternative Solutions

Where adverse impacts on the integrity of Natura 2000 sites are identified, and mitigation cannot be satisfactorily implemented, alternative ways of achieving the objectives of the plan or project that avoid adverse impacts need to be considered. If none can be found, the process proceeds to Stage 4.

Stage 4: Imperative Reasons of Overriding Public Interest (IROPI)

Where adverse impacts of a plan or project on the integrity of Natura 2000 sites are identified and no alternative solutions exist, the plan or project will only be allowed to progress if imperative reasons of overriding public interest can be demonstrated. In this case compensatory measures will be required.

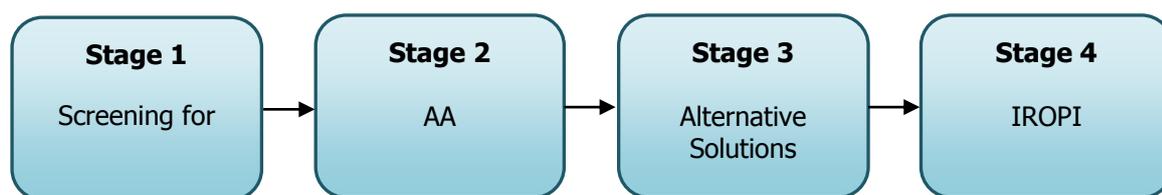


Figure 1-1: The Appropriate Assessment Process (from: Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities, DEHLG, 2009)

The process only proceeds through each of the four stages for certain plans or projects. For example, for a plan or project, not connected with management of a site, but where no likely significant impacts are identified, the process stops at stage 1. Throughout the process, the precautionary principle must be applied, so that any uncertainties do not result in adverse impacts on a site. This report is for Stage 1 Screening for Appropriate Assessment.

The Habitats Directive promotes a hierarchy of avoidance, mitigation and compensatory measures. First, the plan should aim to avoid any impacts on European Sites by identifying possible impacts

early in the plan-making process 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 impacts on European Sites, and no further practicable mitigation is possible, then it must be 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.

1.4.1 Source-Pathway-Receptor Model

In ecological and environmental impact assessment, for an impact to occur there must be a risk enabled by having a 'source' (e.g. discharges or emissions), a 'receptor' (e.g. a Natura 2000 site or other ecologically sensitive feature), and a pathway between the source and the receptor (i.e. a watercourse which connects the Natura 2000 sites or to its supporting features).

Therefore the Draft LAP, as a potential Source and any links or Pathways that may provide a route of significant impacts on the Receptor i.e. Natura 2000 sites, are examined in this screening. The zone of impact and distance is established from this source-pathway-receptor model.

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

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

In the interest of this report, receptors are the ecological features which are known to be utilised by the qualifying interests or special conservation interests of a European Site. A source is any identifiable element of the Draft Plan provision which is known to have interactions with ecological processes. The pathways are any connections or links between the source and the receptor. This report determines if direct, indirect and cumulative adverse effects (however minor) will arise from the proposed development.

1.4.2 Zone of Influence

Following the source-pathway-receptor model, a Zone of Influence (ZOI) will be determined based on the characteristics of the development and the foreseen distribution of likely effects through any pathways identified. Once the ZOI is established, all European Sites within it will be assessed with specific reference to the sensitive receptors of each site and pathways for effect that relate to the ecological integrity of the site.

1.5 Relationship between the Appropriate Assessment process and the Plan

The Appropriate Assessment process needs to be fully integrated with the various stages of the development of the Draft LAP in order to ensure that the ecological implications of the plan do not affect any Natura 2000 sites. As the AA process has been managed by the Forward Planning team, interaction has occurred with the Biodiversity Officer from the early stages of writing of the Draft Plan to raise awareness of the importance of protection of Natura 2000 sites and that the plan must be formulated to avoid adverse impacts on these sites.

In addition, the Strategic Environmental Assessment process has been taken into account in the appropriate assessment process.

2 Description and Background of the Stillorgan Draft Local Area Plan

2.1 Receiving Environment

Stillorgan is a residential suburban district of Dublin, approximately 7 Kilometres south of the city centre, within the heart of Dun Laoghaire Rathdown County. At its core, Stillorgan has a long established commercial/retail centre, servicing the surrounding residential areas. The Draft Local Area Plan has a relatively limited spatial area and is confined predominantly to the District Centre. The District Centre is well connected by public transport to the city along the N11 Quality Bus Corridor and by the LUAS, and with easy access to the M50 motorway.

2.2 Stillorgan Draft Local Area Plan Description

The Stillorgan Draft Local Area Plan covers an area of approximately 16.5 hectares and is located in the centre of the County, between Blackrock to the east and Dundrum to the west. The Draft LAP area encompasses the lands around the intersection at Lower Kilmacud Road, Old Dublin Road and The Hill and includes a number of strategic sites including the Stillorgan Shopping Centre, Leisureplex, the former Blakes site, the Stillorgan Shopping Centre overflow car park, Kilmacud Crokes GAA club lands and existing retail and commercial development on Lower Kilmacud Road.

The Stillorgan Draft LAP is being prepared as a result of an objective contained within the Dún Laoghaire-Rathdown County Development Plan (DLRCDP) 2016-2022 and in accordance to the policies and objectives contained within the DLRCDP. The DLRCDP is the overarching statutory framework for the development of the County and the Stillorgan Draft LAP must be consistent with the objectives of the DLRCDP 2010-2016 under the Planning and Development Acts.

The DLRCDP identifies Stillorgan as an area for 'Development and Regeneration' where the vision is "to address local issues facing Stillorgan including traffic volumes and congestion and aims to promote a more pedestrian friendly environment. The Plan identifies a vision for redevelopment of Stillorgan as a District Centre and Neighbourhood Centre with a strong sense of place."

2.3 Draft Plan Vision

The emphasis of the Draft Plan is to enhance the sense of place and community within Stillorgan, improving its vitality and viability as a District Centre. The Plan strategy is to seek a transformative improvement in the quality of the public realm where priority movement for pedestrians, cyclists and public transport will be ensured and the creation of high quality spaces will be a prerequisite. The influence and impact of the private car on the environs of the District Centre will be moderated.

The high-quality regeneration and redevelopment of key sites in Stillorgan District Centre will be encouraged, in tandem with a radically improved public realm, to provide a coherent and balanced urban environment in respect of scale, design and layout. Stillorgan will successfully perform its role as a high-quality, accessible retail and commercial centre serving the needs of the wider community.

New residential development in Stillorgan will assist in improving the diversity of the housing mix in the area and reversing the long-term trends of population decline in the area. The residential amenity of established residential areas on the fringes of the District Centre is to be protected and, where possible, enhanced through the successful integration of future developments with the existing built fabric of Stillorgan.

2.4 Relationship with other Relevant Plans and Programmes

The Draft LAP sits within a hierarchy of strategic actions such as plans and programmes, including those listed below. The Draft LAP must comply with relevant higher level strategic actions and may, in turn, guide lower level strategic actions.

2.4.1 Draft National Planning Framework

At national level, the most important recent publication has been the Draft National Planning Framework (NPF) 'Ireland 2040 – Our Plan' which was on public display in November 2017. The Plan forms the "spatial expression of Government policy" and will provide a National Planning Framework to guide national, regional and local planning and investment decisions for the years ahead, building on and co-ordinating the existing regional and local authority planning processes. The Framework is a strategic high level Plan and the practical implications of the policy will be implemented through the finer grained 'Regional Spatial and Economic Strategies' – yet to be published.

2.4.2 Regional Spatial and Economic Strategies

Regional Spatial and Economic Strategies (RSESs) will be prepared by the Regional Assemblies and must be in accordance with the NPF. In addition, the preparation of Metropolitan Area Strategic Plans (MASPs) for the five cities, including Dublin - in the form of 12 year planning frameworks crossing administrative boundaries - will be a key feature of the RSES's.

2.4.3 Dún Laoghaire-Rathdown County Development Plan 2016-2022

The County Development Plan 2016-2022 provides the overarching planning framework for the County and sets out the zoning 'hierarchy' for the County. The 2016-2022 County Development Plan aims to continue to facilitate appropriate levels of sustainable development predicated on the delivery of high quality community, employment and recreational environments - allied to the promotion of sustainable transportation and travel patterns - but all the while protecting Dún Laoghaire–Rathdown's unique landscape, natural heritage and physical fabric, to ensure the needs of those living and working in the County can thrive in a socially, economically, environmentally sustainable and equitable manner.

2.4.4 Core Strategy

The Planning and Development (Amendment) Act 2010 introduced the requirement for an evidence-based Core Strategy to be incorporated as part of all County Development Plans. The purpose of a Core Strategy is to articulate a medium-to-longer term quantitatively based strategy for the spatial development of the area of the Planning Authority, and, in so doing, to demonstrate that a Development Plan and its policies and objectives are entirely consistent with national and regional development objectives as set out in the National Spatial Strategy 2002-2022 (NSS) and the Regional Planning Guidelines 2010-2022 (RPGs).

The Core Strategy seeks to ensure a level of equilibrium between residential land supply in the County and forecast household growth. The Draft LAP lands, which are predominantly zoned 'District Centre', and therefore have a mixed-use focus as opposed to a purely residential one, form a part of the Council's medium-to-long term residential land supply and are highlighted in the Core Strategy as such.

2.4.5 Environmental Protection Objectives

The Draft Plan is subject to a number of high level environmental protection policies and objectives with which it must comply. Examples of Environmental Protection Objectives include the aims of the EU Habitats Directive which is to contribute towards ensuring biodiversity through the conservation of natural habitats and of wild fauna and flora in the European territory of Member States and the purpose of the Water Framework Directive which is to establish a framework for the protection of inland surface waters, transitional waters, coastal waters and groundwater which, among other things, prevents deterioration in the status of all water bodies and protects, enhances and restores all waters with the aim of achieving good status.

3 Screening for Appropriate Assessment

3.1 Introduction to Screening

3.1.1 Background to Screening

This stage of the process identifies any likely significant affects to European Sites from a project or plan, either alone or in combination with other projects or plans. The screening phase was progressed in the following stages. A series of questions are asked during the Screening Stage of the Appropriate Assessment process in order to determine:

- a. whether the proposed plan or project is directly connected with or necessary for the management of the European designated site for nature conservation
- b. if it is likely to have a significant adverse effect on the Natura 2000 sites, either individually or in combination with other plans or projects

The screening stage of the Appropriate Assessment takes account of the elements detailed above with regard to the details and characteristics of the project or plan to determine if potential for effects to the integrity of the European Site are likely. The characteristics of the draft plan were designed through in iterative process, as a result the Natura 2000 Sites which are screened below may differ from those of high level plans, due to refinements in the methods/project details available.

3.1.2 Desktop Studies

The desktop study completed for this Screening for Appropriate Assessment includes a review of data available relating to Natura 2000 sites including:

- Identification of Natura 2000 Sites within 15km with identification of potential pathways links for specific sites (if relevant) greater than 15km from the proposed development study area;
- Review of the NPWS site synopsis and conservation objectives for Natura 2000 Sites with identification of potential pathways from the Draft LAP, if any; and
- EU Annexed Habitats and Species.

Site synopses, which are summary descriptions of the key conservation interests of sites, Natura 2000 standard data forms and conservation objectives documents for the relevant Natura 2000 sites were obtained from the NPWS website. Other information and data, that was considered pertinent in terms of supporting information was obtained from other sources for example, EPA Envision website and Geological Survey Ireland, Geohive website.

Other information examined from the NPWS website included Species Action Plans, Conservation Management Plans, Freshwater Pearl Mussel sub-basin management plans, and species reports.

3.2 Identification of Relevant Natura 2000 Sites

This section involves an examination of what Natura 2000 sites might be affected. These sites have been identified and listed below, and have considered the potential for a plan or project, whether it is within or outside a Natura 2000 site, to have direct, indirect or cumulative effects, and has taken a precautionary approach so that a site is included if doubt exists. Natura 2000 sites are included that occur within the Zone of Influence of the Draft LAP, and this recognises the sites that occur beyond the Draft LAP may be affected depending upon the connectivity to the site through pathways such as land, air and water pathways.

The DoEHLG (2009) Guidance on Appropriate Assessment recommends a 15km buffer zone be considered around the site. Natura 2000 sites that occur within 15km of the Plan Area or that were identified to have hydrological pathways to the Draft LAP are listed in Table 3-1 and illustrated in Figure 3-1 below. Details of the qualifying interests of each European Site are also identified in Table

3-2. There are sixteen (16) sites in all, nine (9) SACs and seven (7) SPAs. No Natura 2000 site lies within the boundary of the Draft LAP area.

In order to determine the potential for effects from the Draft LAP, information on the qualifying interests, known vulnerabilities and threats to site integrity relevant to any potentially affected Natura 2000 Sites were examined. The information on threats to individual sites and vulnerability of habitats and species that was used during this assessment included the following:

- Ireland’s Article 17 Report to the European Commission ‘Status of EU Protected Habitats and Species in Ireland’ (NPWS, 2013);
- Site Synopses;
- NATURA 2000 Standard Data Forms; and
- Conservation Objectives and Supporting Documents (where available).

Since the conservation objectives for the European Sites focus on maintaining the favourable conservation condition of the qualifying interests of each site, the screening process concentrated on assessing the potential effects of the Draft LAP against the qualifying interests and conservation objectives of each site.

Table 3-1: European Sites which occur within 15 km of the Draft Local Area Plan or with hydrological links to the site (list in accordance to proximity to the Draft LAP boundary)

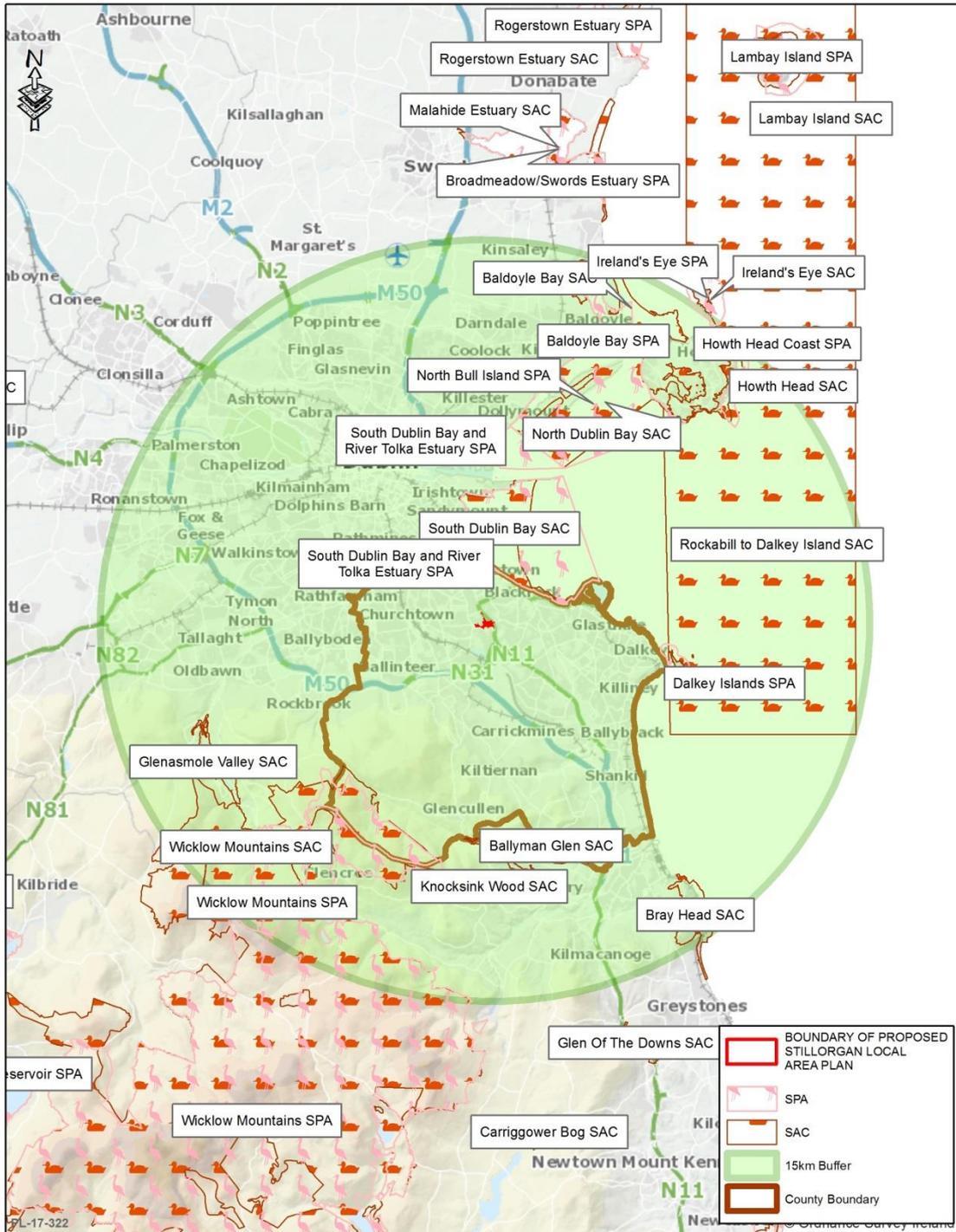
Site Code	Site Name	Distance (km)	Site Synopsis and Existing Threats or Sensitivities
000713	Ballyman Glen SAC	9.03	Ballyman Glen contains a small strip of alkaline fen which is associated with petrifying spring/seepage areas that have given rise to thick deposits of marl. There is an area of broadleaved woodland on the steeper southern slopes of the glen. This is under threat from invasion of species such as Sycamore (<i>Acer pseudoplatanus</i>). An area of land that slopes towards the fen has been used as a landfill site for domestic refuse. The site is also used for a clay pigeon shoot and shattered clay pigeons are scattered throughout the area. These activities pose a threat to the integrity site due to potential water quality issues.
000714	Bray Head SAC	12.296	Dry heath is the principal habitat over much of Bray Head. The heath communities which occur on the dry slopes above the sea cliffs, especially those south-facing, are more open in character and dominated by grasses rather than dwarf shrubs. Calcareous dry grassland, typically species-rich, occurs on deposits of glacial till. Rocky sea cliffs, another Annex I habitat, form most of the seaward boundary at this site and extend for approximately 2 km. Steep clay cliffs extend southwards for a further 1 km, with a small area of clay cliff also at the northernmost part of site. A stand of mostly native woodland occurs in the northern part of the site. Bray Head has an important seabird colony. Peregrine Falcon, an Annex I species of the E.U. Birds Directive, breeds at the site, as do Raven and Kestrel. The heath and grassland habitats at this site are threatened by reclamation for agriculture and also by frequent burning. The site is a popular recreational area and is especially used by walkers.
000725	Knocksink Wood SAC	8.405	Some of the slopes of Knocksink Wood are dominated by Sessile Oak (<i>Quercus petraea</i>), with a sparse shrub layer of Holly (<i>Ilex aquifolium</i>) and Hazel (<i>Corylus avellana</i>). A notable feature of the wooded slopes are the frequent and extensive springs and seepage areas, and there is tufa formation in several places. Associated with the springs and the river are stands of wet alluvial forest. These areas are dominated by Ash and Alder (<i>Alnus</i> spp.), and are assigned to the group Carici remotae-Fraxinetum. This site has one of the most diverse woodland invertebrate faunas in Ireland, including some wet woodland organisms which are threatened at an international level. No site-specific threats have been identified by the NPWS and the site is run as a nature reserve with an education centre.
004172	Dalkey Islands SPA	6.698	Dalkey Islands SPA is both a breeding and a staging site for Sterna terns. Common Tern is the most common species, usually outnumbering Arctic Tern by at least 3:1. The site, along with other parts of south Dublin Bay, is used by the three-tern species as a major post-breeding/pre-migration autumn roost area. The site also provides nesting areas for other breeding

			wader species such as Oystercatchers and Shelducks. There are no site-specific threats identified by the NPWS however the special conservation interest species are sensitive to noise pollution as a form of disturbance.
003000	Rockabill to Dalkey Island SAC	6.912	Reef habitat is uncommon along the eastern seaboard of Ireland due to prevailing geology and hydrographical conditions. These reefs are subject to strong tidal currents with an abundant supply of suspended matter resulting in good representation of filter feeding fauna such as sponges, anemones and echinoderms. The area selected for designation represents a key habitat for the Annex II species Harbour Porpoise within the Irish Sea. The site also supports Common Seal and Grey Seal, for which terrestrial haul-out sites occur in immediate proximity to the site. Bottlenosed Dolphins has also occasionally been recorded in the area. A number of other marine mammals have been recorded in this area including Minke, Fin and Killer Whales and Risso's and Common Dolphins. The NPWS have not identified site specific threats for this site.
002122	Wicklow Mountains SAC	7.687	The vegetation over most of Wicklow Mountains SAC is a mosaic of heath, blanket bog and upland grassland, stands of dense Bracken (<i>Pteridium aquilinum</i>), and small woodlands mainly along the rivers. The two dominant vegetation communities in the area are heath and blanket bog. Due to the underlying rock strata, the water of the rivers and streams is acid rather than alkaline. The water is generally oligotrophic and free from enrichment. Alpine vegetation occurs on some of the mountain tops, notably in the Lugnaquilla area, and also on exposed cliffs and scree slopes elsewhere in the site. Old lead mine workings at Glendasan support an estimated 3.6 hectares of Calaminarian Grassland. Small areas of old oakwood (<i>Blechno-Quercetum petraeae</i> type) occur on the slopes of Glendalough and Glenmalure, near Lough Tay and Lough Dan, with native Sessile Oak (<i>Quercus petraea</i>) trees, many of which are 100-120 years old. Large areas of the site are owned by the National Parks and Wildlife Service (NPWS) and are managed for nature conservation based on traditional land uses of upland areas. The most common land use is traditional sheep grazing, but others include turf cutting, mostly hand-cutting but some machine-cutting also occurs. These land uses pose potential threats to the integrity of the site.
004040	Wicklow Mountains SPA	7.812	Traditionally a ground-nesting species, Merlin in the Wicklow Mountains are usually found nesting in old crows nests in conifer plantations. The open peatlands provide excellent foraging habitat for Merlin with small birds such as Meadow Pipit being their main prey. The cliffs and crags within the site also provide ideal breeding locations for Peregrine. Disturbance from recreational use is thought to be the greatest threat to the special qualifying interest species.
000210	South Dublin Bay SAC	1.754	Several small, sandy beaches with incipient dune formation occur in the northern and western sectors of the site, notably at Poolbeg, Irishtown and Merrion/Boosterstown. The formation at Boosterstown is very recent. Drift line vegetation occurs in association with the embryonic and incipient fore dunes. The bed of Dwarf Eelgrass (<i>Zostera noltii</i>) found below Merrion Gates is the largest stand on the east coast. 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. Water quality concerns for the Wetland habitats and recreational uses are the main threats to the site. 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.
004024	South Dublin Bay and River Tolka Estuary SPA	1.727	In the south bay, the intertidal flats extend for almost 3km 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 Dún Laoghaire. The landward boundary is now almost entirely artificially embanked. There is a bed of Dwarf Eelgrass (<i>Zostera noltii</i>) below Merrion Gates which is the largest stand on the east coast. The site is an important site for wintering waterfowl, being an integral part of the internationally important Dublin Bay complex. The site is of ornithological importance as it supports an internationally important population of Light-bellied Brent Goose and nationally important populations of a further nine wintering species. The site is sensitive to alterations to sediment quality and disturbances such as noise pollution to avian species.

004006	North Island	Bull SPA	6.701	Saltmarsh extends along the length of the landward side of the island and provides the main roost site for wintering birds in Dublin Bay. 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. 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 Light-bellied Brent Goose, Black-tailed Godwit and Bar-tailed Godwit that use it. Sediment and disturbance are the main threats identified by the NPWS for the site.
000206	North Bay SAC	Dublin	6.703	North Bull 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. 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 (<i>Alnus glutinosa</i>). The water table is very near the surface and is only slightly brackish. 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 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. Three rare plant species which are legally protected under the Flora (Protection) Order, 1999 have been recorded on the North Bull Island. The main land uses of this site are amenity activities and nature conservation. Sediment quality and disturbance through recreational activities are the main threats to this site.
004113	Howth Coast SPA	Head	12.404	Howth Head Coast SPA is of high ornithological importance as it supports a nationally important population of Kittiwake. It is also a traditional nesting site for Peregrine Falcon, a species that is listed on Annex I of the E.U. Birds Directive. The site is easily accessible and has important amenity and educational value due to its proximity to Dublin City.
004016	Baldoyle SPA	Bay	12.355	Baldoyle Bay is an important site for wintering waterfowl, providing good quality feeding areas and roost sites for an excellent diversity of waterfowl species. It supports an internationally important population of Light-bellied Brent Goose, and has a further five species with nationally important populations. 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, Ringed Plover, Golden Plover, Grey Plover and Bar-tailed Godwit. 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 and Waterbirds.
002193	Ireland's SAC	Eye	14.733	Situated c. 1.5 km north of Howth, Ireland's Eye is a small uninhabited island. The underlying geology is Cambrian greywackes and quartzites. These rocks form impressive cliffs along the northern and eastern sides of the island, reaching up to 69 m. Elsewhere the island is covered by glacial drift. A sandy beach, backed by shingle and low sand hills, occurs at Carrigeen Bay on the western shore. An extensive area of bedrock shore is exposed at low tide to the south of the island. The main habitat on the island is a mix of dry grassland and bracken. Owing to its proximity to the mainland, the island is popular with day-trippers and also has educational value. The island has a small, though significant, example of vegetated stony or shingle habitat of the type which fringes sandy beaches. It also contains an example of vegetated sea cliffs and has two Red Data Book species, <i>Crambe maritima</i> and <i>Hyoscyamus niger</i> . Excellent diversity of breeding seabirds (up to 12 species), with four species in numbers of national importance and also a recently established gannet (<i>Sula bassana</i>) colony, the only one on the east coast. Traditional site for <i>Falco peregrinus</i> .
004117	Ireland's SPA	Eye	14.733	Ireland's Eye is an important seabird colony, with 11 species breeding regularly. It has nationally important populations of <i>Phalacrocorax carbo</i> , <i>Larus argentatus</i> , <i>Larus marinus</i> , <i>Rissa tridactyla</i> , <i>Uria aalge</i> and <i>Alca torda</i> . In addition, the island has a recently established colony of <i>Sula bassana</i> , which is one of only five in the country and the only one on the East coast. It also has regionally important populations of <i>Fulmarus glacialis</i> , <i>Phalacrocorax aristotelis</i> , <i>Cephus grylle</i> and a small colony of <i>Fratercula</i>

			arctica only. It is a traditional site for <i>Falco peregrinus</i> , though this species breeds in some years. It supports two Red Data Book plant species, <i>Crambe maritima</i> and <i>Hyoscyamus niger</i> . The seabird colony is monitored annually.
001209	Glenasmole Valley SAC	11.26	<p>Glenasmole Valley lies at the northern foothills of the Dublin and Wicklow Mountains. It is a glaciated valley, with drift deposits, consisting of fluvioglacial sands and gravels of varying thickness and rich in Carboniferous limestone, occurring on the slopes. Spring lines occur along both sides of the northern part of the valley. The River Dodder flows through the valley and within the site the river has been impounded to form two reservoirs. Associated with the reservoirs are areas of swamp and marsh vegetation. The valley is heavily wooded, mostly with mixed woodland of both deciduous and coniferous species but also some native woodland. Dry calcareous pasture grassland, improved to varying degrees, is a main habitat of the valley sides and occurs in association with wet grassland and, in places of seepage, fen or marsh type vegetation.</p> <p>The site has important examples of petrifying springs. The physical and chemical properties of the springs have been studied. Good examples of orchid rich calcareous grassland, including <i>Pseudorchis albida</i> (legally protected) and <i>Orchis morio</i> (Red Data Book species) are found. The quality of grassland is variable owing to agricultural improvement. <i>Molinia</i> meadows are also represented. Several other Red Data Book plant species occur, along with a host of rare or scarce plant species for Co. Dublin. The botany of this site has been well studied since the 19th century. The site has <i>Alcedo atthis</i>, and is important for bats, with four Red Data Book species present (<i>Pipistrellus pipistrellus</i>, <i>Nyctalus leisleri</i>, <i>Myotis daubentoni</i>, <i>Plecotus auritus</i>).</p>

Figure 3-1: Natura Sites 2000 with hydrological links or within 15 km of the Draft Plan Area
 Source: NPWS (January 2018)



<p>0 2.5 5 10 Kilometres</p> <p>Includes Ordnance Survey Ireland data reproduced under OSI Licence number 2013-2015/CCMA/ Dun Laoghaire-Rathdown County Council. Unauthorised reproduction infringes Ordnance Survey Ireland and Government of Ireland copyright. © - Ordnance Survey Ireland, 2017</p>	<p>EUROPEAN SITES WITH HYDROLOGICAL LINKS OR WITHIN 15 KM OF THE PLAN AREA</p> <p>Source: NPWS (datasets downloaded January 2017; verified July 2017)</p>		<p>Senior Planner: D. Irvine</p>	<p>Chief Tech: M. Hevehan</p>
	<p>Planning and Human Resources Department</p> <p>M. Henchy Director</p>	 <p>Comhairle Contae County Council</p>	<p>Prepared By: L. Clarke</p>	<p>Drawn By: M. Hevehan</p>
	<p>Date: January 2018</p>	<p>Scale: 1:200,000</p>	<p>PL-17-322</p>	

3.2.3 Elements of the Draft Plan with Potential to Give Rise to Effects

The Stillorgan Draft Local Area Plan contains policies and objectives which have the potential to give rise to effects on Natura 2000 Sites. The Draft Plan contains provisions for the renewal and redevelopment of key sites identified within the Draft Plan area through the implementation of the site-specific Site Framework Strategies. The Draft Plan also contains provisions for comprehensive improvements to the public realm, through the phased implementation of the Stillorgan Village Area Movement Framework Plan. In this regard, the Council will have regard to its responsibilities in relation to the requirements of the Habitats Directive, and any development proposal within the vicinity of or potentially having an effect on a designated site will be subject to an Appropriate Assessment. In addition, elements of the Draft Plan, such as the objectives set out in Section 4.6 pertaining to 'Sustainable Infrastructure', will have, it is thought, a positive ecological effect on the area.

3.3.3 Identification of Potential Likely Significant Effects

This section documents the final stage of the screening process. It has used the information collected on the sensitivity of each Natura 2000 Site and describes any likely significant effects resulting from the Draft LAP. This assumes the absence of any controls, conditions, or mitigation measures. In determining the potential for significant effects, a number of factors have been taken into account. Firstly, the sensitivity and reported threats to the European Site. Secondly, the individual elements of the Draft LAP and the potential effect they may cause to the site were considered. The elements of the Draft LAP with potential to cause effect to Natura 2000 Sites are presented in Table 3 2 below. Sites are screened out based on one or a combination of the following criteria:

- where it can be shown that there are no pathways or links between activities of the Draft LAP, and the site to be screened;
- where the site is located at such a distance from Draft LAP that effects are not anticipated;
- where known threats or vulnerabilities at a site cannot be linked to potential impacts that may arise from the Draft LAP; and
- where there are no significant 'in combination' effects.

The following parameters are described when characterising impacts (following CIEEM (2016), EPA (2002) and NRA (2009)):

Direct and Indirect Impacts – An impact can be caused either as a direct or as an indirect consequence of a proposed development.

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

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

Duration – The time for which the effect is expected to last prior to recovery or replacement of the resource or feature:

- Temporary: Up to 1 Year;
- Short Term: The effects would take 1-7 years to be mitigated;
- Medium Term: The effects would take 7-15 years to be mitigated;
- Long Term: The effects would take 15-60 years to be mitigated;
- Permanent: The effects would take 60+ years to be mitigated.

Likelihood – The probability of the effect occurring taking into account all available information:

- Certain/Near Certain: >95% chance of occurring as predicted;

- Probable: 50-95% chance as occurring as predicted;
- Unlikely: 5-50% chance as occurring as predicted;
- Extremely Unlikely: <5% chance as occurring as predicted.

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

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

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

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

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

Generic Conservation Objectives for cSACs have been provided as follows:

- To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.
- One generic Conservation Objective has been provided for SPAs as follows:
- To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.

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

- Land take
- Resource Requirements (Drinking Water Abstraction Etc.)
- Emissions (Disposal to Land, Water or Air)
- Excavation Requirements
- Transportation Requirements
- Duration of Construction, Operation, Decommissioning

In addition, the guidance document outlines the following likely changes that may occur at a designated site, which may result in effects on the integrity and function of that site:

- Reduction of Habitat Area
- Disturbance to Key Species
- Habitat or Species Fragmentation
- Reduction in Species Density
- Changes in Key Indicators of Conservation Value (Water Quality Etc.)
- Climate Change

The elements detailed above were considered with specific reference to each of the European Sites identified in Tables 3-1 and 3-2.

Table 3-2: Screening assessment of European Sites within 15km or with significant hydrological links to the Draft LAP boundary

Site Code	Site Name	Distance (km)	Qualifying Interests (Sensitive Receptors)	Relevant environmental conditions that support Site Integrity	Pathways	Pathway for Significant Effects	Potential for In-Combination Effects
000713	Ballyman Glen SAC	9.03	Petrifying springs with tufa formation (Cratoneurion) [7220] Alkaline fens [7230]	Water quality and quantity and alterations in the water table/chemistry.	The SAC is upstream of the Draft LAP. Therefore, there are no pathways or hydrological links between the Draft LAP and this SAC. There are no likely effects foreseen as a result of the implementation of the Draft Plan.	No	No
000714	Bray Head SAC	12.296	Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] European dry heaths [4030]	Flat topography on coastal cliff bedrock. High pH influence of sands and seabird guano.	There are no pathways for effects to the qualifying interests listed for this SAC. There are no likely effects foreseen as a result of the implementation of the Draft Plan.	No	No
000725	Knocksink Wood SAC	8.405	Petrifying springs with tufa formation (Cratoneurion) [7220] Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, <i>Alnion incanae</i> , <i>Salicion albae</i>) [91E0]	Water quality and quantity and alterations in the water table/chemistry.	There are no pathways or hydrological links between the Draft LAP and this SAC. There are no likely effects foreseen as a result of the implementation	No	No

					of the Draft Plan.		
004172	Dalkey Islands SPA	6.698	Roseate Tern (Sterna dougallii) [A192] Common Tern (Sterna hirundo) [A193] Arctic Tern (Sterna paradisaea) [A194]	The qualifying features of this SPA are most sensitive to direct disturbance due to noise and/or increased activity on site. Water quality and key resources e.g. food source prey items such as fish, crustaceans etc. upon which tern species depend.	The impact of increased visitor pressure to Dalkey Island is unlikely as a result of the Draft LAP. There are no likely effects foreseen as a result of the implementation of the Draft Plan.	No	No
003000	Rockabill to Dalkey Island SAC	6.912	Phocoena phocoena (Harbour Porpoise) [1351] Reefs [1170]	Human activities and disturbance. Artificial barriers may restrict their range. Water quality and key resources e.g. food source upon which harbour porpoises depend. Water quality and habitat quality of reefs.	The impact of increased visitor pressure to Dalkey Island is unlikely as a result of the Draft LAP. There are no likely effects foreseen as a result of the implementation of the Draft Plan.	No	No
002122	Wicklow Mountains SAC	7.687	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110] Natural dystrophic lakes and ponds [3160] Northern Atlantic wet heaths with Erica tetralix [4010] European dry heaths [4030] Alpine and Boreal heaths [4060] Calaminarian grasslands of the Violetalia calaminariae [6130] Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) [6230] Blanket bogs (* if	Water quality and habitat quality.	The SAC is upstream of the Draft LAP. Therefore, there are no pathways or hydrological links between the Draft LAP and this SAC. There are no likely effects foreseen as a result of the implementation of the Draft Plan	No	No

			<p>active bog) [7130] Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) [8110] Calcareous rocky slopes with chasmophytic vegetation [8210] Siliceous rocky slopes with chasmophytic vegetation [8220] Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] Lutra lutra (Otter) [1355]</p>				
004040	Wicklow Mountains SPA	7.812	<p>Merlin (Falco columbarius) [A098] Peregrine (Falco peregrinus) [A103]</p>	Disturbance and habitat quality.	<p>The SAC is upstream of the Draft LAP. Therefore, there are no pathways or hydrological links between the Draft LAP and this SAC.</p> <p>There are no likely effects foreseen as a result of the implementation of the Draft Plan</p>	No	No
000210	South Dublin Bay SAC	1.754	<p>Mudflats and sandflats not covered by seawater at low tide [1140] Annual vegetation of drift lines [1210] Salicornia and other annuals colonising mud and sand [1310] Embryonic shifting dunes [2110]</p>	Water quality and habitat quality.	<p>There are no pathways or hydrological links between the Draft LAP and this SAC.</p> <p>There are no likely effects foreseen as a result of the implementation of the Draft Plan.</p>	No	No
004024	South Dublin Bay and River Tolka Estuary SPA	1.727	<p>Light-bellied Brent Goose (Branta bernicla hrota) [A046] Oystercatcher (Haematopus ostralegus) [A130] Ringed Plover (Charadrius hiaticula) [A137] Grey Plover (Pluvialis</p>	Disturbance, water quality and habitat quality.	<p>There are no pathways or hydrological links between the Draft LAP and this SPA.</p> <p>There are no likely effects foreseen as a result of the implementation</p>	No	No

			<p>squatarola) [A141] Knot (Calidris canutus) [A143] Sanderling (Calidris alba) [A144] Dunlin (Calidris alpina) [A149] Bar-tailed Godwit (Limosa lapponica) [A157] Redshank (Tringa totanus) [A162] Black-headed Gull (Chroicocephalus ridibundus) [A179] Roseate Tern (Sterna dougallii) [A192] Common Tern (Sterna hirundo) [A193] Arctic Tern (Sterna paradisaea) [A194] Wetland and Waterbirds [A999]</p>		of the Draft Plan.		
004006	North Bull Island SPA	6.701	<p>Light-bellied Brent Goose (Branta bernicla hrota) [A046] Shelduck (Tadorna tadorna) [A048] Teal (Anas crecca) [A052] Pintail (Anas acuta) [A054] Shoveler (Anas clypeata) [A056] Oystercatcher (Haematopus ostralegus) [A130] Golden Plover (Pluvialis apricaria) [A140] Grey Plover (Pluvialis squatarola) [A141] Knot (Calidris canutus) [A143] Sanderling (Calidris alba) [A144] Dunlin (Calidris alpina) [A149] Black-tailed Godwit (Limosa limosa) [A156] Bar-tailed Godwit (Limosa lapponica) [A157] Curlew (Numenius arquata) [A160] Redshank (Tringa totanus) [A162] Turnstone (Arenaria interpres) [A169] Black-headed Gull (Chroicocephalus</p>	Disturbance, water quality and habitat quality.	<p>There are no pathways or hydrological links between the Draft LAP and this SPA.</p> <p>There are no likely effects foreseen as a result of the implementation of the Draft Plan.</p>	No	No

			ridibundus) [A179] Wetland and Waterbirds [A999]				
000206	North Dublin Bay SAC	6.703	Mudflats and sandflats not covered by seawater at low tide [1140] Annual vegetation of drift lines [1210] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (Glauco- Puccinellietalia maritimae) [1330] Mediterranean salt meadows (Juncetalia maritimi) [1410] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Humid dune slacks [2190] Petalophyllum ralfsii (Petalwort) [1395]	Disturbance, water quality and habitat quality.	There are no pathways or hydrological links between the Draft LAP and this SAC. There are no likely effects foreseen as a result of the implementation of the Draft Plan.	No	No
004113	Howth Head Coast SPA	12.404	Kittiwake Rissa tridactyla [A188]	Disturbance, water quality and habitat quality.	There are no pathways or hydrological links between the Draft LAP and this SPA. There are no likely effects foreseen as a result of the implementation of the Draft Plan.	No	No
004016	Baldoyle Bay SPA	12.355	A046 Brent Goose Branta bernicla hrota A048 Shelduck Tadorna tadorna A137 Ringed Plover Charadrius hiaticula A140 Golden Plover Pluvialis apricaria A141 Grey Plover Pluvialis squatarola A157 Bar-tailed Godwit Limosa lapponica A999 Wetlands	Disturbance, water quality and habitat quality.	There are no pathways or hydrological links between the Draft LAP and this SPA. There are no likely effects foreseen as a result of the implementation of the Draft Plan.	No	No

002193	Ireland's Eye SAC	14.733	A200 Alca torda A103 Falco peregrinus A204 Fratercula arctica A009 Fulmarus glacialis A017 Phalacrocorax carbo A188 Rissa tridactyla A016 Sula bassana A199 Uria aalge	Disturbance, water quality and habitat quality.	There are no pathways or hydrological links between the Draft LAP and this SAC. There are no likely effects foreseen as a result of the implementation of the Draft Plan.	No	No
004117	Ireland's Eye SPA	14.733	A017 Cormorant Phalacrocorax carbo A184 Herring Gull Larus argentatus A188 Kittiwake Rissa tridactyla A199 Guillemot Uria aalge A200 Razorbill Alca torda	Disturbance, water quality and habitat quality.	There are no pathways or hydrological links between the Draft LAP and this SPA. There are no likely effects foreseen as a result of the implementation of the Draft Plan.	No	No
001209	Glenasmole Valley SAC	11.26	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410] Petrifying springs with tufa formation (Cratoneurion) [7220]	Surface and groundwater quality and flows.	There are no pathways or hydrological links between the Draft LAP and this SAC. There are no likely effects foreseen as a result of the implementation of the Draft Plan.	No	No

3.4 Other Plans and Programs

The E.C. Habitats Directive and the Irish Habitats Regulations 2011 require that the impacts on Natura 2000 sites be assessed from the plan or project in question and also in the presence of other plans and projects that could affect the same Natura 2000 sites. Projects and/or plans that have potential to act in combination with the Draft LAP and potentially result in adverse impacts on European Sites are listed below. This Section identifies if these plans/projects have undergone an Appropriate Assessment themselves as it is assumed that if a plan/project has been adopted following an AA then it cannot pose likely significant adverse effects on Natura 2000 sites.

The characteristics of the Draft LAP are foreseen to have very low effects to any European Sites. Therefore, the in-combination effects do not need to be considered, as per the CIEEM 2016 guidelines. It is thought that the proposed Draft LAP in-combination with the plans and projects listed below are not likely to have significant effects on any European Site. However, following a

precautionary approach relevant plans and projects have been assessed. A list of the plans and projects considered are as follows:

- Dún Laoghaire – Rathdown County Development Plan 2016-2022
- Dublin City Development Plan 2016-2022;
- Wicklow County Development Plan 2016-2022;
- South Dublin County Development Plan 2016-2022;
- Cherrywood SDZ Planning Scheme 2014 (to be read in conjunction with Approved Amendments 1-4 June 2017);
- Greater Dublin Area Draft Transport Strategy, 2011-2030;
- Smarter Travel: A Sustainable Transport Future, A new Transport policy for Ireland, 2009-2020;
- Greater Dublin Strategic Drainage Study 2002-2031;
- Dún Laoghaire Harbour Masterplan (2011);
- Eastern RBD Management Plan 2009-2015;
- Sandyford Urban Framework Plan 2016-2022;
- Woodbrook-Shanganagh Local Area Plan 2017-2023;
- Blackrock Local Area Plan 2015-2021;
- Deansgrange Local Area Plan 2010-2020;
- Goatstown Local Area Plan 2012-2018;
- Kiltiernan/Glenamuck Local Area Plan 2013-2019;
- Glencullen Local Area Plan 2008-2018;
- Water Supply Project Eastern and Midland Region.

Table 3-3 outlines plans or projects that were considered which may interact with the Draft LAP to cause in-combination effects to European Sites.

Table 3-3: Plans and projects likely to cause in-combination effects

Plan or project	Status	Overview	Possible significant effects from plan or project	Possible significant in-combination effects	Risk of significant in-combination effects with the Stillorgan Local Area Plan
Draft National Planning Framework: Ireland 2040 Our Plan	The Pre-Draft Consultation period ended on the 10 th November 2017. Review of submissions and preparation of the final National Planning Framework is currently underway.	The Draft Plan As a strategic development framework, Ireland 2040 - Our Plan sets the long-term context for our country's physical development and associated progress in economic, social and environmental terms and in an island, European and global context. Ireland 2040 will be followed and underpinned by supporting policies	Yes However, iterative AA and SEA processes were conducted. Review of submissions and preparation of the final AA and SEA is currently underway.	Yes However, iterative AA and SEA processes were conducted. Review of submissions and preparation of the final AA and SEA is currently underway.	Mitigation Measures proposed within the Draft Planning Framework are robust. Development proposals which arise as a result of the final Planning Framework will be subject to Appropriate Assessment. This will provide specific project level detail to ensure no adverse significant effects

		and actions at sectoral, regional and local levels.			to European Sites.
Dún Laoghaire-Rathdown County Development Plan 2016-2022	Published	The Plan sets out Dún Laoghaire-Rathdown County Council's policies for the sustainable development of the County from 2016 to 2022.	No Stage 1 Appropriate Assessment carried out.	No Potential impacts are to be avoided through mitigatory policies in the Development Plan.	Mitigation Measures proposed within the Plan are robust. Development proposals which arise as a result of the Development Plan are subject to Appropriate Assessment. This will provide specific project level detail to ensure no adverse significant effects to European Sites.
Dublin City Development Plan 2016-2022	Published	The Dublin City Development Plan sets out policies and objectives for Dublin City. This plan guides how and where development will take place in the city over the next 6 years. This includes SDRA sites including the Poolbeg Peninsula.	Yes Appropriate Assessment carried out.	No Potential impacts are to be avoided through mitigatory policies in the Development Plan.	Major projects within the Dublin City Development Plan will be subject to an Environmental Impact Assessment and all statutory requirements, including a public consultation process, by the relevant authorities. An Appropriate Assessment of the proposed project is also required in accordance with the Habitats Directive.
Wicklow County Development Plan 2016-2022	Published	The Plan sets out Wicklow County Council's policies for the sustainable development of the County from 2016-2022.	Yes Appropriate Assessment carried out.	No Potential impacts are to be avoided through mitigatory policies in the Development Plan.	Mitigation Measures proposed within the Plan are robust. Development proposals which arise as a result of the Development Plan are subject to Appropriate Assessment. This will provide specific project level detail to ensure no adverse significant effects to European

					Sites.
South Dublin County Development Plan 2016-2022	Published	The Plan sets out South Dublin County Council's policies and objectives for the continued development of the County from 2016 to 2022.	No Stage 1 Appropriate Assessment carried out.	No Potential effects are to be avoided through avoidance policies in the Development Plan.	South Dublin County Development Plan has generally been formulated to ensure that uses, developments, and effects arising from permissions based upon the Plan (either individually or in combination with other plans or projects) shall not give rise to significant adverse impacts on the ecological integrity of any European sites.
Cherrywood SDZ Planning Scheme 2014 (to be read in conjunction with Approved Amendments 1-4 June 2017)	Published	The Planning Scheme sets out the strategic framework for the provision, including the phasing and delivery, of a major new residential and employment settlement with all associated social and physical infrastructure.	Yes However, iterative AA and SEA processes were conducted as part of the process. Robust mitigation measures were put in place.	Yes However, iterative AA and SEA processes were conducted as part of the process. Robust mitigation measures were put in place.	The mitigation measures proposed within the AA limit the potential of the Planning Scheme on the integrity of European Sites. The potential likely effects from the Draft LAP are thought to be very-low (as detailed above). Therefore, it is not likely that significant in combination effects to the integrity of any European Site will arise.
Greater Dublin Area Draft Transport Strategy 2011-2030	Published	The Transport Strategy provides a framework for the planning and delivery of transport infrastructure and services in the Greater Dublin Area (GDA) for the next two decades.	No Stage 1 Appropriate Assessment carried out.	No Potential effects are to be avoided through avoidance policies in the Strategy.	The potential effects of the Strategy were assessed to be negligible by the AA Screening report. Therefore, no in-combination effects are foreseen.
Smarter Travel: A Sustainable Transport Future, A new Transport policy for Ireland 2009-2020	Published	Smarter Travel is a framework for actions aimed at ensuring that alternatives to the car are more widely available, mainly through a	No Stage 1 Appropriate Assessment carried out.	No Potential effects are to be avoided through avoidance policies in the Strategy.	The overall aim of this strategy is to reduce the use of cars to move towards a more sustainable ethos. Therefore, in combination

		radically improved public transport service and through investment in cycling and walking; actions aimed at improving the fuel efficiency of motorised transport through improved fleet structure, energy efficient driving and alternative technologies; and actions aimed at strengthening institutional arrangements to deliver the targets.			effects are not foreseen.
Greater Dublin Strategic Drainage Study 2002-2031	Published	The Greater Dublin Drainage (GDD) initiative aims to provide strategic drainage infrastructure required for the Greater Dublin Area (GDA) to continue to develop. It is also required to protect the environment and ensure compliance with EU and national legislative requirements. The project involves the provision of a 26km pipeline, a wastewater treatment plant (WwTP) located at Clonshagh (Clonshaugh) and a marine outfall 6km out to sea from Baldoyle Bay. The project is being led by Fingal County Council, on behalf of Dublin City Council, Dún Laoghaire-Rathdown County Council, and South Dublin County Council, in partnership with Kildare and Meath County Councils.	Yes However, iterative Ecological Assessments and SEA processes were conducted as part of the process. Robust mitigation measures were put in place.	Yes However, iterative Ecological Assessments and SEA processes were conducted as part of the process. Robust mitigation measures were put in place.	The mitigation measures proposed within the AA limit the potential of the Strategy on the integrity of European Sites. The potential likely effects from the Draft LAP are thought to be very-low (as detailed above). Therefore, it is not likely that significant in combination effects to the integrity of any European Site will arise.
Dún Laoghaire	Published	The non-statutory	No	No	Minimal

Harbour Masterplan 2011		Masterplan sets out policies in relation to the management of the harbour, with particular reference to heritage protection, is an important part of this plan. The policies have been developed with regard to the identification and retention of character, the enhancement of the public realm, the repair of historic fabric and the addition of new interventions.	SEA Screening Statement and Environmental Reports were prepared. No AA was undertaken.	SEA Screening Statement and Environmental Reports were prepared. No AA was undertaken.	development is possible within this area and the plan largely relates to maintenance and progression of socio economic factors. Therefore, no in-combination effects are foreseen.
Eastern River Basin District Management Plan 2009-2015	Published	The ERBD Management Plan describes the actions that are proposed to ensure the necessary protection of our waters over the coming years. There is a second phase of the management plan due to be created.	No Appropriate Assessment carried out.	No Screening for potential effects under Habitats Directive Article 6 process is put in place once details of the implementation of the programme of Measures (POMs) under the ERBD are known.	The actions and objectives in relation to the Water Framework Directive and the ERBD Management plan are to protect and restore Protected Areas.
Sandyford Urban Framework Plan 2016-2022	Published	The overall purpose of this Framework Plan is to set out a strategy for the proper planning and sustainable development of the plan area.	No AA and SEA processes were conducted as part of the process. Robust mitigation measures were put in place.	No AA and SEA processes were conducted as part of the process. Robust mitigation measures were put in place.	Minimal development is possible within this area and the plan largely relates to maintenance and progression of socio economic factors. Therefore, no in-combination effects are foreseen.
Woodbrook-Shanganagh Local Area Plan 2017-2023	Published	The overall purpose of this Local Area Plan is to set out a strategy for the proper planning and sustainable development of the plan area.	No Stage 1 Appropriate Assessment carried out.	No AA and SEA processes were conducted as part of the process. Robust mitigation measures were put in place.	Mitigation Measures proposed within the Draft LAP are robust. Development proposals which arise as a result of the Draft LAP are subject to Appropriate Assessment. This will provide

					specific project level detail to ensure no adverse significant effects to European Sites.
Blackrock Local Area Plan 2015-2020	Published	The overall purpose of this Local Area Plan is to set out a strategy for the proper planning and sustainable development of the plan area.	No Stage 1 Appropriate Assessment carried out.	No AA and SEA processes were conducted as part of the process.	Robust mitigation measures were put in place. Mitigation Measures proposed within the Draft LAP are robust. Development proposals which arise as a result of the Draft LAP are subject to Appropriate Assessment. This will provide specific project level detail to ensure no adverse significant effects to European Sites.
Deansgrange Local Area Plan 2010-2020	Published	The overall purpose of this Local Area Plan is to set out a strategy for the proper planning and sustainable development of the plan area.	No No AA was undertaken.	No No AA was undertaken	Minimal development is possible within this area and the plan largely relates to maintenance and progression of socio economic factors. Therefore, no in-combination effects are foreseen.
Goatstown Local Area Plan 2012-2018	Published	There are a very limited number of sites within the Plan area that have any significant or realistic development / redevelopment potential. The principle challenge for the Local Area Plan is therefore, to encourage and guide future development that enhances Goatstown and strengthens the area's overall sense of place	No No AA was undertaken.	No No AA was undertaken.	Minimal development is possible within this area and the plan largely relates to maintenance and progression of socio economic factors. Therefore, no in-combination effects are foreseen.

		whilst at the same time protecting the residential amenity of existing residents.			
Kiltiernan/Glenamuck Local Area Plan 2013 - 2019	Published	The overall purpose of this Local Area Plan is to set out a strategy for the proper planning and sustainable development of the plan area.	No AA Screening was undertaken and the effects were deemed to be negligible. An SEA processes was conducted as part of the process. Robust mitigation measures were put in place.	No AA Screening was undertaken and the effects were deemed to be negligible. An SEA processes was conducted as part of the process.	Robust mitigation measures were put in place. The potential effects of the Draft LAP were assessed by the AA Screening report. Therefore, no in-combination effects are foreseen.
Glencullen Local Area Plan 2008 – 2018	Published	The overall purpose of this Local Area Plan is to set out a strategy for the proper planning and sustainable development of the plan area.	No No AA was undertaken.	No No AA was undertaken.	Minimal development is possible within this area and the plan largely relates to maintenance and progression of socio economic factors. Therefore, no in-combination effects are foreseen.
Water Supply Project Eastern and Midland Region	Feasibility; Under Assessment	The project aims to fulfil the growing demand for fresh drinking water within the Dublin Region. The current emerging preferred option is for abstraction from the Parteen Weir Site controlled by the ESB. An underground pipeline would connect the abstraction point to a terminal point in west Dublin.	Yes Appropriate Assessment is currently being carried out.	No Mitigation measures will be put in place to minimise effects.	There is no hydrological link between the abstraction point and the zone of influence of Stillorgan Draft LAP. Therefore, only possible local effects were considered in addition to abstraction volume. Mitigation measures are being formulated within the WSP to ensure that the Water Table remains consistent through interactions with the ESB pumping station at Parteen.

4 Conclusions

Stage 1 Screening for AA of the Stillorgan Draft Local Area Plan has been carried out. It has been demonstrated that implementation of the Plan is not foreseen to have any likely significant effects on any European Site.

The Draft LAP is not located within or directly adjacent to any European Site. The Appropriate Assessment screening process considered potential effects which may arise during all phases of the Plan as a result of the implementation of the Draft LAP. Through an assessment of the pathways for effects and an evaluation of the Draft LAP characteristics, taking account of the processes involved and the distance of separation between European Sites in the wider area, it has been evaluated that there are no likely significant adverse effects on the qualifying interests and the conservation objectives of any designated Natura 2000 sites. The ecological integrity of the relevant Natura 2000 Sites is not foreseen to be significantly affected by the Draft LAP.

It is concluded that it is unlikely that the Draft LAP will give rise to any significant adverse effects on designated Natura 2000 sites, alone or in combination with other plans or projects. This evaluation is made in view of the conservation objectives of the habitats or species for which these Natura 2000 sites have been designated. Consequently, a Stage 2 – Natura Impact Statement is not required for the Draft LAP.

Appendix IV

Draft Stillorgan Local Area Plan

Strategic Flood Risk Assessment

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1.1 Introduction

This Flood Risk Assessment (FRA) of the Draft Stillorgan Local Area Plan 2017-2023 (LAP) has been prepared and informed having regard to '*The Planning System and Flood Risk Management Guidelines for Planning Authorities*', 2009 (DEHLG & OPW) and the Strategic Flood Risk Assessment (SFRA) undertaken at County level for Dún Laoghaire-Rathdown prepared as part of the Dún Laoghaire-Rathdown County Development Plan 2016-2022 (Appendix 13).

The Planning System and Flood Risk Management Guidelines state that Planning Authorities are required to introduce flood risk assessment as an integral and leading element of their Development Plan functions. It sets out that Development Plans and Local Area Plans must establish the flood risk assessment requirements for their functional area. The Guidelines further state that flood risk management should be integrated into spatial planning policies at all levels to enhance certainty and clarity in the overall planning process.

A Strategic Flood Risk Assessment is an area-wide assessment of the existing risks of flooding and the impact of those risks arising from proposed spatial planning decisions. A staged approach has been adopted in the preparation of this FRA, as advocated under the Guidelines.

- Stage 1: Identifies if the area is at risk of flooding and if so, the principal sources of flooding.
- Stage 2: Flood Risk Assessment confirms sources of flooding that affect the Plan area and involve the preparation of a flood zone map, based on best available data. This assessment will also detail a flood management strategy for the Plan area, if necessary.
- Stage 3: Where a detailed Flood Risk Assessment is required to assess flood risk areas in sufficient detail and to provide quantitative appraisal of potential flood risk to a proposed or existing development, a Stage 3 Flood Risk Assessment will be carried out.

The Guidelines require the planning system at National, Regional and Local levels to:

- A: Avoid developments in areas at risk of flooding, particularly flood plains, unless there are proven wider sustainability grounds that justify appropriate development and where the flood risk can be reduced or managed to an acceptable level without increasing flood risk elsewhere.
- B: Adopt a sequential approach to flood risk management when assessing the location for new development based on avoidance, reduction and mitigation of flood risk, and incorporate flood risk assessment into the process of making decisions on planning applications and planning appeals.

1.2 Flooding & Strategic Environmental Assessment (SEA)

The Planning System and Flood Risk Management Guidelines, 2009, set out best-practice in terms of integrating SFRA and SEA. In this regard, Section 3.10 of the Guidelines states that, '*The SEA Process provides a good practice framework for scoping and considering a range of planning and environmental issues, including flooding in the plan making process*' and that '*Flood risk assessments carried out in response to these Guidelines, should be integrated with the SEA process*'.

The Guidelines further state that, '*Where SEA and the environmental report is required, flood risk assessment should be undertaken as early as possible in the process so that the SEA is fully informed of the flood risks and impacts of the proposed zoning or development (See Appendix A)*'.

Accordingly, this SFRA for the Draft Stillorgan LAP has been prepared at the very outset of the plan-making process, as a working document to align with the initial scoping stage for the SEA. In this way, it is envisaged that the SFRA may be integrated into the parallel SEA Process.

1.3 Flood Risk Management – Development Plan Policy

Section 5.2.5.2 of the Dún Laoghaire Rathdown County Development Plan, Policy CC15, relates to Flood Risk Management and states that '*It is Council policy to support, in cooperation with the OPW, the implementation of the EU Flood Risk Directive (2007/60/EC) on the assessment and management of flood risks, the Flood Risk Regulations (SI No 122 of 2010) and the Department of the Environment, Heritage and Local Government and the Office of Public Works Guidelines on 'The Planning System and Flood Risk Management, (2009)' and relevant outputs of the Eastern District Catchment and Flood Risk Assessment and Management study (ECFRAMS Study).*'

Section 5.2.5.2 further states that the Council will ensure the implementation of the Planning System and Flood Risk Management Guidelines and Planning Circular PL2/2014 (or any updated / superseded document) in relation to flood risk management within the County. It refers to the Strategic Flood Risk Assessment of the County undertaken as part of the County Development Plan process (Appendix 13), and that the implementation of the Guidelines will include, *inter alia*, the following:

- Avoid, reduce and / or mitigate, as appropriate in accordance with the Flood Risk Management Guidelines, the risk of the flooding within the flood risk areas that may be identified during the period of the Plan or in relation to a planning application.
- Flood Risk Management and Strategic Flood Risk Assessment (SFRA) shall be incorporated into the preparation of all Local Area Plans and any other lower tier plans.
- Regard shall be had to any future flood hazard maps, flood risk maps and flood risk management plans prepared as part of the Eastern District Catchment Flood Risk Assessment and Management Study and future iterations of other similar studies of impacts of climate change.

Having regard to the Planning System and Flood Risk Management Guidelines, 2009, and County Development Plan policy, a Flood Risk Assessment (FRA) has been prepared for the Draft Stillorgan LAP.

1.4 Stillorgan Local Area Plan – Statutory Context

The Stillorgan LAP is being prepared as a result of and in accordance with the policies and objectives contained within the Dún Laoghaire-Rathdown County Development Plan 2016-2022, the overarching statutory framework for the development of the County. The County Development Plan states that spatially-based Local Area Plans have been, and will continue to be, prepared by the Council primarily targeted at new development nodes and areas of the County in need of redevelopment and/or regeneration. The Stillorgan Local Area Plan 2007 expired on the 7th October 2017 and in this regard the County Development Plan contained an objective to review the LAP during the lifetime of the County Development Plan.

In accordance with Section 10(2)(h) of the Planning and Development Act 2010 (as amended), Stillorgan was considered to contain lands in need of regeneration / renewal. While it is acknowledged that there are differing definitions of regeneration in urban planning, in this instance, it is taken to mean the integrated local redevelopment of the area. The Stillorgan LAP is being prepared in accordance with Sections 18-20 of the Planning and Development Act, 2000 (as amended). The parallel environmental assessments, namely, the Strategic Environmental Assessment, Appropriate Assessment and the Strategic Flood Risk Assessment are being undertaken in tandem, as iterative processes, informing the preparation of the Draft Stillorgan Local Area Plan.

1.5 Description of the Plan Area

Stillorgan is a residential suburban district of Dublin, located approximately 7 Kilometres south of the city centre, within the heart of Dun Laoghaire Rathdown County between Blackrock to the east and Dundrum to the west. The Stillorgan LAP covers an area of approximately 16.5 hectares and encompasses the lands around the intersection at Lower Kilmacud Road, Old Dublin Road and the Hill Road.

At its core, Stillorgan has a long established shopping district, servicing the surrounding residential areas. It is this District Centre that primarily forms the LAP area. The area includes a number of strategic sites including the Stillorgan Shopping Centre, the Leisureplex site, the former Blakes and Esmonde Motors sites, the Stillorgan Shopping Centre overflow car park and existing retail and commercial development on Lower Kilmacud Road. Stillorgan is well connected by public transport to Dublin City along the N11 Quality Bus Corridor and by the LUAS, and has easy access to the M50 motorway.

Stillorgan is designated under the Core Strategy of the County Development Plan as a 'Secondary Centre' in the County (see Figure 2 overleaf). The LAP lands are primarily zoned Objective DC 'To protect, provide for and/or improve mixed-use district centre facilities' and Objective NC 'To protect, provide for and/or improve mixed-use neighbourhood centre facilities'.

Fig 1: Stillorgan LAP - Plan Boundary Area

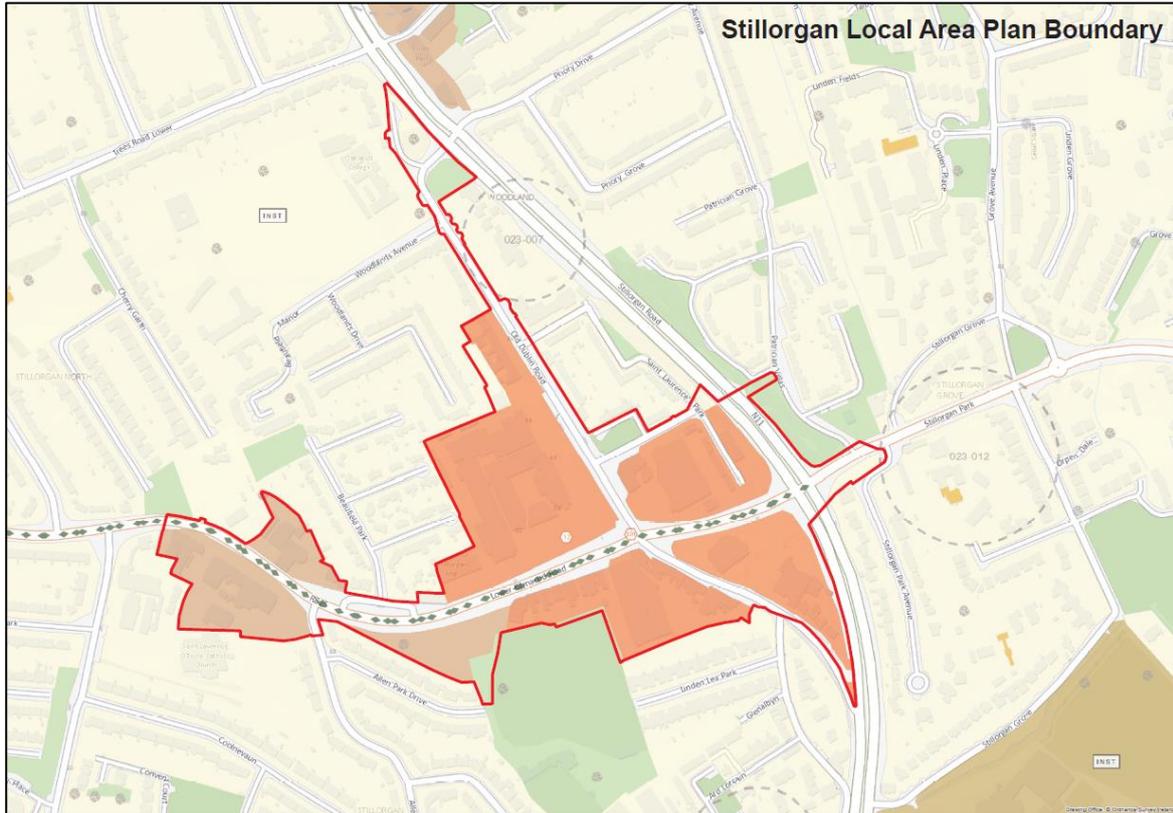
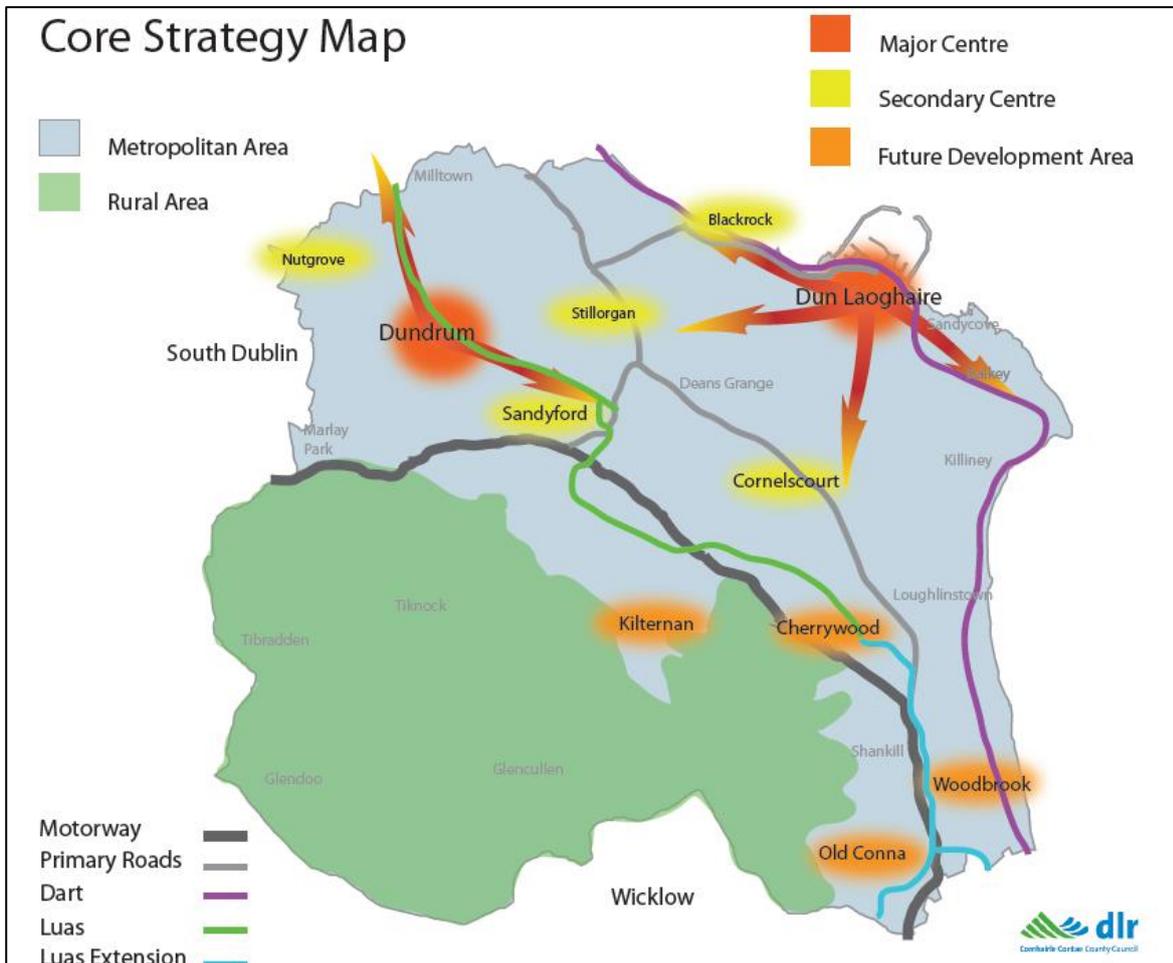


Fig 2: Core Strategy Map - Dún Laoghaire-Rathdown County Development Plan 2016-2022



1.6 Identification of Flood Risk

i. Strategic Flood Risk Assessment - County Development Plan 2016-2022

A Strategic Flood Risk Assessment was undertaken for the Dún Laoghaire-Rathdown County Development Plan 2016-2022, the purpose of which was to provide sufficient information to allow proper planning decisions to be made on sites at risk of flooding over the lifetime of the Plan, and to ensure that the necessary information with regard to flooding, the '*Sequential Approach*' and the '*Justification Test*', was available as part of the decision-making process of the County Development Plan.

As recommended in the Planning System and Flood Risk Management Guidelines, 2009, the SFRA for the County Development Plan undertook a two-stage assessment of flood risk for the entire County area.

The first stage identified flood risk and developed flood zone maps which confirmed that a proportion of zoned lands are at flood risk. The second stage, and the main purpose of the SFRA report, highlighted development areas that require more detailed assessment on a site specific level. The SFRA also provides guidelines for development within areas at potential risk of flooding, and specifically looks at flood risk and the potential for development across the County.

The SFRA for the County Development Plan provides a background to flood risk in Dún Laoghaire-Rathdown, including a review of available flood risk information and a summary of sources of flooding. It also provides an overview of flood management policy which includes details of development which may be appropriate in certain areas and the expected content of site specific FRAs. The Justification Test was applied across the County, with particular regard to the major growth areas as identified under the Core Strategy.

The SFRA for the County Development Plan sets out the definition of the Flood Zones as per the Planning System and Flood Risk Management Guidelines, with reference to the high, moderate or low-risk of flooding from fluvial or tidal sources, being based on an undefended scenario which does not take into account the presence of existing or proposed flood protection structures such as flood walls or embankments. The set of supplementary maps categorises the entire county area according to these flood zones (Flood Zones A-C).

ii. Data and Flood Zone Maps of the County Development Plan 2016-2022

The SFRA undertaken for the County Development Plan utilised a number of datasets relating to historical and predicted flood extents. The Identification of Flood Risk (Stage 1), identified flood risk based on the data available, including historical records and a range of data sources (see Appendix 13 (p9) of the County Development Plan).

The Catchment Flood Risk Assessment and Management (CFRAM) for the Eastern Region, which includes Dún Laoghaire-Rathdown, was being finalised at the time of the Draft Plan process. Notwithstanding the draft status, the flood extent maps which were available at the time of the SFRA had been the subject of several iterations throughout the CFRAM process and were considered to be of high quality in most locations including the Stillorgan LAP area.

This information was compiled into the flood zone maps that formed the basis of the SFRA for the County Development Plan, which in turn guided Development Plan policy and informed the application of the Justification Test. However, the SFRA cautions that

the input data was developed at a point in time and that, as a result, there may be changes in the catchment that means a future study, or more localised assessment of risk, may result in a change in either flood extent or depth. In this regard the SFRA notes that a site specific flood risk assessment may result in more locally accurate information which could show a greater or less level of risk than is included in the flood zone maps of the County Development Plan.

The Eastern CFRAM process commenced in 2011 to (i) assess flood risk through identification of flood hazard areas, (ii) identify viable structural and non-structural measures and options for managing the flood risk, and (iii) prepare a Flood Risk Management Plan (FRMP) and Strategic Environmental Assessment that sets out the measures and policies that should be pursued. The CFRAM studies were used as the basis of the SFRA for the higher level County Development Plan.

The Council acknowledges that the CFRAM studies are a work in progress, with public consultation undertaken in October 2016 by the OPW, as the lead agency. In this regard, Section 6.2.5.1, Policy CC14: Catchment Flood Risk Assessment and Management (CFRAM), of the County Development Plan, states as follows: *'It is Council policy to assist the Office of Public Works (OPW) in the preparation of the Regional Catchment Flood Risk Assessment (CFRAM) Study being carried out for the Eastern District. Any recommendations and outputs arising from the CFRAM study for the Eastern District that are relevant for Dún Laoghaire Rathdown will require to be incorporated into the Development Plan'*. Accordingly, the SFRA of the Stillorgan LAP may require to be subsequently revised, if necessary.

iii. Flood Zone Maps – SFRA of County Development Plan

Utilising the CFRAM Studies and other data sources, flood zone maps for the entire County were prepared as part of the SFRA for the County Development Plan. The flood zone maps show Flood Zones A, B, and C and also show historical and predicted flooding hotspots in the County.

iv. Definition of Flood Zones

Flood Zone	Description
Zone A High Probability of Flooding	This zone defines areas with the highest risk of flooding from rivers (i.e. more than 1% probability or more than 1 in 100) and the coast (i.e. more than 0.5% probability or more than 1 in 200)
Zone B Moderate Probability of Flooding	This zone defines areas with a moderate risk of flooding from rivers (i.e. 0.1% to 1% probability or between 1 in 100 and 1 in 1000) and the coast (i.e. 0.1% to 0.5% probability or between 1 in 200 and 1 in 1000)
Zone C Low Probability of Flooding	This zone defines areas with a low risk of flooding from rivers and the coast (i.e. less than 1 in 1000)

1.7 Stillorgan LAP – Identification of Flood Risk

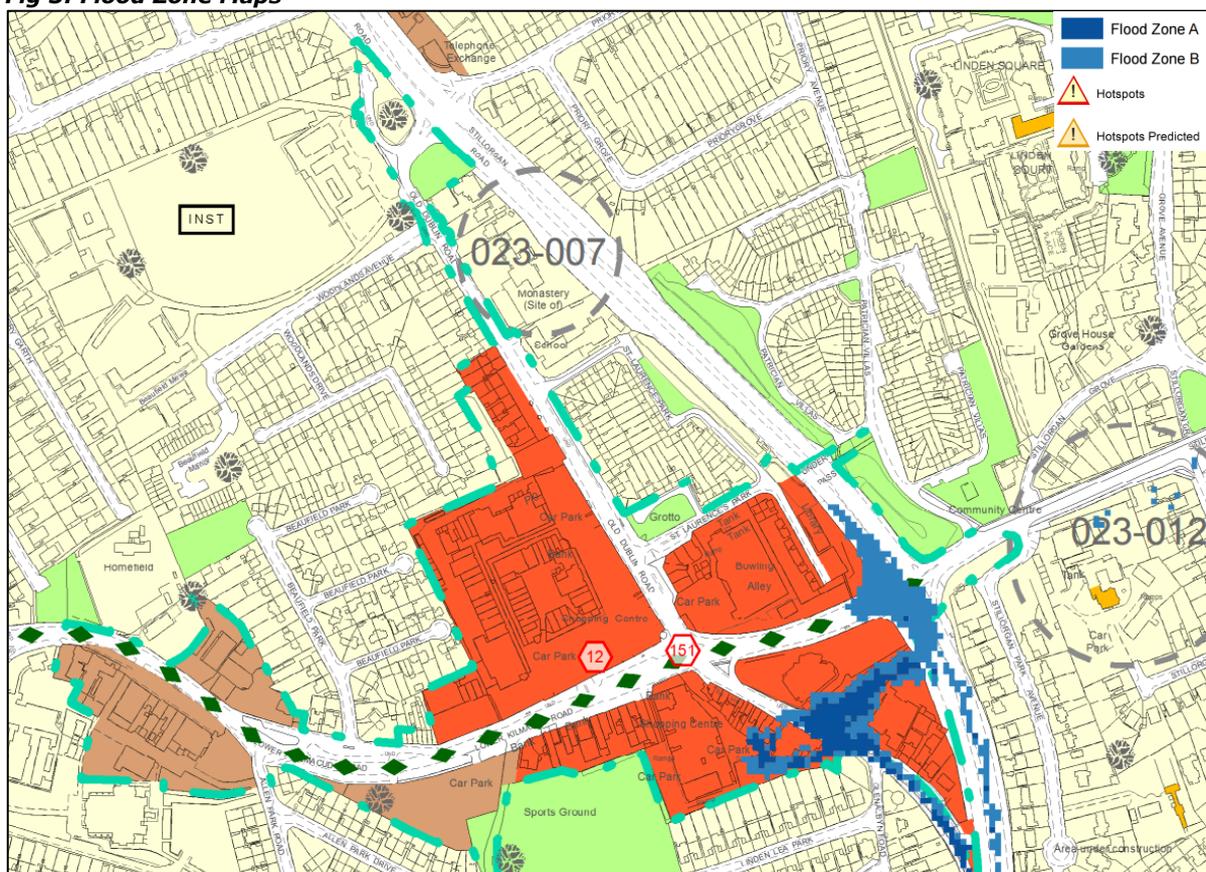
i. Flood Zone Maps

Dún-Laoghaire Rathdown County Development Plan 2016-2022 - SFRA

Flood zone maps were developed as part of the SFRA for the County Development Plan. Map 2 of the SFRA relates to the Stillorgan LAP area and an extract from same is set out in Figure 3 below. It shows that the Stillorgan LAP lands are primarily located within Flood Zone C (low probability); with some lands to the east of the Plan area located within Flood Zones A and B (high probability and moderate probability). These lands primarily relate to existing developed lands that include the former Blakes and Esmonde Motors sites, the Stillorgan Orchard pub and adjacent lands, and both Hill Road and the Stillorgan Road (N11).

In addition to identifying Flood Zones A, B and C, the flood zone maps also identify historical and predicted flooding hotspots in the County. Historical surface water hotspots are those where Dún Laoghaire-Rathdown County Council has a record of a flood occurring, although in some cases work has been carried out to remediate the issue. The predicted hotspots are based on modelling and indicate where surface water has the potential to pond to depths of greater than 0.3m. It is noted that there are no historical or predicted flooding hotspots identified within the Stillorgan LAP area, and specifically the Flood Zone A and B lands.

Fig 3: Flood Zone Maps



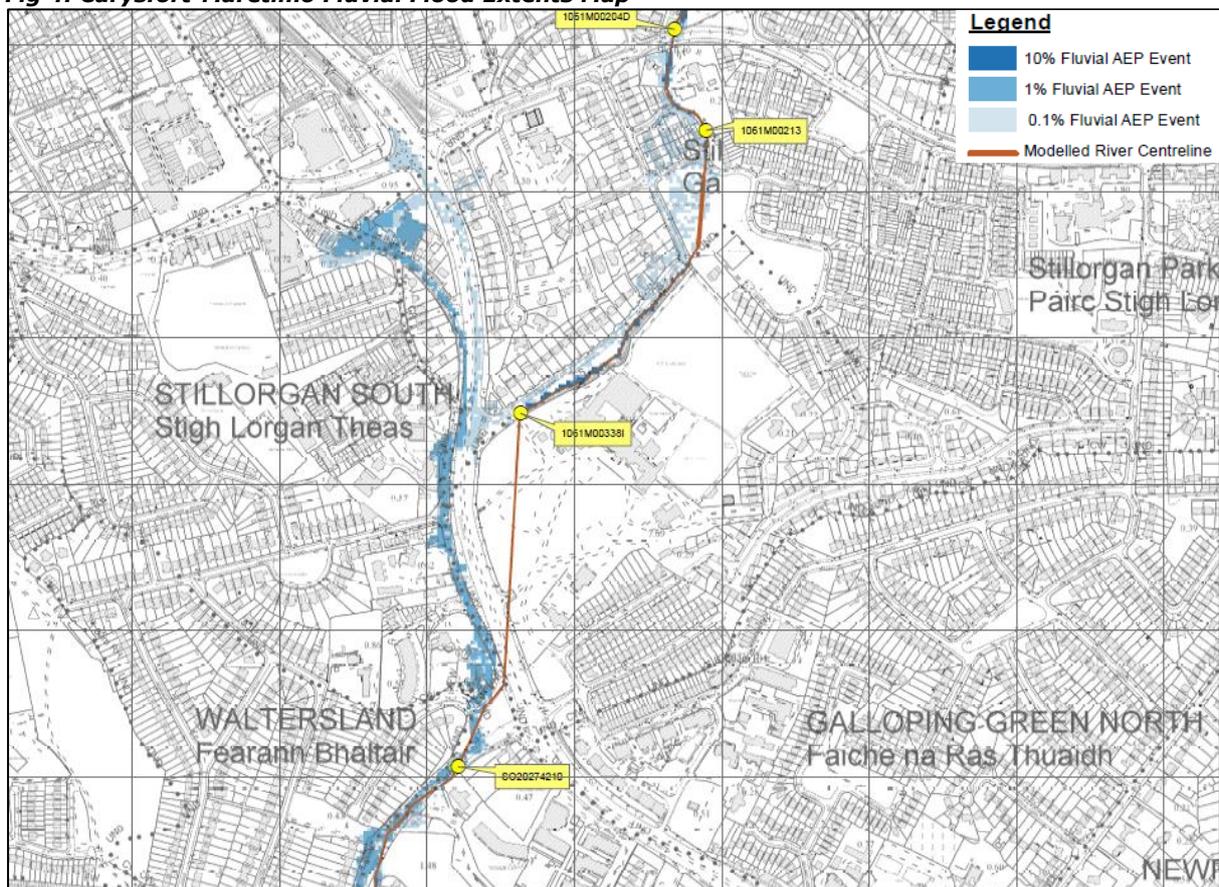
Source: Extract from Map 2 of the SFRA of the Dún Laoghaire Rathdown County Development Plan 2016-2022

Eastern CFRAM Fluvial Flood Extents Map (2016)

The OPW are the lead Authority on flooding in the Country and in 2011 they commenced a National Catchment Flood Risk Assessment and Management programme. As set out above in Section 1.6(ii) the CFRAMs for the Eastern Region were still being finalised at the time of developing the flood zone maps for the SFRA of the County Development Plan. However it is highlighted that advanced drafts of the flood extent maps were available and in the public domain at the time of making the Plan and as such there is a high degree of correlation between the flood zone maps developed for the SFRA of the County Development Plan and the final fluvial flood extents maps for the Eastern CFRAM.

The Carysfort-Maretimo fluvial flood extents maps for the Eastern CFRAM were finalised in 2016, subsequent to the adoption of the County Development Plan, and an extract of same is set out in Figure 4 below. The finalised fluvial flood extent maps have been assessed as part of the SFRA for the Draft Stillorgan LAP.

Fig 4: Carysfort-Maretimo Fluvial Flood Extents Map



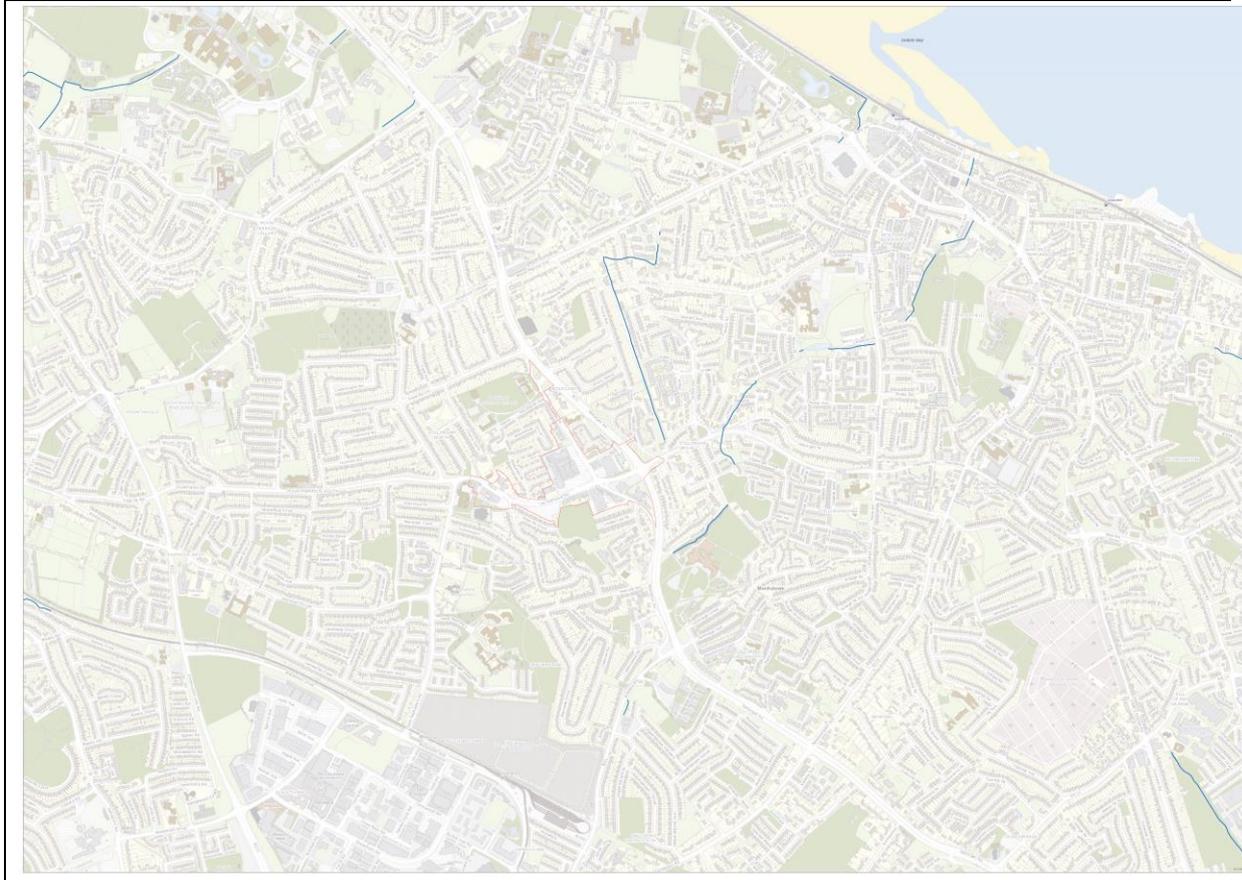
Source: Final Flood Hazard and Risk Maps, 2016 (Eastern CFRAM)

ii. Watercourses

The primary source of fluvial flooding relating to the aforementioned Flood Zone A and Flood Zone B lands in the Stillorgan LAP area relates to the Carysfort Maretimo stream that starts in the Three Rock Mountains and flows through the urbanised areas of Sandyford, Leopardstown, Stillorgan and Blackrock before discharging into Dublin Bay. The Carysfort Maretimo stream's catchment area of 9.55sq.km is almost entirely urbanised (91%) with only a small upland catchment outside of the urban footprint. The stream has in the past been extensively culverted at various locations along its length. It is noted that while the Stillorgan LAP lands fall within the catchment boundary of the Carysfort Maretimo, the stream itself does not traverse the LAP lands. The stream runs to the east of the LAP area adjacent to Brewery Road, the Stillorgan Road (N11) and

Stillorgan Grove, as shown in Figure 5 below. A second watercourse, the Priory Stream, is located to the north east of the LAP area at a considerable lower elevation. The Kilmacud stream also traverses the area, in culvert.

Fig 5: Watercourses in the Stillorgan LAP Area



iii. Historical Flooding Records

The following sets out an overview of the main historical flooding events, and causes where known, that are relevant to the Stillorgan LAP area.

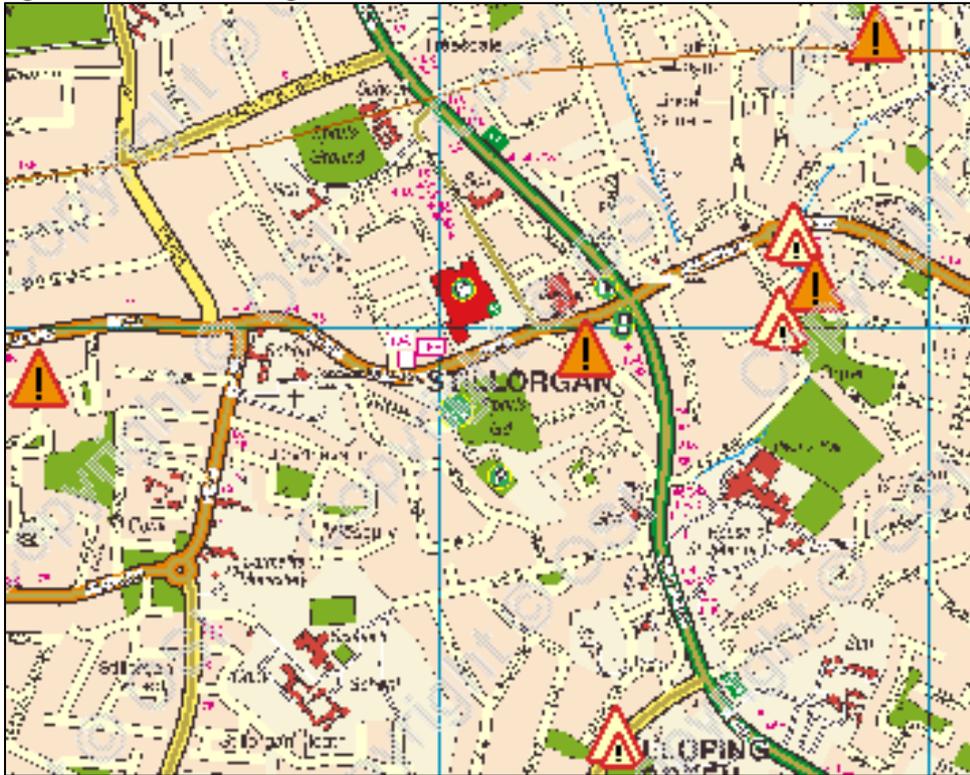
- **2002 Flood Event – Stillorgan Hill (Flood ID No. 2024):** Flooding to the basement of a shop premises on Hill Road caused by a localised blockage of a culvert. The location of this flooding event is identified by the 'flood symbol' illustrated in Figure 5 overleaf.
- **2002 Flood Event – Stillorgan Road:** Blocked/broken culvert along the central median of Stillorgan Road (N11) causes some road flooding.

Outside of the Stillorgan LAP area the most significant historical flooding records relate to incidences caused by the flooding of the Carysfort Maretimo stream. Upstream at Brewery Road the stream has overflowed on a number of separate occasions usually caused by screens becoming blocked by storm debris. The overflowing of the stream has caused water to run down Brewery Road along the 'Old Bray Road' causing flooding in the vicinity of St. Brigid's National School. It is noted that Hill Road and adjacent properties would be vulnerable to such a flow route if flood waters continued northwards.

As illustrated in Figure 6 there have been a number of historical flooding events in the area of Stillorgan Grove and Orpen Dale caused by the overtopping of the Carysfort

Maretimo stream. However, it is noted that these flooding events are located downstream and at a considerable lower elevation to the Stillorgan LAP area.

Fig 6: Historical Flooding Records



Source: National Flood Hazard Mapping, OPW (www.floodmaps.ie)

1.8 The Sequential Approach & Justification Test

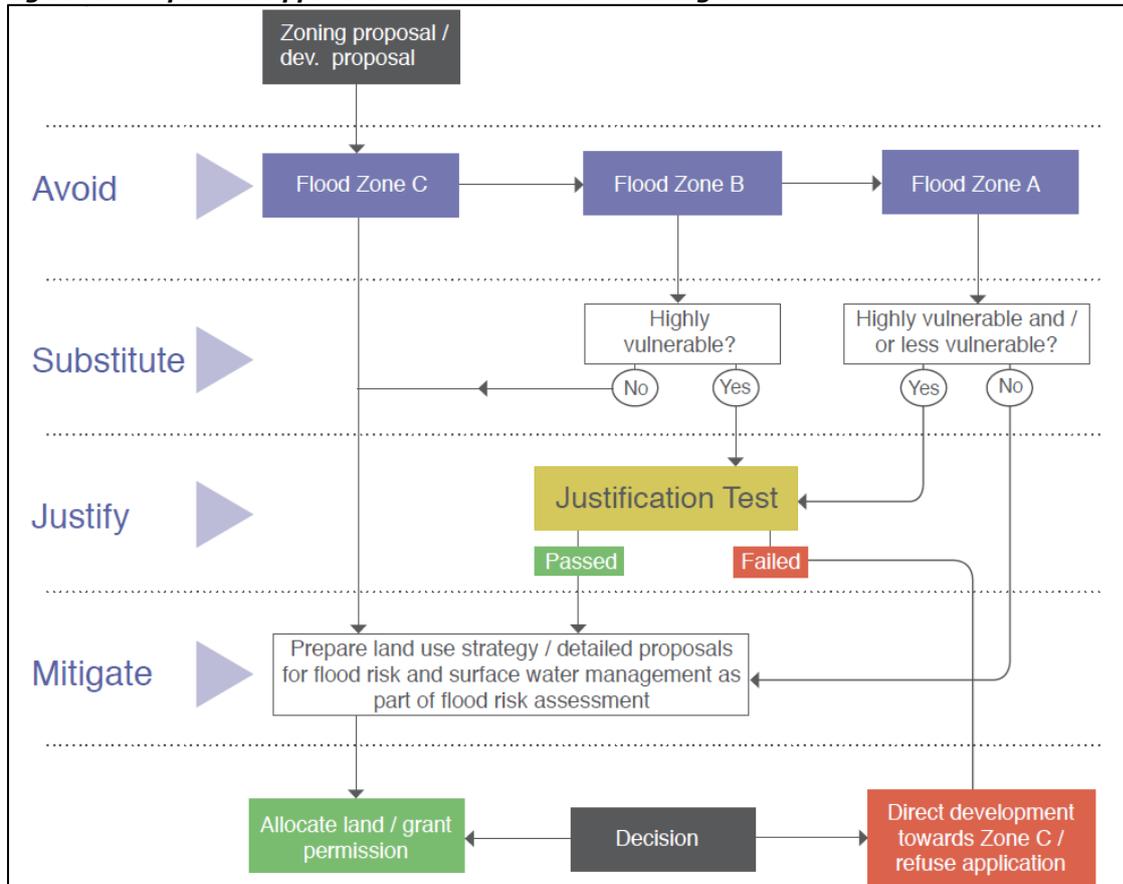
The key principles of the risk-based sequential approach is managing flood risk in the preparation of plans, as set out in Chapter 3 of the Planning System and Flood Risk Management Guidelines, and these principles are adhered to in the Draft Stillorgan LAP.

This is the key tool in the decision-making process of preparing plans to ensure that development is first and foremost directed towards land that is at low risk of flooding. This approach makes use of existing Flood Risk Assessments (FRAs) and other data identifying flood zones for rivers, coastal and fluvial flooding and the classification of the vulnerability of flooding of different types of development. The sequential approach in terms of flooding is based on the following principles:

- The primary objective of the sequential approach is that development is primarily directed towards land that is at low risk of flooding (AVOID).
- The next stage is to ensure that the type of development proposed is not especially vulnerable to adverse impacts of flooding (SUBSTITUTION).
- The Justification Test is designed to rigorously assess the appropriateness, or otherwise, of particular developments that, for various reasons, are being considered in areas of moderate or high flood risk (JUSTIFICATION).

- The Justification Test comprises of two processes, namely, the Plan-Making Justification Test and the Development Management Justification Test.

Fig 7: The Sequential Approach Mechanism in the Planning Process



(Source: The Planning System and Flood Risk Management – Guidelines for Planning Authorities, 2009)

i. Justification Test for the Stillorgan LAP Area

The SFRA undertaken for the County Development Plan indicated that there were existing, developed and zoned areas within the LAP area that were at risk of flooding (Flood Zone A and Flood Zone B). Having reviewed the level of flood risk within the County through the preparation of flood zone maps, and determined appropriate measures for assessing and managing risks to high and low vulnerability development in Flood Zones A, B and C, a more detailed assessment of sites and areas was carried out through the Plan-Making Justification Test. The Plan-Making Justification Test was undertaken having regard to the guidance set out in Planning Circular PL2/2014 that states the following:

'Notwithstanding the need for future development to avoid areas at risk of flooding, it is recognised that the existing urban structure of the country contains many well established cities and urban centres which will continue to be at risk of flooding. At the same time such centres may also have been targeted for growth in the National Spatial Strategy, Regional Planning Guidelines and the various City and County Development Plans taking account of historical patterns of development and their national and strategic value. In addition, development plans have identified various strategically located urban centres and particularly city and town centre areas whose continued consolidation, growth, development or regeneration, including for residential use, is being encouraged in order to bring about compact and sustainable urban development...'

ii. Plan-Making Justification Test (Part 1 & 2)

The SFRA for the County Development Plan applied Part 1 and Part 2 of the Plan-Making Justification Test to lands in the County with zoning objectives A, A1, A2, NC, DC, MTC, E, TLI, MH, MIC, MOC, OE, W that were already developed (excluding areas with very low intensity development) and included existing vulnerable uses that were in Flood Zone A and/or B.

The relevant Flood Zone A and Flood Zone B lands within the Stillorgan LAP are zoned 'District Centre', and were thus assessed as part of the Plan-Making Justification Test contained in the SFRA for the County Development Plan. Table 1 below sets out the findings of Part 1 and Part 2 of the Plan-Making Justification Test undertaken.

Table 1: County Development Plan – Plan Making Justification Test (Part 1 and 2)

	Criteria	Response
1	The urban settlement is targeted for growth under the National Spatial Strategy, regional planning guidelines, statutory plans or under the Planning Guidelines or Planning Directives provisions of the Planning and Development Act 2000, as amended.	The National Spatial Strategy 2002-2022 is a twenty year plan for the Country and consolidating the Greater Dublin Area, a Gateway, is a primary policy of this Strategy. The Regional Planning Guidelines for the Greater Dublin Area 2010 – 2016 show the entire built up area of the County of Dun Laoghaire Rathdown as falling within the Metropolitan Area as illustrated in Figure 12 (p89 of Development Plan).
2	The zoning or designation of the lands for the particular use or development type is required to achieve the proper planning and sustainable development of the urban settlement and, in particular:	
2(i)	Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement.	All of these areas are developed areas that include suburban housing and are essential in order to support the continued viability of the urban centres in the County.
2(ii)	Comprises significant previously developed and/or under-utilised lands.	All the lands in question contain existing development and are therefore previously developed lands.
2(iii)	Is within or adjoining the core of an established or designated urban settlement.	The lands in question fall within the Metropolitan Area of the GDA.
2(iv)	Will be essential in achieving compact and sustainable urban growth.	As the lands in question contain existing development in the County they are already essential in achieving compact and sustainable urban growth.
2(v)	There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	There are no suitable alternative lands identified within the County.

iii. Plan Making Justification Test (Part 3)

Part 3 of the Plan-Making Justification Test was applied to lands throughout the County including lands within the catchment of the Carysfort-Maretimo stream. As outlined in Section 1.7 above, it is the Carysfort-Maretimo stream that is the primary source of flooding that impacts the Flood Zone A and Zone B lands within the Stillorgan LAP area. In this regard, the Plan-Making Justification Test undertaken for the County Development Plan stated the following:

Carysfort Maretimo

The CFRAM shows flood risk along the majority of the Carysfort Maretimo River, being a combination of Flood Zone A and B and covering a range of land existing land uses, including open space, residential and office and enterprise (Figure 5-7).

In particular, flooding is indicated at Blackrock Bypass, Brookfield, Carysfort Avenue, Avondale Lawn, Carysfort Hall, Avoca Park, Grove Paddock, Stillorgan Grove, Stillorgan Road and Brewery Road, Blackthorn Avenue and Blackthorn Road, Corrig Road, Blackthorn Drive, Lakelands, Moreen Estate, along M50 at Sandyford Interchange, Sandyford Park, Coolkill, Sandyford Downs and Sandyford Village (15).

Where there is existing residential housing, and supporting infrastructure, Part 1 and 2 of the Justification Test have been applied and passed and flood risk can be managed through non-structural responses. Future development within Flood Zone A and B should be limited to extensions, changes of use and small scale infill and flood risks can be managed through a site specific FRA, which should include consideration of culvert blockage (where appropriate) and the impact this could have on flood risk at lower return periods.

The majority of flood risk highlighted in the Sandyford Business District and surrounding area is shown to be Flood Zone B, with small pockets indicated to be Flood Zone A. Where less vulnerable development is proposed within or near Flood Zone A or B a site specific flood risk assessment should be undertaken with the aim of a) refining the delineation of flood risk based on local topography and surface water systems; b) demonstrating that the proposed development will not increase flood risk to neighbouring lands; and c) developing flood management measures appropriate to the development proposed.

There is a length of defence along this watercourse which runs parallel to Rockfield Park (16). These defences are of robust construction, although consideration of the impacts of overtopping, either through higher return period events or with the impact of climate change on river flows, should be taken into account in any site specific flood risk assessment. Breach assessment is unlikely to be required.

iv. Stillorgan Local Area Plan – Flood Zones A & B

The aim of the assessment undertaken in the SFRA for the County Development Plan was to apply the Plan-Making Justification Test, taking into account Planning Circular PL2/2014 in relation to existing development. In terms of undeveloped land, the Justification Test found that:

*'With the exception of zoned Major Town Centres, **District Centres** and Sandyford Business District, new development within Flood Zones A or B does not pass the Justification Test and will not be permitted. This applies to undeveloped areas which are zoned for development but are currently undeveloped and to areas of existing low intensity development. Whilst lands may have retained a zoning objective which would include development, applying the guidance in Section 4 means such development is restricted to Flood Zone C, with water compatible uses located within Zone A and B.'*

It is therefore considered that the Flood Zones A & B lands within the Stillorgan LAP that are zoned District Centre are thus deemed to have passed the Plan-Making Justification Test (Parts 1, 2 & 3). Notwithstanding this, the subject lands will be subject to the findings of Part 3 of the Plan-Making Justification Test (set out above) and all applicable flood management requirements set out in the SFRA for the County Development Plan

and the Planning System and Flood Risk Management Guidelines (to include the Development Management Justification Test).

1.9 Flood Risk Management - Policy Response

This Section sets out the policy response relating to the management of flood risk within the Stillorgan LAP area. This Section should be read in conjunction with the overarching guidance set out in the SFRA for the County Development Plan and that contained in the Planning System and Flood Risk Management Guidelines.

A summary of flood risks associated with the primary zoning objectives of the Stillorgan LAP area is provided in Table 2 below. It should be noted that this Table is intended as a guide only and that when planning applications are being considered not all uses will be appropriate on flood risk grounds, hence the need to work through the Justification Test for Development Management on a site by site basis.

Table 2: Zoning objective vulnerability

Zoning Objective		Indicative Primary Vulnerability	Flood Risk Commentary
DC	To protect, provide for and-or improve mixed-use district centre facilities.	Less / highly vulnerable	A mix of uses within this zoning objective is possible. Flood risk should be assessed and managed in accordance with the SFRA (of both the County Development Plan and the Stillorgan LAP), and applying the sequential approach.
NC	To protect, provide for and-or improve mixed-use neighbourhood centre facilities.	Highly / less vulnerable	A mix of uses within this zoning objective is possible. Flood risk should be assessed and managed in accordance with this SFRA (of both the County Development Plan and the Stillorgan LAP), and applying the sequential approach.

i. Requirements for a Flood Risk Assessment - Overview

For proposals within the Stillorgan LAP area an appropriately detailed flood risk assessment will be required in support of all planning applications. The level of detail will vary depending on the risks identified and the proposed land use. At a minimum, all proposed development, including that in Flood Zone C, must consider the impact of surface water flood risks on drainage design. In addition, flood risk from sources other than fluvial should be reviewed.

For sites within Flood Zone A or B, a site specific 'Stage 2 - Initial FRA' will be required, and may need to be developed into a 'Stage 3 - Detailed FRA'. The extents of Flood Zone A and B for the Stillorgan LAP area are delineated in the SFRA for the County Development Plan (see Figure 3 above) and the Carysfort-Maretimo Fluvial Flood Extents Map (see Figure 4 above), however, it is acknowledged that future studies may refine the extents (either to reduce or enlarge them) and as such a comprehensive review of available data should be undertaken once a FRA has been triggered.

Within the FRA the impacts of climate change and residual risk (including culvert/structure blockage) should be considered and remodelled where necessary, using an appropriate level of detail, in the design of FFL. Further information on the required

content of the FRA is provided in the Planning System and Flood Risk Management Guidelines.

Any proposal that is considered acceptable in principle shall demonstrate the use of the sequential approach in terms of the site layout and design and, in satisfying the Justification Test (where required), the proposal will demonstrate that appropriate mitigation and management measures are put in place.

ii. Development Proposals in Flood Zone C

The majority of lands in the Stillorgan LAP area are located within Flood Zone C. Where a site is within Flood Zone C, but adjoining or in close proximity to Flood Zone A or B there could be a risk of flooding associated with factors such as future scenarios (climate change) or in the event of failure of a defence, blocking of a bridge or culvert. Risk from sources other than fluvial must also be addressed for all development in Flood Zone C. At a minimum in such a scenario, a flood risk assessment should be undertaken which will screen out possible indirect sources of flood risk and where they cannot be screened out it should present mitigation measures.

iii. Applications for Minor Developments in Areas at Risk of Flooding (Flood Zones A & B)

In an extension to Section 5.28 of the Planning System and Flood Risk Management Guidelines, two classes of 'Minor developments' were defined as part of the SFRA undertaken for the County Development Plan. These are:

- Class 1 - Works directly associated with existing developments, such as extensions, renovations and rebuilding within the footprint of the existing development, and changes of use.
- Class 2 - Works in relation to infill development, which may include development of previously unused (greenfield) land, or building within the curtilage of an existing development, but outside the footprint of the building.

Consideration of Class 1 minor development works is relevant given the urbanised and developed status of lands that are at risk of flooding within the Stillorgan LAP area. In the case of Class 1, the 'Sequential Approach' and 'Justification Test' will not apply as they relate to existing buildings. However, an assessment of the risks of flooding should accompany such applications to demonstrate that they would not have adverse impacts or impede access to a watercourse, floodplain or flood protection and management facilities.

For Class 2 minor developments, construction of new buildings on what would otherwise be greenfield, or undeveloped land, has generally been found to generate an unjustifiable level of risk, either through introducing additional people into the floodplain, blocking surface water and overland flow paths or requiring works which are likely to have a negative impact on flood risk elsewhere. For this reason, new, standalone development is not permitted within Flood Zone A or B for highly vulnerable uses or in Flood Zone A for less vulnerable uses.

The following sets out a checklist of what is required for planning applications for minor development works in areas at risk of flooding in the Stillorgan LAP area:

Planning Application Checklist
<ul style="list-style-type: none">• Consideration of minor works classification (Class 1 or Class 2).
<ul style="list-style-type: none">• Assessment of flood risk carried out by an appropriately qualified Engineer with relevant FRA

experience (as deemed acceptable by the Planning Authority).
<ul style="list-style-type: none"> • Flood resilient design.
<ul style="list-style-type: none"> • Access, egress and emergency plans must be in place which are appropriate to the vulnerability of the development and its occupiers, the intensity of use and the level of flood risk.

iv. Applications for Larger Developments in Areas at Risk of Flooding (Flood Zones A & B)

Highly Vulnerable Development in Flood Zones A and B

Development which is highly vulnerable to flooding includes *inter alia* dwelling houses, residential care homes, hospitals, emergency services and primary strategic transport and utilities infrastructure (as defined in the Planning System and Flood Risk Management Guidelines).

As per the SFRA prepared for the County Development Plan it is not appropriate for new, highly vulnerable development to be located on greenfield land in Flood Zones A or B, particularly outside the core of a settlement and where there are no flood defences. Such proposals do not pass the Justification Test and instead, a less vulnerable use should be considered.

Stillorgan is a designated District Centre under the County Development Plan containing lands in need of regeneration / renewal. With regard to existing developed areas, Planning Circular PL2/2014 states that *'notwithstanding the need for future development to avoid areas at risk of flooding, it is recognised that the existing urban structure of the country contains many well established cities and urban centres which will continue to be at risk of flooding. In addition, development plans have identified various strategically important urban centres ... whose continued consolidation, growth, development or generation, including for residential use, is being encouraged to bring about compact and sustainable growth.'*

As set out in Section 1.8, lands within the Stillorgan District Centre that are located in Flood Zones A & B are deemed to have passed the Plan-Making Justification Test (Parts 1, 2 & 3). Notwithstanding this, any planning applications for large highly vulnerable development on Flood Zone A and/or B lands will be subject to the findings of Part 3 of the Plan-Making Justification Test (set out in Section 1.8(iii)) and all applicable flood management requirements set out in the SFRA for the County Development Plan and the Planning System and Flood Risk Management Guidelines (to include the Development Management Justification Test). Of prime importance is the requirement to manage risk to the development site and not to increase flood risk elsewhere.

As part of the SFRA undertaken for the County Development Plan, small scale infill housing, extensions and changes of use were considered and, subject to site specific flood risk assessment, can generally be considered appropriate provided they constitute a continuation of the existing level of development.

Less Vulnerable Development in Flood Zones A and B

Less vulnerable development includes *inter alia* retail, leisure, warehousing and secondary strategic transport and utilities infrastructure. This category includes less vulnerable development in all forms, including refurbishment or infill development, and new development both in defended and undefended situations.

The design and assessment of less vulnerable development should begin with 1% AEP fluvial or 0.5% tidal events as standard, with climate change and a suitable freeboard included in the setting of finished floor levels.

The presence or absence of flood defences informs the level of flood mitigation recommended for less vulnerable developments in areas at risk of flooding. In contrast with highly vulnerable development, there is greater scope for the developer of less vulnerable uses to accept flood risks and build to a lower standard of protection, which is still high enough to manage risks for the development in question. However, any deviation from the design standard of 1%/0.5% AEP, plus climate change, plus freeboard, needs to be fully justified within the FRA.

Major developments may be located in areas with a higher likelihood of flooding, provided the risks are understood, and accepted, and operability and emergency response is clearly defined; this may allow construction to a finished floor level which is lower than the 'ideal' starting point.

The following sets out a checklist of what is required for planning applications for larger developments in areas at risk of flooding in the Stillorgan LAP area:

Planning Application Checklist
<ul style="list-style-type: none"> • Development Management 'Justification Test' has been passed.
<ul style="list-style-type: none"> • FRA in accordance the Dún Laoghaire-Rathdown SFRA and the Planning System and Flood Risk Management Guidelines, to be carried out by an appropriately qualified Engineer with relevant FRA experience (as deemed acceptable by the Planning Authority).
<ul style="list-style-type: none"> • Flood resilience statement to be submitted.
<ul style="list-style-type: none"> • Compliance with the Greater Dublin Strategic Drainage Study and inclusion of SuDS.
<ul style="list-style-type: none"> • Assessment of the potential impacts of Climate Change and the adaptive capacity of the development.
<ul style="list-style-type: none"> • Access, egress and emergency plans must be in place which are appropriate to the vulnerability of the development and its occupiers, the intensity of use and the level of flood risk.

1.10 Conclusions and Recommendations

It is the strategy of Dún Laoghaire-Rathdown Council, in accordance with the Planning System and Flood Risk Management Guidelines, to reduce the potential risk to people, property and the environment, caused by flooding, through a hierarchy of avoidance, followed by substitution of lower vulnerability uses and, only if avoidance and substitution are not possible, reduction and management of the risks through a variety of techniques.

Having regard to the SFRA undertaken for the County Development Plan 2016-2022, the majority of lands within the Stillorgan LAP are located within Flood Zone C (lowest probability); while some lands to the east of the Plan area are located within Flood Zone A & B (high probability and moderate probability). The lands within Flood Zone A and B are zoned Objective 'DC' District Centre. The Plan-Making Justification Test was carried out; taking into account Planning Circular PL2/2014 and it was found that:

*'With the exception of zoned Major Town Centres, **District Centres** and Sandyford Business District, new development within Flood Zones A or B does not pass the*

Justification Test and will not be permitted. This applies to undeveloped areas which are zoned for development but are currently undeveloped and to areas of existing low intensity development. Whilst lands may have retained a zoning objective which would include development, applying the guidance in Section 4 means such development is restricted to Flood Zone C, with water compatible uses located within Zone A and B.'

The Flood Zone A and Flood Zone B lands located within the Stillorgan District Centre are deemed to have passed the Plan-Making Justification Test (Parts 1, 2 & 3). Notwithstanding this, the lands in question will be subject to the requirements of Part 3 of the Plan-Making Justification Test (set out in Section 1.8(iii)) and all applicable flood management requirements set out in the SFRA for the County Development Plan and the Planning System and Flood Risk Management Guidelines (to include the Development Management Justification Test).

Furthermore, it is provided that all proposals for new development in the Stillorgan LAP Area shall have regard to the following:

- All planning applications for proposed development within the LAP Area should include a site-specific Flood Risk Assessment (FRA).
- Until the Eastern CFRAM Studies are completed and the flood protection and management options are finalised, the flood map should only be taken as indicative. All planning applications will be required to submit a site-specific flood risk assessment addressing risks from all sources of flooding, using the best available data. All new development will be required to comply with the Greater Dublin Strategic Drainage Study for surface water management, with possible provision for the Eastern CFRAMS High End Future Scenario.
- Flood Risk Management Objectives, as incorporated into the Draft LAP will apply (See Appendix 1)
- Full SUDS measures will be incorporated into future development proposals (See Appendix 2)

1.11 Disclaimer

It is important to note that compliance with the requirements of Planning System and Flood Risk Management Guidelines, 2009, and the Floods Directive 2007 60/EC is a work in progress and is currently based on emerging and incomplete data as well as estimates of the locations and likelihood of flooding. In particular, the assessment and mapping of areas of flood risk awaits the finalisation of Catchment Based Flood Risk Assessment and Management Plans (CFRAMP). As a result, this guide for Flood Risk Assessment is based on best available information and may require revision as new information becomes available.

Accordingly, all information in relation to flood risk is provided for general policy guidance only. It may be altered in light of future data and analysis. As a result, all landowners and developers are advised that Dún Laoghaire-Rathdown County Council accepts no responsibility for losses or damages arising due to the vulnerability to flooding of lands, uses and developments. It remains the principal responsibility of owners, users and developers to take all reasonable measures to assess the vulnerability to flooding of lands in which they have an interest prior to making planning or development decisions.

The indicative flood zone map (see Figure 3) for the Stillorgan LAP area does not show indicative flood hazard associated with any of the following:

- Extreme fluvial dominated combinations with pluvial flows
- Extreme pluvial events
- Blocked drains
- High ground water level conditions
- Other unforeseen events, e.g. bridge /culvert collapse etc.

Dún Laoghaire-Rathdown County Council makes no representations, warranties or undertakings about any of the information provided in this Draft SFRA for the forthcoming Stillorgan LAP, including without limitation, on its accuracy, completeness, quality or fitness for any particular purpose. To the fullest extent permitted by applicable law, neither Dún Laoghaire-Rathdown County Council nor any of its members, officers, associates, consultants, employees, affiliates, servants, agents or other representatives shall be liable for loss or damage, arising out of or in connection with, the use of, or the inability to use, the information provided in this plan, including but not limited to, indirect or consequential loss or damages, loss of data, income, profit, or opportunity, loss or, or damage to, property and claims of third parties, even if Dún Laoghaire-Rathdown County Council has been advised of the possibility of such losses or damages, or such losses or damages were reasonably feasible. Dún Laoghaire-Rathdown County Council reserves the right to change the content and / or presentation of any of the information provided in this report at its sole discretion, including these notes and disclaimer. This disclaimer shall be governed by, and construed in accordance with, the laws of the Republic of Ireland. If any provision of this disclaimer shall be unlawful, void or for any reasons unenforceable, that provision shall be deemed severable and shall not affect the validity and enforceability of the remaining provisions.

APPENDICES TO SFRA

APPENDIX 1: Flood Risk Management Strategy Objectives

(See Section 4.6 Sustainable Infrastructure of Draft LAP)

SI9:	<p>To require all proposed developments to carry out a Site-Specific Flood Risk Assessment (SSFRA) that shall demonstrate compliance with:</p> <ul style="list-style-type: none"> • The Planning System and Flood Risk Management, Guidelines for Planning Authorities (DEHLG / OPW, 2009), as may be revised and/or updated. • The prevailing Dún Laoghaire-Rathdown County Development Plan. • Any SSFRA shall <u>not</u> be required to carry out a Plan-Making Justification Test, given that this exercise was already carried out at County Development Plan-level. A review of this process was also undertaken as part of the preparation of this Local Area Plan (LAP). • The SSFRA shall pay particular emphasis to site-specific mitigation measures and any necessary management measures, as per Appendix B4 of the above 2009 National Guidelines. • Attention shall be given in the SSFRA to the incorporation of SuDS design measures into the public realm and open space provision.
SI8:	<p>It is an objective of the Council that all proposed flood protection or alleviation works will comply with the requirements of Article 6 of the EU Habitats Directive to ensure there are no likely significant effects on the integrity, defined by the structure and function, of any Natura 2000 sites and that the requirements of Article 6 of the EU Habitats Directive are met.</p>
SI7:	<p>It is an objective of the Council to ensure the protection of groundwater resources within the Draft Stillorgan Local Area Plan boundary and associated habitats and species in accordance with the EU Groundwater Directive. All new planning applications within the Stillorgan Local Area Plan boundary shall have regard to the likely impacts the proposed development may have on groundwater resources</p>
SI6:	<p>That green roofs shall be provided in accordance with the County Development Plan Green Roofs Guidance Document. SI6 It is an objective of the Council to ensure that Sustainable Drainage Systems (SuDS) is applied to any development in Stillorgan and that site specific solutions to surface water drainage systems are developed which meet the requirements of the Water Framework Directive and associated River Basin Management Plans. SuDS measures may include green roofs, permeable paving, detention basins, water butts, infiltration etc</p>
SI5	<p>It is an objective of the Council to ensure the implementation of the surface water legislation Environmental Objectives (Surface Waters) Regulations 2009 S.I. No 272 of 2009 and the EPA report Water Quality in Ireland 2007-2009 in order to ensure that development permitted would not have an unacceptable impact on water quality including surface waters, ground water, river corridors, estuarine waters, bathing waters, coastal and transitional waters.</p>

APPENDIX 2: SuDS Measures for New Development

It is an objective to promote Sustainable Drainage Systems (SuDS) to manage surface and ground water regimes sustainably. The following measures are key elements of the SuDS solution proposed for the LAP Area in the public realm areas, i.e. those areas not within private developments.

SuDS in the Public Realm: Options for Consideration Include:

Ponds: These will provide storage to meet attenuation requirements for the 1 in 100 year criterion. Ponds provide the final stage of treatment for water runoff prior to discharge to the watercourses. Ponds also provide amenity and biodiversity benefits in accordance with best design practice.

Detention Basins: These are vegetated surface storage basins that provide flow control through attenuation of stormwater runoff. They also facilitate some settling of particulate pollutants. They are normally dry and in most cases can accommodate soft landscaping and contribute to local amenity.

Infiltration Basins: Located at carefully selected locations in the detention basins. These are vegetated depressions designed to store run off and infiltrate it gradually into the ground. These are very effective at pollutant removal and contribute to groundwater recharge.

Infiltration Trenches & Engineered Swales: These can be located throughout public realm spaces and along selected routes including green routes and cycle routes. These are narrow excavations (1 to 2 m depth) filled with selected stone that create temporary subsurface storage for infiltration of stormwater runoff.

Underground Modular Systems: These have a high void ratio (e.g. Stormtech system or similar) and can be used subject to agreement with the Local Authority in any suitable locations of open spaces and parks subject to level and ready access to provide below ground storage and infiltration.

Tree Root Structural Cell Systems: (e.g. Silva Cell) are subsurface tree and stormwater systems that hold large soil volumes while supporting traffic loads beneath paving and hardscapes. It is proposed that these will be used throughout the LAP area to assist with attenuation and groundwater recharge.

SuDS in Development Sites

Run-off from all sites must pass through at least one level of treatment using a SuDS component prior to the final level of treatment in the public realm areas. The various SuDS measures that are required for different development types include:

Green Roofs: As well as providing environmental benefits, the installation of green roofs allows for more efficient use of space. Properly placed roof terraces and gardens visible from residential units or within a building enhance the aesthetic experience of the building and open up additional space for amenity, recreational and commercial use. Internal courtyards, terraces and roof tops can serve as multi-functional spaces.

Pervious Paving / Permeable Surfacing: Where courtyards and walkways in landscaped areas are proposed, it is suggested that permeable surfacing is considered. A variety of new durable permeable surfacing solutions are now available on the market

(proposals where surface water accesses the underground storage via gaps in interlocking paving will not be permitted – grilles, gullies, or similar, that are easily maintained are only permitted).

Infiltration Trenches: See Above

Detention Basins: See Above

Swales: Swales are shallow, flat bottomed vegetated open channels designed to convey, treat and attenuate surface water runoff. For design guidance refer to Chapter 17 of the CIRA SuDS Manual 2015.

Water Butts: Large containers used for collecting and storing rainwater for use on the property. Generally plastic and located to the rear of a property and connected to the downpipe.

Tree Root Structural Cell Systems: See Above

Rain Water Harvesting: Rainwater is collected from a roof or paved surface in an underground or over ground tank for use on the site. Depending on its intended usage the system may include treated elements, for design guidance refer to Chapter 11 of the CIRIA SuDS Manual 2015.

APPENDIX 3: Glossary of Terms

Annual Exceedance Probability (AEP) - Likelihood or probability of flooding or a particular flood event is classified by its annual exceedance probability (AEP) or return period (in years). A 1% AEP flood indicates the flood event that will occur or be exceeded on average once every 100 years and has a 1 in 100 chance of occurring in any given year.

Catchment - The area that is drained by a river or artificial drainage system.

Catchment Flood Risk Assessment and Management Studies (CFRAMS) - A catchment-based study involving an assessment of the risk of flooding in a catchment and the development of a strategy for managing that risk in order to reduce adverse effects on people, property and the environment. CFRAMS precede the preparation of Flood Risk Management Plans.

Flood Risk - An expression of the combination of the flood probability or likelihood and the magnitude of the potential consequences of the flood event. Flood Risk Assessment (FRA) can be undertaken at any scale from the National down to the individual site and comprises three stages: flood risk identification, initial flood risk assessment and detailed flood risk assessment.

Flooding (or inundation) - Flooding is the overflowing of water onto land that is normally dry. It may be caused by overtopping or breach of banks or defences, inadequate or slow drainage of rainfall, underlying groundwater levels or blocked drains and sewers. It presents a risk only when people, human assets and ecosystems are present in the areas that flood.

Flood Defence - A man-made structure (e.g. embankment, bund, sluice gate, reservoir or barrier) designed to prevent flooding of areas adjacent to the defence.

Flood Risk Assessment (FRA) - An examination of the risks from all sources of flooding of the risks to and potentially arising from development on a specific site, including an examination of the effectiveness and impacts of any control or mitigation measures to be incorporated in that development.

Flood Zones - A geographic area for which the probability of flooding from rivers, estuaries or the sea is within a particular range as defined within these Guidelines.

Fluvial Flooding - Flooding from a river or other watercourse.

Groundwater Flooding - Flooding caused by groundwater escaping from the ground when the water table rises to or above ground level.

Initial Flood Risk Assessment - A qualitative or semi-quantitative study to confirm sources of flooding that may affect a Plan area or proposed development site, to appraise the adequacy of existing information, to provide a qualitative appraisal of the risk of flooding to development, including the scope of possible mitigation measures, and the potential impact of development on flooding elsewhere, and to determine the need for further detailed assessment.

'Justification Test' - An assessment of whether a development proposal within an area at risk of flooding meets specific criteria for proper planning and sustainable development and demonstrates that it will not be subject to unacceptable risk nor increase flood risk elsewhere. The 'Justification Test' should be applied only where

development is within flood risk areas that would be defined as inappropriate under the screening test of the sequential risk based approach adopted by this guidance.

Likelihood (probability of flooding) – A general concept relating to the chance of an event occurring. Likelihood is generally expressed as a probability or frequency of a flood of a given magnitude or severity occurring or being exceeded in any given year. It is based on the average frequency estimated, measured or extrapolated from records over a large number of years and is usually expressed as the chance of a particular flood level.

Mitigation Measures - Elements of a development design which may be used to manage flood risk to a development, either by reducing the incidence of flooding both to the development and as a result of it and/or by making the development more resistant and/or resilient to the effects of flooding.

Precautionary Approach - The approach to be used in the assessment of flood risk which requires that lack of full scientific certainty, shall not be used to assume flood hazard or risk does not exist, or as a reason for postponing cost-effective measures to avoid or manage flood risk. River Basin Management Plan (RBMP) is required by the EU Water Framework Directive (2000/60/EC). These plans will establish a strategic plan for the long-term management of the River Basin District, set out objectives for water bodies and in broad terms, identify what measures are planned to meet these objectives, and act as the main reporting mechanism to the European Commission.

Pluvial Flooding - Usually associated with convective summer thunderstorms or high intensity rainfall cells within longer duration events, pluvial flooding is a result of rainfall-generated overland flows which arise before run-off enters any watercourse or sewer. The intensity of rainfall can be such that the run-off totally overwhelms surface water and underground drainage systems.

Return Period - The return period is means of expressing the likelihood or probability of flooding or a particular flood event occurring and is comparable to the AEP of the event. A 1% AEP flood indicates the flood event that will occur or be exceeded on average once every 100 years and has a 1 in 100 chance of occurring in any given year.

'Sequential Approach' - The 'Sequential Approach' is a risk-based method to guide development away from areas that have been identified through a flood risk assessment as being at risk from flooding.

Site Specific Flood Risk Assessment – An examination of the risks from all sources of flooding of the risks to and potentially arising from development on a specific site, including an examination of the effectiveness and impacts of any control or mitigation measures to be incorporated in that development.

Strategic Flood Risk Assessment (SFRA) - The assessment of flood risk on a wide geographical area against which to assess development proposed in an area (Region, County, Town).

Surface Water Management – This activity focuses on the assessment and management of flood risk within the urban environment from sources primarily resulting from intense rainfall. Surface water management should understand the performance of the urban drainage network, where exceedance flow routes would form and what impact this would have. Solutions to surface water flood risk can involve green infrastructure provision to capture and direct these excessive flows to lower vulnerable areas or open space. New development can provide solutions to reducing run-off not only from the proposed development also from existing areas. This should be considered in the SFRA in critical areas where development is planned upstream of flooding hotspots.

Sustainable Drainage Systems (SuDS) - A form of drainage that aims to control run-off as close to its source as possible using a sequence of management practices and control structures designed to drain surface water in a more sustainable fashion than some conventional techniques.

Source: Definitions are for the most part sourced from the DEHLG / OPW Guidelines for Planning Authorities on 'The Planning System and Flood Risk Management, 2009'.